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Summary Report of Number of workshops/seminars/ Research Methodology/ Intellectual Property Rights (IPR) and Entrepreneurship

A.Y: 2018-19

Sl. No.	Name of the workshops/seminars/ Research Methodology/ Intellectual Property Rights (IPR) and Entrepreneurship Organized	Date	Number of Participants
1	One day Webinar on "Ethical Leadership & Emotional Intelligence	06-06-18	35
2	Guest Lecture on Awareness on Intellectual Property Rights (IPR) by Y Surya Chandra Rao, Advocate	02-07-2018	60
3	A Two day FDP on Intellectual Property rights	26th & 27th Jul 2018	43
4	Guest Lecture on Awareness on Intellectual Property Rights (IPR) by Y Surya Chandra Rao, Advocate	20-8-2018	60
5	One day Workshops on Opportunities in Clean Energy Innovation	03-09-18	38
6	One day Workshop onMulti Criteria Decision Making	09-10-18	32
7	Research Methodology: Tools & Techniques Using R Programming(FDP)	3-12-2018 to 8-12-2018	60
8	A Two days Workshop on thesis writing and Plagiarism Verification	11-2-2019 to 16-02-2019	60
9	A Two days Workshop on thesis writing and Plagiarism Verification	4-3-2019 to 5-3-2019	45
10	One day Workshop on Research Methodology: Tools& Techniques	07-03-19	32
11	A One day work shop on "Research Methodology: Techniques"	04-06-2019	23
12	One day National level seminar on " New Frontier-Entrepreneur Development programme" by T Viswanadham Managing Director, Khaspa Enterprises Pvt Ltd, Hyderabad	06-05-2019	25

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Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

REPORT ABOUT THE PROGRAMME

Dt: 07-06-2018

Title Of The Programme: A One day Webinar on "Ethical Leadership & Emotional Intelligence"

Inauguration Date & Venue: 6th Jun 2018 & DNRCET Seminar Hall

Organized By: Department of Computer Science Engineering, DNRCET

Resource Person: Dr. S. Suresh Kumar, Asst.Prof & Head ISTE, ACM Information Technology.

Chief Guest: Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 35

Concept:

Many of us will have experienced ethical leadership - alternatively, some of us will have experienced a lack of ethical leadership in our professional lives. Having people in place at the very top will determine what kind of leadership style is in place. Ethical leaders give way to employees by inspiring, developing and creating a culture of trust and respect.

Emotional intelligence is defined as the ability to understand and manage your own emotions, as well as recognize and influence the emotions of those around you. The term was first coined in 1990 by researchers John Mayer and Peter Salovey, but was later popularized by psychologist Daniel Goleman.

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One day Webinar on "Ethical Leadership & Emotional Intelligence 6th Jun 2018

Sl. NO	NAME OF THE FACULTY	DEPARTMENT	Date 06/06/18	
			FN	AN
1	T. Avinash	M E		
2	M. Jagamadham	ME		
3	Dr A. Rama Murthy	CSE		
4	B. Sri Devi	BCB		
5	V. Bhavani Durga	BCB	VBD	VBD
6	L. Bujji babu	CSE		
7	G. Sai Baba	EEE		
8	K. P. Mani	ECE		
9	I Geetha	BCB		
10	S. Swathi	BCB		
11	Dr. A. Sudhamadhuri	BSH		
12	G. N. D. Srinivas	EEE		
13	NSVL Sowjanya	BCB		
14	D. Joseph Kumar	EEE		
15	G. Vamsi Krishna	ME		
16	M. Rama Jog. Raju	M.E	M Rama	M. Rama
17	S. Ravi kumar	ME		
18	G. koteswara Rao	ECE		
19	S. Rajesh.	EEE	S Rajesh	S Rajesh
20	Dr PYV Satyanarayana	BSH		
21	Dr. A. P. Ramesh	ECE		
22	P. B. swathi	BCB	P. B Swathi	P. B. Swathi
23	Y. Vikas	ME		
24	B. Somana Babu	EEE		
25	Y. Srinivas	ECE		

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26	T. Radha Madhuri	BSH		
27	S. Swathi	ECE	S. Swathi	S Swathi
28	M. Naga lakshmi	CSE	Naga	Naga
29	NSVL Soujany	ECE		
30	Dr. M. Vasantha	~~ASH~~ ASH		
31	P. Lalitha Rajeswari	BCB		
32	S. Lakshmana Rao	CSE		
33	T. S. Chakravarthi	BSH		
34	V. Susmitha	CSE		
35	E. Rama lakshmi	CSE		

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PROFILE

Dr. Sanampudi Suresh Kumar
B.E (CSE), M.Tech(CSE), Ph.D(CSE)
Assistant Professor & Head
ISTE, ACM
Information Technology

Areas of Interest:

Artificial Intelligence
Natural Language processing
Machine Learning
Deep Learning
Information Extraction
Data Analytics

Academic Qualifications

1. Ph.D in Computer Science Engineering, J.N.T.U.H (2006-2010)
2. M.Tech in Computer Science Engineering, SASTRA University with First Class With Distinction (2003-2005)
3. B.E in Computer Science Engineering, Bharathidasan Univ

Adminstrative Positions Held

1. Training and placement officer , JNTUHCEJ, 2021 - Present

2. HOD , JNTUH College o Engineering Jagtial, 2016 - Present

3. Computer maintenance Officer , J.N.T.U.H.C.E.J, 2015 - 2017

Dr. Sanampudi Suresh Kumar
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Ethical Leadership and Emotional Intelligence

This chapter will reflect on two themes that have increased in popularity in the past few decades: ethical behavior at work—particularly important when reviewed in light of the corporate scandals of recent years—and emotional intelligence—a growing area of interest in a world of work where there is increased diversity, cultural blend, accelerating ambiguity, and augmenting awareness among workforce members. First, the topic of ethics will be discussed, with specific focus on leadership ethics and organizational ethics. Subsequently, emotional intelligence will be reviewed, with some comments on emotional and intellectual intelligence. In the final part of the chapter, the interplay between ethics and emotional intelligence will be discussed.

Introduction

Two terms have earned increasing interest in the past decades in the business world, and therefore also in higher business education: ethics and emotional intelligence (EI). Though each phenomenon acquired this attention for entirely different reasons, there is an interesting interplay between these ethics and emotional intelligence. They seem to be interdependent, another term that has earned high acclaim in the twenty-first century. This chapter will first look into ethical behavior, inside and outside the corporate environment, and subsequently into emotional intelligence. Specific attention will be given to the applicability of these two topics in contemporary times. Finally, the chapter will discuss the interaction between these two themes.

Ethics: Definitions

Ethics is a very personal, hence very subjective, topic. What is considered unethical to one may be perfectly acceptable to another. Yet, the recent decade of major corporate scandals and unethical behavior, instigated by

leaders who were supposed to responsibly lead multi-million dollar entities, has made it apparent that there is a higher need to discuss ethics than most people initially thought, especially when preparing business students to become honorable members of the future workplace.

Up until the ethics scandals, ethics was not considered course material in higher education. It was something that employees would select to discuss in voluntary two-day seminars, and not a requirement for top management. Unfortunately, it turned out that the ones exempted from ethics workshops were the ones who needed them most.

In the past years of corporate deception, economic downturn, and global warming, members of the workforce have started to place the theme "ethics" in a broader picture than ever before. It has come to their understanding that unethical behavior can lead to national and international economic disasters, and can cause innocent people to lose all they worked for their entire lives. Increasingly, corporate social responsibility has become a term that was used as an extension of ethics. The role and influence of business has never been more apparent than today.

The link between corporate social responsibility and ethics lies in the last word of the first theme: *responsibility*. Although ethics can be interpreted in multiple ways, there are societal standards that cannot and should not be ignored.

Robin (2009) attempts a generally acceptable definition of business ethics by asserting: "stakeholders should be treated with fairness and respect in their naturally occurring exchanges with business."

Leadership Ethics

The shocking revelations of corporate greed and short-term profit-based behavior of the past decade have prompted an increasing need among today's corporate stakeholders to look for individuals in leadership positions that behave ethically, inside and outside the workplace. This is, in fact, no more than logical, because the actions and decisions of corporate leaders usually set the tone of behavior in their workforce. Sims (2009) stresses the importance of a leader's reputation within an organization's context and asserts that companies can send a strong message into the community when they get rid of unethical CEOs and hire leaders with a reputation of fairness, honesty, and responsibility. He mentions Boeing as an example, as the company let go two CEOs in two years: Phil Condit in 2003, because he was Boeing's main man at a time when the company's name got tainted in a scandal involving a $23 billion deal, and Harry Stonecipher in 2005, who got involved in an extra-marital affair at work.

Valente, Varca, Gotkin, and Barnett (2010) confirm that ethical or unethical behavior of top managers usually influences employees' ethical decisions, and the seriousness of an ethical issue usually influences

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REPORT ABOUT THE PROGRAMME

Dt: 03-07-2018

Title of the Programme: Guest Lecture on Awareness on Intellectual Property Rights

Inauguration Date & Venue: 2nd Jul 2018 & DNRCET Seminar Hall

Organized By: Department of Civil Engineering, DNRCET

Resource Person: Dr. Y. Surya Chandra Rao, Advocate, Visakhapatnam.

Chief Guest: Sri G. Satyanarayana Raju (Babu)
Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju
Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 60

Concept:

Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. Intellectual property rights are legal rights that provide creators protection for original works, inventions, or the appearance of products, artistic works, scientific developments, and so on. Basically speaking, intellectual property rights are a common type of legal IP protection for those who invent. In India, there are 7 types of intellectual property rights, namely – copyright, trademarks, patents, geographical indications, plant varieties, industrial designs and semiconductor integrated circuit layout designs.

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GUEST LECTURE ON AWARENESS ON IPR.

SNO	NAME	DATE & SIGN 02.07.2018.
1	Dr.B.V.S.VARMA	
2	Dr.A.RAMA MURTHY	
3	Dr. G SATYANARAYANA	
4	Dr. P SAMBA SIVA RAO	
5	K.SURYA RAM PRASAD	
6	B.V RAM KUMAR	
7	B.NANDANA KUMAR	
8	G SUNIL PREM KUMAR	
9	G.V.SATYA SRI RAM	
10	S.LAKSHMAN RAO	
11	N.BHARATHI	
12	P. LALITHA RAJESWARI	
13	B .JYOTHI PRIYANKA	
14	M.MOUNICA DEVI	
15	V NAVYA DEVI	
16	L BUJJI BABU	
17	K S H PRASANNA KUMAR	
18	K SIVA SYAMALA	
19	E RAMA LAKSHMI	
20	V LAKSHMI	
21	KORADA KALYANI	
22	M.PRABHAVATHI	
23	K.SPANDANA	
24	K SARATH CHANDRA	
25	M NAGA LAKSHMI	

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26	CH SAI SIVA DURGA	
27	U SUSHMITHA	
28	M S N Srikanth	
29	K.VENKATA CHANDRAN	
30	PRAVEEN PRAKASH	
31	BALAM SANTOSH KUMAR	
32	BANDARU JYOTHI	
33	BODDUPALLI SURYA TEJA	
34	BORRA GAYATHRI DEVI	
35	BORRA PURNA CHANDU	
36	BORRA VENKATESWARAMMA	
37	CHALLA PRASANTHI	
38	KALIPATNAPU GOWTHAM	
39	KANDIBOYINA AKHIL	
40	KANDULA SRI NAGA BHARGAVA PRIYA	
41	KANUMURI MAHESH VARMA	
42	KETHA BHUVANA SAI PAVAN	
43	KIMIDI THERESA	
44	KOLLA PAVANI	
45	KOLLA PAVANI	
46	DANIKONDA DEVI VARA PRASAD	
47	DASARI MAHI MANVITHA	
48	DATLA JHANSI LAKSHMI	
49	DULAM MADHURI DEVI	
50	DUVVI NARASAVENI	
51	GADIRAJU VASAVI	
52	GANDHAM SRI VANI	
53	GOKARAJU GOWRI MANASA	
54	GUBBALA SUDHEER	

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55	GUDURI HEMA MALINI DEVI	
56	GUDURI MANIKANTA	
57	IMANDI ANJAN KUMAR	
58	INDUGA VARUN	
59	INDUKURI GEETHA PAVITHRA	
60	JAMPANA BHAVYA	

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PERSONAL PROFILE

Suryachandra Rao y

Advocate

Visakhapatnam

Suryachandra Rao y listed under CA in Visakhapatnam. Check Address, Contact Number, Ratings & Reviews, Photos, Maps etc, on Justdial.

CA helps in the methodical management of taxation and financial matters.

They are expert financial professionals who take care of the budgeting, auditing, taxing and business strategies for their clients. By taking care of the financial matters of a business, they help them scale great heights.

If you are looking for a good Charted Accountant who can handle your business's finance and tax matters, then reach out to Suryachandra Rao y in , Visakhapatnam. With them taking care of the financial aspect of your business, you can focus on the other areas with ease.

Location and overview

Suryachandra Rao y in Visakhapatnam is a reliable name in the industry as they aim to deliver the best experience to their customers. This has helped them build up a loyal customer base.

They started their journey in and ever since, they have ensured that the customer remains at the centre of their business operations and philosophy.

As they are located in a favourable neighbourhood, exactly at 49-27-4/1, Md Nagar, Md Nagar-530016.

It is easy to locate Suryachandra Rao y on the map. For any kind of assistance or questions, it is best to contact them directly during their business hours.

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Interllectual Property Right

Intellectual property rights (IPR) have been defined as ideas, inventions, and creative expressions based on which there is a public willingness to bestow the status of property. IPR provide certain exclusive rights to the inventors or creators of that property, in order to enable them to reap commercial benefits from their creative efforts or reputation. There are several types of intellectual property protection like patent, copyright, trademark, etc. Patent is a recognition for an invention, which satisfies the criteria of global novelty, non-obviousness, and industrial application. IPR is prerequisite for better identification, planning, commercialization, rendering, and thereby protection of invention or creativity. Each industry should evolve its own IPR policies, management style, strategies, and so on depending on its area of specialty. Pharmaceutical industry currently has an evolving IPR strategy requiring a better focus and approach in the coming era.

Intellectual property (IP) pertains to any original creation of the human intellect such as artistic, literary, technical, or scientific creation. Intellectual property rights (IPR) refers to the legal rights given to the inventor or creator to protect his invention or creation for a certain period of time.These legal rights confer an exclusive right to the inventor/creator or his assignee to fully utilize his invention/creation for a given period of time. It is very well settled that IP play a vital role in the modern economy. It has also been conclusively established that the intellectual labor associated with the innovation should be given due importance so that public good emanates from it. There has been a quantum jump in research and development (R&D) costs with an associated jump in investments required for putting a new technology in the market place.

The stakes of the developers of technology have become very high, and hence, the need to protect the knowledge from unlawful use has become expedient, at least for a period, that would ensure recovery of the R&D and other associated costs and adequate profits for continuous investments in R&D.[3] IPR is a strong tool, to protect investments, time, money, effort invested by the inventor/creator of an IP, since it grants the inventor/creator an exclusive right for a certain period of time for use of his invention/creation. Thus IPR, in this way aids the economic development of a country by promoting healthy competition and encouraging industrial development and economic growth. Present review furnishes a brief overview of IPR with special emphasis on pharmaceuticals.

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The laws and administrative procedures relating to IPR have their roots in Europe. The trend of granting patents started in the fourteenth century. In comparison to other European countries, in some matters England was technologically advanced and used to attract artisans from elsewhere, on special terms. The first known copyrights appeared in Italy. Venice can be considered the cradle of IP system as most legal thinking in this area was done here; laws and systems were made here for the first time in the world, and other countries followed in due course. Patent act in India is more than 150 years old. The inaugural one is the 1856 Act, which is based on the British patent system and it has provided the patent term of 14 years followed by numerous acts and amendments.

- it provides a mechanism of handling infringement, piracy, and unauthorized use
- it provides a pool of information to the general public since all forms of IP are published except in case of trade secrets.

IP protection can be sought for a variety of intellectual efforts including

(i) Patents

(ii) Industrial designs relates to features of any shape, configuration, surface pattern, composition of lines and colors applied to an article whether 2-D, e.g., textile, or 3-D, e.g., toothbrush

(iii) Trademarks relate to any mark, name, or logo under which trade is conducted for any product or service and by which the manufacturer or the service provider is identified. Trademarks can be bought, sold, and licensed. Trademark has no existence apart from the goodwill of the product or service it symbolizes

(iv) Copyright relates to expression of ideas in material form and includes literary, musical, dramatic, artistic, cinematography work, audio tapes, and computer software

(v) Geographical indications are indications, which identify as good as originating in the territory of a country or a region or locality in that territory where a given quality, reputation, or other characteristic of the goods is essentially attributable to its geographical origin

A patent is awarded for an invention, which satisfies the criteria of global novelty, non-obviousness, and industrial or commercial application. Patents can be granted for products and processes. As per the Indian Patent Act 1970, the term of a patent was 14 years from the date of filing except for processes for preparing drugs and food items for which the term was 7 years from the date of the filing or 5 years from the date of the patent, whichever is earlier. No product patents were granted for drugs and food items.

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A copyright generated in a member country of the Berne Convention is automatically protected in all the member countries, without any need for registration. India is a signatory to the Berne Convention and has a very good copyright legislation comparable to that of any country. However, the copyright will not be automatically available in countries that are not the members of the Berne Convention. Therefore, copyright may not be considered a territorial right in the strict sense. Like any other property IPR can be transferred, sold, or gifted

Role of Undisclosed Information in Intellectual Property

Protection of undisclosed information is least known to players of IPR and also least talked about, although it is perhaps the most important form of protection for industries, R&D institutions and other agencies dealing with IPR. Undisclosed information, generally known as trade secret or confidential information, includes formula, pattern, compilation, programme, device, method, technique, or process. Protection of undisclosed information or trade secret is not really new to humanity; at every stage of development people have evolved methods to keep important information secret, commonly by restricting the knowledge to their family members. Laws relating to all forms of IPR are at different stages of implementation in India, but there is no separate and exclusive law for protecting undisclosed information/trade secret or confidential informationPressures of globalisation or internationalisation were not intense during 1950s to 1980s, and many countries, including India, were able to manage without practising a strong system of IPR. Globalization driven by chemical, pharmaceutical, electronic, and IT industries has resulted into large investment in R&D. This process is characterized by shortening of product cycle, time and high risk of reverse engineering by competitors. Industries came to realize that trade secrets were not adequate to guard a technology. It was difficult to reap the benefits of innovations unless uniform laws and rules of patents, trademarks, copyright, etc. existed. That is how IPR became an important constituent of the World Trade Organization (WTO).

Rationale of Patent

Patent is recognition to the form of IP manifested in invention. Patents are granted for patentable inventions, which satisfy the requirements of *novelty* and *utility* under the stringent

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examination and opposition procedures prescribed in the Indian Patents Act, 1970, but there is not even a *prima-facie* presumption as to the validity of the patent granted.

Most countries have established national regimes to provide protection to the IPR within its jurisdiction. Except in the case of copyrights, the protection granted to the inventor/creator in a country (such as India) or a region (such as European Union) is restricted to that territory where protection is sought and is not valid in other countries or regionsFor example, a patent granted in India is valid only for India and not in the USA. The basic reason for patenting an invention is to make money through exclusivity, i.e., the inventor or his assignee would have a monopoly if,

- the inventor has made an important invention after taking into account the modifications that the customer, and
- if the patent agent has described and claimed the invention correctly in the patent specification drafted, then the resultant patent would give the patent owner an exclusive market.

The patentee can exercise his exclusivity either by marketing the patented invention himself or by licensing it to a third party.

The following would not qualify as patents:

- An invention, which is frivolous or which claims anything obvious or contrary to the well established natural law. An invention, the primary or intended use of which would be contrary to law or morality or injurious to public health
- (ii) A discovery, scientific theory, or mathematical method
- (iii) A mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine, or apparatus unless such known process results in a new product or employs at least one new reactant
- (iv) A substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance
- (v) A mere arrangement or re-arrangement or duplication of a known device each functioning independently of one another in its own way
- (vi) A method of agriculture or horticulture
- (vii) Any process for the medicinal, surgical, curative, prophylactic diagnostic, therapeutic or other treatment of human beings or any process for a similar treatment of animals to render them free of disease or to increase their economic value or that of their products

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- (viii) An invention relating to atomic energy
- (ix) An invention, which is in effect, is traditional knowledge

Rationale of License

A license is a contract by which the licensor authorizes the licensee to perform certain activities, which would otherwise have been unlawful. For example, in a patent license, the patentee (licensor) authorizes the licensee to exercise defined rights over the patent. The effect is to give to the licensee a right to do what he/she would otherwise be prohibited from doing, i.e., a license makes lawful what otherwise would be unlawful.

The licensor may also license 'know-how' pertaining to the execution of the licensed patent right such as information, process, or device occurring or utilized in a business activity can also be included along with the patent right in a license agreement. Some examples of know-how are:

- (i)technical information such as formulae, techniques, and operating procedures and
- (ii)commercial information such as customer lists and sales data, marketing, professional and management procedures.

Indeed, any technical, trade, commercial, or other information, may be capable of being the subject of protection.

Benefits to the licensor:

- (i) Opens new markets
- (ii) Creates new areas for revenue generation
- (iii) Helps overcome the challenge of establishing the technology in different markets especially in foreign countries – lower costs and risk and savings on distribution and marketing expenses

Benefits to the licensee are:

- (i) Savings on R&D and elimination of risks associated with R&D
- (ii) Quick exploitation of market requirements before the market interest wanes
- (iii) Ensures that products are the latest

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The Role of Patent Cooperation Treaty

The patent cooperation treaty (PCT) is a multilateral treaty entered into force in 1978. Through PCT, an inventor of a member country contracting state of PCT can simultaneously obtain priority for his/her invention in all or any of the member countries, without having to file a separate application in the countries of interest, by designating them in the PCT application. All activities related to PCT are coordinated by the world intellectual property organization (WIPO) situated in Geneva

In order to protect invention in other countries, it is required to file an independent patent application in each country of interest; in some cases, within a stipulated time to obtain priority in these countries. This would entail a large investment, within a short time, to meet costs towards filing fees, translation, attorney charges, etc. In addition, it is assumed that due to the short time available for making the decision on whether to file a patent application in a country or not, may not be well founded

Inventors of contracting states of PCT on the other hand can simultaneously obtain priority for their inventions without having to file separate application in the countries of interest; thus, saving the initial investments towards filing fees, translation, etc. In addition, the system provides much longer time for filing patent application in the member countries

The time available under Paris convention for securing priority in other countries is 12 months from the date of initial filing. Under the PCT, the time available could be as much as minimum 20 and maximum 31 months. Further, an inventor is also benefited by the search report prepared under the PCT system to be sure that the claimed invention is novel. The inventor could also opt for preliminary examination before filing in other countries to be doubly sure about the patentability of the invention.

Management of Intellectual Property in Pharmaceutical Industries

More than any other technological area, drugs and pharmaceuticals match the description of globalization and need to have a strong IP system most closely. Knowing that the cost of introducing a new drug into the market may cost a company anywhere between $ 300 million to $1000 million along with all the associated risks at the developmental stage, no company will like to risk its IP becoming a public property without adequate returns. Creating, obtaining, protecting, and managing IP must become a corporate activity in the same manner as the raising of resources and funds. The knowledge revolution, which we are sure to witness, will demand a special pedestal for IP and treatment in the overall decision-making process.

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Competition in the global pharmaceutical industry is driven by scientific knowledge rather than manufacturing know-how and a company's success will be largely dependent on its R&D efforts. Therefore, investments in R&D in the drug industry are very high as a percentage of total sales; reports suggest that it could be as much as 15% of the sale. One of the key issues in this industry is the management of innovative risks while one strives to gain a competitive advantage over rival organizations. There is high cost attached to the risk of failure in pharmaceutical R&D with the development of potential medicines that are unable to meet the stringent safety standards, being terminated, sometimes after many years of investment. For those medicines that do clear development hurdles, it takes about 8-10 years from the date when the compound was first synthesized. As product patents emerge as the main tools for protecting IP, the drug companies will have to shift their focus of R&D from development of new processes for producing known drugs towards development of a new drug molecule and new chemical entity (NCE). During the 1980s, after a period of successfully treating many diseases of short-term duration, the R&D focus shifted to long duration (chronic) diseases. While looking for the global market, one has to ensure that requirements different regulatory authorities must be satisfied.

It is understood that the documents to be submitted to regulatory authorities have almost tripled in the last ten years. In addition, regulatory authorities now take much longer to approve a new drug. Consequently, the period of patent protection is reduced, resulting in the need of putting in extra efforts to earn enough profits. The situation may be more severe in the case of drugs developed through the biotechnology route especially those involving utilization of genes. It is likely that the industrialized world would soon start canvassing for longer protection for drugs. It is also possible that many governments would exercise more and more price control to meet public goals. This would on one hand emphasize the need for reduced cost of drug development, production, and marketing, and on the other hand, necessitate planning for lower profit margins so as to recover costs over a longer period. It is thus obvious that the drug industry has to wade through many conflicting requirements. Many different strategies have been evolved during the last 10 to 15 years for cost containment and trade advantage. Some of these are out sourcing of R&D activity, forming R&D partnerships and establishing strategic alliances.[19]

Nature of Pharmaceutical Industry

The race to unlock the secrets of human genome has produced an explosion of scientific knowledge and spurred the development of new technologies that are altering the economics of drug development. Biopharmaceuticals are likely to enjoy a special place and the ultimate goal will be to have personalized medicines, as everyone will have their own genome mapped and stored in a chip.

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Doctors will look at the information in the chip(s) and prescribe accordingly. The important IP issue associated would be the protection of such databases of personal information. Biotechnologically developed drugs will find more and more entry into the market. The protection procedure for such drug will be a little different from those conventional drugs, which are not biotechnologically developed. Microbial strains used for developing a drug or vaccine needs to be specified in the patent document. If the strain is already known and reported in the literature usually consulted by scientists, then the situation is simple. However, many new strains are discovered and developed continuously and these are deposited with International depository authorities under the Budapest Treaty. While doing a novelty search, the databases of these depositories should also be consulted. Companies do not usually go for publishing their work, but it is good to make it a practice not to disclose the invention through publications or seminars until a patent application has been filed.While dealing with microbiological inventions, it is essential to deposit the strain in one of the recognized depositories who would give a registration number to the strain which should be quoted in the patent specification.

This obviates the need of describing a life form on paper. Depositing a strain also costs money, but this is not much if one is not dealing with, for example cell lines. Further, for inventions involving genes, gene expression, DNA, and RNA, the sequences also have to be described in the patent specification as has been seen in the past. The alliances could be for many different objectives such as for sharing R&D expertise and facilities, utilizing marketing networks and sharing production facilities. While entering into an R&D alliance, it is always advisable to enter into a formal agreement covering issues like ownership of IP in different countries, sharing of costs of obtaining and maintaining IP and revenue accruing from it, methods of keeping trade secrets, accounting for IP of each company before the alliance and IP created during the project but not addressed in the plan, dispute settlements. It must be remembered that an alliance would be favorable if the IP portfolio is stronger than that of concerned partner. There could be many other elements of this agreement. Many drug companies will soon use the services of academic institutions, private R&D agencies, R&D institutions under government in India and abroad by way of contract research. All the above aspects mentioned above will be useful. Special attention will have to be paid towards maintaining confidentiality of research. The current state of the pharmaceutical industry indicates that IPR are being unjustifiably strengthened and abused at the expense of competition and consumer welfare.

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The lack of risk and innovation on the part of the drug industry underscores the inequity that is occurring at the expense of public good. It is an unfairness that cannot be cured by legislative reform alone. While congressional efforts to close loopholes in current statutes, along with new legislation to curtail additionally unfavorable business practices of the pharmaceutical industry, may provide some mitigation, antitrust law must appropriately step in. While antitrust laws have appropriately scrutinized certain business practices employed by the pharmaceutical industry, such as mergers and acquisitions and agreements not to compete, there are several other practices that need to be addressed. The grant of patents on minor elements of an old drug, reformulations of old drugs to secure new patents, and the use of advertising and brand name development to increase the barriers for generic market entrants are all areas in which antitrust law can help stabilize the balance between rewarding innovation and preserving competition.

Traditional medicine dealing with natural botanical products is an important part of human health care in many developing countries and also in developed countries, increasing their commercial value. The world market for such medicines has reached US $ 60 billion, with annual growth rates of between 5% and 15%. Although purely traditional knowledge based medicines do not qualify for patent, people often claim so. Researchers or companies may also claim IPR over biological resources and/or traditional knowledge, after slightly modifying them. The fast growth of patent applications related to herbal medicine shows this trend clearly. The patent applications in the field of natural products, traditional herbal medicine and herbal medicinal products are dealt with own IPR policies of each country as food, pharmaceutical and cosmetics purview, whichever appropriate. Medicinal plants and related plant products are important targets of patent claims since they have become of great interest to the global organized herbal drug and cosmetic industries

Some Special Aspects of Drug Patent Specification

Writing patent specification is a highly professional skill, which is acquired over a period of time and needs a good combination of scientific, technological, and legal knowledge. Claims in any patent specification constitute the soul of the patent over which legal proprietary is sought. Discovery of a new property in a known material is not patentable. If one can put the property to a practical use one has made an invention which may be patentable. A discovery that a known substance is able to withstand mechanical shock would not be patentable but a railway sleeper made from the material could well be patented. A substance may not be new but has been found to have a new property. It may be possible to patent it in combination with some other known substances if in combination they exhibit some new result.

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The reason is that no one has earlier used that combination for producing an insecticide or fertilizer or drug. It is quite possible that an inventor has created a new molecule but its precise structure is not known. In such a case, description of the substance along with its properties and the method of producing the same will play an important role.

Combination of known substances into useful products may be a subject matter of a patent if the substances have some working relationship when combined together. In this case, no chemical reaction takes place. It confers only a limited protection. Any use by others of individual parts of the combination is beyond the scope of the patent. For example, a patent on *aqua regia* will not prohibit any one from mixing the two acids in different proportions and obtaining new patents. Methods of treatment for humans and animals are not patentable in most of the countries (one exception is USA) as they are not considered capable of industrial application. In case of new pharmaceutical use of a known substance, one should be careful in writing claims as the claim should not give an impression of a method of treatment. Most of the applications relate to drugs and pharmaceuticals including herbal drugs. A limited number of applications relate to engineering, electronics, and chemicals. About 62% of the applications are related to drugs and pharmaceuticals.

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REPORT ABOUT THE PROGRAMME

Dt: 28-07-2018

Title of the Programme: A Two day FDP on Intellectual Property rights

Inauguration Date & Venue: 26th Jul 2018 & DNRCET Seminar Hall

Organized By: Department of Computer Science Engineering, DNRCET

Resource Person: Dr. S. Suresh Kumar, Asst. Prof & Head ISTE, ACM Information Technology.

Chief Guest: Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 43

Concept:

Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. Intellectual property rights are legal rights that provide creators protection for original works, inventions, or the appearance of products, artistic works, scientific developments, and so on. Basically speaking, intellectual property rights are a common type of legal IP protection for those who invent. In India, there are 7 types of intellectual property rights, namely – copyright, trademarks, patents, geographical indications, plant varieties, industrial designs and semiconductor integrated circuit layout designs.

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A Two day FDP on Intellectual Property rights
26th & 27th jul 2018

Sl. NO	NAME OF THE FACULTY	DEPT	Date 26-07-2018		Date 27-07-2018	
			FN	AN	FN	AN
1	T. Prasanth	CE	Prasanth	Prasanth	Prasanth	Prasanth
2	K.V Subrahmanyam.	CE				
3	Dr. S. Koteswari	ECE	S.Koteswari	S.Koteswari	S.Koteswari	S.Koteswari
4	A. Vamsi Krishna	BSH	A.V.Krishna	A.V.Krishna	A.V.Krishna	A.V.Krishna
5	M. Vijay Daniel	ME	Vijay daniel	vijay daniel	Vijay daniel	vijay daniel
6	Dr. G. G. RATNAM	BSH.	Ratnam	Ratnam	Ratnam	Ratnam
7	P.Narasimha Raju	BSH	P.N.Raju	P.N.Raju	P.N.Raju	P.N.Raju
8	S.Rajesh	EEE	Rajesh	Rajesh	Rajesh	Rajesh
9	K. Surya Satish Kum	ECE				
10	J. Keerthana	CE	Keerthana	Keerthana	Keerthana	Keerthana
11	K.V.S. Sirisha	BSH.	K.V.S.Sirisha	K.V.S Sirisha	K.V.S. Sirisha	K.V.S. Sirisha
12	G. Koteswararao	ECE	G.Koteswararao	G. koteswarao	G.Koteswarao	G.Koteswarao
13	Dr. R. Ramya Sweta	CE				
14	Dr.G. Satyanarayana	CE	G.S.N	G.S.N	G.S.N	G.S.N
15	D.D.P. Varma	BSLH	Varma	Varma	Varma	Varma
16	P. Nageswara	EEE				
17	I. Geetha	ECE	I.Geetha	I.Geetha	I.Geetha	I.Geetha
18	ODD Suribabu	CE	Suribabu	Suribabu	Suribabu	Suribabu
19	MKMV Ratnam	CE	Ratnam	Ratnam	Ratnam	Ratnam
20	M. Thombi babu	ME	M.Thombi	M.Thombi	M.Thombi	M.Thombi
21	Dr. J. Harish	ME				
22	M. Pandu ranga rao	ME				
23	T.S. Chakravarthi	BSLH	Chakravarthi	Chakravarthi	Chakravarthi	Chakravarthi
24	V. Balaji	ECE	V.Balaji	V.Balaji	V.Balaji	V.Balaji
25	K. Venkata Chandram	CE	K.V.Chandram	K.V.Chandram	K.V.Chandram	K.V.Chandram
26	S. Chandra prasad	CSE				
27	M. Lakshmi kumari	CE	M.Lkumari	M.Lkumari	M.Lkumari	M.Lkumari
28	Dr. M. Ashan	ECE				
29	M. Vasantha	BSLH	Vasantha	Vasantha	Vasantha	Vasantha
30	Dr. M. Aryan Kumar.	CE	M.Aryan	M.Aryan	M.Aryan	M.Aryan
31	S. Lakshmana Rao	CSE	S.Rao	S.Rao	S.Rao	S.Rao
32	G. Suribabu	ECE				
33	Navya Leena. N.	ECE	Navyaleena	Navyaleena	Navyaleena	Navyaleena
34	E. Rama Lakshmi	CE	Ramalakshmi	Ramalakshmi	Ramalakshmi	Ramalakshmi
35	TVS Suresh	BSLH	Suresh	Suresh	Suresh	Suresh
36	B. Celeste	ME				
37	Dr. B. Bhanuprakash	ME				

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38	P. Anjaneyulu	CE	PAnjalu	PAnjalu	PAnjalu	P.Anjal
39	V.Praveen	BSH	Praveen	Praveen	Praveen	Praveen
40	P. Jayalakshmi	BSH	Jayalakshmi	jayalakshmi	jayalakshmi	jayalakshmi
41	N.S.V.L SOWJANYA	ECE	Sowjanya	N.S.V.L Sowjanya	N.S.V.L Sowjanya	N.S.V.L. Sowjanya
42	B. Sridevi	ECE	B.Sri.	B.Sri.	B.Sri.	B.Sri.
43	M. Venkata Krisha	CE	M.VKrish	M.VKrish	M.VKrish	M.Vkr

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PROFILE

Dr. Sanampudi Suresh Kumar
B.E (CSE), M.Tech(CSE), Ph.D(CSE)
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ISTE, ACM
Information Technology

Areas of Interest:

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Machine Learning
Deep Learning
Information Extraction
Data Analytics

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1. Ph.D in Computer Science Engineering, J.N.T.U.H (2006-2010)
2. M.Tech in Computer Science Engineering, SASTRA University with First Class With Distinction (2003-2005)
3. B.E in Computer Science Engineering, Bharathidasan Univ

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1. Training and placement officer , JNTUHCEJ, 2021 - Present

2. HOD , JNTUH College o Engineering Jagtial, 2016 - Present

3. Computer maintenance Officer , J.N.T.U.H.C.E.J, 2015 - 2017

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Title: Interllectual Property Right

Intellectual property rights (IPR) have been defined as ideas, inventions, and creative expressions based on which there is a public willingness to bestow the status of property. IPR provide certain exclusive rights to the inventors or creators of that property, in order to enable them to reap commercial benefits from their creative efforts or reputation. There are several types of intellectual property protection like patent, copyright, trademark, etc. Patent is a recognition for an invention, which satisfies the criteria of global novelty, non-obviousness, and industrial application. IPR is prerequisite for better identification, planning, commercialization, rendering, and thereby protection of invention or creativity. Each industry should evolve its own IPR policies, management style, strategies, and so on depending on its area of specialty. Pharmaceutical industry currently has an evolving IPR strategy requiring a better focus and approach in the coming era.

Intellectual property (IP) pertains to any original creation of the human intellect such as artistic, literary, technical, or scientific creation. Intellectual property rights (IPR) refers to the legal rights given to the inventor or creator to protect his invention or creation for a certain period of time.These legal rights confer an exclusive right to the inventor/creator or his assignee to fully utilize his invention/creation for a given period of time. It is very well settled that IP play a vital role in the modern economy. It has also been conclusively established that the intellectual labor associated with the innovation should be given due importance so that public good emanates from it. There has been a quantum jump in research and development (R&D) costs with an associated jump in investments required for putting a new technology in the market place.

The stakes of the developers of technology have become very high, and hence, the need to protect the knowledge from unlawful use has become expedient, at least for a period, that would ensure recovery of the R&D and other associated costs and adequate profits for continuous investments in R&D.[3] IPR is a strong tool, to protect investments, time, money, effort invested by the inventor/creator of an IP, since it grants the inventor/creator an exclusive right for a certain period of time for use of his invention/creation. Thus IPR, in this way aids the economic development of a country by promoting healthy competition and encouraging industrial development and economic growth. Present review furnishes a brief overview of IPR with special emphasis on pharmaceuticals.

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The laws and administrative procedures relating to IPR have their roots in Europe. The trend of granting patents started in the fourteenth century. In comparison to other European countries, in some matters England was technologically advanced and used to attract artisans from elsewhere, on special terms. The first known copyrights appeared in Italy. Venice can be considered the cradle of IP system as most legal thinking in this area was done here; laws and systems were made here for the first time in the world, and other countries followed in due course. Patent act in India is more than 150 years old. The inaugural one is the 1856 Act, which is based on the British patent system and it has provided the patent term of 14 years followed by numerous acts and amendments.

- it provides a mechanism of handling infringement, piracy, and unauthorized use
- it provides a pool of information to the general public since all forms of IP are published except in case of trade secrets.

IP protection can be sought for a variety of intellectual efforts including

(i) Patents

(ii) Industrial designs relates to features of any shape, configuration, surface pattern, composition of lines and colors applied to an article whether 2-D, e.g., textile, or 3-D, e.g., toothbrush

(iii) Trademarks relate to any mark, name, or logo under which trade is conducted for any product or service and by which the manufacturer or the service provider is identified. Trademarks can be bought, sold, and licensed. Trademark has no existence apart from the goodwill of the product or service it symbolizes

(iv) Copyright relates to expression of ideas in material form and includes literary, musical, dramatic, artistic, cinematography work, audio tapes, and computer software

(v) Geographical indications are indications, which identify as good as originating in the territory of a country or a region or locality in that territory where a given quality, reputation, or other characteristic of the goods is essentially attributable to its geographical origin

A patent is awarded for an invention, which satisfies the criteria of global novelty, non-obviousness, and industrial or commercial application. Patents can be granted for products and processes. As per the Indian Patent Act 1970, the term of a patent was 14 years from the date of filing except for processes for preparing drugs and food items for which the term was 7 years from the date of the filing or 5 years from the date of the patent, whichever is earlier. No product patents were granted for drugs and food items.

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A copyright generated in a member country of the Berne Convention is automatically protected in all the member countries, without any need for registration. India is a signatory to the Berne Convention and has a very good copyright legislation comparable to that of any country. However, the copyright will not be automatically available in countries that are not the members of the Berne Convention. Therefore, copyright may not be considered a territorial right in the strict sense. Like any other property IPR can be transferred, sold, or gifted

Role of Undisclosed Information in Intellectual Property

Protection of undisclosed information is least known to players of IPR and also least talked about, although it is perhaps the most important form of protection for industries, R&D institutions and other agencies dealing with IPR. Undisclosed information, generally known as trade secret or confidential information, includes formula, pattern, compilation, programme, device, method, technique, or process. Protection of undisclosed information or trade secret is not really new to humanity; at every stage of development people have evolved methods to keep important information secret, commonly by restricting the knowledge to their family members. Laws relating to all forms of IPR are at different stages of implementation in India, but there is no separate and exclusive law for protecting undisclosed information/trade secret or confidential informationPressures of globalisation or internationalisation were not intense during 1950s to 1980s, and many countries, including India, were able to manage without practising a strong system of IPR. Globalization driven by chemical, pharmaceutical, electronic, and IT industries has resulted into large investment in R&D. This process is characterized by shortening of product cycle, time and high risk of reverse engineering by competitors. Industries came to realize that trade secrets were not adequate to guard a technology. It was difficult to reap the benefits of innovations unless uniform laws and rules of patents, trademarks, copyright, etc. existed. That is how IPR became an important constituent of the World Trade Organization (WTO).

Rationale of Patent

Patent is recognition to the form of IP manifested in invention. Patents are granted for patentable inventions, which satisfy the requirements of *novelty* and *utility* under the stringent

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examination and opposition procedures prescribed in the Indian Patents Act, 1970, but there is not even a *prima-facie* presumption as to the validity of the patent granted.

Most countries have established national regimes to provide protection to the IPR within its jurisdiction. Except in the case of copyrights, the protection granted to the inventor/creator in a country (such as India) or a region (such as European Union) is restricted to that territory where protection is sought and is not valid in other countries or regionsFor example, a patent granted in India is valid only for India and not in the USA. The basic reason for patenting an invention is to make money through exclusivity, i.e., the inventor or his assignee would have a monopoly if,

- the inventor has made an important invention after taking into account the modifications that the customer, and
- if the patent agent has described and claimed the invention correctly in the patent specification drafted, then the resultant patent would give the patent owner an exclusive market.

The patentee can exercise his exclusivity either by marketing the patented invention himself or by licensing it to a third party.

The following would not qualify as patents:

- An invention, which is frivolous or which claims anything obvious or contrary to the well established natural law. An invention, the primary or intended use of which would be contrary to law or morality or injurious to public health
- (ii) A discovery, scientific theory, or mathematical method
- (iii) A mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine, or apparatus unless such known process results in a new product or employs at least one new reactant
- (iv) A substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance
- (v) A mere arrangement or re-arrangement or duplication of a known device each functioning independently of one another in its own way
- (vi) A method of agriculture or horticulture
- (vii) Any process for the medicinal, surgical, curative, prophylactic diagnostic, therapeutic or other treatment of human beings or any process for a similar treatment of animals to render them free of disease or to increase their economic value or that of their products

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- (viii) An invention relating to atomic energy
- (ix) An invention, which is in effect, is traditional knowledge

Rationale of License

A license is a contract by which the licensor authorizes the licensee to perform certain activities, which would otherwise have been unlawful. For example, in a patent license, the patentee (licensor) authorizes the licensee to exercise defined rights over the patent. The effect is to give to the licensee a right to do what he/she would otherwise be prohibited from doing, i.e., a license makes lawful what otherwise would be unlawful.

The licensor may also license 'know-how' pertaining to the execution of the licensed patent right such as information, process, or device occurring or utilized in a business activity can also be included along with the patent right in a license agreement. Some examples of know-how are:

- (i)technical information such as formulae, techniques, and operating procedures and
- (ii)commercial information such as customer lists and sales data, marketing, professional and management procedures.

Indeed, any technical, trade, commercial, or other information, may be capable of being the subject of protection.

Benefits to the licensor:

- (i) Opens new markets
- (ii) Creates new areas for revenue generation
- (iii) Helps overcome the challenge of establishing the technology in different markets especially in foreign countries – lower costs and risk and savings on distribution and marketing expenses

Benefits to the licensee are:

- (i) Savings on R&D and elimination of risks associated with R&D
- (ii) Quick exploitation of market requirements before the market interest wanes
- (iii) Ensures that products are the latest

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The Role of Patent Cooperation Treaty

The patent cooperation treaty (PCT) is a multilateral treaty entered into force in 1978. Through PCT, an inventor of a member country contracting state of PCT can simultaneously obtain priority for his/her invention in all or any of the member countries, without having to file a separate application in the countries of interest, by designating them in the PCT application. All activities related to PCT are coordinated by the world intellectual property organization (WIPO) situated in Geneva

In order to protect invention in other countries, it is required to file an independent patent application in each country of interest; in some cases, within a stipulated time to obtain priority in these countries. This would entail a large investment, within a short time, to meet costs towards filing fees, translation, attorney charges, etc. In addition, it is assumed that due to the short time available for making the decision on whether to file a patent application in a country or not, may not be well founded

Inventors of contracting states of PCT on the other hand can simultaneously obtain priority for their inventions without having to file separate application in the countries of interest; thus, saving the initial investments towards filing fees, translation, etc. In addition, the system provides much longer time for filing patent application in the member countries

The time available under Paris convention for securing priority in other countries is 12 months from the date of initial filing. Under the PCT, the time available could be as much as minimum 20 and maximum 31 months. Further, an inventor is also benefited by the search report prepared under the PCT system to be sure that the claimed invention is novel. The inventor could also opt for preliminary examination before filing in other countries to be doubly sure about the patentability of the invention.

Management of Intellectual Property in Pharmaceutical Industries

More than any other technological area, drugs and pharmaceuticals match the description of globalization and need to have a strong IP system most closely. Knowing that the cost of introducing a new drug into the market may cost a company anywhere between $ 300 million to $1000 million along with all the associated risks at the developmental stage, no company will like to risk its IP becoming a public property without adequate returns. Creating, obtaining, protecting, and managing IP must become a corporate activity in the same manner as the raising of resources and funds. The knowledge revolution, which we are sure to witness, will demand a special pedestal for IP and treatment in the overall decision-making process.

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Competition in the global pharmaceutical industry is driven by scientific knowledge rather than manufacturing know-how and a company's success will be largely dependent on its R&D efforts. Therefore, investments in R&D in the drug industry are very high as a percentage of total sales; reports suggest that it could be as much as 15% of the sale. One of the key issues in this industry is the management of innovative risks while one strives to gain a competitive advantage over rival organizations. There is high cost attached to the risk of failure in pharmaceutical R&D with the development of potential medicines that are unable to meet the stringent safety standards, being terminated, sometimes after many years of investment. For those medicines that do clear development hurdles, it takes about 8-10 years from the date when the compound was first synthesized. As product patents emerge as the main tools for protecting IP, the drug companies will have to shift their focus of R&D from development of new processes for producing known drugs towards development of a new drug molecule and new chemical entity (NCE). During the 1980s, after a period of successfully treating many diseases of short-term duration, the R&D focus shifted to long duration (chronic) diseases. While looking for the global market, one has to ensure that requirements different regulatory authorities must be satisfied.

It is understood that the documents to be submitted to regulatory authorities have almost tripled in the last ten years. In addition, regulatory authorities now take much longer to approve a new drug. Consequently, the period of patent protection is reduced, resulting in the need of putting in extra efforts to earn enough profits. The situation may be more severe in the case of drugs developed through the biotechnology route especially those involving utilization of genes. It is likely that the industrialized world would soon start canvassing for longer protection for drugs. It is also possible that many governments would exercise more and more price control to meet public goals. This would on one hand emphasize the need for reduced cost of drug development, production, and marketing, and on the other hand, necessitate planning for lower profit margins so as to recover costs over a longer period. It is thus obvious that the drug industry has to wade through many conflicting requirements. Many different strategies have been evolved during the last 10 to 15 years for cost containment and trade advantage. Some of these are out sourcing of R&D activity, forming R&D partnerships and establishing strategic alliances.[19]

Nature of Pharmaceutical Industry

The race to unlock the secrets of human genome has produced an explosion of scientific knowledge and spurred the development of new technologies that are altering the economics of drug development. Biopharmaceuticals are likely to enjoy a special place and the ultimate goal will be to have personalized medicines, as everyone will have their own genome mapped and stored in a chip.

Doctors will look at the information in the chip(s) and prescribe accordingly. The important IP issue associated would be the protection of such databases of personal information. Biotechnologically developed drugs will find more and more entry into the market. The protection procedure for such drug will be a little different from those conventional drugs, which are not biotechnologically developed. Microbial strains used for developing a drug or vaccine needs to be specified in the patent document. If the strain is already known and reported in the literature usually consulted by scientists, then the situation is simple. However, many new strains are discovered and developed continuously and these are deposited with International depository authorities under the Budapest Treaty. While doing a novelty search, the databases of these depositories should also be consulted. Companies do not usually go for publishing their work, but it is good to make it a practice not to disclose the invention through publications or seminars until a patent application has been filed.While dealing with microbiological inventions, it is essential to deposit the strain in one of the recognized depositories who would give a registration number to the strain which should be quoted in the patent specification.

This obviates the need of describing a life form on paper. Depositing a strain also costs money, but this is not much if one is not dealing with, for example cell lines. Further, for inventions involving genes, gene expression, DNA, and RNA, the sequences also have to be described in the patent specification as has been seen in the past. The alliances could be for many different objectives such as for sharing R&D expertise and facilities, utilizing marketing networks and sharing production facilities. While entering into an R&D alliance, it is always advisable to enter into a formal agreement covering issues like ownership of IP in different countries, sharing of costs of obtaining and maintaining IP and revenue accruing from it, methods of keeping trade secrets, accounting for IP of each company before the alliance and IP created during the project but not addressed in the plan, dispute settlements. It must be remembered that an alliance would be favorable if the IP portfolio is stronger than that of concerned partner. There could be many other elements of this agreement. Many drug companies will soon use the services of academic institutions, private R&D agencies, R&D institutions under government in India and abroad by way of contract research. All the above aspects mentioned above will be useful. Special attention will have to be paid towards maintaining confidentiality of research. The current state of the pharmaceutical industry indicates that IPR are being unjustifiably strengthened and abused at the expense of competition and consumer welfare.

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The lack of risk and innovation on the part of the drug industry underscores the inequity that is occurring at the expense of public good. It is an unfairness that cannot be cured by legislative reform alone. While congressional efforts to close loopholes in current statutes, along with new legislation to curtail additionally unfavorable business practices of the pharmaceutical industry, may provide some mitigation, antitrust law must appropriately step in. While antitrust laws have appropriately scrutinized certain business practices employed by the pharmaceutical industry, such as mergers and acquisitions and agreements not to compete, there are several other practices that need to be addressed. The grant of patents on minor elements of an old drug, reformulations of old drugs to secure new patents, and the use of advertising and brand name development to increase the barriers for generic market entrants are all areas in which antitrust law can help stabilize the balance between rewarding innovation and preserving competition.

Traditional medicine dealing with natural botanical products is an important part of human health care in many developing countries and also in developed countries, increasing their commercial value. The world market for such medicines has reached US $ 60 billion, with annual growth rates of between 5% and 15%. Although purely traditional knowledge based medicines do not qualify for patent, people often claim so. Researchers or companies may also claim IPR over biological resources and/or traditional knowledge, after slightly modifying them. The fast growth of patent applications related to herbal medicine shows this trend clearly. The patent applications in the field of natural products, traditional herbal medicine and herbal medicinal products are dealt with own IPR policies of each country as food, pharmaceutical and cosmetics purview, whichever appropriate. Medicinal plants and related plant products are important targets of patent claims since they have become of great interest to the global organized herbal drug and cosmetic industries

Some Special Aspects of Drug Patent Specification

Writing patent specification is a highly professional skill, which is acquired over a period of time and needs a good combination of scientific, technological, and legal knowledge. Claims in any patent specification constitute the soul of the patent over which legal proprietary is sought. Discovery of a new property in a known material is not patentable. If one can put the property to a practical use one has made an invention which may be patentable. A discovery that a known substance is able to withstand mechanical shock would not be patentable but a railway sleeper made from the material could well be patented. A substance may not be new but has been found to have a new property. It may be possible to patent it in combination with some other known substances if in combination they exhibit some new result.

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The reason is that no one has earlier used that combination for producing an insecticide or fertilizer or drug. It is quite possible that an inventor has created a new molecule but its precise structure is not known. In such a case, description of the substance along with its properties and the method of producing the same will play an important role.

Combination of known substances into useful products may be a subject matter of a patent if the substances have some working relationship when combined together. In this case, no chemical reaction takes place. It confers only a limited protection. Any use by others of individual parts of the combination is beyond the scope of the patent. For example, a patent on *aqua regia* will not prohibit any one from mixing the two acids in different proportions and obtaining new patents. Methods of treatment for humans and animals are not patentable in most of the countries (one exception is USA) as they are not considered capable of industrial application. In case of new pharmaceutical use of a known substance, one should be careful in writing claims as the claim should not give an impression of a method of treatment. Most of the applications relate to drugs and pharmaceuticals including herbal drugs. A limited number of applications relate to engineering, electronics, and chemicals. About 62% of the applications are related to drugs and pharmaceuticals.

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Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

REPORT ABOUT THE PROGRAMME

Dt: 21-08-2018

Title of the Programme: Guest Lecture on Awareness on Intellectual Property Rights

Inauguration Date & Venue: 20th Aug 2018 & DNRCET Seminar Hall

Organized By: Department of Electronics & Communication Engineering, DNRCET

Resource Person: Dr. Y. Surya Chandra Rao, Advocate, Visakhapatnam.

Chief Guest: Sri G. Satyanarayana Raju (Babu)
Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju
Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 60

Concept:

Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. Intellectual property rights are legal rights that provide creators protection for original works, inventions, or the appearance of products, artistic works, scientific developments, and so on. Basically speaking, intellectual property rights are a common type of legal IP protection for those who invent. In India, there are 7 types of intellectual property rights, namely – copyright, trademarks, patents, geographical indications, plant varieties, industrial designs and semiconductor integrated circuit layout designs.

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WORKSHOP ON INTELLECTUAL PROPERTY RIGHTS (IPR)

SNO	NAME	DATE & SIGN 20.08.2018.
1	Dr.B.V.S.VARMA	
2	Dr.A.RAMA MURTHY	
3	Dr. G SATYANARAYANA	
4	Dr. P SAMBA SIVA RAO	
5	K.SURYA RAM PRASAD	
6	B.V RAM KUMAR	
7	B.NANDANA KUMAR	
8	G SUNIL PREM KUMAR	
9	G.V.SATYA SRI RAM	
10	S.LAKSHMAN RAO	
11	N.BHARATHI	
12	P. LALITHA RAJESWARI	P. Lalitha
13	B .JYOTHI PRIYANKA	
14	M.MOUNICA DEVI	
15	V NAVYA DEVI	
16	L BUJJI BABU	
17	K S H PRASANNA KUMAR	
18	K SIVA SYAMALA	K.S.Syamala
19	E RAMA LAKSHMI	
20	V LAKSHMI	V. Lakshmi
21	KORADA KALYANI	K. Kalyani
22	M.PRABHAVATHI	
23	K.SPANDANA	
24	K SARATH CHANDRA	
25	M NAGA LAKSHMI	

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26	CH SAI SIVA DURGA	Ch. Sai Siva Durga
27	U SUSHMITHA	U. Sushmanth
28	M S N Srikanth	M.S.N. Srikanth.
29	K.VENKATA CHANDRAN	K. Venkata chandran
30	PRAVEEN PRAKASH	P. Prakash.
31	BALAM SANTOSH KUMAR	B. Santhosh kumar
32	BANDARU JYOTHI	B. Jyothi
33	BODDUPALLI SURYA TEJA	B. Surya teja.
34	BORRA GAYATHRI DEVI	B. Gayathri Devi
35	BORRA PURNA CHANDU	B. Chandu.
36	BORRA VENKATESWARAMMA	B. Venkateswaramma.
37	CHALLA PRASANTHI	C. Prasanthi
38	KALIPATNAPU GOWTHAM	K. Gowtham
39	KANDIBOYINA AKHIL	K. Akhil
40	KANDULA SRI NAGA BHARGAVA PRIYA	K. Sri naga bhargava priya.
41	KANUMURI MAHESH VARMA	K. H. Varma.
42	KETHA BHUVANA SAI PAVAN	K. B S. Pavan.
43	KIMIDI THERESA	K. Theresa.
44	KOLLA PAVANI	K. Pavani.
45	KOLLA PAVANI	K. Pavani
46	DANIKONDA DEVI VARA PRASAD	D. D.V. Prasad.
47	DASARI MAHI MANVITHA	D. Mahi manvitha
48	DATLA JHANSI LAKSHMI	D.T. Lakshmi.
49	DULAM MADHURI DEVI	D. Madhuri Devi
50	DUVVI NARASAVENI	D. Narasaveni.
51	GADIRAJU VASAVI	G. Vasavi
52	GANDHAM SRI VANI	G. S Vani
53	GOKARAJU GOWRI MANASA	G. gowri manasa.
54	GUBBALA SUDHEER	G. Sudheer.

M. Ajaykumar

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55	GUDURI HEMA MALINI DEVI	G. Hema Malini devi.
56	GUDURI MANIKANTA	G. Manikanta
57	IMANDI ANJAN KUMAR	I. A. kumar.
58	INDUGA VARUN	I. Varun.
59	INDUKURI GEETHA PAVITHRA	I. Geetha Pavithra
60	JAMPANA BHAVYA	J. Bhavya.

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PERSONAL PROFILE

Suryachandra Rao y

Advocate

Visakhapatnam

Suryachandra Rao y listed under CA in Visakhapatnam. Check Address, Contact Number, Ratings & Reviews, Photos, Maps etc, on Justdial.

CA helps in the methodical management of taxation and financial matters.

They are expert financial professionals who take care of the budgeting, auditing, taxing and business strategies for their clients. By taking care of the financial matters of a business, they help them scale great heights.

If you are looking for a good Charted Accountant who can handle your business's finance and tax matters, then reach out to Suryachandra Rao y in , Visakhapatnam. With them taking care of the financial aspect of your business, you can focus on the other areas with ease.

Location and overview

Suryachandra Rao y in Visakhapatnam is a reliable name in the industry as they aim to deliver the best experience to their customers. This has helped them build up a loyal customer base.

They started their journey in and ever since, they have ensured that the customer remains at the centre of their business operations and philosophy.

As they are located in a favourable neighbourhood, exactly at 49-27-4/1, Md Nagar, Md Nagar-530016.

It is easy to locate Suryachandra Rao y on the map. For any kind of assistance or questions, it is best to contact them directly during their business hours.

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Intellectual Property Rights (IPR)

Intellectual Property Rights (IPR) are an essential but often overlooked set of rights. The creative rights over an original piece of work, invention or even an idea behind a business can come under the purview of Intellectual Property Rights. With the emergence of the digital age,instances of pla Characteristics and Nature Of Intellectual Property Rights | Overview Intangible property Rights & Duties Creation of Statute Territoriality Assignable Dynamism Subject to public policy Subject matter of IPR Protection Different rights' co-existence Exhaustion of rights Exclusive Rights of the Owner Characteristics and Nature Of Intellectual Property Rights |Overview Intangible property Rights & Duties Creation of Statute Territoriality Assignable Dynamism Subject to public policy Subject matter of IPR Protection Different rights' co- existence Exhaustion of rights Exclusive Rights of the Owner Controller an invention pertains to a subject matter relevant for the purpose of defence as notified by the Central Government, the Controller issues a secrecy direction prohibiting the publication of the application to the applicant and refers the matter to the Central Government for their consideration as to whether the application is prejudicial to the defence of India. 2. The Central Government, after considering the merits of the secrecy direction, may give notice to the Controller as to whether the secrecy direction needs to be continued or not. 3.

The Central Government reviews the matter at an interval of six months. The applicant may request for a reconsideration of the secrecy direction and if the same is found reasonable by the Controller, he may request the Central Government for a review. 4. If the Central Government is of the opinion that an invention in respect of which the Controller has not imposed a secrecy direction and is relevant for defence purposes, it may at any time before the grant of the patent notify the Controller to that effect. Thereupon, the Controller invokes the provisions of Section 35(1).

5. So long as any directions under Section 35 are in force, the Controller shall not take a decision on grant/refusal of the application. [Section 35, 36, 37, 38] Publication of Application Section 11A(1) provides that no application for patents shall ordinarily be open to public for such period as may be prescribed. Sub-section (2) entitles an applicant to request the Controller, in the prescribed manner, to publish his application at any time before the expiry of the period prescribed under sub-section (1) and subject to the provisions of sub-section (3). The Controller on receipt of such request shall publish such application in the Official Journal as soon as possible.

Every application for patent shall be published on expiry of the period specified in sub-section (1) except those applications in which secrecy direction is imposed under Section 35; or application has been abandoned under section 9(1); or application has been withdrawn three months prior to the period specified under sub-section (1). Rule 24 dealing with procedure for publication of application provides that the period for which an application for patent shall not ordinarily be open to public under Section 11A(1) shall be eighteen months from the date of filing of application or the date of priority of the application, whichever is earlier. A request for publication under Section 11A (2) is required to be made in Form 9. The publication of every application shall include the particulars of the date of application, number of application, name and address of the applicant identifying the application and an abstract. Upon publication of an application for a patent, the depository institution shall make the biological material mentioned in the specification available to the public. The patent office may, on payment of prescribed fee make the specification and drawings, if any, of such application available to the public. Section

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11A(7) provides that on or from the date of publication of the application for patent and until the date of grant of a patent in respect of such application, the applicant shall have the like privileges and rights as if a patent for invention had been granted on the date of publication of application. However, the applicant shall have no right to institute any proceedings for infringement until the patent has been granted.

Additionally, the rights of a patentee in respect of applications made under Section 5(2) before January 1, 2005 shall accrue from the date of grant of patent. Moreover, after the patent is granted in respect of applications made under Section 5(2), the patent holder shall only be entitled to receive reasonable royalty from such enterprises which have made significant investment and were producing and marketing concerned product prior to January 1, 2005 and which continue to manufacture the product covered by the patent on the date of grant of the patent and no infringement proceedings shall be instituted against such enterprises. Lesson 2 Patents 55 Request for Examination 1. As per Section 11B an application for a Patent will not be examined unless the applicant or any other person interested makes a request for examination in the prescribed manner. The request is to be filed in Form-18 with the fee as prescribed in First Schedule. 2.

A request for examination has to be made within forty eight months from the date of priority of the application or from the date of filing of the application, whichever is earlier. If no such request for examination is filed within the prescribed time limit, the application shall be treated as withdrawn by the applicant. 3. In a case where secrecy direction has been issued under Section 35, the request for examination may be made within six months from the date of revocation of the secrecy direction, or within forty-eight months from the date of filing or priority, which ever is later. 4. The Office will not examine an application unless it is published and a request for examination is filed. 5. When a request for examination is filed by a person interested other than the applicant, the Examination Report is sent to the applicant only, and intimation is given to the person interested. [Section 11B & 35. Rule 24B] Reference for Examination 1. Once a request for examination is received, and the application is published under Section 11A, the application is taken up for Examination in the chronological order of filing of request forexamination.

2. The patent application is referred to an Examiner by the Controller for conducting the formal as well as substantive examination as per the subject matter of the invention vis-à-vis the area of specialization of the Examiner. At present, the Patent Office has four examination groups based on the broad area of specialization viz.: (a) Chemistry and allied subjects. (b) Biotechnology, Microbiology and allied subjects. (c) Electrical, Electronics & related subject (d) Mechanical and other subjects. The reference to the Examiner is made ordinarily within one month from the date of publication or one month from the date of request for examination,whichever is later, and is made in order in which the request is filed. 3.

When an application is referred by the Controller, the Examiner makes a report on the patentabilility as well as other matters ordinarily within one month but not exceeding three months from the date of such reference. [Section 11A, & 12.Rule 24B (2)(i)] Examination of Application Section 12 dealing with examination of application provides that when the request for examination has been filed in respect of an application for a patent in the prescribed manner under Section 11B(1) or (3), the application and specification and other documents related thereto shall be referred at the earliest by the Controller to an examiner for making a report to him in respect of the following matters, namely: (a) whether the application and the specification and other documents relating thereto are in accordance with the requirements of the Act and of any rules made thereunder; 56 PP-IPRL&P (b) whether there is any lawful ground of objection to the grant of the patent in pursuance of the application; (c) the result of investigations made under Section

15, and (d) any other matter which may be prescribed. The examiner to whom the application and the specification and other documents relating thereto are referred shall ordinarily make the report to the Controller within the prescribed period. Search for Anticipation by Previous Publication and by Prior Claim Section 13

dealing with search for anticipation by previous publication and by prior claim provides that the examiner to whom the application for a patent is referred shall make investigation for the purpose of ascertaining whether the invention so far as claimed in any claim of the complete specification: (a) has been anticipated by publication before the date of filing of the applicant's complete specification in any specification filed in pursuance of an application for a patent made in India and dated on or after the 1st day of January,

1912; (b) is claimed in any claim of any other complete specification published on or after the date of filing of the applicant's complete specification, being a specification filed in pursuance of an application for a patent made in India and dated before or claiming the priority date earlier than that date. The examiner shall, in addition, make such investigation for the purpose of ascertaining whether the invention so far as claimed in any claim of the complete specification has been anticipated by publication in India or elsewhere in any document other than those mentioned in Section 13(1) before the date of filing of the applicant's complete specification. In case a complete specification has been amended before the grant of a patent, the amended specification shall be examined and investigated in the like manner as the original specification. Consideration of the Report of Examiner by Controller Section 14

provides that in case the report of the examiner is adverse to the applicant or requires any amendment of the application, specification or other documents, the controller shall, before proceeding to dispose of the application, communicate the gist of obligations to the applicant as expeditiously as possible and give him an opportunity of being heard. Power of Controller to Refuse or Require Amended Application in Certain matters Section 15 empowers the Controller to refuse the application or direct to amend the application, specification or other documents, if he is satisfied that the application or any specification or any other document filed in pursuance thereof does not comply with the provisions of the Act and the rules made thereunder.

Power of Controller to make Orders Respecting Dating of Application and Cases of Anticipation Section 17 provides that at any time after the filing of an application and before the grant of the patent, the Controller may at the request of the applicant direct that the application shall be post-dated to such date as may be specified in the request and proceed with the application accordingly. However, no application shall be post-dated to a date later than six months from the date on which it was actually made or would be deemed to have been made. This is subject to the provisions of Section 9 of the Act dealing with provisional and complete specifications. Lesson 2 Patents 57 Where an application or specification (including drawings) or any other document is required to be amended under Section 15, the application or specification or other document shall, if the Controller so directs, be deemed to have been made on the date on which the requirement is complied with or where the application or specification or other document is returned to the applicant, the

date on which it is refiled after complying with the requirement. Section 18 says that where it appears to the Controller that the invention so far as claimed in any claim of the complete specification has been anticipated, he may refuse the application unless the applicant: (a) shows to the satisfaction of the Controller that the priority date of the claim of his complete specification is not later than the date on which the relevant document was published; or (b) amends his complete specification to the satisfaction of the Controller. If it appears to the Controller that the invention is claimed in a claim of any other complete specification, he may, direct that a reference to that other specification be inserted in the applicant's complete specification unless the applicant shows to the satisfaction of the Controller that the priority date of his claim is not later than the priority date of the claim of the said other specification; or the complete specification has been amended to his satisfaction. The above-mentioned provisions also apply in the case where it appears to the Controller that the invention so far claimed in any claim of the applicant's complete specification has been claimed in other complete specification referred to in section

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13(1)(a) and that such other complete specification was published on or before the priority date of the applicant's claim. The Controller of Patents is not technically a Court, or a tribunal exercising judicial functions in the legal acceptation of the terms, but that does not make it untrue to say that, so far as he has a duty imposed upon him to hear and determine objections to applications for leave to amend, there is a fair analogy between his position and the position of a Court. [In re: National Carbon Co. Incorporated AIR 1934 Cal. 725]. Potential infringement Section 19 provides that if in consequence of the investigations it appears to the Controller that an invention in respect of which an application for a patent has been made cannot be performed without substantial risk of infringement of a claim of any other patent, he may direct that a reference to that other patent, be inserted in the applicant's complete specification by way of notice to the public within

such time as may be prescribed, unless: (a) the applicant shows to the satisfaction of the Controller that there are reasonable grounds for contesting the validity of the said claim of the other patent; or (b) the complete specification is amended to the satisfaction of the Controller. Where after a reference to another patent has been inserted in a complete specification in pursuance of a direction under Section 19(1): (a) that other patent is revoked or otherwise ceases to be in force; or (b) the specification of that other patent is amended by the deletion of the relevant claim; or (c) it is found, in proceedings before the court or the Controller, that the relevant claim of that other patent is invalid or is not infringed by any working of the applicant's invention, the Controllermay, on the application of the applicant delete the reference to that other patent.

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REPORT ABOUT THE PROGRAMME

Dt: 04-09-2018

Title of the Programme: One day Workshop on Opportunities in Clean Energy Innovation

Inauguration Date & Venue: 3rd Sep 2018 & DNRCET Seminar Hall

Organized By: Department of Civil Engineering, DNRCET

Resource Person: Dr. M. C S Madan, Professor in Civil, BVCITS, Amalapuram.

Chief Guest: Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 38

Concept:

Opportunities in clean energy innovation is central to addressing global climate change while increasing economic growth, boosting international competitiveness, and eliminating energy poverty. ITIF's Center for Clean Energy Innovation seeks to accelerate the transition of the domestic and global energy systems to low-carbon resources.

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One day Workshops on Opportunities in Clean Energy Innovation
3 rd sep 2018

Sl. NO	NAME OF THE FACULTY	DEPARTMENT	Date 03/09/2018	
			FN	AN
1	S. Rajesh	EEE		
2	L. Bujji Babu	CSE		
3	Masoda Vijayadaniel	ME		
4	T. S. Chakravarthy	CSE BSH		
5	Dr. A. Ranganatham	CE		
6	K. V. Chandran	CSE		
7	Guvvala Sai Baba	EEE		
8	E. Rama Lakshmi	CSE		
9	K. V. S. Sireesha	BSH		
10	V. Bhavani Durga	ECE		
11	Burra SHALEM	ME		
12	K. V. S. Satyanarayana	BSH		
13	Dr. Satyanarayana	CSE		
14	V. Nandhan Kumar	CSE		
15	Y. Srinivas	ECE		
16	MR MV Ratnam	CE		
17	MOSHE. A	BSH		
18	B. Sridevi	ECE		
19	Gali Suri Babu	EC		
20	P. Jaya Lakshmi	BSH		
21	Mrs. V. Sushmita	CSE		
22	N. Bharathi	CSE		
23	M. Venkata Krishna	CE		
24	A. Vamsi Krishna	BSH		
25	P. Lalitha Rajeswari	CSE		

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26	KODELLI POSTMANI	ECE		
27	M. SRINU	EEE		
28	Dr V. S. Varma	CSE	Varm	Varm
29	Dr. A. padmanabhan	BSH		
30	I Geetha	ECE		
31	Ch. Koteswara Rao	ECE		
32	K. Raja Rajeswari	CSE		
33	M.S. V.L. Soujanya	ECE		
34	M. Naga Lakshmi	CSE		
35	I. Geetha	ECE		
36	T. Keerthana	CE		
37	Ch. Koteswararao	ECE		
38	Ch. V. Satya Sai Ram	CSE		

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M. Ajaykumar

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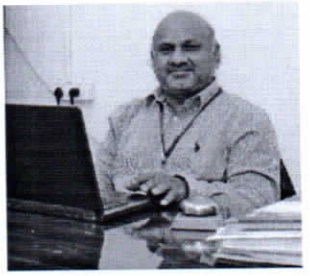
PROFILE



Dr. M C S MADAN

Ph.D. in Environmental Engineering and Managementspecialization.
Dr M Chandra Shekhar Madan has been with us for the last 15 years,and he is responsible for the College Academic Committee. He hasprepared courses for the Civil Engineering department, such as Environmental Engineering I & II and Waste Water Management, along with handling courses like Industrial Waste and Waste Water Management, Air Pollution Control, Solid Waste and Hazardous Waste Management, Engineering Geology.

In his 25+ years of experience, he has deployed different teachingmethodologies such as the traditional White Board & Marker, PowerPoint Presentations, Demonstration based lectures, textbook Assignments, Web References, Video Lectures, Enquire oriented Education, Interactive Learning and Group Discussion.

He is a member of the ISTE professional body, and has published research journals and papers on :

- Effect of Structural Irregularity in Multistoried Effect of Carbon Fibre Reinforced Polymer (CFRP) sticking on Load Carrying Capacity of Columns
- Effect of basalt Fibre reinforced Polymer (BFRP) sticking on LoadCarrying Capacity of Columns
- Enhancement and partial Replacement of Cement by Glass Powder based on Concrete
- Utilization of Demolished Concrete Waste for New Construction

He has also mentored and guided research committees on thefollowing projects:

- A Study on drinking Water Quality and Security in Amalapuram Municipality
- A Study on Municipal Solid Waste (MCW) designing of Sanitary Land Filling (SLF) site and management of MSW in Amalapuram
- A Study on Effect of Sea Food Processing Effluent in Coringi River
- A Study about Effects on Compressive Strength of Concrete by Partially Replacing Concrete with Marble Dust Powder and Using Polycarboxylate Ethane as Super Plasticizer
- A Study on Shrimp Processing Industry effluent waste and utilisation of treated waste in East Godavari District, Andhra Pradesh
- A Study on Disposal of Untreated Sewage for Land treatmentin Amalapuram
- A Study on Use of Rice Husk Ash in Concrete

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He has received the following recognitions and awards by theUniversity:

- Lab External for Environmental Engineering
- E Waste management (NPTEL)
- Paper Evaluation of Environmental Engineering course (JNTUK)
- Paper Evaluation of IWHWM course (JNTUK)
- Paper Evaluation of APC course (JNTUK)
- Paper Evaluation of WWM course (JNTUK)
- Lab External Examiner for EE (JNTUK)
- Project External for viva voce for B.Tech & M.Tech
- Lab External for UG & PG courses (JNTUK)
- Preparation for Scheme of Evaluation for UG subjects (JNTUK)
- Chief Examiner for UG subjects (JNTU)

He has been a vital part in organizing Seminars and Workshops on E Waste Management, Auto CAD 2D, Internship Program Restructuring, ARC GIS amongst a few.

In his previous stint, he was an Assistant Professor at Aditya College (2005-2007) & Founder HoD and Associate Professor at SGCSR College (1994-2005)

M. Ajay Kumar

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Workshops on R&D Opportunities in Clean Energy Innovation Material

Introduction Mission Innovation (MI) is an international initiative to reinvigorate and accelerate global clean energy innovation and make clean energy widely affordable. The 23 MI members, which include 22 countries and the European Union, have committed to make significant investments in clean energy research and development (R&D) to improve technology performance, reduce costs, avoid harmful emissions, and promote economic growth. While each MI member organizes its own clean energy R&D portfolio to serve national priorities, members may also pursue opportunities to cooperate in areas of shared interest to leverage complementary assets and further accelerate progress. MI Workshops on R&D Opportunities in clean energy innovation provide a way for MI member countries to pursue both of these aims. Workshops can help them build robust domestic energy research portfolios and identify prospects for bi-lateral or multi-lateral R&D collaborations. These workshops are multi-day, carefully planned and structured working meetings.

They are generally invitation-only and not open to the public. Well-organized MI R&D Opportunities Workshops focus on a selected energy topic or emerging knowledge frontier. The format for these events brings together experts from relevant scientific disciplines to (1) jointly identify and prioritize clean energy areas that are ripe for further investigation and (2) explore collaborative research opportunities that will benefit from cooperation on high-impact scientific research. MI R&D Opportunities Workshops serve the following purposes:

• Provide expert guidance to inform R&D investment decisions. Thoughtful exploration of how and where to invest in research will maximize the effectiveness of available funding for clean energy R&D. Workshops provide a structured approach for gathering expert insight from scientists and industry on the most promising areas for investment. Workshop results can be used as input for government officials deciding on research directions, priorities, and tenders—reinforced by the expert judgments of scientists. Mission Innovation at a Glance Launched at the Paris Climate Conference in 2015, Mission Innovation is a global initiative of 22 nations and the European Union. Together, MI members represent about 60% of the world's population, 70% of GDP, and more than 80% of government investment in clean energy research. The MI goal is to significantly accelerate the pace of innovation, reduce costs, achieve performance breakthroughs, and make clean energy technologies widely affordable and reliable worldwide. MI members make enormous investments in clean energy R&D, driving economic growth and catalyzing progress in technology areas that could make a significant impact in the fight to avoid the worst consequences of climate change. MI members coordinate with businesses and investors and seek opportunities to cooperate with partner nations on R&D needs, projects, and best practices. Mission Innovation 2 R&D Opportunities Workshops

• Inspire the research community. By assembling top experts on a given topic, workshops enable researchers to discover new approaches, strengthen bonds across sectors, forge new partnerships, and encourage them to take action to solve some of the toughest challenges to energy innovation

. • Facilitate intergovernmental collaboration. Workshops foster information sharing and uncover opportunities for bi-lateral or multi-lateral collaborations or joint research partnerships.

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• Spur transformational change. If past experience is an indicator, successful workshops will give rise to the types of scientific collaboration and gamechanging solutions needed to increase energy security, stimulate economic growth, and costeffectively transition to a low-carbon future. [See examples of impacts from other R&D opportunity workshops in the box at right.] An MI R&D Opportunities Workshop has the following features:

• A topic area in which intensified explorations could lead to meaningful advancements or breakthroughs to solve pressing clean energy challenges, with related R&D opportunities pre-competitive in nature and therefore conducive to cooperation among countries, companies, and research institutes.

• A pre-workshop report that describes the current state of technology and/or status of the field, and the associated innovation and technology challenges. This background report serves as a resource for workshop participants and the larger clean energy research community.

• Structured workshop sessions that promote productive discussions among scientific experts. The discussions identify priority research directions, further R&D needed on the topic to address key challenges, and related areas for potential collaboration among MI members.

• A final workshop report that summarizes the findings, including priority research directions and potential collaboration opportunities. MI members can use the report to inform self-directed R&D Sample Outcomes of R&D Opportunity Workshops in the United States Over 15 years, the US Department of Energy (DOE) sponsored a series of 18 R&D Workshops at which experts from academia, national labs, industry, US agencies, and other countries explored opportunities in basic energy research. The workshop results now serve as resources to guide disruptive basic energy research and accelerate innovation. Example outcomes include the following:

• Basis for establishing 60 Energy Frontier Research Centers, each of which focuses basic research on one area of technology innovation. Collaborative research at these centers has spun off at least 10 start-ups and helped more than 90 companies. Related outputs include 7,700 publications, 640 patent applications, and 100 licenses for intellectual property.

• Influenced the formation of five DOE Innovation Hubs—integrated research centers that combine basic and applied research with engineering to accelerate innovation in critical areas.

• Basis for tenders, funding opportunity announcements soliciting grant proposals, and research calls from the Advanced Research Projects Agency–Energy (ARPA-E). Mission Innovation 3 R&D Opportunities Workshops investment decisions, guide potential public–private partnerships, mobilize research communities, and launch research efforts with other members to achieve mutual benefit. MI R&D Opportunities Workshops can be conducted as a series, with each workshop focused on a separate theme. For example, the first workshop could focus broadly on the overarching status and challenges of a particular technology area, generate high-level priority research directions, and identify potential R&D synergies among countries. Subsequent workshops could hone in on specific aspects of the technology area or research to develop roadmaps, identify potential joint research projects, and outline action plans to achieve transformational changes. About This Guide This guide outlines key steps in planning and implementing an R&D Opportunities Workshop, highlights best practices, and provides examples of materials and templates. Users are

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M. Ayyankumar

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encouraged to view the document as a reference guide, skipping directly to the sections of interest and referring to other sections as needed. While many support staff will not need to read the guide from cover to cover, those responsible for integrating the various activities are likely to benefit from a thorough read of the document. Some of the key steps in planning and executing a workshop are outlined in Figure 1, along with a proposed timeline for staying on track during the planning process. Each step is cross-referenced with corresponding sections of the guide (noted in parentheses) so that users can easily find further information. Throughout the document, the blue sidebar boxes provide examples, explanations, and amplifications or other details, while the gold boxes identify best practices. Activities in Figure 1 are loosely grouped under three main categories: Workshop Structure and Content; Administration and Coordination; and Logistics. Activities under Logistics are typically the responsibility of the Logistics Coordinator; assignments of responsibility are more distributed in the other two categories. All members of the Workshop Planning Team will need to clearly communicate and coordinate their activities and progress (see Section 2).

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(Accredited with B^{++} Grade by NAAC)

Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

REPORT ABOUT THE PROGRAMME

Dt: 10-10-2018

Title of the Programme: One day Workshop on Multi Criteria Decision Making

Inauguration Date & Venue: 9th Oct 2018 & DNRCET Seminar Hall

Organized By: Department of Electronics & Communication Engineering, DNRCET

Resource Person: Dr. Lakshmi D, Senior Associate Professor, School of Computer Science Engineering, VIT, Bhopal University, Madya Pradesh.

Chief Guest: Sri G. Satyanarayana Raju (Babu)
Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju
Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 32

Concept:

Multiple-criteria decision-making (MCDM) or multiple-criteria decision analysis (MCDA) is a sub-discipline of operations research that explicitly evaluates multiple conflicting criteria in decision making (both in daily life and in settings such as business, government and medicine). MCDM is a generic term for all methods that exist for helping people makes decisions according to their preferences, in cases where there is more than one conflicting criterion. Integrated analytic hierarchy process and its applications–a literature review.

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Principal

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(Accredited with B^{++} Grade by NAAC)

Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

One day Workshop on Multi Criteria Decision Making 9th Oct 2018

Sl. NO	NAME OF THE FACULTY	DEPARTMENT	Date 09-10-2018	
			FN	AN
1	J. Keerthana	CE	Keerthana	Keerthana
2	K.V Subrahmanyam	CE.	K.V	K.V
3	DR. Nekkanti Venkata Rao	ECE	Venkata Rao	Venkata Rao
4	T. Prasanth	CE	Prasanth	Prasanth.
5	Mashe Gedela	BSH	Mashe Gedela	Mashe Gedela
6	Dr. R. Ramya SWETHA	CE		
7	MRS. Susmitha	CSE	MRS. Susmitha	MRS. Susmitha
8	G. Koteswararao	ECE	G. koteswararao	G. koteswararao
9	MKMV Ratnam	CE	Ratnam	Ratnam
10	Bandhu Sridevi	ECE	B. Sridevi	B. Sridevi
11	Dr. G. Satyanarayana	CSE	Dr. G. Satyanarayana	Dr. G. Satyanarayana
12	Balla Nandana Kumar	CSE	Ballanandanakumar	Ballanandanakumar
13	P. Anjaneyulu JD	CE	P. Anjaneyulu	P. Anjaneyulu
14	B. Vamsidhar	BSH	Vamsidhar	Vamsidhar
15	Dr. M. Anjankumar.	CE.	Dr. M	
16	Dr. G. G. Ratnam	BSH	Dr. G. G. Ratnam	Dr. G. G. Ratnam
17	N. Mary Leena	ECE	N. Mary Leena	N. Mary Leena
18	M. Lakshmi kumar	CE	M. L kumar	M. L kumar

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M. Anjankumar

19	MORTHA . JAGANNADHAM	ME	M. Jaggannadham	M. Jaggannadham
20	B. elisharaju	CE	Elisharaju	Elisharaju
21	M. venkata krishna	CE	M. V. krishna	M. V. Krishna
22	Dr. S. KOTESWARI	ECE	Dr. S. Koteswari	Dr. S. Koteswari
23	K. Surya Ram Prasad	CSE	K. Surya	K. Surya
24	M. Vijay daniel	ME	M. V. Daniel	M. V. DAniel
25	DDD. SUVIBABU	CIE	D. Suvibabu	D. Suvibabu
26	Dr. BUDDHRAJU Venkata Subrahmanya Varma	CSE	Dr. B. V. S Varma	Dr. B. V. S Varma
27	Dr. K. Rajesh	ME	Dr. Rajesh	Dr. Rajesh
28	K. V. S SRISHA	BSH	K. Srisha	K. Srisha
29	MRS. P. Lalitha Rajeswari	CSE	MRS. P. L. Rajeswari	MRS. P. L Rajeswari
30	D. Geetha	ECE	D. Geetha	D. Geetha
31	E. Rama Lakshmi	CSE	E. R. LAKSHMI	E. R. LAKSHMI
32	Dr. A. Purna Ramesh	ECE	Dr. A. Purna Ramesh	Dr. A. Purna Ramesh

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M. Ayankumar
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Personal Profile

Institution's Address : Dr Lakshmi D
Senior Associate Professor
School of Computing Science
and Engineering
VIT Bhopal University
Madhya Pradesh, India

Residential Address : Dr. D. Lakshmi

Mobile contact : 9945379089

E-mail : lakshmi.lifefordivine@gmail.com

Website(s)

https://educationforempowerment.blogspot.com

www.atchayapaathiram.com

YouTube Channel

https://www.youtube.com/c/DrLakshmiD/videos

Educational Profile

Degree / Diploma	University	Name of the Institution	Class/ Marks obtained	Month & Year of Passing
Ph.D	Anna University, Chennai	Part-Time	May 2017 **Title: Investigations On Behavioral Analysis For Improving Learning Practices**	

M. Lakshmi

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			uder the supervision of Dr Rajeev Sukumaran	
M.Tech Computer Cognition Technology	University of Mysore, Mysore.	Department of Studies in Computer Science, University of Mysore, Mysore.	First Class with Distinction 4.83/5	2003 – 2005
B.E Computer Science and Engineering	University of Madras, Chennai	VRS College of Engineering and Technology,	69.70%	1994-1998
Higher Secondary Certificate	Board of Hr. Sec. Examination- Tamilnadu	Nirmala Girls Hr. Sec. School, Ariyalur. Tamil Nadu	85.00%	1992-1994
Secondary School Leaving Certificate	Board of Secondary Education- Tamilnadu	Sevamandir Girl's Higher Secondary School, Parangipettai.Tamil Nadu.	85.00%	Mar-92

Teaching Experience

Sl. No	Designation	Institution	Period of Employment			
			From	To	Years	Months
1	Senior Associate Professor	VIT Bhopal University	03-March-2021	Till date		9
2	Associate Professor	B V Raju Institute of Technology	15-June-2016	Till Date	5	8
3	Educational Research Officer	Vishnu Educational and Development Center, Hyderabad	15-June-2016	Till Date	5	8
4	Asso. Prof	AIMS Institute of Higher Education, Bangalore	17-July-2015	10-June-2016	0	11
5	Asso. Prof.	Adithya Institute of Technology, Coimbatore	Jun-10	16-July-2015	5	1
6	Asst.Prof	Dr.N.G.P Institute of Technology, Coimbatore	13-Jul-09	31-May-10	0	11
7	Asst.Prof/ Sr. Lecturer	Bannari Amman Institute of Technology, Sathyamangalam	5-Jan-05	29-May-09	4	5

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8	Sr. Lecturer / Lecturer	Sri Krishna College of Engg & Tech, Kuniamuthur, Coimbatore	20-Aug-01	30-Dec-03	2	5
9	Lecturer	Mahendra Engineering College, Tiruchengode	2-Jun-00	20 Aug -01	1	3
10	Lecturer	Sri Krishna College of Engg & Tech, Kuniamuthur, Coimbatore	10-Aug-98	18-Mar-00	1	8

Conference Presentations

1. Dr Lakshmi D, Abhinav Prakash, Ramesh Chandra Panda, and AmritaSnake Classification 'Venomous and Non-Venomous' using Transfer Learning Techniques on Indian Species: A Life-Saving Application. (Presented on March 19th, 2021 in the European, Asian, Middle Eastern, North African Conference on Management & Information Systems (EAMMIS) and won the best paper award.

2. Amrita, Ramesh Chandra Panda, and Dr Lakshmi D, A Novel Hydro Renewable Power Platform: A Sustainable Innovation (Presented on March 19th, 2021 in the European, Asian, Middle Eastern, North African Conference on Management & Information Systems (EAMMIS).

3. Dr . Lakshmi D, Mr. Srinivas Reddy Gurrala and Mr. Manideep Kuncharam, A Comparative Study on Breast Cancer Tissues Using Conventional and Modern Machine Learning Models, SCI-2020 (4th INTERNATIONAL CONFERENCE ON SMART COMPUTING & INFORMATICS)

4. Dr. D. Lakshmi & **Mr. C P Pavan Kumar Hota** , A Study on Adaptive Tutoring System using Learning Analytics, International Conference on Advances in Computing and Information Technology (ICACIT '19).

5. Dr. D. Lakshmi & U.Chandrasekahar Mining Maximal Association Rules on Soft Sets using Critical Relative Support based Pruning, Springer Conference at Panimalar Engineering College, Chennai, 22nd & 23rd March 2019.

6. Dr. D. Lakshmi & U.Chandrasekahar, "A New Student Model for an Intelligent Tutoring System Using Analytical Hierarchy Process" bearing the paper ID SCOPUS1077, International Conference on Research Advancements in Applied Engineering Sciences, Computer and Communication Technologies 12th & 13th July 2018, ICRAAESCCT-2018.

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7. Dr. D. Lakshmi &, Mr. S. Naveen Kumar, "**Cloud Platform (SaaS) for the Development of Logical Reasoning and Programming Practices**", Fifth International Conference on "Emerging Research in Computing, Information, Communication, and Applications" (**ERCICA-18**).

8. Dr. D. Lakshmi & **Mr. C P Pavan Kumar Hota, Use Of Web 2.0 Educational Software's In The Higher Education A Multi-Dimensional Analysis, Ap International Conference On Transformations In Engineering Education July 15-17, 2018; SRM University, Amaravati, AP.**

9. Dr. D. Lakshmi & Mr. S. Naveen Kumar Use, of e-Learning Platform (eLab v2.0) in Developing Logical Reasoning and Programming Skills - The State of Art ", Transforming Education Conference for Humanity (TECH 2017) at Visakhapatnam during 16th December to 18th December 2017.

10. Lakshmi Dhandabani & Rajeev Sukumaran, 2016, "Multi-Model Learning Practices Using TPACK Framework", International Conference on Indian Languages and their Kaleidoscopic Role in the Advancement of Literature, Teaching, Education, and Culture, Organized By Field Marshal K. M. Cariappa College, Madikeri In Association With International Association of Academicians and Researchers, Pune.

11. A H Parvin, Lakshmi D, Use of TPACK Framework Model in English Language Teaching, Two day International Conference on Emerging Approaches and Methods in English Language Teaching-(EAMELT) (from text to book to mind in association with The Global Association of English studies All India Network of English Teachers AINET) December 9-12-2015 and 10-12-2015.

12. Lakshmi Dhandabani & Rajeev Sukumaran , Use of Multiple Intelligences and Instructional Technologies in Learning Theory of Computation: An Experimental Case Study, 2015 International Conference on Advanced Computing and Communication Systems (ICACCS -2015), IEEE, Jan. 05 – 07, 2015, Coimbatore, INDIA.

13. Lakshmi Dhandabani & Rajeev Sukumaran , Exploring Relationship between Thinking And Learning Styles: An Experimental Study Towards Improving Learning Of Theoretical Courses In Engineering, 2015 International Conference on Computer Communication and Informatics (ICCCI -2015), IEEE, Jan. 08 – 10, 2015, Coimbatore, INDIA.

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14. Lakshmi D, D. Senthil Kumaran, Multifaceted Training Model for Enhancing the Capability of Acquiring Skills towards Better Placements in Engineering Education: A Case Study, 2nd National Conference on Sustainable Institute Industry Partnership SIIP – 2014, at IIT Madras, Chennai on 26th August 2014.

15. Lakshmi Dhandabani & Rajeev Sukumaran , Use of ICT in Engineering Education: A Survey Report, 2014 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), Coimbatore, INDIA. [SCOPUS INDEXED]

16. Lakshmi Dhandabani & Rajeev Sukumaran , Use of ICT in teaching "Theory of Computation": An experimental case study at IEEE Conference on MOOC technologies at Poornima Institute of Technology, Jaipur. December 2013. Won the **best track award** for the presentation. The paper is available at DOI: 10.1109/MITE.2013.6756316

17. Lakshmi Dhandabani, Classification Rule Discovery with Ant Colony Optimization Meta-Heuristic in Third National Conference on Cutting Edge Technologies in Power Conversion and Industrial Drives, at Bannari Amman Institute of Technology, Feb 2007.

Journal Publications

1. Dr. B. Mrunalini Sasanka, Dr. Lakshmi Dhandabani, Integration Of ICT In Language Classroom – Classroom Experiments In Teaching And Learning, Journal of Critical Reviews, Year: 2020, Volume: 7, Issue: 19,

2. Dr. D. Lakshmi & U.Chandrasekahar Mining Maximal Association Rules on Soft Sets using Critical Relative Support based Pruning, Springer Lecture Notes on Data Engineering and Communications Technologies series, SCOPUS, Book Chapter.

3. **"A new student model for an intelligent tutoring system using analytical hierarchy process"** in International Journal of Engineering & Technology (UAE) (**IJET**) in ***Vol.7, No.3.29, Page 433-442, 2018***which is **SCOPUS INDEXED JOURNAL** (*www.sciencepubco.com/index.php/IJET*). ISSN: 2227-524X
Published by Science Publishing Corporation (SPC),

URL: https://www.sciencepubco.com/index.php/ijet/article/view/19285/8903

4. Vijay Bhasker V and Lakshmi D, "Individuals Personality – Multiple affects – Gender Differentiation!?, AIMS-Journal of Research, ISSN 2321-8487, Vol 12, Issue 2, Sep 2015.

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5. Lakshmi Dhandabani & Rajeev Sukumaran 2015, 'Correlational Analysis between Brain Dominance and Multiple Intelligences', World Academy of Science Engineering and Technology WASET , (Print) : 2010376X, (Online) :20103778, , France, vol. 9, no. 2, pp.1108-1116. (ISI 0.1)

6. Lakshmi Dhandabani & Rajeev Sukumaran 2015, 'Exploring the Relationship between Academic Performances and Brain Dominances', Indian Journal Science and Technology. ISSN (Print) : 0974-6846 ISSN (Online) : 0974-5645, Indian Journal of Science and Technology, Vol 8(9), pp. 889-896, DOI: 10.17485/ijst/2015/v8i9/56513. (SCOPUS 1.4053)

7. Lakshmi Dhandabani & Rajeev Sukumaran Causal Effect Analysis between Brain Dominance and Multiple Intelligences, International Journal of Applied Engineering Research, January 2015, Vol. 10, No. 2, Print-ISSN: 0973-4562. [SCOPUS INDEXED].

8. Chinnu Thomas & D. Lakshmi & Gesture-Based Computing as an Alternative to Mouse by Calibrating Principal Contour Process Actions, International Journal of Research in Advent Technology, Vol.2, No.5, May 2014, E-ISSN: 2321-9637.

9. P. Dhivya & D. Lakshmi & A Comprehensive Review of Image Retrieval Based On Example Video Clip, International Journal of Research in Advent Technology, Vol.2, No.5, May 2014, E-ISSN: 2321-9637.

Book Chapter(s)

1. Educational Technology Too and Software for Virtual, Flipped and Blended Learning, Immortal Publication, ISBN: 979-8-6432-1141-9.

Book Publication

1. Theory of Computation, Charulatha Publications, Chennai, 2006, ISBN: A100009222.
2. "Leading Education in Age of Disruption", An Educator Guideline Series with the ISBN Number: 978-93-5526-730-6.

Indian Patent Publication

1. Provisionally published patents waiting for examination: Dynamically Understanding 3D Visual Scenes Using Deep Learning, Application Number: 202041002488, IP India.

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2. Provisionally published patents waiting for examination: Hybrid Renewable Power Platform: Harvests Wind, Solar and Water Current Power from Running Water-Channel. Application Number: 332221 -001, IP India.

3. Provisionally published patents waiting for examination: A Novel Phenotypic Antimicrobial Resistance Testing Using Cost-Effective Integrated Biochip, 202031036654, IP India.

4. Provisionally published patents waiting for examination: A Novel Nanosilver Hand Rub Sanitizer Gel, Application Number: 202031037352-001, IP India.

5. Provisionally published patents waiting for examination: IoT Based Smart Electro-Mechanical Standing Ventilator, Application Number: 202031045420, IP India.

6. Provisionally published patents waiting for examination: A novel smart carbonless cooking Gasifier, Application Number 202031044344

Copyrights IP India

1. Arogya Odisha-Mobile App-Based Empowering TeleMedicine, Diary Number: 14815/2020/CO/L (Filed Under Copyright Act) Date: 03/10/2020

2. Investigations On Behavioral Analysis For Improving Learning Practices, Diary Number: 16131/2020/CO/L (Filed Under Copyright Act) Date 17/10/2020

3.

Australian Patents

1. AQUA LIFE: A COMPACT DEVICE EXTRACTING DRINKABLE WATER FROM SEAWATER ApplicationNumber-2021100286, Patent application type-Innovation, Filing date 2021-01-17

Granted

2. A Novel Indigenous Sustainable Vaccine Carrier for Maintenance of Cold Chain, ApplicationNumber-2021101099, Patent application type-Innovation, Filing date 2021-01-17

Membership of Professional Bodies

IEEE Member, Member of the Computer Science Teachers Association (CSTA), IAENG - International Association of Engineers, IFERP

Online Certifications

1. Big Data analytics – Demo from Big Data University
2. Brief Introduction to Psychology, NPTEL, IIT Kanpur

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3. "Quizlet-A cool for teachers" online course June 2nd, 2018
4. Edpuzzle Big Goals on 26-05-2018
5. Khan Academy for Teachers 101 May 14th, 2018
6. Google Digital Unlocked "The Online Marketing Fundamentals"
7. Using proper manuscript language by Elsevier Researcher Academy Certificate of Completion
8. Problem-Solving through C Programming, NPTEL
9. Mentorship Certification for "Problem Solving through C Programming, NPTEL"
10. Workshop on "IoT" Texas Instrument Certification
11. Python for Data Science, NPTEL
12. Advanced Deep Learning by Bennett University through leading India AI

Book Reviewer

Cambridge University Press, PEARSON Education, and Tata Mc Graw Hill Publications

Workshops/Conferences/Seminar/Guest Lecture/Conclave Attended

1. Attended NASSCOM Data Analytics Workshop 20-03-2018 to 24-03-2018.
2. Attended IBM 'Mobile application Development Workshop' at AIMS Institute of Higher Education, Bangalore in the month of December 2015.
3. Attended IBM 'HADOOP and Map Reduce workshop' at AIMS Institute of Higher Education, Bangalore in the month of November 2015.
4. Attended IBM 'SPSS training program' at AIMS Institute of Higher Education, Bangalore in the month of August 2015.
5. Became jury for many symposiums and n conferences.
6. Editor for Vivega - College Newsletter at Adithya Institute of Technology
7. Organized many orientation programs as a part of Women Development Cell both at Bannari Amman Institute of Technology and Adithya Institute of Technology.
8. Organized Memory Improving Techniques at both Bannari Amman Institute of Technology and Adithya Institute of Technology.
9. Organized five yoga programs, two eye and general checkups at Adithya Institute of Technology.
10. Internal Quality Auditor Training program at Bannari Amman Institute of Technology

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11. A two-day workshop on Concepts of Research and its Techniques on 25th & 26th 2014 at Adithya Institute of Technology.

12. Two-day national level workshop on Vulnerable Web Applications and Cyber Security on 19th & 20th August 2014 at Adithya Institute of Technology.

13. Workshop on Principles and Practices of Learning for Effective Teaching at Poornima Institute of Engineering & Technology, Jaipur in December 2013.

14. Workshop on Exploring Engineering Education Research at Poornima Institute of Engineering & Technology, Jaipur on December 2013.

15. A two-day workshop on Data Structures and Algorithms by Dr.D.S.Guru, Professor, the University of Mysore at Adithya Institute of Technology, December 2013.

16. A one-day workshop on Android Application Development jointly organized by LANSA Informatics Pvt Ltd and JP Infotech on 24/08/2013.

17. Two-day Workshop on Image and Video Processing Dr.Jharna Majumdar, Retired Scientist DRDO, Bangalore at Adithya Institute of Technology, June 2013.

18. Awarded Certification of Appreciation for Yoga Club Activities for the academic year 2010-2011 at Adithya Institute of Technology.

19. Awarded Certificate of Appreciation for Attaining 100% results for the academic year 2010-2011 for Advance Java Programming for final year IT at Adithya Institute of Technology.

20. One day Faculty Development Program on Web 3.0 Technologies at Dr.N.G.P Institute of Technology.

21. A one-day workshop on Oracle was held on 7th November 2009 at KGISL, Coimbatore.

22. National Level workshop for Eminent Technologies of Open Source Systems conducted by HCL and Dr.N.G.P Institute of Technology in October 2009.

23. One day Sensitization-Cum-Awareness Programme on Technology Information Facilitation at Bannari Amman Institute of Technology in December 2007.

24. One day workshop on Nanotechnology and its applications, Organized by IIT Chennai and Bannari Amman Institute of Technology

25. Attended Training the Trainer Programme on 8th and 9th December 2006 at the campus of M/s. Infosys Technologies Limited, Chennai.

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26. A two-day workshop on Design and Analysis of Algorithm conducted by Dr.P.Nagabhushan at Bannari Amman Institute of Technology in August 2006.

27. One week short-term course on Web Technologies at SSN College of Engineering, Kalavakkam in June 2005.

28. Quality System Awareness took by Zandig TQM Solutions Private Limited in April 2005.

29. A workshop on 'Re-Engineer' teaching skills was taken by Mrs.Sushila Balagurusamy at R.R Engineering Technology in January 2003.

30. National Level Seminar on Cognition & Recognition at Sri Krishna College of Engg & Tech.

31. State Level Seminar on Mobile Computing at Sri Krishna College of Engg & Tech.

32. Personality Development Program took by Mr.Suresh Panjabi at Sri Krishna College of Engg & Tech.

33. Two-day residential meditation program at Chinmaya Vidyalaya, Coimbatore sponsored by Sri Krishna College of Engg & Tech.

34. One-day Yoga Program at Sri Krishna College of Engg & Tech conducted by Vethathiri Maharishi Manavalakalai Mandram.

35. Faculty Development Program ON Teaching Technology and Counselling Skill took by Abirami Academy at Sri Krishna College of Engg & Tech in November 2001.

36. Third National Level Conference on Soft Computing at P.S.G College of Technology, Coimbatore in 2001.

37. One day Seminar on Soft Computing at Bharathiar University in 1999

Personal Attributes

- Effective communication & presentation skills
- Fond of gaining new experiences
- Sincere towards my work
- Readily accepting the challenges
- Involvement in work with continuous improvement at all levels

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- Having exposure to the TRAIR framework
- Expertise in designing and working with MOODLE educational software
- Having exposure in the arena of educational psychology
- Exposure to nature cures solutions

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Subject Expertise

- Machine Learni9ng & Deep Learning
- Internet of Things
- Educational Technology
- Educational Psychology
- Theory of Computation
- Compiler Design
- System Software
- Data Structures and Algorithms
- Data Warehousing and Mining
- Web Technologies

Responsibilities held so far

- Interview panel member
- Project panel member
- Students Mentoring
- Project Coordinator
- Students Association In Charge
- Project Guide both for B.E and M.E Level
- Short term course Coordinator
- GATE Coaching Committee member
- Yoga Centre In-charge
- Deputy Warden for more than 10 years
- Faculty Recreation Club In-charge
- IAS Exam Coaching Coordinator
- National Level Technical Symposium (Futura'06) Project Coordinator
- National Level Technical Symposium (Futura'07) Project Coordinator
- National Level Technical Symposium (Futura'08) Coordinator

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- Women Development Cell In-charge
- HOD-In charge during 1998-2000 at Sri Krishna College of Engg. & Technology, During 2005-2009 Acting HOD at Bannari Amman Institute of Technology, HOD-In Charge during 2013-2014 at Adithya Institute of Technology.

Total Years of Experience

U.G Teaching Experience: 20

P.G Teaching Experience: 9

Educational Research Officer : 3

Thesis Abstract

In the conventional education system parameters like learning capacity, grasping skills, logical skills, mathematical skills, emotional quotient, rapport skills and language skills of students can be perceived easily. On the other hand, understanding students' strength, weaknesses, and attitude become a challenge in virtual education. To date understanding students' thinking ability, strengths, weaknesses, behavior, and learning capacity has not been considered in the Virtual Learning Environment (VLE). Online courses are attracted by self-determined and intellectually capable students. The student model is crucial for an intelligent tutoring system. It provides an ability to adapt to the needs and knowledge of an individual. The prime objective of this research study is to design the 'student model' based on individuals' 'biopsychological potential'. A major constituent of this research study includes educational technology, educational psychology, and data mining techniques.

The first phase of this research study focuses on primary data compilation using psychometric assessments, to categorize the cognitive traits and personality traits of every individual. The data samples (n=1145) are collected from 16 engineering colleges from Tamil Nadu, Kerala, and Puducherry.

Primary datasets are collected by administering suitable psychometric inventories such as Benziger Thinking Style Assessment (BTSA) for Brain Dominance Analysis, Kolb's Learning Style Inventory for learning style identification, Howard Gardner's MI inventory for multiple intelligence identification, and Paul Costa R. Robert McCrae's BIG Five personality identification.

Rule-based classification technique is used to understand the individual's innate capacity (Model-1 Dataset) and their holistic developmental characteristics (Model-2 Dataset). From these two models, the Personalized Profiling System (PPS) is built to generate the psychometric profile for all the individuals. Subsequently, feedback was collected in order to verify the system's robustness. PPS can be treated as a 'student model' for Virtual Learning Environment (VLE). The statistical measures Chi-Square

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analysis, Pearson inter and intra correlation analysis, and linear regression analysis are carried out. The statistical investigations are carried out to analyze the strength of association and inter-dependency between the dependent and independent variables.

The clustering technique is used to handle the diversified group of students into four different categories. The mean-difference clustering method is proposed to customize personalized education. Personalized education methods are suggested for all four groups of students.

In order to classify the unseen data, both categorical data and numerical data sets are used. The clustered data is classified using 6 different classifiers and 5 different classifiers in order to induce an efficient classification. Finally, the framework model is proposed for an Intelligent Tutoring System (ITS) in order to provide a personalized education considering an individual's thinking style, learning style, multiple intelligences, and personality traits. The proposed 'Student Model' consists of a Personalized Profiling System (PPS), classifier, and the outcome of Analytical Hierarchical Process (AHP).

Personal Profile

Marital Status: Married

Husband's Name: S. Karunakaran

Gender: Female

Date of Birth: 06/06/1977

Age: 44

Nationality & Religion: Indian, Hindu

Place of Birth: Attur, Salem

Known Languages to speak: Tamil, English, Telugu, Kanada, Malayalam

Known Languages to write: Tamil, English

Hobbies: Meditation and Yoga, Blogging, Involvement in the social activities, Writing Tamil Poems, Voracious reader, Gardening, Volunteering, Playing Chess, Playing Shuttle Batmitton, Counseling, Public Speaking, Nature Therapist.

Short Biography

M. Ayyankumar
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Dr.D.Lakshmi, presently working as a Senior Associate Professor in the School of Computing & Assistant Director, Centre for Innovation in Teaching & Learning at VIT Bhopal University, Madhya Pradesh. Till February 2021, she was designated as an ***Educational Research Officer*** at ***Vishnu Educational Development and Innovation Centre (VEDIC) and Associate Professor at B V Raju Institute of Technology*** run by Shri Vishnu Educational Society, Hyderabad from 2016 to Feb 2021. She has been working in the educational sector since 1998. She has more than 22 years of teaching experience. Her key focus is on exploring the dynamics of learning, dynamics of the learner, and classroom dynamics, suitable to accelerate the learning efficacy of higher education students. Her research areas include educational technology, educational data mining, virtual education, and educational psychology. She has been actively involved in educational research and her research papers have been published both in international conferences as well as in peer-reviewed journals. Her main responsibilities at VEDIC include conducting workshops to foster quality initiative, quality sustenance and quality improvement in higher education, e-learning initiative, providing workshops to faculty members who are interested in integrated technology and researching educational trends.

Her ***Ph.D.*** research work is an interdisciplinary work "***Investigations On Behavioral Analysis for Improving Learning Practices''in*** the cognitive science domain using data analysis and mining techniques. The prime objective of her research work is to build the "***Student Model***" for the ***Intelligent Tutoring System (ITS)*** based on '***bio-psychological potential*** grounded on the cognitive features such as Brain Dominance, Learning Style Preferences, Multiple Intelligences, and Personality models for the purpose of assessing an individual's innate capabilities. She completed her doctoral degree from ***Anna University*** in May 2017 under the supervision of ***Dr. Rajeev Sukumaran, TCL, IIT-Madras.***

Earlier, she obtained her ***Master of Technology*** in ***Computer Cognition Technology*** with '***distinction'*** from the ***University of Mysore***, Mysore, and ***Bachelor of Engineering*** in ***Computer Science & Technology*** from ***V.R.S. College of Engineering***, Madras University. My career, spanning over 19 years, started from humble beginnings as a ***Software Instructor*** in a computer academy which was located in a remote town, through various challenging and rewarding teaching assignments, such as: ***Lecturer*** and ***Faculty Advisor*** at **Sri Krishna College of Engg. & Tech**, Coimbatore in 1998; then as ***Lecturer*** at **Mahendra Engg. College**, Tiruchengode; a second stint at **Sri Krishna College**, Coimbatore, as ***Lecturer CSE***; as ***Sr. Lecturer*** at **Bannari Amman Institute of Technology**, Coimbatore, later promoted as ***Asst. Professor***; and at **Dr.N.G.P Institute of Technology**, Coimbatore, as **Asst. Professor**. She had joined **Adithya Institute of Technology**, Coimbatore, as ***Asst. Professor***, where she had been promoted to the role of ***Associate Professor-CSE*** and ***HoD of CSE/ITB***; and ***Associate Professor, Department of Information Technology*** at ***AIMS Institute of Higher Education***, Bangalore. At AIMS institute, she has gained international exposure in handling various courses for international students and students from all over India too. This experience had brought her new insights into the different geographical perceptions on the academic and cultural context.

With reference to the academic interests, she is naturally aligned to the teaching and computation, as her specialization and core expertise lie in *Theory of Computation*, her favorite subject on which she has authored and published a book, ***Theory of Computation***, and a handbook, and been the first Indian woman author in the subject. Her research paper presentation, ***Use of ICT in Teaching Theory of Computation: An Experimental Case Study*** at the IEEE Conference on MOOC Technologies at Poornima Institute of Technology, Jaipur (December 2013), won the **Best Paper Award**. She has addressed innumerable guest lectures, conducted and organized several Faculty Development Program (FDP) Training ***(covering approximately ~50,000 plus faculty members including TEQIP, SERB, SWAYAM, DST, AICTE, MHRD, ATAL sponsored workshops and also self-financed workshops across India from different STEM Educational institutions)*** conducted numerous workshops at JNTU-

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Hyderabad on various titles in association with UGC-HRDC, and have served as Subject Matter Expert and Consultant on *Theory of Computation.* The passion and deep reverence with which she approaches the subject, both as a student and as a teacher, have earned her much admiration and adulation, as well as reaping her rich rewards in terms of knowledge and experience.

She has been invited as a ***jury for the national level conferences*** and national level student's symposium. She had been invited as a Session ***Chair and keynote speaker*** as well. She had reviewed several books for Tata McGraw Hill and Pearson Publishers and conference papers and Journal papers too.

She had presented papers in 17 ***international conferences*** and published ***9 international journal papers, 2 book chapters, and 8 Indian patents provisionally published and waiting for examinations. 2 Indian Copyrights have been granted. 4 Australian patents have been filed and all have been granted. Recently March 2021 her paper has owned the best paper award in the Springer Conference on Snake Classification Using Deep Learning Models: A life-Saving App*** Currently, her research work has been submitted to two journal papers and two book series which are under review. She has vast experience in attending more than 100 workshops, conferences, and seminars related to her field of interest. She is also keen in continuous learning and completed a few online certification courses. She has completed ***more than 100 certification workshops/programmes*** both online and offline.

It is her firm belief that given the opportunity to work in any institution, she shall find the right avenues to express her true capabilities to not only extend her own frontiers but also to transcend the institution to a different progressive dimension. She had served in various academic institutions in various capacities and roles. She had been involved in developing several software(s) for academic usefulness as well as instructional interventions. She had built a software model based on 'bio-psychological potential' grounded on cognitive features such as Brain Dominance, Learning Style Preferences, Multiple Intelligence, and Personality. This software is named KYC ***(Know Your Calibre)***.

With the passion to mentor students with the holistic approach, she has gained an adequate amount of exposure towards secondary specialization such as life sciences, food and nutrition, cognitive science, yoga and meditation, educational psychology, and educational technology.

On a personal level, she has consistently excelled at both academia and extra-curricular activities, such as her interest in natural medicine, reading, and spirituality. She is also actively involved in co-curricular activities, such as seminars and conferences, doing educational research, discharging her familial and social responsibilities, as well as devoting time to other interests such as natural medicine, gardening, extensive reading on diverse subjects, and spiritual travel. She can speak all the south Indian languages. She is a blogger as well.

YouTube Channel:
https://www.youtube.com/c/DrLakshmiD/videos

M. Ayyankumar
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Areas of expertise: Educational research methodologies, IQAC, Curriculum Planning, Learning Assessment, improving learning using Cognitive Psychology-based Assessment, Accreditation (NBA/NAAC), expertise in interactive video material creation as well in video editing.

Technical Domain: Computer Science and Engineering - Data Structures, Theory of Computation, Compiler Design, Education Technologies, Data Analytics, Machine Learning, Internet of Things, Deep Learning, and Big Data Analytics.

I trust that you will find my profile synchronous with your requirements.

Thanking you,

Sincerely yours.

Dr D. LAKSHMI

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Common to these examples and all MCDA applications in general is that they involve alternatives (including people) being ranked or chosen based on considering multiple criteria together. Some applications also include the allocation of budgets or other scarce resources across alternatives, with the objective of maximizing 'value for money'.

Traditional intuitive decision-making compared to MCDA

Of course, considering multiple criteria when ranking or choosing between alternatives is a natural approach for making decisions that is as old and fundamental as human history (see famous quotes). However, 'traditional' intuitive decision-making – how most people make their everyday decisions – typically involves evaluating the criteria and the trade-offs between them in an intuitive or holistic fashion.

In contrast, MCDA / MCDM, a sub-discipline of operations research with foundations in economics, psychology and mathematics, is concerned with formally structuring and solving decision problems. Most MCDA methods, which are increasingly supported by specialized software (e.g. 1000minds), involve the explicit weighting of criteria and the trade-offs between them.

Overall, MCDA is intended to reduce biases from decision-makers relying on their 'gut feeling', and also group decision-making failures (e.g. 'groupthink'), that almost inevitably afflict intuitive approaches. By making the weights and associated trade-offs between the criteria explicit in a structured way, MCDA results in better decision-making.

How does Multi-Criteria Decision Analysis work?

MCDA / MCDM, in essence, involves these four key components:

- **Alternatives** (or individuals) to be ranked or chosen from

  Any number of alternatives may be included in the MCDM – depending on the application, ranging from a minimum of two (otherwise there wouldn't be a choice to make) up to 10s, 100s, 1000s or even millions of alternatives.

- **Criteria** by which the alternatives are evaluated and compared

  For most applications, fewer than a dozen criteria is usually sufficient, with 5-8 fairly typical, which may be quantitative or qualitative in nature.

- **Weights** representing the relative importance of the criteria

  As explained later in the article, there is a variety of methods available for determining the weights on the criteria, representing their relative importance.

- **Decision-makers** and potentially other stakeholders, whose preferences are to be represented

professionals and other decision makers are always entangled with decision-making dilemmas. In real-life problems, there are many critical parameters (criteria) that can directly or indirectly affect the consequences of different decisions. Stakes are always high whenever human life is in danger, so it is always important to make the right decisions. When deciding whether to use a particular medication, treatment, or medical equipment, not only are the problems with multiple criteria very complex, but multiple parties are also deeply affected by the effects.
There are many methods available for solving MCDM problems. However, the MCDM methods discussed in this textbook are the Analytic Hierarchy Process (AHP), Technique for Order of Preference by Similarities to Ideal Solution (TOPSIS), Elimination Et Choix Traduisant la Realité (ELECTRE), Preference Ranking Organization Method for Enrichment of Evaluations (PROMETHEE), ViseKriterijumska Optimizcija i Kaompromisno Resenje (VIKOR), and Data Envelopment Analysis (DEA). AHP is based on mathematics and psychology. Rather than recommending the best alternative, AHP encourages decision makers to find a solution that better suits their goal and perception of the problem. It offers a comprehensive and rationally oriented context in which the decision problem can be organized, quantified, and evaluated. TOPSIS is a very useful MCDM method. This is an alternative approach that measures weights for each parameter, normalizes scores for each criterion, and determines the numerical difference for each alternative and the optimal alternative, which is the best score for every criteria. ELECTRE is another popular MCDM method used to eliminate any unacceptable alternatives. PROMETHEE is suitable when groups of people are working on complex issues, particularly those with various parameters that require several views and viewpoints that have long-term consequences in their decisions. This provides unique advantages when it is difficult to quantify or compare important elements in the decision, or when cooperation between departments or team members is limited by their different requirements or expectations. Other multicriteria decision-making MCDM methods that will be discussed include VIKOR, fuzzy logic–based MCDM methods, and DEA.

There are many thousands, if not millions, of possible applications for Multi-Criteria Decision Analysis (MCDA), also known as Multiple Criteria Decision Making and Multi-Criteria Decision-Making (MCDM). Most decisions made by individuals and groups that involve ranking or choosing between alternatives (including people) are amenable to MCDA / MCDM.

Here are some mainstream examples of applications from the worlds of business, nonprofits, government, health, education and personal decision-making:

- Short-listing job applicants
- Selecting projects or investments for funding
- Picking microfinance or aid programs for support
- Prioritizing local or central government spending
- Prioritizing patients for access to health care (e.g. NZ health system success story)
- Ranking researchers or students for research grants or scholarships
- Choosing a new home, car or smartphone, etc

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TITLE: Multi Criteria Decision Making

Multi-criteria decision making (MCDM) also referred to as multiple criteria decision analysis (MCDA), is a research area that involves the analysis of various available choices in a situation or research area which spans daily life, social sciences, engineering, medicine, and many other areas. MCDM is one of the most popular decision-making tools utilized in various fields

MCDM analyses the criteria to determine whether each criterion is a favorable or unfavorable choice for a particular application. It also attempts to compare this criterion, based on the selected criteria, against every other available option in an attempt to assist the decision maker in selecting an option with the minimal compromise and maximum advantages. The criteria used in the analyses of these criteria can be either qualitative or quantitative criteria.

Division of MCDM can be made into two categories based on the method used to determine the weight of each alternative.

1.**Compensatory decision making:** Involves the evaluation of the criteria, of the criteria including the weak points and strong points of the criteria and allows the strong points of each criteria to compensate for the weak points, thereby putting all the criteria of the criteria into consideration. An example of a compensatory decision-making tool is the analytical hierarchy process (AHP)—a technique used mostly when the environment for the analysis is complex. It is used in the comparison of criteria that are difficult to quantify.

2.**Outranking decision making:** This method compares the criteria of the criteria in couples in order to determine which criteria ranks higher than the others based on the comparisons. A popular example of an outranking decision-making method is elimination and choice expressing reality (ELECTRE), a method that is used to choose, rank, and sort alternatives to solve a problem.

Application of multi-criteria decision-making (MCDM) theory is the use of computational methods that incorporate several criteria and order of preference in evaluating and selecting the best option among many alternatives based on the desired outcome. It is applied to different fields to obtain an optimum solution to a problem where there are many parameters to consider that cannot be decided by the users' experiences. The application gives a ranking result based on the selected criteria, their corresponding values, and assigned weights. The application of MCDM theory in biomedical engineering (MCDM) theory is the use of computational methods that incorporate several criteria and order of preference in evaluating and selecting the best option among many alternatives based on the desired outcome. It is applied to different fields to obtain an optimum solution to a problem where there are many parameters to consider that cannot be decided by the users' experiences. The application gives a ranking result based on the selected criteria, their corresponding values, and assigned weights. The application of MCDM theory in biomedical engineering and healthcare is a new approach that can be enormously helpful for patients, doctors, hospital managers, engineers, etc. Whether it is improving healthcare delivery or making a sound and safe decision for the benefit of the patient, healthcare

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Again, depending on the application, any number of decision-makers and potentially other stakeholders may be involved, ranging from just one (e.g. you!) up to many 1000s of people.

MCDA is about getting these four things right! Do so and you'll be more likely to make the 'right' decision (though, of course, there are no guarantees, as things can change or the unexpected happen).

One-off versus repeated applications

MCDA / MCDM tools can be used for one-off (e.g. ranking applicants applying for a job or prioritizing new business projects) or repeated applications (e.g. prioritizing patients as they present for treatment).

One-off applications involve ranking particular alternatives (or individuals) that are already known to, or under consideration by, the decision-maker. In these applications, the number of alternatives is usually in at most the 10s or 100s – e.g. 250 people applying for a job, or 80 business projects to be prioritized.

In contrast, repeated applications involve ranking alternatives in a pool that is continually changing over time, involving potentially many 1000s of alternatives. For example, in health and education applications, new patients or students ('alternatives') may need to be prioritized – e.g. for treatment or scholarships – on an ongoing basis (e.g. hourly or daily), including potentially in 'real time'.

The dynamism of repeated applications means that the MCDA process needs to be capable of including potentially all hypothetically possible alternatives (including people, e.g. patients or students) that might ever occur. Accordingly, MCDA outputs are increasingly incorporated into information systems (e.g. as used by New Zealand's Ministry of Health).

Overview of the MCDA / MCDM process

Most MCDA applications are based, at least implicitly, on the process represented in Figure 1 below reproduced from Belton & Stewart (2002). The "Model building" and "Challenging thinking" stages in particular are often supported by specialized MCDA software, as discussed later below.

As represented in the diagram, the iterative nature of the process, with multiple possible feedbacks and cycles, serves to emphasize that MCDA is intended to function as a *tool to help people*, individually or in groups, to reach a decision – i.e. their decision (made by humans), not the tool's decision.

As well as more transparent and consistent decision-making, MCDA can also be used to facilitate the participation of a wide range of stakeholders, systematically taking their preferences into account. MCDA results can also be used to communicate and justify the final decision to stakeholders.

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Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

REPORT ABOUT THE PROGRAMME

Dt: 10-12-2018

Title of the Programme: One Week FDP on "Research Methodology: Tools & Techniques Using R Programming"

Inauguration Date & Venue: 3rd Dec 2018 & DNRCET Seminar Hall

Organized By: Department Of Computer Science Engineering, DNRCET

Resource Person: Dr. K. Subramanyam, Professor CSE, KL University

Dr. K. Srinivas, Professor in CSE, BVCITS, Amalapuram.

Chief Guest:

Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 60

Concept:

R is a free, open source statistical programming language. It is useful for data cleaning, analysis, and visualization. It complements workflows that require the use of other software. You can read more about the language and find documentation on the R Project Website. It is widely used as a statistical software and data analysis tool. R generally comes with the Command-line interface. R is available across widely used platforms like Windows, Linux, and macOS. Also, the R programming language is the latest cutting-edge tool.

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Principal
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RESEARCH METHODOLOGY: TOOLS & TECHNIQUES USING R PROGRAMMING (FDP)

SNO	NAME	03.12.2018 DATE & SIGN
1	Dr.B.V.S.VARMA	
2	Dr.A.RAMA MURTHY	
3	Dr. G SATYANARAYANA	
4	Dr. P SAMBA SIVA RAO	
5	K.SURYA RAM PRASAD	
6	B.V RAM KUMAR	
7	B.NANDANA KUMAR	
8	G SUNIL PREM KUMAR	
9	G.V.SATYA SRI RAM	
10	S.LAKSHMAN RAO	S. Lakshmana Rao
11	N.BHARATHI	N. Bharathi
12	P. LALITHA RAJESWARI	P. Lalitha
13	B .JYOTHI PRIYANKA	Jyothi Priyanka
14	M.MOUNICA DEVI	
15	V NAVYA DEVI	
16	L BUJJI BABU	
17	K S H PRASANNA KUMAR	
18	K SIVA SYAMALA	K. S. Syamala
19	E RAMA LAKSHMI	
20	V LAKSHMI	V. Lakshmi
21	KORADA KALYANI	K. Kalyani
22	M.PRABHAVATHI	
23	K.SPANDANA	
24	K SARATH CHANDRA	
25	M NAGA LAKSHMI	

M. Ayyankumar

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26	CH SAI SIVA DURGA	Ch. Sai Sivadurga.
27	U SUSHMITHA	U. Sushmitha
28	M S N Srikanth	M. [illegible]
29	K.VENKATA CHANDRAN	K. Venkatachandran
30	PRAVEEN PRAKASH	Praveen Prakash
31	BALAM SANTOSH KUMAR	B. Santhosh
32	BANDARU JYOTHI	B. Jyothi
33	BODDUPALLI SURYA TEJA	B. Surya Teja
34	BORRA GAYATHRI DEVI	B. Gayathridevi
35	BORRA PURNA CHANDU	B. Purna Chandu
36	BORRA VENKATESWARAMMA	B. Venkateswaramma
37	CHALLA PRASANTHI	Ch. Prasanthi
38	KALIPATNAPU GOWTHAM	K. Gowtham
39	KANDIBOYINA AKHIL	K. Akhil
40	KANDULA SRI NAGA BHARGAVA PRIYA	K. S. N. B. Priya
41	KANUMURI MAHESH VARMA	K. Mahesh Varma
42	KETHA BHUVANA SAI PAVAN	K. Bhuvan Pavan
43	KIMIDI THERESA	K. Theresa
44	KOLLA PAVANI	K. Pavani
45	KOLLA PAVANI	K. Pavani
46	DANIKONDA DEVI VARA PRASAD	D. Devi Vara Prasad
47	DASARI MAHI MANVITHA	D. Mahi Manvitha
48	DATLA JHANSI LAKSHMI	D. Jhansi Lakshmi
49	DULAM MADHURI DEVI	D. Madhuri Devi
50	DUVVI NARASAVENI	D. Narasaveni
51	GADIRAJU VASAVI	G. Vasavi
52	GANDHAM SRI VANI	G. Srivani
53	GOKARAJU GOWRI MANASA	G. Gowri Manasa
54	GUBBALA SUDHEER	G. Sudheer

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55	GUDURI HEMA MALINI DEVI	G. H. Malini Devi
56	GUDURI MANIKANTA	G. Manikanta
57	IMANDI ANJAN KUMAR	I. Anjan kumar
58	INDUGA VARUN	I. varun
59	INDUKURI GEETHA PAVITHRA	I. Pavithra.
60	JAMPANA BHAVYA	J. BHAVYA

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Katikireddy Srinivas

Name	**Katikireddy Srinivas**
Designation	Professor and HOD
Department	CSE
DateofJoiningtheInstitution	06/02/2022
QualificationswithClass/Grade	B Tech(CSIT)-69 %,M Tech(CS):76% ,(PhD)
Total Experience in Years	19 Years
Research Papers published	Journals:15 Patents:01
ResearchPaperspresentedin Conferences	6
PhD Research Area & University	Machine Learning- K L Deemed to be University, Vaddeswaram,Guntur Dt,AP
ProjectsGuided	M Tech:15 B Tech:50
ProfessionalSocietyMemberships	02 (LMCSI,LMISTE)
Awards	04
FDPs/WorkshopsOrganized	10
FDPs/WorkshopsAttended	45
Interactionwith ProfessionalBodies	03

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Research Paper Writing Using R Programming

You should start writing your paper *while* you are working on your experiment. Prof. George Whitesides says: "A pa- per is not just an archival device for storing a completed research program; it is also a structure for planning your research in progress. If you clearly understand the pur- pose and form of a paper, it can be immensely useful to you in organizing and conducting your research. A good outline for the paper is also a good plan for the research program. You should write and rewrite these plans/outlines throughout the course of the research. At the beginning, you will have mostly plan; at the end, mostly outline. The continuous effort to understand, an- alyze, summarize, and reformulate hypotheses on paper will be immensely more efficient for you than a processin which you collect data and start to organize them only when their collection is 'complete' ." Here are some con- crete steps to get started.

1. Read George Whitesides' "How to Write a Paper".
2. Read through *at least* one full paper in your target journal, to get a sense of the content and writing style.
3. To clarify in your own head the purpose of your paper, start by drafting your abstract.
4. Before you tackle the body of the paper, sketch block outlines of the figures. Decide what images and plots you will put in the paper, and how the panels will be arranged.
5. Outline at the paragraph level before you write. Look at how many paragraphs there will be in the style of paper you are trying to write. For example, for a standard 4-page scientific letter, aim for 13 paragraphs (generally, you can estimate about 200 words per paragraph). Figure out how to tell your entire story (not numbers, just story!) in 13 stand-alone sentences.
6. Make each of those sentences into the first sentence of a paragraph, and fill into each paragraph only de- tails that are relevant to that first sentence.If you find yourself writing details about the figures, cut and paste them into the captions.
7. If you can include the minimal identifying information in parentheses to trigger your memory later, e.g. "(WhitesidesAdvMat)", so all of the information is compact.
8. Dig into the existing literature to write the intro paragraphs. A thorough literature search may take a full focused week for each intro paragraph. Use an organized, three-pass approach to keep a good balance between depth and breadth of your search.
9. Rewrite your abstract, taking into account what you have learned from the process of writing the paper. Asyou fine-tune your abstract, refer again to Nature's instructions for writing an abstract and for clear communication more generally.

Your paper should be fractal:

Somebody with one minute to look at it should be able to get the main idea just from reading the abstract. Somebody with 5 minutes should be able to look at the figures and get more out of it. Somebody with 10 minutes should be able to get the story from the introduction, first sentenceof each paragraph, and conclusion.

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LaTeX – A document preparation system

LaTeX is a high-quality typesetting system; it includes features designed for the production of technical and scientific documentation. LaTeX is the de facto standard for the communication and publication of scientific documents. LaTeX is available as free software.
You don't have to pay for using LaTeX, i.e., there are no license fees, etc. But you are, of course, invited to support the maintenance and development efforts through a donation to the TeX Users Group (choose LaTeX Project contribution) if you are satisfied with LaTeX.
You can also sponsor the work of LaTeX team members through the GitHub sponsor program at the moment for Frank, David and Joseph. Your contribution will be matched by GitHub in the first year and goes 100% to the developers.
The volunteer efforts that provide you with LaTeX need financial support, so thanks for any contribution you are willing to make.

Maintain your outline:

It's important not to lose sight of your outline, as you fill in the details of your paper. This LATEX template file allows you to title each paragraph using the \ptitle{} command. You should keep these titles in place throughout the entire paper- writing process; they will serve as a constant reminderto keep each paragraph focused on a single point. You should be able to skim through these bold paragraph titles, without reading any of the intervening sentences, and still understand the basic logical flow of the paper. At the final step before submission, comment out the line ptitletrue in the header, to hide the paragraph titles. But do not delete the paragraph titles, because they will remain useful to you in the inevitable paper revision process down the road.

Formatting checklist:

Whether you are using a compiler on your computer or online, please use the latest version of REVTeX, and check your formatting carefully.

TABLE I. Formatting mathematical symbols.

Incorrect	Correct
$cos\theta$	$\cos\theta$
$Tsample$	Tsample
Vrms, V (rms)	Vrms
Ex, x direction	E_x, x direction
$B\vec{}$app	$\vec{B}$ app
$Sb2Te3$, Sb2Te3	Sb2Te3
Sb2−x VxTe	Sb2−xVx Te3
	dI/dV

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3 dI/dV $B = 5T$, B=5T x direction, X direction 1st, 1st, 2nd, 2nd	$B = 5$ T x direction 1st, 2nd

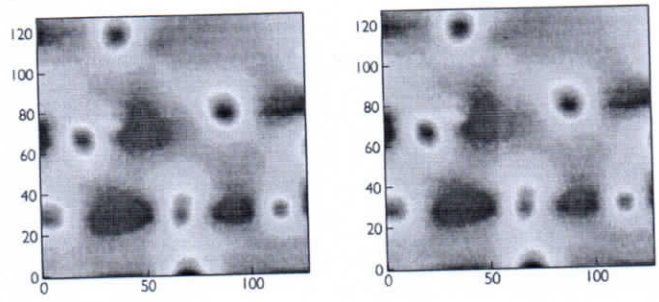
TABLE II. Spacing.

	LATEX	Output
Incorrect	e.g. incorrect	e.g. incorrect
Incorrect	Fig. 2	Fig. 2
Correct	e.g.\ correct	e.g. correct
Correct	Fig.\ 2	Fig. 2
Correct	Fig.~2	Fig. 2

Use vector format figures:

Figures should typically be made in Python, Adobe Illustrator, or other program that allows vector format export, so that all fonts, arrows, etc. will scale cleanly when zoomed. Most journals prefer to stay away from Microsoft Powerpoint (although it can be exported to eps or pdf) because the fonts are often not transcribed correctly in publication format. A bigger problem with Microsoft is that it does not faithfully reproduce the pixelation of data images. Microscope images are acquired with a specific pixel resolution, and that pixelation should be honestly communicated to the reader without interpolation.

Fig. 1 illusrates this point.



Comparison between blurry pixels (dishonest interpo- lation occurs when the image is processed in Microsoft Pow-erpoint) vs. clean pixels (honest representation is preserved when the image is processed in Python and Adobe Illustra- tor). MFM images of vortices in NdFeAsO1$-x$Fx.

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Vector Graphics

Mendeley also provides an export function to automatically create your bib file. Here are some tips to use Mendeley most effectively.

1. Import paper: In the upper left corner of Mendeley Desktop, click the drop-down menu for "Add" and se- lect the bottom option "Add Entry Manually". In the dialog box that pops up, scroll down until you find the DOI field. Paste the DOI into the field, and click the little magnifying glass icon to the right of the field. This will auto-populate all of the relevant paper infor- mation such as author names, title, etc., without risk of typos due to manual copying.
   Note 1: Mendeley also allows you to import directly from a PDF file, and it tries to pull all of the meta- data from the PDF, but the process is imperfect. So it's safest to use the DOI for an error-free import.

   Note 2: Even if you use the DOI, some journal titles will not import correctly with special characters,so you may need to manually correct.

2. Add tags: It's useful to add tags to help sort your imported papers. For example, if you are going to be writing a manuscript in 2019 on superconductivity, you might add the tag "sc19" to all the relevant papers that you will be citing in your manuscript.
3. Export bib file: Select all of the references that you want to include, and go to File Export. Name your file, and it will add a citation key to each paper (e.g. Whitesides2004) and automatically export to a bib file.
4. **Resolve redundant citation keys**: At this point, you may have several references with the same citation key, e.g. Huang2016a and Huang2016b For your future convenience, you should manually change the redundant citation keys to be more informative, e.g. HuangNanoLett2016 and HuangPRB2016. Now re export the bib file. Open the bib file in your tex file editor. By default, Mendeley exports all fields, including long ones like the abstract. To reduce clutter in your bib file, and make it easier to debug any errors, it's a good idea to remove the abstracts and other unnecessary fields. For exam- ple, in WinEdt go to Search Replace, check the reg- ular expressions box, search for "<abstract** ,>," and replace it with nothing.

Introduction to R

You've made it this far. In theory you know how to collect your data now. You might have done that by conducting interviews or running a survey, or just by visiting an archive like the General Social Survey website. *Having* data is worth something, but it's not worth everything. You have to do something with the data in order to answer any questions with it.

The rest of this book is focused on that goal - using the data you collected in order to answer the questions you want to be able to ask. A lot of the time we use statistics to

answer those questions, at least partially. Sometimes we'll use the basic calculations you probably did in a high school stats class and sometimes using something more complicated. Statistics is a substantial part of how social scientists know anything about the world. But this book wont focus on how to calculate a standard deviation by hand, because you don't have to. It's good for understanding what the measure means, but software can do that work for you lightning fast - the more important skill is knowing what to do with it once it is calculated.

The next set of chapters will all be structured the same way. The first half of the chapter will introduce a topic (in this chapter R and programming) and the second half will focus on examples and practice. You can read the first half without being concerned about the second half, and you can just go practice the second half if you already know everything you need to about the topic.

The second half of the chapter will generally repeat the material in two forms. I'll describe all the steps involved in whatever we're learning, and I'll walk you through those steps using videos too. That gives you a few opportunities to see the material. If you get stuck practicing it'll be frustrating. I still get frustrated pretty often when coding. What I would recommend is slowing down, looking back at what you did and just trying to reproduce exactly what is in the book as closely as possible.

9.1 Concepts

9.1.1 What is R

R is a programming language and environment for data analysis that is popular with researchers from many disciplines. R refers both to the computer program one runs, as well as the language one uses to alter data within the environment. R only speaks R, and so like traveling to a foreign country it is useful to learn the local language in order to communicate. You call yell at R in English as long as you want, but it can't produce your data unless you ask correctly. Fortunately, R's language is based on English and it wants to be as straightforward as possible

9.1.2 Why Use R?

There are other statistical packages that similar research methods classes use, including Stata and SPSS. One of the greatest benefits of R is the price: free. Access to Stata for a one semester class costs $45-125, and extended access costs more. And like Apple they update the software periodically, which means purchasing a new license. R is an open source software that anyone can use free of charge forever. That means whatever skills you learn you can continue to develop after the class ends.

Many people have access to Excel as a spreadsheet program through Microsoft Office, but R is faster and more flexible for data analysis. Excel is a drag-and-drop

program that does not produce reproducible analysis. R, as a programming language, allows users to create a 'script' that the computer runs in order to output analysis. That means the script can be reusable, shareable, and iterative, which will have significant benefits if you continue with data analysis after the class. Luckily, R is a relatively straightforward introduction to programming.

Me justifying that you should learn to code because it will benefit you after the class and you can write something called a script probably sounds weird though. The majority of readers wont be interested in doing anything related to this class after the semester, and you have no idea what a script or reproducible analysis is. Using Excel would be more user friendly - there would be no language to learn, and the data you're using is always right in front of you. I've done that before in a similar class, and actually using Excel as a tool is just as a difficult for beginners, and the ceiling on how useful it can be for working with data is considerably lower. Take this class as an opportunity and gentle introduction to a really valuable career skill: programming.

9.1.3 Why learn to program?

Data analytics is a quickly growing field with numerous job possibilities. The skills you learn in this class, if more fully developed, can be applicable to any industry, from Google to banks to government to a lemonade stand.

Computer programming is a flexible skill that can help you to manage laborious processes. It can stimulate creative thinking, grow your problem solving capabilities, and can help teach persistence. All of that with a valuable on the job market.

Data Scientist has been called the sexiest job of the 21st Century.

If you wont take my word for it, President Obama once stated that every kid should learn how to code/program.

Let's give it a shot in this class, and see if it's a skill you'd like to continue developing.

I'll make one final argument in favor of coding. It's a bit like doing magic of casting spells. You get to speak an arcane language that not everyone understands and when you do speak it things happen. If I write a statement like "a graph that shows the relationship between murder and assault rates for US states" the sentence does nothing. It just sits there, and you can read that sentence, but nothing happens. If I write a spell though like plot(USArrests$Murder, USArrests$Assault) suddenly it transforms into what I want.

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Balusumudi, Bhimavaram – 2

(Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada)

(Accredited with B^{++} Grade by NAAC)

Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

REPORT ABOUT THE PROGRAMME

Dt: 13-02-2019

Title Of The Programme: A Two days Workshop on Thesis Writing and Plagiarism Verification

Inauguration Date & Venue: 11th Feb 2019 & DNRCET Seminar Hall

Organized By: Department Of Civil Engineering, DNRCET

Resource Person: Dr. M. C S Madan, Professor in Civil, BVCITS, Amalapuram.

Chief Guest: Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 60

Concept:

Plagiarism is presenting someone else's work or ideas as your own, with or without their consent, by incorporating it into your work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition. Plagiarism constitutes a breach of academic integrity and represents substandard scholarship. Plagiarism can have lasting impact on the future career, regardless of whether it was intentional or not. The responsibility to avoid plagiarism belongs with the student or researcher.

Principal

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WORKSHOP ON THESIS WRITING & PLAGIARISM VERIFICATION

SNO	NAME	11.02.2019 DATE & SIGN
1	Dr.B.V.S.VARMA	
2	Dr.A.RAMA MURTHY	
3	Dr. G SATYANARAYANA	
4	Dr. P SAMBA SIVA RAO	
5	K.SURYA RAM PRASAD	
6	B.V RAM KUMAR	
7	B.NANDANA KUMAR	
8	G SUNIL PREM KUMAR	
9	G.V.SATYA SRI RAM	
10	S.LAKSHMAN RAO	S. Lakshman Rao
11	N.BHARATHI	
12	P. LALITHA RAJESWARI	P. Lalitha
13	B .JYOTHI PRIYANKA	Jyothi priyanka
14	M.MOUNICA DEVI	
15	V NAVYA DEVI	
16	L BUJJI BABU	
17	K S H PRASANNA KUMAR	
18	K SIVA SYAMALA	K. S. Syamala
19	E RAMA LAKSHMI	
20	V LAKSHMI	V. Lakshmi
21	KORADA KALYANI	K. Kalyani
22	M.PRABHAVATHI	
23	K.SPANDANA	K. Spandana
24	K SARATH CHANDRA	
25	M NAGA LAKSHMI	

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26	CH SAI SIVA DURGA	Ch. Sivadurga
27	U SUSHMITHA	U. Sushmitha
28	M S N Srikanth	M. S. N Srikanth
29	K.VENKATA CHANDRAN	K. Venkata Chandran
30	PRAVEEN PRAKASH	Praveen prakash.
31	BALAM SANTOSH KUMAR	Santhosh.
32	BANDARU JYOTHI	B. Jyothi.
33	BODDUPALLI SURYA TEJA	B. Surya Teja
34	BORRA GAYATHRI DEVI	B. Devi
35	BORRA PURNA CHANDU	B. Purna Chandu
36	BORRA VENKATESWARAMMA	B. Venkat...
37	CHALLA PRASANTHI	Ch. prasanthi
38	KALIPATNAPU GOWTHAM	K. Gowtham
39	KANDIBOYINA AKHIL	K. Akhil
40	KANDULA SRI NAGA BHARGAVA PRIYA	K. Naga bhargava Priya.
41	KANUMURI MAHESH VARMA	K. Mahesh...
42	KETHA BHUVANA SAI PAVAN	K. Bhuvana sai pavan
43	KIMIDI THERESA	K. Theresa...
44	KOLLA PAVANI	K. Pavani
45	KOLLA PAVANI	K. Pavani
46	DANIKONDA DEVI VARA PRASAD	D. D. Vara prasad.
47	DASARI MAHI MANVITHA	D. mahi manvithi
48	DATLA JHANSI LAKSHMI	D. Jhansi Lakshmi
49	DULAM MADHURI DEVI	D. Madhuri devi
50	DUVVI NARASAVENI	D. Narasaveni.
51	GADIRAJU VASAVI	G. Vasavi
52	GANDHAM SRI VANI	G. Sri Vani
53	GOKARAJU GOWRI MANASA	G. Gowri manasa
54	GUBBALA SUDHEER	G. Sudheer.

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57	IMANDI ANJAN KUMAR	I. Anjan Kumar.
58	INDUGA VARUN	I. Varun
59	INDUKURI GEETHA PAVITHRA	I Anjaneya Prasad
60	JAMPANA BHAVYA	J. Bhavya.

M. Anjaneyulu

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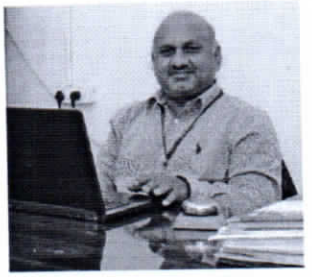
PROFILE



Dr. M C S MADAN

Ph.D. in Environmental Engineering and Managementspecialization.
Dr M Chandra Shekhar Madan has been with us for the last 15 years,and he is responsible for the College Academic Committee. He hasprepared courses for the Civil Engineering department, such as Environmental Engineering I & II and Waste Water Management, along with handling courses like Industrial Waste and Waste Water Management, Air Pollution Control, Solid Waste and Hazardous Waste Management, Engineering Geology.

In his 25+ years of experience, he has deployed different teaching methodologies such as the traditional White Board & Marker, PowerPoint Presentations, Demonstration based lectures, textbook Assignments, Web References, Video Lectures, Enquire oriented Education, Interactive Learning and Group Discussion.

He is a member of the ISTE professional body, and has published research journals and papers on :

- Effect of Structural Irregularity in Multistoried Effect of Carbon Fibre Reinforced Polymer (CFRP) sticking on Load Carrying Capacity of Columns
- Effect of basalt Fibre reinforced Polymer (BFRP) sticking on LoadCarrying Capacity of Columns
- Enhancement and partial Replacement of Cement by Glass Powder based on Concrete
- Utilization of Demolished Concrete Waste for New Construction

He has also mentored and guided research committees on thefollowing projects:

- A Study on drinking Water Quality and Security in Amalapuram Municipality
- A Study on Municipal Solid Waste (MCW) designing of Sanitary Land Filling (SLF) site and management of MSW in Amalapuram
- A Study on Effect of Sea Food Processing Effluent in Coringi River
- A Study about Effects on Compressive Strength of Concrete by Partially Replacing Concrete with Marble Dust Powder and Using Polycarboxylate Ethane as Super Plasticizer
- A Study on Shrimp Processing Industry effluent waste and utilisation of treated waste in East Godavari District, Andhra Pradesh
- A Study on Disposal of Untreated Sewage for Land treatmentin Amalapuram
- A Study on Use of Rice Husk Ash in Concrete

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He has received the following recognitions and awards by theUniversity:

- Lab External for Environmental Engineering
- E Waste management (NPTEL)
- Paper Evaluation of Environmental Engineering course (JNTUK)
- Paper Evaluation of IWHWM course (JNTUK)
- Paper Evaluation of APC course (JNTUK)
- Paper Evaluation of WWM course (JNTUK)
- Lab External Examiner for EE (JNTUK)
- Project External for viva voce for B.Tech & M.Tech
- Lab External for UG & PG courses (JNTUK)
- Preparation for Scheme of Evaluation for UG subjects (JNTUK)
- Chief Examiner for UG subjects (JNTU)

He has been a vital part in organizing Seminars and Workshops on E Waste Management, Auto CAD 2D, Internship Program Restructuring, ARC GIS amongst a few.

In his previous stint, he was an Assistant Professor at Aditya College (2005-2007) & Founder HoD and Associate Professor at SGCSR College (1994-2005)

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INTRODUCTION

Thesis is a kind of obligatory academic writing for the students in higher education level. In most universities in Indonesia, the students from undergraduates, masters, and doctorates, have a requirement to conduct a research and report it in a form of thesis or dissertation. Surely, that assignment must be completed properly, considering that the critical issue in academic writing is the originality and honesty.

Academic dishonesty became a great concern in education, particularly in the higher level. Sadly, cheating and plagiarism are still committed by many scholars. For that matter, the scholars have taken many efforts to reduce plagiarism in their community. Nonetheless, Dahl (2007) claimed that the effort would be challenging since there is an ambiguity in defining the clear concept of plagiarism. Supporting the statement, Razera (2011) explained that the concept of plagiarism might be straightforward in theory, but it will be harder to be determined practically.

Furthermore, some students still have lack of understanding about the boundaries in plagiarism, in terms of the limit of direct quotation allowed in their papers (Goddard & Rudzki, 2005). Therefore, there must be a common understanding among the academics including the students about the definition or plagiarism in their paper writing. Goddard & Rudzki (2005) believed that having prior knowledge of the sources used by the students was the initial way the lecturer did in detecting plagiarism.

These days, the internet provides countless sources the students can take. They can easily just copy and paste the texts or images from the internet with or without making citations. Regarding to the issue, the essential way to avoid plagiarism is by using proper citations and paraphrasing or quotations. In using the idea of other's work, it should be well paraphrased and included a citation of the author's name and the year. The materials taken from other sources are initially to support the writer's idea. Minor role of the writer's idea in a paper even contain well-paraphrased sources and proper citation may still be considered as plagiarism (Turnitin, 2012).

Conversely, a common way to prevent plagiarism in this digital era is by implementing plagiarism detection software. *Turnitin*, as one of many online services in detecting similarity index of students' writing, is very helpful for the tutors/lecturers in spotting suspected plagiarism in the students' paper and using the result to keep them revise their writings (Dahl, 2007). Parkhurst & Moore (2006) noted that *Turnitin* is very reliable in detecting similarity since its algorithm can find matching text even if some words or phrases in the text have been replaced. Many studies proved that the access to such websites is effective in reducing plagiarism among students (e.g. Baker, Thornton, & Adams, 2008; Batane, 2010; Sutherland-Smith & Carr, 2005).

The software analysed and then highlighted the sentences, which were found as similar to the other publications – in their huge database. By using the software, the students can directly

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notice the bad paraphrased sentence or paragraph, the highlighted ones, and then they may re-paraphrase them appropriately.

In general, many studies concluded that the students have a good perception about plagiarism-prevention software (e.g. Ali, 2013; Dahl, 2007; Davis, 2007; Graham-Matheson & Starr, 2013). Thus, it can be assumed that reducing plagiarism will depend on the use of such software. On their study, Graham-Matheson & Starr (2013) and Dahl (2007) concluded that the students seem tend to support the implementation of *Turnitin*. Moreover, some studies pointed out that the software is effective in detecting and reducing plagiarism practices among the students (e.g. Ali, 2013; Biggam & McCann, 2010; Kiriakidis, 2012). Nevertheless, Davis (2007) had a doubt that the students, who used the software without intention to learn, will likely commit a 'well-organised plagiarism' since the website only display the similarity index of the text.

Davis (2007) recommended that in order to get a valuable learning opportunities, the scholars should use the software to submit the draft of their papers before assessment. Furthermore, to avoid the students misinterpreting of the originality reports from the website, the supervisor should assist them through the process. On the other hand, the students must understand clearly the concept of plagiarism.

Nonetheless, plagiarism is a complex problem that requires many kinds of efforts to reduce it. The implementation of *Turnitin* is simply a tool to educate the importance of originality and novelty in writing to the students (Sutherland-Smith & Carr, 2005). For that reason, the decision to determine whether a paper contains plagiarism will depend on the tutors/lecturers.

The implementation of plagiarism prevention software will be a challenge to all of the students to prove the originality of their theses and dissertations. On the other hand, this will also be a chance for the students to improve the quality of their academic writings. Therefore, related to those issues, this paper elaborates the advantages of plagiarism prevention software and the students' attitudes towards the use of such software in checking their theses.

METHODS

The participants in this study were the students of Master's Degree in English Language Education. In selecting the participants, the researcher employed purposive sampling technique. Seven students, who already completed writing their theses and were in the final stage of their study, were selected for interview.

The researcher applied in-depth interview to gain the information on the advantages and the students' attitudes towards plagiarism prevention software in checking their theses writing. The data of the interview was examined and reduced into specific information needed from the interview transcripts. Afterwards, the researcher displayed the data and provided description and analysis related to the purpose of this study.

FINDINGS AND DISCUSSION

The Advantages of Plagiarism Prevention Software

This part elaborates the advantages that the students got from plagiarism prevention software. The students believed that there were several advantages of the implementation of the software, such as:

1. Encouraging the students to be more aware of learning the skills of quoting other people's ideas, paraphrasing sentences, and citing the source properly;
2. Encouraging the students to improve the quality of their academic writings; and
3. Encouraging the students to be more creative and confident in formulating their own ideas, rather than 'stealing' other people's ideas

The following excerpt was taken from the interview of the students' statements about the advantages.

Excerpt 1. Advantages of plagiarism prevention software

"Firstly, from the perspective of introduction and development of science and technology, it was quite well-intentioned. Secondly, for the students themselves, when their theses had been submitted and detected the similarity, they would learn on what steps they should do about it." – (S01)

"...by the national level, it would contribute to our country in terms of our scientific abilities and our writings, because the writings were originally generated from our own ideas. Secondly, we could certainly promote our campus, as the use of the software would decrease the similarity (of our writings) compared to the others, there would be many journals published by our campus. The third, it would be a challenge for me myself in order to make my writings better and meet the international standard. It would be a pride to be able to create original writings." – (S02)

"...to prevent from committing plagiarism. This would reduce the number of plagiarism made by the students, not because of awareness, but because of fear. Besides, it would improve our creativities to be not only rely on other people's works, but also the students' original ideas." – (S04)

"Surely, it would decrease and preventing plagiarism. For me, it would help me keeping the quality and originality of my thesis." – (S05)

"It was useful because it made me more aware of the importance of knowing the source and citing the quotations in writing. Plagiarism detector would indirectly demand us to read, to dig (information), to formulate (ideas), and how to process the information, how to formulate our ideas, how to develop ideas in order not to commit plagiarism. So, the advantage would lead us to develop writing skill, to be a learning material, and to raise awareness (of plagiarism free)." – (S06)

"The true benefit of this software is helping us as a writer to be more careful in producing our work by quoting and using other people's ideas or arguments. In the past, we might just quote (people's ideas) and considered that it was our own ideas. This software will detect such actions. By the concern of being detected, we would be aware to learn that we must be honest in telling things in our writing." – (S07)

The students agreed that the use of plagiarism prevention software would benefit them in terms of their writing skill. Specifically, the software would help the students to learn about how to prevent and avoid plagiarism. Moreover, it would help them to be more creative and be aware of the importance of developing original writings.

Another important issue that should be considered is the benefit of plagiarism prevention software in order to keep the academic integrity or ethics among the students. The students' responses on that issue are displayed in the following excerpt taken from the interview.

Excerpt 2. Plagiarism prevention software in raising the academic integrity

> "Personally, *Turnitin* was one of many things that raise my awareness to not plagiarise other people's writings. Actually, I had such awareness before, but I did not know that we have to paraphrase (the words) in order to be not similar. Generally, *Turnitin* should have an impact to the academic awareness of the students. It might not be significant, but it should have (impact)." – (S02)

> "Without the standard or regulation of using the software, such awareness had actually existed in every student who is writing their theses. I mean, the students should feel guilty when they use other people's idea without citing the author. Some students felt indifferent and some others felt guilty. Those who felt guilty should have the intention to admit that they actually did (plagiarism). Those who felt indifferent might only be degree-oriented. The use of such software should affect the students negatively; they should be worry of being accused for stealing." – (S03)

> "Yes, I am sure. In the beginning, the students would be introduced to the software and then they would reach the stage of asking how to avoid plagiarism. I am sure that they would know the importance of citing properly, as the ideas belong to other people. An idea is the attribute of professionalism; therefore, we should not take it directly (without giving credit)." – (S06)

> "As they learned that the software exists, even though not implemented entirely, it would have impacts. Inevitably, the students will be afraid, worried, and careful in writing or in quoting other people's statements." – (S07)

Some students were optimist that the implementation of plagiarism prevention software could help in keeping the academic integrity or ethics among the students. However, some others showed a different perspective. They doubt that the implementation of the software would only make the students to be trickier in avoiding the high similarity report of the software. The following are the excerpts of those students' statements.

> "I think it would be difficult for the students to raise awareness themselves. Self-awareness is very difficult because it might be a tradition for the students. (The implantation of such software) could only make them to be more creative, trickier, on cheating and plagiarising. It could make them to be trickier even more, not making new things, but being shiftier, trickier." – (S04)

> "The main purpose of plagiarism checking would definitely be keeping ethics in writing, to keep the quality and ethics in academic writing. I am not sure about that because there would always be students who cheat. Sometimes there would always be deviations, but it should definitely be prevented as much as possible. It always depends on the individual." – (S05)

Although some students doubt on the role of plagiarism prevention software in raising the academic integrity among the students, most of the students generally agreed that the integrity or ethics would always depend on the students themselves. The implementation of plagiarism prevention software might help the students in building or keeping their integrity. Nevertheless, the action of either ignoring or embracing it would always depend on each student's personality.

Utilizing the Software's Advantages

The implementation of plagiarism prevention software should have advantages into two terms: developing the students' individual skills and maintaining the integrity or ethics in academic environment. Based on the findings of this study, the students agreed that the software should benefit them in several things. Firstly, the software could encourage the students to be more aware of learning the skills of quoting other people's ideas, paraphrasing sentences, and citing or crediting the source properly. Secondly, the software could encourage the students to improve the quality of their academic writings. Thirdly, the software could encourage the students to be more creative and confident in formulating their own ideas, rather than stealing other people's ideas (see Excerpt 1: S01, S02, S04, S05, S06, S07). Furthermore, the academic integrity or ethics among the students should be maintained when the students become aware and skilful enough to avoid plagiarism (see Excerpt 2: S02, S03, S06, S07).

Nevertheless, there is also a hesitation of the possibility for some students to be trickier in committing intentional plagiarism (see Excerpt 2: S04, S05). That issue was also raised in previous study (Davis, 2007). The students who would like to do such thing must be those who have no intention to learn and develop themselves. By this fact, it surely would be better if the students develop their skills in writing and improve the quality of their writings rather than attempt to manipulate the software's detection.

Therefore, there will be two stages regarding the benefit of plagiarism prevention software in building up the academic integrity. The first will be the stage of plagiarism reduction. As it was explained previously, the first time checking will display the current quality of the students' theses, in terms of similarity. After the theses was properly revised and then rechecked through the software, the similarity should be decreased. Many studies proved that the use of plagiarism prevention software effectively reduced plagiarism among the students (e.g. Ali, 2013; Baker, Thornton, & Adams, 2008; Batane, 2010; Biggam & McCann, 2010; Kiriakidis, 2012; Sutherland-Smith & Carr, 2005).

The second will be the stage of prevention. As the students get used to the software, they will be aware of properly paraphrasing other people's sentences, and making proper quotations and citations in every time they write. As a result, the students will always try to avoid plagiarism in their academic writings. Likewise, if the university issue a regulation to require all students to check their theses through plagiarism prevention software, it would build the atmosphere of preparedness and awareness among the students to try their best in order to avoid plagiarism.

These findings are quite related to Twomey's (2009) study that there should be two highly beneficial purposes of plagiarism detection software. In the short term, it can enable the lecturers to check out every concern, to distinguish accurately between students who have done the work

correctly and those who have not. In the long term, the lecturers will be easier to assign and grade pedagogically valuable research papers and other written work.

The Students' Attitudes towards Plagiarism Prevention Software

Regarding the regulation of implementing plagiarism prevention software, generally, there were two kinds of attitudes raised by the students:

1. Those who agreed and fully supported the implementation of plagiarism prevention software; and
2. Those who doubted and raised some concerns on the implementation of plagiarism prevention software.

The following excerpt displays the students' attitude toward the policy of implementing plagiarism prevention software.

Excerpt 3. Attitudes toward the implementation of plagiarism prevention software

"I certainly support this, in order to improve the quality of the alumni of this graduate program. If the (students') writings are good, they will be qualified to be published either nationally or internationally. Therefore, the grade of this campus will increase, although it will still be difficult. It might be difficult for the students as well. However, if they are willing to develop, I think they will be pleased to accept this. We should always pass the difficult things before something good come to happen." – (S02)

"If this is become a regulation in this institution, it will be great. It would teach the students not to steal. I mean, there are so many books in this world. You do not have to copy and paste. I think it is good. It would be even better in order to create creative people. Because, you can be creative without copy and paste other statements." – (S03)

Some students supported the idea of implementing plagiarism prevention software in checking the students' theses. Mostly they argued that such regulation could help the students develop their ability and skill in academic writing. In addition, they also believed that the use of the software could help the students to be more creative and honest. However, some students doubted the implementation of the software. They did not fully support the idea of such regulation. The following are the excerpt of those students' opinions.

"...ideally, the authorities of the graduate program should not change their system, but review their purpose of using that software. Because, I think it is clear that the software is not for detecting plagiarism, but similarity. That (matter) must be understood firstly. Therefore, they would not directly issue their judgments." – (S01)

"I am sure that the students will certainly be shocked, because unconsciously plagiarism has become a tradition. I guess that is very common. When they are introduced with plagiarism detector and they are introduced with the concept of plagiarism, they would firstly be shocked. The same thing happened to me. Their first question would be: Why should be like that? However, as the drafting progress, I am sure that they would reach the next stage by asking, how to avoid plagiarism." – (S06)

"I agree if the regulation intended to prevent plagiarism in scientific writing. However, in my opinion, the regulation was not implemented maximally. I mean, it was only said that there is a tool for detecting plagiarism and such, but in reality, it was not entirely applied. I think it would be ineffective if the regulation is not followed up by the authorities of this campus." – (S07)

The students who doubted the policy of implementing the software argued that the authorities should reconsider their purpose of the policy. They mostly worried of being accused of plagiarism when the judgement made solely based on the report of the plagiarism prevention software. Moreover, as S06 stated, the students would likely be shocked if the use of such software directly implemented before they are ready and aware of the concept of plagiarism. On the other hand, S07 argued that the regulation of using plagiarism prevention software would be ineffective if it is not implemented entirely for all students.

The Students' Reactions towards the Software's Similarity Reports

Different attitudes showed by the students towards the idea of the regulation. On the other hand, it would be interesting to find out how the students would react after their theses had been checked through the software. The researcher then interviewed the students about their reactions. Generally, they were willing to change the detected similar words in their theses. The following are the excerpt of the students' reactions.

Excerpt 4. Reaction towards the similarity report

"...reconstruct (the sentence), change the words, paraphrase, but remain putting the name of the author. That would reduce the percentage of similarity. So, that is what I would do, paraphrasing." – (S02)

"I will change it automatically to be more valid and original of my writing." – (S03)

"I will change it. I will replace (the words) immediately." – (S05)

"I will take the print out, and then look on which parts are detected as similar. The first step I would do is to find out if the script had existed or had been written before, and where is the source. The software would have provide the source of each similarity. Then, I would see the structure of the sentence. Is the context of that sentence similar with the context I intent? If I could not get that, I would not change it. On the contrary, if I could get that, and it is truly similar or had been written before, then I would take the second step. I would paraphrase that." – (S01)

"The first thing to do is introspection, making improvements. What else to do (?). It would be very high indeed in chapter two, because we quote words there. We could not paraphrase everything. Those contain sets of information that is related to our concentration. Therefore, the parts that would not be detected are our arguments in responding those ideas." – (S06)

The students seemed to show positive attitudes towards the report. Mostly they were willing to change or replace the similar words, which are displayed in the reports. They tend to criticise the reports by assessing the context meant by the source text compared to their own writings. Overall, they were all agreed to review the report of the software before making any changes of which sentences should and should not be replaced.

The Students' Attitudes: Trusts vs. Doubts

The implementation of plagiarism prevention software in academic institutions aimed to control the quality and the originality of the students' academic writings. As the software exists, the students were encouraged to be more careful in quoting other people's sentences. Surely, each student would have particular attitude toward the university's regulation in implementing

plagiarism prevention software. Previous studies indicated that the students tend to support the implementation of plagiarism prevention software (Dahl, 2007; Graham-Matheson & Starr, 2013). Similar to that, this study found that some students agreed and supported if such regulation remains implemented in this university (see Excerpt 3: S02, S03). Those students argued that with the implementation of plagiarism prevention software, it could improve the quality of the students' writings to be more qualified to be published in the reliable academic journals. Moreover, they also assumed that the regulation might encourage the students to be more creative in writing.

On the other hand, some other students still doubted the regulation (see Excerpt 3: S01, S06, S07). In general, they tend to support the regulation, but still concerning on some issues. They mostly doubted if the university only consider the result of similarity detection in issuing the judgment on plagiarism in students' theses. For this argument, the researcher assumed that it might be an unnecessary, but reasonable worry, since the university should have not implement such plagiarism prevention software without knowing the whole concepts of the software. Another argument, it seems that the university did not implement plagiarism prevention software for the entire study programs. Therefore, some students doubted the effectiveness of the software to this university.

Since the use of plagiarism prevention software considered as new things for most universities, there will be some concerns that the regulation of implementing such software will likely surprise most students. All these past years of ignoring the importance of proper paraphrasing, quoting, and citing sources will be drawn to an end. Subsequently, the new era of maintaining the academic integrity will arrive. Therefore, the students who are unprepared and unwilling to change will likely be shocked. However, it is only a matter of time until the students will get used to the regulation. Undeniably, changing a habit is not an easy thing to do. Therefore, it is crucial not to put an early judgement to the students' theses along with the initial implementation of the software.

The findings of this study supported that argument. This study found out that the students would likely display positive reactions if their theses detected by plagiarism prevention software (see Excerpt 4: S01, S02, S03, S05, S06). Those students were willing to improve their theses by replacing the detected similar words necessarily. They were all agreed to review the detected similar words before constructing newly well-paraphrased sentences. It might be many additional works left to do, but it is noteworthy if the students are willing to develop their skills in writing and correct their mistakes.

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The Act of Prevention

Many studies refer the service of *Turnitin* and other similar services as 'plagiarism detection software.' However, the researcher does not totally approve such term. There are some reasons to be considered:

1. The software did not actually detect plagiarism on the checked texts. Instead, it would only detect word-by-word similarity patterns of the submitted texts with the previously published texts;
2. The similarity of the detected texts is not always mean plagiarism. It might be caused of poor paraphrasing skill or unintentionally suspected plagiarism. Referring to Introna & Hayes' (2008) term, 'to copy is not always to plagiarise' and 'to plagiarise is not always to copy.' Besides, the software could not detect well paraphrased ideas or translated ideas which failed to put credits to the original sources; and
3. The software should be used as a learning tool in developing writing skill, not only used as a detector that judge the students' papers.

The term 'plagiarism detection software' is not entirely unacceptable. Nonetheless, the use of the word 'detection' indicated that the main purpose of the software is to identify plagiarism made by the students in their theses. In this case, it sounds like the software would put judgement on whether the students committed plagiarism or not. In fact, the authorities or the students' research supervisors should make such decision. The report of software's detection should only become a consideration for the judgement.

Therefore, the researcher proposed the term 'plagiarism prevention software.' The word 'prevention' is used to describe the decent purpose of the software to help the students improving their writing skills. The software's similarity detection on the students' theses should not become the primary objective. Instead, the most important things are how to interpret the detection reports and how to react to the detections. In this case, the students should examine the software's detection reports, and then revise the detected similar words in their theses. This way, the students will learn and improve their academic writing skills, in terms of proper quoting, paraphrasing, and citing the reference in their theses. Zimitat (2008) argued that academic writing is a developmental skill, which needs more practices to be mastered. Unintentional 'suspected plagiarism' or patchwork writing might be a part of learning process. As those steps of learning, including the implementation of plagiarism prevention software, were conducted before the theses is submitted to the university or published, that way the software already played an important role in preventing the students from committing plagiarism.

CONCLUSIONS AND SUGGESTIONS

Plagiarism prevention software could benefit the students in encouraging them to be more aware of academic integrity and to develop their own skills in academic writing. Therefore, it would be unwise if the result of software's detection on the students' theses directly used in making judgement of plagiarism to the students. As a learning tool, the software should be used to prevent plagiarism by using it to make sure that the students' theses will be free of poorly paraphrased sentences. In other words, the students need to check their theses through the software, and then revise the detected similar words appropriately. The steps might be repeated until the similarity rates reach 20% or lower.

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REPORT ABOUT THE PROGRAMME

Dt: 06-03-2019

Title Of The Programme: A Two days Workshop on Thesis Writing and Plagiarism Verification

Inauguration Date & Venue: 4th Mar 2019 & DNRCET Seminar Hall

Organized By: Department of Electrical & Electronics Engineering, DNRCET

Resource Person: Dr. M. C S Madan, Professor in Civil, BVCITS, Amalapuram.

Chief Guest: Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 45

Concept:

Plagiarism is presenting someone else's work or ideas as your own, with or without their consent, by incorporating it into your work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition. Plagiarism constitutes a breach of academic integrity and represents substandard scholarship. Plagiarism can have lasting impact on the future career, regardless of whether it was intentional or not. The responsibility to avoid plagiarism belongs with the student or researcher. The main purpose of plagiarism

1) To steal and pass off (the ideas or words of another) as one's own
2) To use (another's production) without crediting the source
3) To commit literary theft
4) To present as new and original an idea or product derived from an existing source. In other words, plagiarism is an act of fraud.

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WORKSHOP ON TWO DAYS FOR THESIS WRITING AND PLAGIARISM VERIFICATION

SNO	NAME	DATE 26.08.2019, & SIGN
1	Dr.B.V.S.VARMA	
2	Dr.A.RAMA MURTHY	
3	Dr. G SATYANARAYANA	G Satyanarayana
4	Dr. P SAMBA SIVA RAO	
5	K.SURYA RAM PRASAD	
6	B.V RAM KUMAR	
7	B.NANDANA KUMAR	
8	G SUNIL PREM KUMAR	
9	G.V.SATYA SRI RAM	
10	S.LAKSHMAN RAO	
11	N.BHARATHI	N. Bharathi
12	P. LALITHA RAJESWARI(V)	P Lalitha
13	B .JYOTHI PRIYANKA	Jyothi Priyanka
14	M.MOUNICA DEVI(V)	
15	V NAVYA DEVI	Devi
16	L BUJJI BABU	
17	K S H PRASANNA KUMAR	
18	K SIVA SYAMALA	K. Siva Syamala
19	E RAMA LAKSHMI	
20	V LAKSHMI(V)	V Lakshmi
21	KORADA KALYANI(V)	K. Kalyani
22	M.PRABHAVATHI(V)	
23	K.SPANDANA(V)	
24	K SARATH CHANDRA	
25	M NAGA LAKSHMI	
26	CH SAI SIVA DURGA	Ch. Sivadurga
27	U SUSHMITHA	

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28	M S N Srikanth	MSN Srikanth
29	K.VENKATA CHANDRAN	K. V. Chandran
30	PRAVEEN PRAKASH	P. Prakash
31		
32	KODIBOINA SUREKHA	K. Surekha
33	KOPPARTHI RAMYA SAI LAKSHMI DURGA	K.R.S.L. Durga
34	KOPPINEEDI SANDHYA	K. Sandhya
35	KOPPINENI DURGA BHAVANI	K. D Bhavani
36	KOTHAPALLI NAGA SWATHI	K. N. Swathi
37	KUDIPUDI SAI KRISHNA	K. S. Krishna
38	MAJJI BHAGYA LAKSHMI	M.B. Lakshmi
39	MALLADI PALLAVI	M. Pallavi
40	MANIKONDA VINOD RAMANA	M.V. Ramana
41	MANNE VENUMADHAV	M. venumadhav
42	MANTENA APARNA	M. Aparna
43	MANTHENA LIKITHA	M. Likitha
44	MANTHENA NAGA VENKATA RAMYA	M.N.V. Ramya
45	MATHI VINOD KUMAR	M.V. kumar

M. Ayankumar

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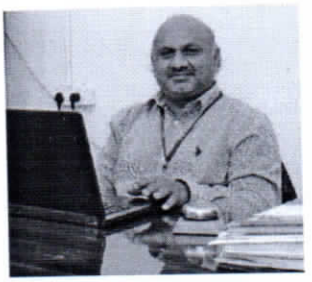
PROFILE



Dr. M C S MADAN

Ph.D. in Environmental Engineering and Managementspecialization.
Dr M Chandra Shekhar Madan has been with us for the last 15 years,and he is responsible for the College Academic Committee. He hasprepared courses for the Civil Engineering department, such as Environmental Engineering I & II and Waste Water Management, along with handling courses like Industrial Waste and Waste Water Management, Air Pollution Control, Solid Waste and Hazardous Waste Management, Engineering Geology.

In his 25+ years of experience, he has deployed different teaching methodologies such as the traditional White Board & Marker, PowerPoint Presentations, Demonstration based lectures, textbook Assignments, Web References, Video Lectures, Enquire oriented Education, Interactive Learning and Group Discussion.

He is a member of the ISTE professional body, and has published research journals and papers on :

- Effect of Structural Irregularity in Multistoried Effect of Carbon Fibre Reinforced Polymer (CFRP) sticking on Load Carrying Capacity of Columns
- Effect of basalt Fibre reinforced Polymer (BFRP) sticking on LoadCarrying Capacity of Columns
- Enhancement and partial Replacement of Cement by Glass Powder based on Concrete
- Utilization of Demolished Concrete Waste for New Construction

He has also mentored and guided research committees on thefollowing projects:

- A Study on drinking Water Quality and Security in Amalapuram Municipality
- A Study on Municipal Solid Waste (MCW) designing of Sanitary Land Filling (SLF) site and management of MSW in Amalapuram
- A Study on Effect of Sea Food Processing Effluent in Coringi River
- A Study about Effects on Compressive Strength of Concrete by Partially Replacing Concrete with Marble Dust Powder and Using Polycarboxylate Ethane as Super Plasticizer
- A Study on Shrimp Processing Industry effluent waste and utilisation of treated waste in East Godavari District, Andhra Pradesh
- A Study on Disposal of Untreated Sewage for Land treatmentin Amalapuram
- A Study on Use of Rice Husk Ash in Concrete

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He has received the following recognitions and awards by theUniversity:

- Lab External for Environmental Engineering
- E Waste management (NPTEL)
- Paper Evaluation of Environmental Engineering course (JNTUK)
- Paper Evaluation of IWHWM course (JNTUK)
- Paper Evaluation of APC course (JNTUK)
- Paper Evaluation of WWM course (JNTUK)
- Lab External Examiner for EE (JNTUK)
- Project External for viva voce for B.Tech & M.Tech
- Lab External for UG & PG courses (JNTUK)
- Preparation for Scheme of Evaluation for UG subjects (JNTUK)
- Chief Examiner for UG subjects (JNTU)

He has been a vital part in organizing Seminars and Workshops on E Waste Management, Auto CAD 2D, Internship Program Restructuring, ARC GIS amongst a few.

In his previous stint, he was an Assistant Professor at Aditya College (2005-2007) & Founder HoD and Associate Professor at SGCSR College (1994-2005)

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INTRODUCTION

Thesis is a kind of obligatory academic writing for the students in higher education level. In most universities in Indonesia, the students from undergraduates, masters, and doctorates, have a requirement to conduct a research and report it in a form of thesis or dissertation. Surely, that assignment must be completed properly, considering that the critical issue in academic writing is the originality and honesty.

Academic dishonesty became a great concern in education, particularly in the higher level. Sadly, cheating and plagiarism are still committed by many scholars. For that matter, the scholars have taken many efforts to reduce plagiarism in their community. Nonetheless, Dahl (2007) claimed that the effort would be challenging since there is an ambiguity in defining the clear concept of plagiarism. Supporting the statement, Razera (2011) explained that the concept of plagiarism might be straightforward in theory, but it will be harder to be determined practically.

Furthermore, some students still have lack of understanding about the boundaries in plagiarism, in terms of the limit of direct quotation allowed in their papers (Goddard & Rudzki, 2005). Therefore, there must be a common understanding among the academics including the students about the definition or plagiarism in their paper writing. Goddard & Rudzki (2005) believed that having prior knowledge of the sources used by the students was the initial way the lecturer did in detecting plagiarism.

These days, the internet provides countless sources the students can take. They can easily just copy and paste the texts or images from the internet with or without making citations. Regarding to the issue, the essential way to avoid plagiarism is by using proper citations and paraphrasing or quotations. In using the idea of other's work, it should be well paraphrased and included a citation of the author's name and the year. The materials taken from other sources are initially to support the writer's idea. Minor role of the writer's idea in a paper even contain well-paraphrased sources and proper citation may still be considered as plagiarism (Turnitin, 2012).

Conversely, a common way to prevent plagiarism in this digital era is by implementing plagiarism detection software. *Turnitin*, as one of many online services in detecting similarity index of students' writing, is very helpful for the tutors/lecturers in spotting suspected plagiarism in the students' paper and using the result to keep them revise their writings (Dahl, 2007). Parkhurst & Moore (2006) noted that *Turnitin* is very reliable in detecting similarity since its algorithm can find matching text even if some words or phrases in the text have been replaced. Many studies proved that the access to such websites is effective in reducing plagiarism among students (e.g. Baker, Thornton, & Adams, 2008; Batane, 2010; Sutherland-Smith & Carr, 2005).

The software analysed and then highlighted the sentences, which were found as similar to the other publications – in their huge database. By using the software, the students can directly

notice the bad paraphrased sentence or paragraph, the highlighted ones, and then they may re-paraphrase them appropriately.

In general, many studies concluded that the students have a good perception about plagiarism-prevention software (e.g. Ali, 2013; Dahl, 2007; Davis, 2007; Graham-Matheson & Starr, 2013). Thus, it can be assumed that reducing plagiarism will depend on the use of such software. On their study, Graham-Matheson & Starr (2013) and Dahl (2007) concluded that the students seem tend to support the implementation of *Turnitin*. Moreover, some studies pointed out that the software is effective in detecting and reducing plagiarism practices among the students (e.g. Ali, 2013; Biggam & McCann, 2010; Kiriakidis, 2012). Nevertheless, Davis (2007) had a doubt that the students, who used the software without intention to learn, will likely commit a 'well-organised plagiarism' since the website only display the similarity index of the text.

Davis (2007) recommended that in order to get a valuable learning opportunities, the scholars should use the software to submit the draft of their papers before assessment. Furthermore, to avoid the students misinterpreting of the originality reports from the website, the supervisor should assist them through the process. On the other hand, the students must understand clearly the concept of plagiarism.

Nonetheless, plagiarism is a complex problem that requires many kinds of efforts to reduce it. The implementation of *Turnitin* is simply a tool to educate the importance of originality and novelty in writing to the students (Sutherland-Smith & Carr, 2005). For that reason, the decision to determine whether a paper contains plagiarism will depend on the tutors/lecturers.

The implementation of plagiarism prevention software will be a challenge to all of the students to prove the originality of their theses and dissertations. On the other hand, this will also be a chance for the students to improve the quality of their academic writings. Therefore, related to those issues, this paper elaborates the advantages of plagiarism prevention software and the students' attitudes towards the use of such software in checking their theses.

METHODS

The participants in this study were the students of Master's Degree in English Language Education. In selecting the participants, the researcher employed purposive sampling technique. Seven students, who already completed writing their theses and were in the final stage of their study, were selected for interview.

The researcher applied in-depth interview to gain the information on the advantages and the students' attitudes towards plagiarism prevention software in checking their theses writing. The data of the interview was examined and reduced into specific information needed from the interview transcripts. Afterwards, the researcher displayed the data and provided description and analysis related to the purpose of this study.

Utilizing the Software's Advantages

The implementation of plagiarism prevention software should have advantages into two terms: developing the students' individual skills and maintaining the integrity or ethics in academic environment. Based on the findings of this study, the students agreed that the software should benefit them in several things. Firstly, the software could encourage the students to be more aware of learning the skills of quoting other people's ideas, paraphrasing sentences, and citing or crediting the source properly. Secondly, the software could encourage the students to improve the quality of their academic writings. Thirdly, the software could encourage the students to be more creative and confident in formulating their own ideas, rather than stealing other people's ideas (see Excerpt 1: S01, S02, S04, S05, S06, S07). Furthermore, the academic integrity or ethics among the students should be maintained when the students become aware and skilful enough to avoid plagiarism (see Excerpt 2: S02, S03, S06, S07).

Nevertheless, there is also a hesitation of the possibility for some students to be trickier in committing intentional plagiarism (see Excerpt 2: S04, S05). That issue was also raised in previous study (Davis, 2007). The students who would like to do such thing must be those who have no intention to learn and develop themselves. By this fact, it surely would be better if the students develop their skills in writing and improve the quality of their writings rather than attempt to manipulate the software's detection.

Therefore, there will be two stages regarding the benefit of plagiarism prevention software in building up the academic integrity. The first will be the stage of plagiarism reduction. As it was explained previously, the first time checking will display the current quality of the students' theses, in terms of similarity. After the theses was properly revised and then rechecked through the software, the similarity should be decreased. Many studies proved that the use of plagiarism prevention software effectively reduced plagiarism among the students (e.g. Ali, 2013; Baker, Thornton, & Adams, 2008; Batane, 2010; Biggam & McCann, 2010; Kiriakidis, 2012; Sutherland-Smith & Carr, 2005).

The second will be the stage of prevention. As the students get used to the software, they will be aware of properly paraphrasing other people's sentences, and making proper quotations and citations in every time they write. As a result, the students will always try to avoid plagiarism in their academic writings. Likewise, if the university issue a regulation to require all students to check their theses through plagiarism prevention software, it would build the atmosphere of preparedness and awareness among the students to try their best in order to avoid plagiarism.

These findings are quite related to Twomey's (2009) study that there should be two highly beneficial purposes of plagiarism detection software. In the short term, it can enable the lecturers to check out every concern, to distinguish accurately between students who have done the work

FINDINGS AND DISCUSSION

The Advantages of Plagiarism Prevention Software

This part elaborates the advantages that the students got from plagiarism prevention software. The students believed that there were several advantages of the implementation of the software, such as:

1. Encouraging the students to be more aware of learning the skills of quoting other people's ideas, paraphrasing sentences, and citing the source properly;
2. Encouraging the students to improve the quality of their academic writings; and
3. Encouraging the students to be more creative and confident in formulating their own ideas, rather than 'stealing' other people's ideas

The following excerpt was taken from the interview of the students' statements about the advantages.

Excerpt 1. Advantages of plagiarism prevention software

"Firstly, from the perspective of introduction and development of science and technology, it was quite well-intentioned. Secondly, for the students themselves, when their theses had been submitted and detected the similarity, they would learn on what steps they should do about it." – (S01)

"...by the national level, it would contribute to our country in terms of our scientific abilities and our writings, because the writings were originally generated from our own ideas. Secondly, we could certainly promote our campus, as the use of the software would decrease the similarity (of our writings) compared to the others, there would be many journals published by our campus. The third, it would be a challenge for me myself in order to make my writings better and meet the international standard. It would be a pride to be able to create original writings." – (S02)

"...to prevent from committing plagiarism. This would reduce the number of plagiarism made by the students, not because of awareness, but because of fear. Besides, it would improve our creativities to be not only rely on other people's works, but also the students' original ideas." – (S04)

"Surely, it would decrease and preventing plagiarism. For me, it would help me keeping the quality and originality of my thesis." – (S05)

"It was useful because it made me more aware of the importance of knowing the source and citing the quotations in writing. Plagiarism detector would indirectly demand us to read, to dig (information), to formulate (ideas), and how to process the information, how to formulate our ideas, how to develop ideas in order not to commit plagiarism. So, the advantage would lead us to develop writing skill, to be a learning material, and to raise awareness (of plagiarism free)." – (S06)

"The true benefit of this software is helping us as a writer to be more careful in producing our work by quoting and using other people's ideas or arguments. In the past, we might just quote (people's ideas) and considered that it was our own ideas. This software will detect such actions. By the concern of being detected, we would be aware to learn that we must be honest in telling things in our writing." – (S07)

The students agreed that the use of plagiarism prevention software would benefit them in terms of their writing skill. Specifically, the software would help the students to learn about how to prevent and avoid plagiarism. Moreover, it would help them to be more creative and be aware of the importance of developing original writings.

Another important issue that should be considered is the benefit of plagiarism prevention software in order to keep the academic integrity or ethics among the students. The students' responses on that issue are displayed in the following excerpt taken from the interview.

Excerpt 2. Plagiarism prevention software in raising the academic integrity

"Personally, *Turnitin* was one of many things that raise my awareness to not plagiarise other people's writings. Actually, I had such awareness before, but I did not know that we have to paraphrase (the words) in order to be not similar. Generally, *Turnitin* should have an impact to the academic awareness of the students. It might not be significant, but it should have (impact)." – (S02)

"Without the standard or regulation of using the software, such awareness had actually existed in every student who is writing their theses. I mean, the students should feel guilty when they use other people's idea without citing the author. Some students felt indifferent and some others felt guilty. Those who felt guilty should have the intention to admit that they actually did (plagiarism). Those who felt indifferent might only be degree-oriented. The use of such software should affect the students negatively; they should be worry of being accused for stealing." – (S03)

"Yes, I am sure. In the beginning, the students would be introduced to the software and then they would reach the stage of asking how to avoid plagiarism. I am sure that they would know the importance of citing properly, as the ideas belong to other people. An idea is the attribute of professionalism; therefore, we should not take it directly (without giving credit)." – (S06)

"As they learned that the software exists, even though not implemented entirely, it would have impacts. Inevitably, the students will be afraid, worried, and careful in writing or in quoting other people's statements." – (S07)

Some students were optimist that the implementation of plagiarism prevention software could help in keeping the academic integrity or ethics among the students. However, some others showed a different perspective. They doubt that the implementation of the software would only make the students to be trickier in avoiding the high similarity report of the software. The following are the excerpts of those students' statements.

"I think it would be difficult for the students to raise awareness themselves. Self-awareness is very difficult because it might be a tradition for the students. (The implantation of such software) could only make them to be more creative, trickier, on cheating and plagiarising. It could make them to be trickier even more, not making new things, but being shiftier, trickier." – (S04)

"The main purpose of plagiarism checking would definitely be keeping ethics in writing, to keep the quality and ethics in academic writing. I am not sure about that because there would always be students who cheat. Sometimes there would always be deviations, but it should definitely be prevented as much as possible. It always depends on the individual." – (S05)

Although some students doubt on the role of plagiarism prevention software in raising the academic integrity among the students, most of the students generally agreed that the integrity or ethics would always depend on the students themselves. The implementation of plagiarism prevention software might help the students in building or keeping their integrity. Nevertheless, the action of either ignoring or embracing it would always depend on each student's personality.

correctly and those who have not. In the long term, the lecturers will be easier to assign and grade pedagogically valuable research papers and other written work.

The Students' Attitudes towards Plagiarism Prevention Software

Regarding the regulation of implementing plagiarism prevention software, generally, there were two kinds of attitudes raised by the students:

1. Those who agreed and fully supported the implementation of plagiarism prevention software; and
2. Those who doubted and raised some concerns on the implementation of plagiarism prevention software.

The following excerpt displays the students' attitude toward the policy of implementing plagiarism prevention software.

Excerpt 3. Attitudes toward the implementation of plagiarism prevention software

"I certainly support this, in order to improve the quality of the alumni of this graduate program. If the (students') writings are good, they will be qualified to be published either nationally or internationally. Therefore, the grade of this campus will increase, although it will still be difficult. It might be difficult for the students as well. However, if they are willing to develop, I think they will be pleased to accept this. We should always pass the difficult things before something good come to happen." – (S02)

"If this is become a regulation in this institution, it will be great. It would teach the students not to steal. I mean, there are so many books in this world. You do not have to copy and paste. I think it is good. It would be even better in order to create creative people. Because, you can be creative without copy and paste other statements." – (S03)

Some students supported the idea of implementing plagiarism prevention software in checking the students' theses. Mostly they argued that such regulation could help the students develop their ability and skill in academic writing. In addition, they also believed that the use of the software could help the students to be more creative and honest. However, some students doubted the implementation of the software. They did not fully support the idea of such regulation. The following are the excerpt of those students' opinions.

"...ideally, the authorities of the graduate program should not change their system, but review their purpose of using that software. Because, I think it is clear that the software is not for detecting plagiarism, but similarity. That (matter) must be understood firstly. Therefore, they would not directly issue their judgments." – (S01)

"I am sure that the students will certainly be shocked, because unconsciously plagiarism has become a tradition. I guess that is very common. When they are introduced with plagiarism detector and they are introduced with the concept of plagiarism, they would firstly be shocked. The same thing happened to me. Their first question would be: Why should be like that? However, as the drafting progress, I am sure that they would reach the next stage by asking, how to avoid plagiarism." – (S06)

"I agree if the regulation intended to prevent plagiarism in scientific writing. However, in my opinion, the regulation was not implemented maximally. I mean, it was only said that there is a tool for detecting plagiarism and such, but in reality, it was not entirely applied. I think it would be ineffective if the regulation is not followed up by the authorities of this campus." – (S07)

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(Accredited with B^{++} Grade by NAAC)

Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

REPORT ABOUT THE PROGRAMME

Dt: 08-03-2019

Title of the Programme: One day Workshop on Research Methodology: Tools & Techniques

Inauguration Date & Venue: 7th Mar 2019 & DNRCET Seminar Hall

Organized By: Department of Mechanical Engineering, DNRCET

Resource Person: M. Akhila Rani, Professor in CSE, BVCITS, Amalapuram.

Chief Guest: Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 32

Concept:

Methodology in research is defined as the systematic method to resolve a research problem through data gathering using various techniques, providing an interpretation of data gathered and drawing conclusions about the research data. Essentially, a research methodology is the blueprint of a research or study. The confusion between "methodology" and "methods" in research is a common occurrence, especially with the terms sometimes being used interchangeably. Methods and methodology in the context of research refer to two related but different things: method is the technique used in gathering evidence; methodology, on the other hand, "is the underlying theory and analysis of how a research does or should proceed". Similarly, Birks and Mills define methodology as "a set of principles and ideas that inform the design of a research study." Meanwhile, methods are "practical procedures used to generate and analyze data

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One day Workshop on Building and Testing Theory Using Structural Equation Modelling 7th Mar 2019

Sl. NO	NAME OF THE FACULTY	DEPARTMENT	Date 07-03-2019	
			FN	AN
1	J. Keerthana	CE	keerthana	keerthana
2	M. vijay daniel	ME	M.V. Daniel	M.V. Daniel
3	K.V. Subrahmanyam	CE	K.V Subrahmanyam	K.V Subrahmanyam
4	MRS. SUSMITHA	CSE	Susmitha	Susmitha
5	G. Ikateswarao	ECE	G. Ikateswarao	G. Ikateswarao
6	P. Anjaneyulu JD	CE	P. Anjaneyulu	P. Anjaneyulu
7	I. Geetha	ECE	I. Geetha	I. Geetha
8	Dr. G. Satyanarayana	CSE	Satyanarayana	Satyanarayana
9	T. Prasanth	CE	Prasanth	Prasanth
10	DDD SURIBABU	CSE	SURIBABU	SURIBABU
11	Balla Nandana kumar	CSE	Balla Nandana kumar	Balla Nandana kumar
12	ASNV BHOGESH	CSE	Bhogesh	Bhogesh
13	MKMV Ratnam	CE	Ratnam	Ratnam
14	N. MARYLEENA	ECE	N. Maryleena	N. Maryleena
15	B. ELISHA RAJU	ECE	ELISHA RAJU	ELISHA RAJU
16	M. Lakshmi kumar	CE	M. Lkumar	M. Lkumar
17	B. Vamsidhar	BSH	B. Vamsidhar	B. Vamsidhar
18	ABDUL AHAD	CSE	ABDUL AHAD	ABDUL AHAD

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19	Dr. G. G. Ratnam	BSH	G. Rathnam	G. Rathnam
20	BOMMU SRIDEVI	ECE	B. Sridevi	B. Sridevi
21	MORTHA JAGANNADHAM	ME	JAGANNADHAM	JAGANNADHAM
22	K. Surya satish kumar	ECE	K. surya	K. surya
23	K.V.S SIRISHA	BSH	K.V.S Sirisha	K.V.S Sirisha
24	P. Nagaraju	EEE	P. Nagaraju	P. Nagaraju
25	M. Venkata krisha	CE	M. Vkrisha	M. Vkrisha
26	Moshe Gedela	BSH	moshe Gedela	moshe Gedela
27	Dr. K. RAJESH	ME	Rajesh	Rajesh
28	Dr. S. harish	ME	S. harish	S. harish
29	M. Thambi babu	ME	M.T. babu	M.T. babu
30	M. Pandu ranga Rao	ME	M P ranga Rao	M.P. Ranga Rao
31	S. SWATHI	ECE	SWATHI	SWATHI
32	DR. Nekkanti Venkata Rao	ECE	Venkata Rao	Venkata Rao

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PROFILE

Name of the faculty	**Dr.M.AKILA RANI** 
Designation	Professor
Date Of Joining	02/01/2019
AY	2018-2020
Responsibility in Committees	1. Innovative and R & D and Consultancy Cell member 2. Academic committee member 3. Women grievance cell member
Counseling/Mentoring	-
Courses handled/List of Instructional materials prepared	**Courses handled** 1. Computer Networks 2. Cryptography and Network Security 3. Machine Learning **Course Files Prepared:** 1. Cryptography and Network Security 2. Machine Learning
Innovative T/L methodologies	Used 10 Different Teaching Methodologies 1. White Board and Marker 2. PPT 3. Lecture-Demonstration 4. Seminar 5. Web Reference 6. Video Lectures, NPTEL 7. Enquiry Based Education 8. Co Operative Learning 9. Brain Storming 10. Quiz
Professional Memberships	1. IETI-(2019) 2. IAENG-Member No: 237285 3. ACS-Membership Number: 32443416
Research Publications (Paper/Poster/book/book chapters/citations/etc)	**Research Publications** 1. "A STUDY ON KNOWLEDGE DISCOVERY OF RELEVANT WEB SERVICES WITH SEMANTIC AND SYNTACTIC APPROACHES",Published on International Journal of Computers &Technology ,Volume 4 No. 1, Jan - Feb, 2013. ISSN:2277-3061,**DOI:https://doi.org/10.24297/ijct.v4i1a.3026** 2. "HYBRID APPROACH FOR GENERATING NON OVERLAPPED SUBSTRING USING GENETIC ALGORITHM",Published on

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International Journal of Research in Engineering and Technology eISSN: 2319-1163 , pISSN: 2321-7308, Volume: 03 Issue: 05, May 2014.**URL:https://ijret.org/volumes/2014v03/i05/IJRET20140305045.pdf**

3. "AN INTERACTIVE MODEL FOR GEORESOURCE SOLUTION SEEKING USING ONTOLOGY "Published on International Journalof Engineering and Technical Research (IJETR),ISSN: 2321-0869,Volume-2, Issue-5, May 2014.**URL:https://www.erpublication.org/published_paper/IJETR021852.pdf**

4. "A HEURISTIC SYSTEM FOR GEORESOURCE SOLUTION SEEKING USING ONTOLOGY "Published on International Journal of Artificial Intelligent and machine Learning(CIIT) ,Volume 6,No 2,2014.**URL:http://www.ciitresearch.org/dl/index.php/aiml/article/view/AIML022014005**

5. "IDENTIFYING AND REPLACING WEBSERVICE USING SERVICE COMPOSITION "Published on International Journal of Computer Science and Mobile Computing, Vol.3 Issue.11, November-2014, pg. 407-413.ISSN 2320–088X, **URL:https://www.ijcsmc.com/docs/papers/November2014/V3I11201457.pdf**

6. "PLAUSIBLY DENIABLE ENCRIPTION OF DATA STORAGE AS HIDDEN FOLDER IN CLOUD "Published on Journal of ComputerScience and Information Technology, Vol. 3, Issue. 11, November2014, pg.351 – 355.ISSN 2320–088X, **URL:https://www.ijcsmc.com/docs/papers/November2014/V3I11201488.pdf**

7. "DEPENDABILITY AND REPLACABILITY FOR COMPOSITE OF WEB SERVICES "Published on International Journal of Emerging Technology and Innovative Engineering Volume I, Issue 3, March 2015.ISSN: 2394 – 6598, **URL: http://www.ijetie.org/articles/IJETIE_201513041.pdf**

8. "ACCURACY OF LEARNING DATA THROUGH NEW BREED OF WEB BASED APPLICATION USING SYNTACTIC APPROACH" Published on International Journal of Soft Computing, Volume 10,issue2, 2015,pg.157-162.ISSN : 1816-9503. **DOI:http://dx.doi.org/10.36478/ijscomp.2015.157.162, URL: https://medwelljournals.com/abstract/?doi=ijscomp.2015.157.162**

9. "OPTIMIZED SERVICE SELECTION IN WEB SERVICE DISCOVERY "Published on International Journal of Applied Engineering Research.**ISSN 0973-4562** Volume 10, Number 10 (2015) pp.27425-27431. **URL:https://www.ripublication.com/Volume/ijaerv10n10.htm**

10. **"**WEB MINING FOR POTENTIALLY VALUE ADDED SERVICES**"**, Published on Asian Journal of Information Technology, vol. 15, no. 16, pp. 2908-2962, ISSN:1682-3915. **DOI: http://dx.doi.org/10.36478/ajit.2016.2908.2926 URL:https://medwelljournals.com/abstract/?doi=ajit.2016.2908.2926**

11. "DATA LOCALITY AWARE FAST AND SECURED RETRIEVAL OF WEB SERVICES USING SECURE SERVICE DISCOVERY

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	SYSTEM IN HADOOP", **Published on Transylvanian Review: vol. 24, no. 10, pp 2345-2360.** 12. "DESIGN OF MACHINE LEARNING BASED SUICIDE RATE PREDICTION SYSTEM", Published on International Journal of Scientific Research and Review, Vol. 8, Issue 4, April 2019, and pp.474-477, **ISSN: 2279-543X. DOI:http://www.dynamicpublisher.org/gallery/62-ijsrr- d-1769.f.pdf**	
Projects guided	2018-19	Car evaluation prediction
	2019-20	Frequent item Recommender system
		Prediction of Loan Approval Using Machine Learning
List of Working models / Products developed / Incubation/start – ups & List of projects received seed money	3	
List of projects received seed money	INR 5000	
List of NPTEL courses certification done	1. Cloud Computing [NPTEL] **2.** Completed What is Data Science?from IBMin **coursera.** 3. Completed Home Networking basics in **Coursera**. **4.** Completed Machine Learning A-Z Python & R in Data Science provided by**Udemy.** **5.** Completed Top 5 Machine Learning libraries in Python provide by**Udemy.** **6.** Completed Linear regression with Numpy and pythonan online non-credit course authorized by Coursera Project Network and offered through **Coursera**	
Incentives/Award/Reward/Recognitions by university	1. Got ELITE in Cloud Computing [NPTEL-AY:2019-2020]	
Faculty Development programs attended /Organized /resource person M. Ayankumar PRINCIPAL D.N.R.College of Engg. & Tech. BHIMAVARAM-534 202.	1. Faculty Development Program on "Machine learning for beginners" organized by Sphoorthy Engineering College, Hydrabad, 3rd May 2020. 2. Faculty Development Program on **"Data Science using R",** dated from **28th May 2020 to 30th May 2020**. Organized by Department of MCA, K. K. Wagh Institute of Engineering Education and Research, Nashik . **3. One week National FDP** and online training on Moodle Learning Management System organized by Spoken Tutorial project, **IIT Bombay, 27th April – 2nd May 2020.** 4. One Week Faculty Development Program on "**Arduino**" organized by Electronics & Telecommunication Engineering Department of Sou. VenutaiChavan Polytechnic, Pune in association with Spoken Tutorial IIT Bombay from **25th May 2020 to 29th May 2020**. **5.** "**R test**" organized at SKN Sinhgad College of Engineering, Korti-Pandharpur by PRAKASH RAMESH GADEKAR with course material provided by the Spoken Tutorial Project, IIT Bombay.This training is offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India, **May 2020.** **6.** Faculty Development Programme (online live instructor-led) on **"Machine Learning and its Applications"** conducted by Electronics and ICT academy, IIT ROORKEE, **5th May – 14th May, 2020.** 7. Completed 60 contact hours faculty Development Program on "Data	

	Science" conducted by APSSDC and Excel R, held from **1st June -30th June** 2020. 8. Participated in 5days FDP on "Natural Language Processing Behind Data Science. From 22nd June – 26th june, 2020. 9. Faculty Development Program "**Machine Learning and Data Science for Engineering Applications"** from **5 th June 2020 - 10th June 2020,** Organized by Department of CSE & IT, Shadan College of Engineering and Technology, Hyderabad. 10. Participated in "**Data Analyst/Business Analyst course training**" conducted by APSSDC and Excel R, held from **8th August- 24th September 2020**. **11.** Participated in "Android Application Development Bootcamp, Conducted by Codegnan IT solutions OPC PVT.LTD ,from **27th July – 6th August, 2020** **12.** 1 Week HANDS-ON Faculty Development Program on **"Artificial Intelligence using Python"**organised by the Department of Information Technology, CMR Engineering College, Hyderabad in association with Brainovision Solutions India Pvt.Ltd. & National Youth Council of India held from **14th September 2020 to 19th September 2020.** 13. Participated in **"Simplifying Data Science With Machine Learning**" Virtual training program conducted by APSSDC and Excel R, held from **28th September To 12th October,2020**. **14.** Participated in "**Simplifying Artificial Intelligence and Deep Learning for Students and Professionals**" Virtual training program conducted by APSSDC and Excel R, held from **13th October to 23rd October, 2020**
Conferences/Seminars/Workshop attended/organised	1. Webinar on "Employability Skills In Curriculum Design",**26th April 2020**. **2.** Webinar on "IOT Using Arduino", **24th May 2020.** **3.** CHALLENGES IN RESEARCH : PUBLICATIONS & ETHICS, **3rd May,2020.** 4. Webinar on "Art of writing research papers" organized by CIT on **29thApril ,2020.** **5.** **"**Developing Thinking Abilities Relevant for Engineering Education",**28th April,2020.** 6. "Get Ready for AI using MATLAB & Simulink" organised in association with Design Tech Systems Pvt. Ltd. Pune by Department of Electronics & Telecommunication Engineering on **27th & 28th July 2020**. 7. Webinar on " Blockchain 2.0- A shift from Bitcoin to Real world applications, **3RD August 2020**. 8. "**International Workshop on Deep Learning (IWDL)**" for 5 days, **22nd August to 26th August**., presented by GOAL street, BITS Pilani, Hydrabad Campus.
ICT USAGE: webpage/blog/google classroom/LMS etc.	1.LMS[Great Learning]:https://olympus.greatlearning.in/courses/17701 2.LMS [BYNDR]: akilakamalam@gmail.com 3. Blog:https://akilarani.blogspot.com/
Ph.D enrolled/ awarded / guided	AwardedPh.Din the faculty of Information and Communication from Anna University, Chennai in the year of 2018 under the guidance of Dr.D.Shanthi, Prof/Head, Department of CSE, PSNACET, Dindigul, Tamil nadu,India.
Invited Lectures (Expert/conference/etc)	1.Invited as Guest Lecture "Core Java Technologies" at N.P.R.College of Engineering and Technology, Dindigul,Tamil Nadu 2.Invited as **Guest of Honor**" in Association Ingurationfuction on 20.07.18 for the Department of Information Technology at Madurai SivakasiNadars Pioneer Meenakshi Women's College, Madurai, Tamil

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	Nadu.and given guest lecture on "**Internet of Things**". **3.Session Chair** in **International Conference** on Intelligent Computing and Control Systems (ICICCS 2018) at The Vaigai College Engineering (VCE), Madurai, Tamil Nadu, 15 June 2018. **4. Session Chair** in **International Conference** on Computer Networks, Big Data and IoT (ICCBI 2018) at The Vaigai College Engineering (VCE), Madurai, Tamil Nadu, 20 December 2018.
Industrial visits / Trainings / Internships organised	NO
List of In-house/Funded / Consultancy activities for R&D projects/documentation	Worked as a part of the team on the invention and **Patent** of "Optimization Method for Machine Learning Based Clustering of Serial Big data". Application No:2019410436004
International fellowship for advanced studies/research	NO
Previous Experience	Worked as Lecturer in Pandian Saraswathi Yadav Engineering college, Sivagangai District, Tamil Nadufrom May 2008 to June 2011. Worked as Assistant Professor in NPR College of Engineering and Technology,Natham, Dindigul District, Tamil Nadu from June 2011 to November 2017. Worked as Assistant Professor in Vaigai College of Engineering,Melur, Madurai District, Tamil Nadu from January 2018 to December 2018.

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RESEARCH METHODOLOY

Research: Research comprises defining and redefining problems, formulating hypothesis or suggested solution; collecting, organizing and evaluating data, making deductions and reaching conclusions and carefully testing the conclusions to determine whether they fit the formulating hypothesis. The manipulation of things, concepts or symbols for the purpose of generalizing to extend , correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art.

Research in simple terms refers to search for knowledge. It is a scientific and systematic search for information on a particular topic or issue. It is also known as the art of scientific investigation. Several social scientists have defined research in different ways.

In the *Encyclopedia of Social Sciences*, D. Slesinger and M. Stephension (1930) defined research as "the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in the construction of theory or in the practice of an art".

Research Methods Vs Methodology:

Research methods include all those techniques/methods that are adopted for conducting research. Thus, research techniques or methods are the methods that the researchers adopt for conducting the research studies. On the other hand, research methodology is the way in which research problems are solved systematically. It is a science of studying how research is conducted scientifically. Under it, the researcher acquaints himself/herself with the various steps generally adopted to study a research problem, along with the underlying logic behind them. Hence, itis not only important for the researcher to know the research techniques/ methods, but also the scientific approach called methodology.

What is the definition of research methodology?

The process used to collect information and data for the purpose of making business decisions. The methodology may include publication research, interviews, surveys and other research techniques, and could include both present and historical information.

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RESEARCH METHODOLOY

Research methodology is a term that basically means the science of how research is done scientifically. It is a way to systematically and logically solve a problem, help us understand the process not just the product of research, and analyzes methods in addition to the information obtained by them.

What are the types of research methodology?

- Basic research
- Applied Research
- Problem oriented research
- Problem solving
- Quantitative Research
- Qualitative Research

Research Problem: A **research problem** is a statement about an area of concern, a condition to be improved, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or in practice that points to the need for meaningful understanding and deliberate investigation.

What is research problem statement?

A **problem statement** is the description of an issue currently existing which needs to be addressed. It provides the context for the **research** study and generates the questions which the **research** aims to answer. The **statement** of the **problem** is the focal point of any **research**.

How do you identify the problem?

Here are seven-steps for an effective problem-solving process.

1. Identify the issues. Be clear about what the problem is.
2. Understand everyone's interests.
3. List the possible solutions (options).
4. Evaluate the options.
5. Select an option or options.
6. Document the agreement(s).
7. Agree on contingencies, monitoring, and evaluation.

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RESEARCH METHODOLOY

Necessity of Defining a Research Problem:

The problem to be researched needs to be described unambiguously as that will help you to discriminate useful data from the unrelated ones. A proper **formulation of research problem** will allow the investigator to be on the track in contrast to an ill-defined problem may possibly create difficulties.

Questions like: What data are to be gathered? What attributes of data are appropriate and need to be analyzed? What relations should be investigated. What methods should be employed for the purpose? as well as other questions turn up in the head of the investigator who can well plan his strategy and find solutions to these kinds of questions only when the research problem has been well defined. Therefore, defining the problem accurately is a necessity for any research and is a step of the highest value.

In fact, formulation of a problem is often vital than its solution. It is only on thoroughly describing the problem that we can work out the research design and can efficiently proceed all the consequential steps needed while doing research.

Important Points to Keep in Mind while Defining the Research Problem

1. The correct question needs to be addressed if research is to help decision makers. A right answer to the wrong question leads either to bad advice or to no advice.
2. Usually in problem we have an inclination to rationalize and defend our actions once we have started upon a specific research plan. The perfect time to examine and think about alternative techniques is in the planning stage. If it is completed unnecessary expense of false start and redoing work may be prevented.
3. An excellent beginning in problem definition is to ask what the decision maker want to know if the requested information can be gathered without error and without expense.
4. Another excellent rule to follow is "**Never settle on a specific strategy**" without developing and taking into consideration at least one alternate option".
5. The problem definition stage of research is the determination and structuring of the decision maker's question. It should be the decision maker's question and not the researcher's question.
6. What decision do you face? Unless you have decision to make, there isn't any research problem.

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7. What are the alternatives? In case there are no options to choose, once again there is absolutely no research problem.
8. What are the factors for selecting the best alternative? Unless you have criteria for evaluation, again there's no problem.
9. The researcher should stay away from the acceptance of the superficial and the obvious.

Frequently we all hear that a problem clearly expressed is a problem half solved. This statement indicates the *necessity of defining a research problem in research methodology*. This actually also results in a smoother progress on all the following steps which are needed for finishing a research project.

Types of Research:

There are different types of research. The basic ones are as follows.

Descriptive Versus Analytical:

Descriptive research consists of surveys and fact-finding enquiries of different types. The main objective of descriptive research is describing the state of affairs as it prevails at the time of study. The term 'ex post facto research' is quite often used for descriptive research studies in social sciences and business research. The most distinguishing feature of this method is that the researcher has no control over the variables here. He/she has to only report what is happening or what has happened. Majority of the ex post facto research projects are used for descriptive studies in which the researcher attempts to examine phenomena, such as the consumers' preferences, frequency of purchases, shopping, etc. Despite the inability of the researchers to control the variables, ex post facto studies may also comprise attempts by them to discover the causes of the selected problem. The methods of research adopted in conducting descriptive research are survey methods of all kinds, including correlational and comparative methods.

Meanwhile in the Analytical research, the researcher has to use the already available facts or information, and analyze themto make a critical evaluation of the subject.

Applied Versus Fundamental: Research can also be applied or fundamental in nature. An attempt to find a solution to an immediate problem encountered by a firm, an industry, a business organization, or the society is known as applied research. Researchers engaged in such researches aim at drawing certain conclusions confronting a concrete social or business problem.

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On the other hand, fundamental research mainly concerns generalizations and formulation of a theory. In other words, "Gathering knowledge for knowledge's sake is termed 'pure' or 'basic' research" (Young in Kothari, 1988). Researches relating to pure mathematics or concerning some natural phenomenon are instances of Fundamental Research. Likewise, studies focusing on human behaviour also fall under the category of fundamental research.

Thus, while the principal objective of applied research is to find a solution to some pressing practical problem, the objective of basic research is to find information with a broad base of application and add to the already existing organized body of scientific knowledge.

Quantitative Versus Qualitative:

Quantitative research relates to aspects that can be quantified or can be expressed in terms of quantity. It involves the measurement of quantity or amount. Various available statistical and econometric methods are adopted for analysis in such research. Which includes correlation, regressions and time series analysis etc,.

On the other hand, Qualitative research is concerned with qualitative phenomena, or more specifically, the aspects related to or involving quality or kind. For example, an important type of qualitative research is 'Motivation Research', which investigates into the reasons for certain human behaviour. The main aim of this type of research is discovering the underlying motives and desires of human beings by usingin-depth interviews. The other techniques employed in such research are story completion tests, sentence completion tests, word association tests, and other similar projective methods. Qualitative research is particularly significant in the context of behavioural sciences, which aim at discovering the underlying motives of human behaviour. Such research helps to analyse the various factors that motivate human beings to behave in a certain manner, besides contributing to an understanding of what makes individuals like or dislike a particular thing. However, it is worth noting that conducting qualitative resea rch in practice is considerably a difficult task. Hence, while undertaking such research, seeking guidance from experienced expert researchers is important.

Conceptual Versus Empirical:

The research related to some abstract idea or theory is known as Conceptual Research. Generally, philosophers and thinkers use it for developing new concepts or for reinterpreting the

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Ph: 08816-221238 Email: dnrcet@gmail.com website: https://dnrcet.org

REPORT ABOUT THE PROGRAMME

Dt: 07-04-2019

Title of the Programme: A One day work shop on "Research Methodology: Techniques"

Inauguration Date & Venue: 6th Apr 2019 & DNRCET Seminar Hall

Organized By: Department of MBA, DNRCET

Resource Person: Dr. Kodukula Subramanyam, Professor Koneru Lakshmaiah Education Foundation.

Chief Guest: Sri G. Satyanarayana Raju (Babu)
Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju
Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 23

Concept:

Methodology in research is defined as the systematic method to resolve a research problem through data gathering using various techniques, providing an interpretation of data gathered and drawing conclusions about the research data. Essentially, a research methodology is the blueprint of a research or study. The confusion between "methodology" and "methods" in research is a common occurrence, especially with the terms sometimes being used interchangeably. Methods and methodology in the context of research refer to two related but different things: method is the technique used in gathering evidence; methodology, on the other hand, "is the underlying theory and analysis of how a research does or should proceed". Similarly, Birks and Mills define methodology as "a set of principles and ideas that inform the design of a research study." Meanwhile, methods are "practical procedures used to generate and analyze data

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One day Workshop on Research Methodology: Tools& Techniques 6th Apr 2019

Sl. NO	NAME OF THE FACULTY	DEPARTMENT	Date 06/04/19	
			FN	AN
1	Sivasankar.K	EEE		
2	Rajasekhar	CSE		
3	K.S.Ramprasad	~~E~~ CSE	K.S.R	K.S.R
4	G.V.Satya SriRam	CSE		
5	DVA.Rama Murthy	CSE		
6	Dr A.Sudhamadhavi	BSH		
7	L.Bujji babu	BCB	B	B
8	B.Sridevi	BCB	B	B
9	Dr.A.P.Ramesh	ECE		
10	V.Praveen	S&H		
11	G.Sai Baba	EEE		
12	Y.Bhavani Durga	BCB	VBD	VBD
13	G.Koteswara Rao	ECE		
14	M nagalakshmi	CSE	Naga	Naga
15	Y.Srinivas	ECE		
16	U.Sushmitha	~~E~~ CSE	U	U
17	Dr.G.G.Ratnam	S&H		
18	Dr P.V.Satyanarayana	BSH		
19	M.Sowmya	EEE		
20	G.Moses	S&H		
21	K.P.Mani	ECE		
22	B Mohan Raju	S&H		
23	K.Raja Rajeswari	CSE		

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PERSONAL PROFILE

Dr Kodukula Subrahmanyam

Professor

Koneru Lakshmaiah Education Foundation

Qualification

- 2009 Ph.D ALU
- vant-garde: A cryptographic enciphering method to secure data in cloud
- Jyoshna, B.;Subramanyam, K.
- Article International Journal of Recent Technology and Engineering, Volume 7, Year 2019, Pages 720-723
- Fuzzy clustering and Fuzzy C-Means partition cluster analysis and validation studies on a subset of CiteScore dataset
- Rajkumar, K. Varada;Yesubabu, Adimulam;Subrahmanyam, K.
- Article International Journal of Electrical and Computer Engineering, Volume 9, Year 2019, Pages 2760-2770
- DOI:10.11591/ijece.v9i4.pp2760-2770
- Scopus 2Citations
-
- Application of SIS framework on information system and its assessment
- Naga Malleswari, D.;Subrahmanyam, K.
- Article International Journal of Recent Technology and Engineering, Volume 8, Year 2019, Pages 1096-1100
- Design of data acquisition process and its validation through statistical approaches
- Naga Malleswari, D.;Subrahmanyam, K.
- Article International Journal of Recent Technology and Engineering, Volume 8, Year 2019, Pages 3242-3245
- Validation of SIS framework using ASP/JSP based information system
- NagaMalleswari, D.;Subrahmanyam, K.
- Article International Journal of Innovative Technology and Exploring Engineering, Volume 8, Year 2019, Pages 323-326

- Feature selection, optimization and clustering strategies of text documents
- Kousar Nikhath, A.;Subrahmanyam, K.
- Article International Journal of Electrical and Computer Engineering, Volume 9, Year 2019, Pages 1313-1320

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- DOI:10.11591/ijece.v9i2.pp.1313-1320
- Effective utilization of storage space by applying file level and block-level deduplication over HDFS
- Thanekar, Sachin Arun;Subrahmanyam, Kodukula;Bagwan, Aliakbar
- Article International Journal of Innovative Technology and Exploring Engineering, Volume 8, Year 2019, Pages 725-730
- A case study on model based test case prioritization
- Chakitha, K.;Kumar, G. Naveen;Reshma, Ch Gayathri;Reddy, Y. Aravin;Subrahmanyam Kodukula, V. Navya Reddy
- Article International Journal of Innovative Technology and Exploring Engineering, Volume 8, Year 2019, Pages 1239-1242
- Hybrid approach to explore efficient document clustering using multi objective attributes
- Kousar Nikhath, A.;Subrahmanyam, K.
- Article Journal of Computational and Theoretical Nanoscience, Volume 16, Year 2019, Pages 2204-2209
- DOI:10.1166/jctn.2019.7873
- A frame work for data locking in cloud
- Jyoshna B.
- Article Journal of Advanced Research in Dynamical and Control Systems, Volume 10, Year 2018, Pages 1-8
- Conceptual relevance based document clustering using concept utility scale
- Kousar Nikhath, A.;Subrahmanyam, K.
- Article Asian Journal of Scientific Research, Volume 11, Year 2018, Pages 22-31
- DOI:10.3923/ajsr.2018.22.31

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Research Methodology

Research is basically a term used for a systematic search for getting relevant answers on any taken up topic. Methodology may be understood as all those methods and techniques that are used for conducting a particular research. It may include the methods of data collection, statistical tools for analyzing the data etc. In my research both the primary and secondary data has been used in order to reach to a conclusion.

Research design: The research in this study is descriptive and analytical in nature.

Primary data: The primary data is collected through a survey through a structured questionnaire and direct interview method.

Secondary data: The secondary data is being collected from different sources. The main source of secondary data was the annual reports of the selected banks. This study is based on last 10 years bank data i.e. 2005 to 2015.

Other sources of secondary data are websites, journals, and magazines etc. Previous research papers have also provided a good collection of data.

Sample size: For my study I have taken a sample size of 500 customers of different banks using plastic money.

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Tools and techniques

Tools and techniques in research are the statistical methods of collection, analysis, interpretation, presentation, and organization of data. Statistics provides numerous tools and techniques to analyze the data and interpret the results of the analysis.

In my study I have used the following statistical tools for the analysis of collected data:

- Average
- Percentage
- Correlation
- Variance –NOVA,ANOVA
- SPSS

Chapter plan

The research is carried out in a systematic manner and the following chapter plan is being followed for the final report:

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1. Introduction
2. Literature review
3. Objectives and Hypothesis
4. Research methodology and data collection
5. Data analysis.
6. Findings and interpretations
7. Conclusion
8. References

Work plan

A work plan is a detailed accounting of how an individual proposes going about accomplishing a specific task, approaching a project. Sometimes referred to as a "statement of work," a work plan generally includes an overview of a project, a breakdown of how individual project-related tasks will be accomplished, and a timeline for completion of the given project.

My research will be carried on for a period of 24 months as per the university requirements. I have divided my research work into four intervals which will be carried on in the following manner:

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MONTHS	WORK PLAN
1 TO 6	Problem decide, Objective decide Completion of coursework of 200 hrs DRC done
6 TO 12	Literature review Introduction Data collection Survey
12 TO 18	Data analysis Result interpretation conclusion summary write-up and submission
18 TO 24	Preparation for pre thesis, Submit the final thesis Preparation for final viva

Limitations of the study

The study is basically limited to certain factors such as:

1. It is only confined to Jhunjhunu area.
2. Only 5 banks have been chosen for the research namely ICICI bank, Axis bank, Punjab National Bank, SBI, and Gramin bank.
3. The comparison of data is only up to 10 years i.e. 2005 to 2015.
4. The study mainly focuses on four variables namely

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- Income
- Awareness
- Occupation
- Standard of living.

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REPORT ABOUT THE PROGRAMME

Dt: 07-05-2019

Title Of The Programme: One day National level seminar on "New Frontier-Entrepreneur Development programme"

Inauguration Date & Venue: 6th May 2019 & DNRCET Seminar Hall

Organized By: Department Of Electronics & Communication Engineering, DNRCET

Resource Person: T Viswanadham, Managing Director, Khaspa Enterprises Pvt Ltd, Hyderabad.

Chief Guest: Sri G. Satyanarayana Raju (Babu)

Secretary & Correspondent, DNR College Association

Inauguration: Dr. U. Ranga Raju

Prinicpal, D.N.R College of Engineering & Technology

Number of Faculty Attended: 25

Concept:

New Frontiers is the national entrepreneurial development programme for ambitious early-stage entrepreneurs with innovative business ideas which have the potential to scale and provide employment. It provides the skills, support, and confidence needed to make the leap to starting a successful business. New Frontiers is a 3-phase programme:

1. Testing business idea - introduction to what is setting up business and opportunity to prepare a business plan.
2. Business planning - weekly training in key business start- up and scaling skills such as research, business models, team development, financials, legal, intellectual property, digital marketing strategy, selling and sales and pitching the business.
3. Business development - support and panel pitches to progress their business.

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ONE DAY SEMINAR ~~WORKSHOP~~ ON NEW-FRONTIER-ENTREPRENEUR DEVELOPMENT PROGRAMME

SNO	NAME	DATE & SIGN 06.05.2019.
1	Dr.B.V.S.VARMA	
2	Dr.A.RAMA MURTHY	
3	Dr. G SATYANARAYANA	
4	Dr. P SAMBA SIVA RAO	
5	K.SURYA RAM PRASAD	
6	B.V RAM KUMAR	
7	B.NANDANA KUMAR	
8	G SUNIL PREM KUMAR	
9	G.V.SATYA SRI RAM	
10	S.LAKSHMAN RAO	
11	N.BHARATHI	
12	P. LALITHA RAJESWARI	
13	B .JYOTHI PRIYANKA	
14	M.MOUNICA DEVI	
15	V NAVYA DEVI	
16	L BUJJI BABU	
17	K S H PRASANNA KUMAR	
18	K SIVA SYAMALA	
19	E RAMA LAKSHMI	
20	V LAKSHMI	
21	KORADA KALYANI	
22	M.PRABHAVATHI	
23	K.SPANDANA	
24	K SARATH CHANDRA	
25	M NAGA LAKSHMI	

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MATERIAL

Entrepreneurship Development Programmes:

Meaning:

As the term itself denotes, EDP is a programme meant to develop entrepreneurial abilities among the people. In other words, it refers to inculcation, development, and polishing of entrepreneurial skills into a person needed to establish and successfully run his / her enterprise. Thus, the concept of entrepreneurship development programme involves equipping a person with the required skills and knowledge needed for starting and running the enterprise.

Need for EDPs:

That, entrepreneurs possess certain competencies or traits. These competencies or traits are the underlying characteristics of the entrepreneurs which result in superior performance and which distinguish successful entrepreneurs from the unsuccessful ones.

Then, the important question arises is: where do these traits come from? Or, whether these traits are in born in the entrepreneurs or can be induced and developed? In other words, whether the entrepreneurs are born or made? Behavioural scientists have tried to seek answers to these questions.

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A well-known behavioural scientist David C. McClelland (1961) at Harvard University made an interesting investigation-cum-experiment into why certain societies displayed great creative powers at particular periods of their history? What was the cause of these creative bursts of energy? He found that 'the need for achievement (n' ach factor)' was the answer to this question. It was the need for achievement that motivates people to work hard. According to him, money-making was incidental. It was only a measure of achievement, not its motivation.

In order to answer the next question whether this need for achievement could be induced, he conducted a five-year experimental study in Kakinada, i.e. one of the prosperous districts of Andhra Pradesh in India in collaboration with Small Industries Extension and Training Institute (SIET), Hyderabad.

This experiment is popularly known as 'Kakinada Experiment'. Under this experiment, young persons were selected and put through a three-month training programme and motivated to see fresh goals.

One of the significant conclusions of the experiment was that the traditional beliefs did not seem to inhibit an entrepreneur and that the suitable training can provide the necessary motivation to the entrepreneurs (McClelland & Winter 1969). The achievement motivation had a positive impact on the performance of entrepreneurs.

In fact, the 'Kakinada Experiment' could be treated as a precursor to the present day EDP inputs on behavioural aspects. In a sense, 'Kakinada Experiment' is considered as the seed for the Entrepreneurship Development Programmes (EDPs) in India.

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The fact remains that it was the 'Kakinada Experiment' that made people appreciate the need for and importance of the entrepreneurial training, now popularly known as 'EDPs', to induce motivation and competence among the young prospective entrepreneurs.

Based on this, it was the Gujarat Industrial Investment Corporation (GIIC) which, for the first time, started a three-month training programmes on entrepreneurship development. Impressed by the results of GIIC's this training programme, the Government of India embarked, in 1971, on a massive programme on entrepreneurship development. Since then, there is no looking back in this front. By now, there are some 686 all-India and State level institutions engaged in conducting EDPs in hundreds imparting training to the candidates in thousands.

Till now, 12 State Governments have established state-level Centre for Entrepreneurship Development (CED) or Institute of Entrepreneurship Development (IED) to develop entrepreneurship by conducting EDPs. Today, the EDP in India has proliferated to such a magnitude that it has emerged as a national movement. It is worth mentioning that India operates the oldest and largest programmes for entrepreneurship development in any developing country.

The impact of India's EDP movement is borne by the fact that the Indian model of entrepreneurship development is being adopted by some of the developing countries of Asia and Africa. Programmes similar to India's EDPs are conducted in

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