COLLEGE OF ENGINEERING AND TECHNOLOGY

**Enlightening Technical Minds** 

Dr. MAHALINGAM

# **R&I Newsletter Vol.2.Iss.3 Office of Dean Research & Innovation**

2024-25

# **DEC 2024- FEB 2025**

# **Editors**:

**Dr.S.Ramakrishnan, Dean, R&I** 

Dr.B.Bala Vijaya Priya, AP(SS), S&H

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# Office of Dean Research & Innovation Vision

To become a globally recognized hub of pioneering research and innovation, driving transformative advancements in engineering and technology for the betterment of society.

## **Mission**

1.Foster research excellence and innovation, by identifying potential IPR, offering financial support for filing, facilitating revenue sharing from consultancy collaborations, and rewarding faculty through fair incentives.

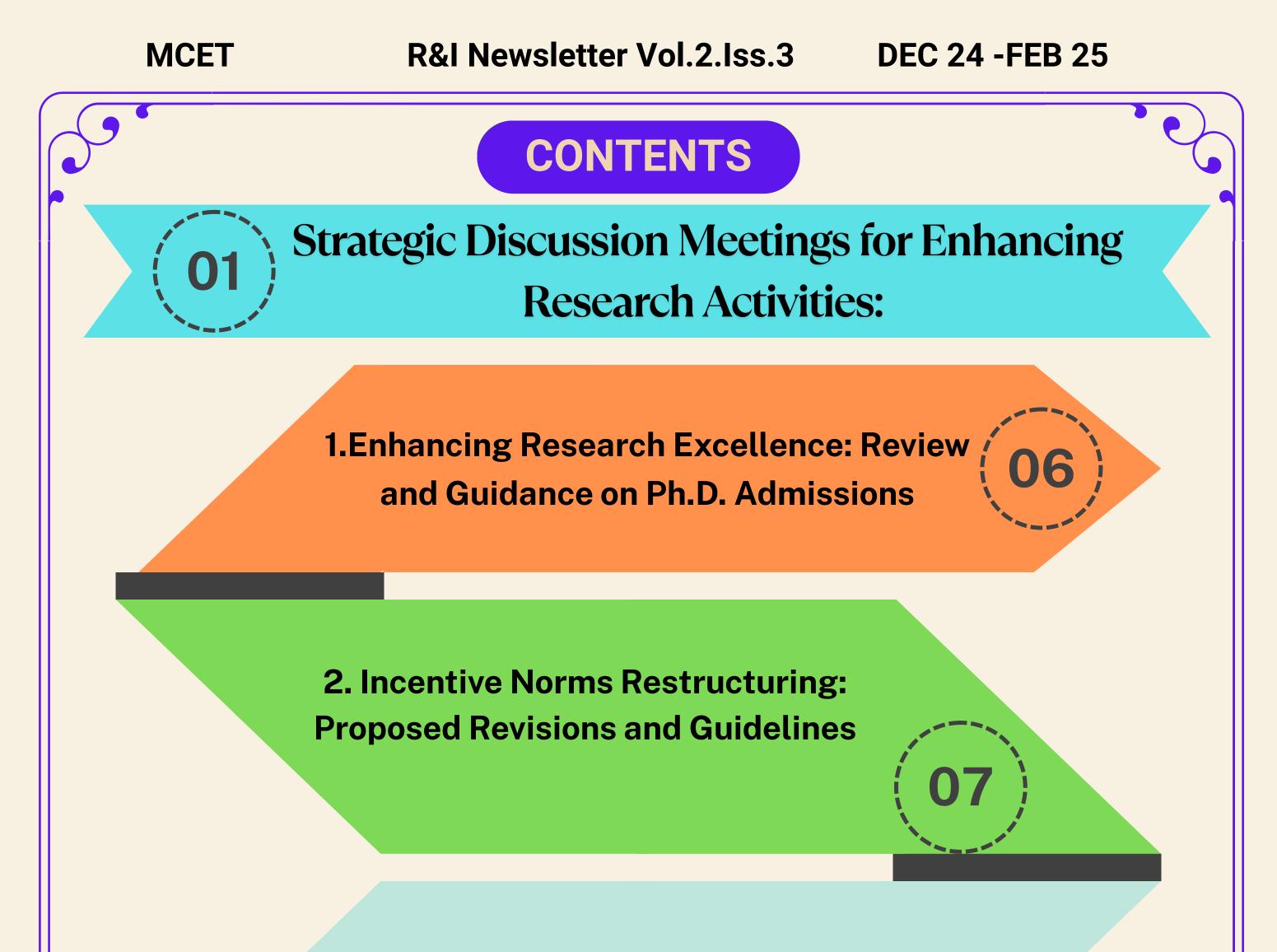
2. Strengthen research interest groups, empower the student research council, and publish the R&I newsletter to promote and celebrate achievements in the domain of research and innovation.

3. Disseminate knowledge through the publication of

research, knowledge-sharing sessions, seminars, faculty development programs, workshops, inter and intra-college technical symposiums, conferences, and open-house exhibitions.

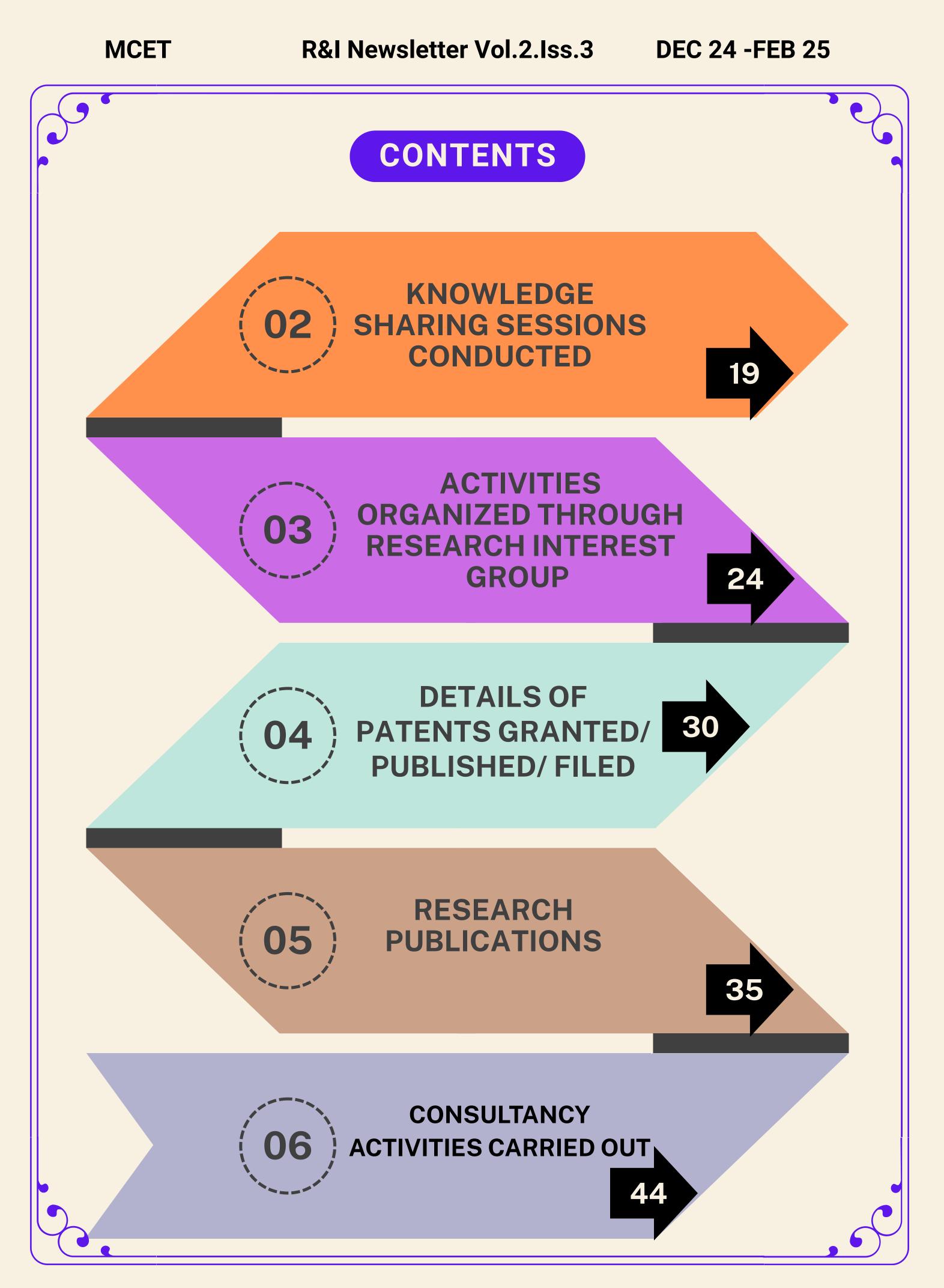
4. Offer state-of-the-art research facilities and resources to facilitate interdisciplinary research projects, secure research funding, conduct research with industry partners, and carry out Ph.D. works.

5. Review Ph.D. scholars' progress, department R&I activities, ongoing externally funded projects, in-house R&D projects, and institute innovation council.



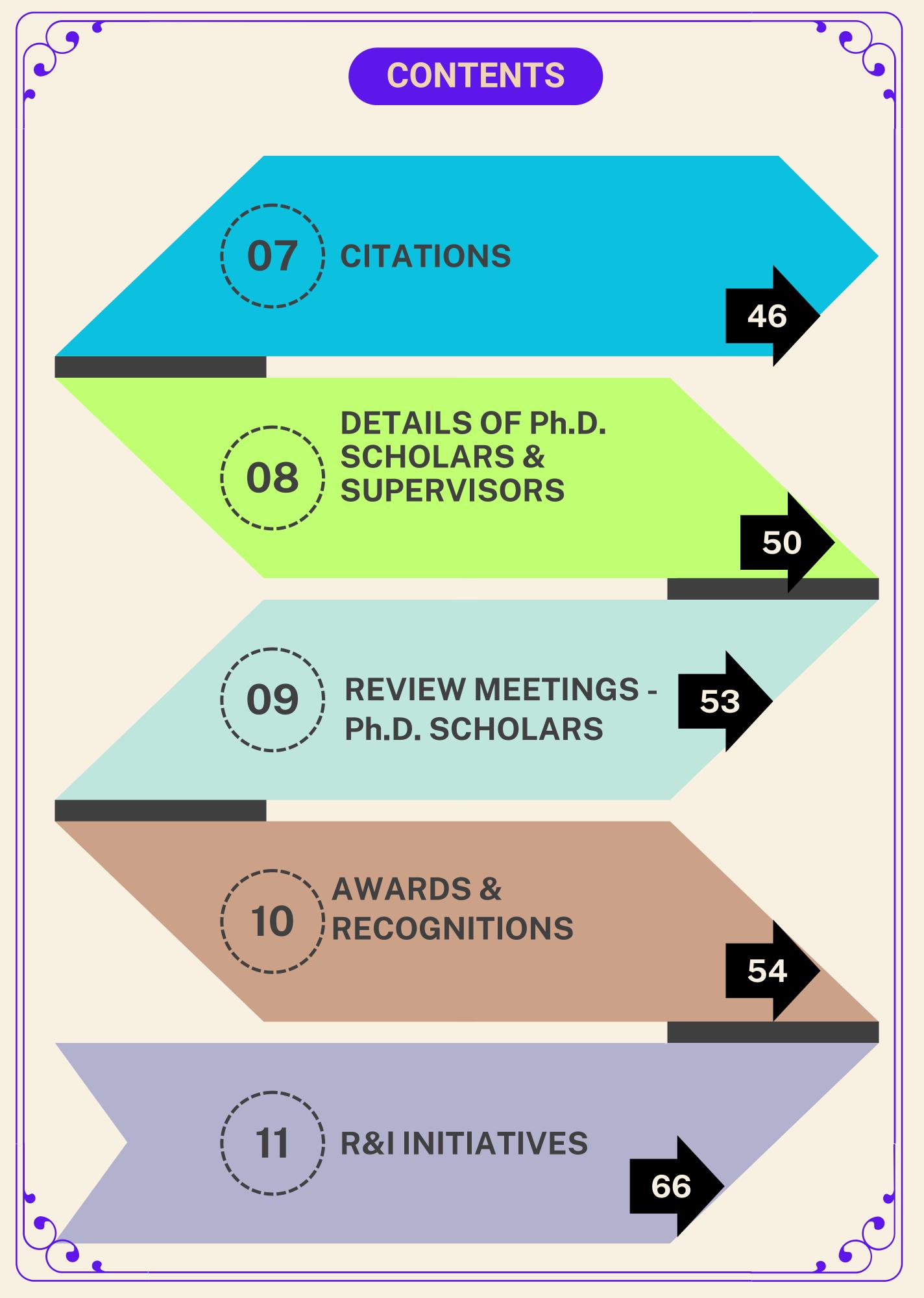
**3. Strategic Discussion on External** 







DEC 24 -FEB 25



#### 1. Enhancing Research Excellence: Review and Guidance on Ph.D. Admissions

Dean R&I convened a pivotal meeting on January 22, 2025, bringing together faculty members who had both secured and missed admission to the Anna University Ph.D. program.

For successful candidates, discussions focused on:

- Streamlining their transition into the Ph.D. program
- Coursework requirements
- Research expectations
- Institutional support for a smooth academic journey

#### Faculty members who were not selected received

- Personalized feedback
- In-depth analysis of their application performance





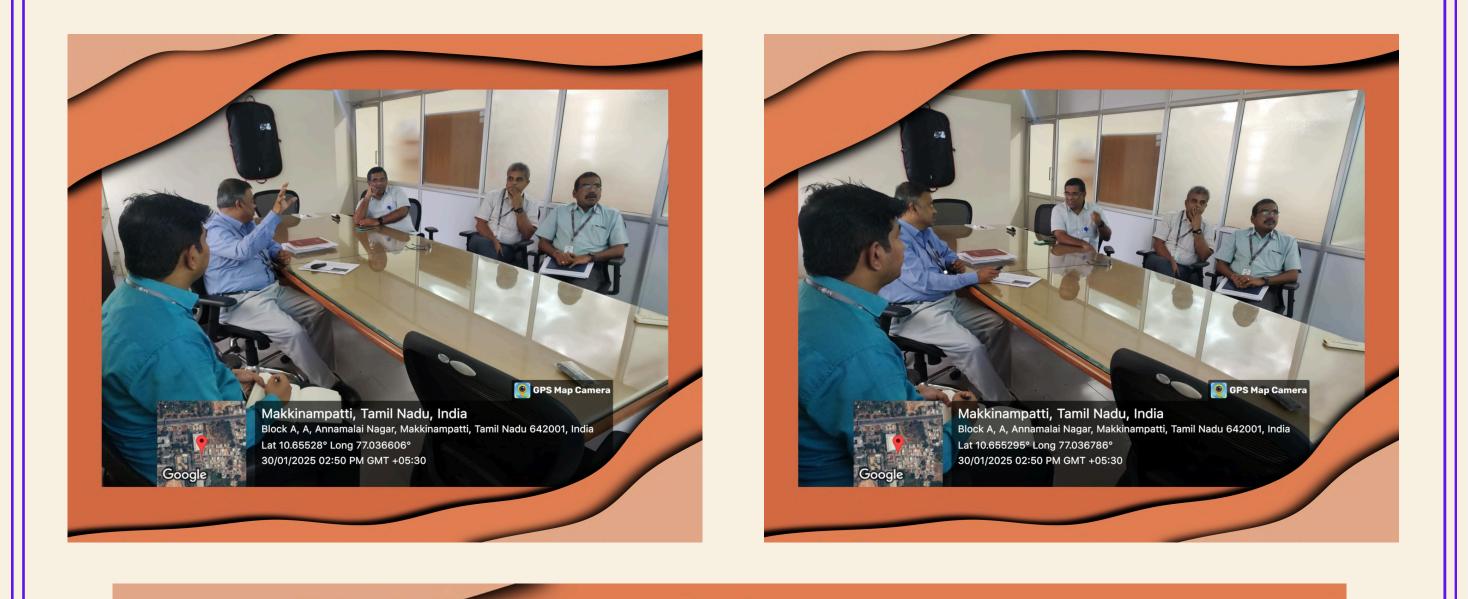




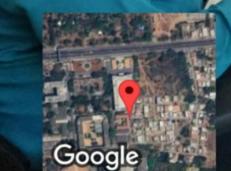
Block A, A, Annamalai Nagar, Makkinampatti, Tamil Nadu 642001, Ind Lat 10.655508° Long 77.036528° 22/01/2025 12:29 PM GMT +05:30

## No. of research Scholars applied: 13

A presentation on the revision of incentive norms was held on January 30, 2025, to enhance research engagement and recognize faculty contributions more effectively. Dean R&I, along with the admin team and R&I coordinators, discussed proposed modifications aimed at making the incentive structure more transparent, equitable, and performance-driven.



#### 💽 GPS Map Camera



Makkinampatti, Tamil Nadu, India Block A, A, Annamalai Nagar, Makkinampatti, Tamil Nadu 642001, India Lat 10.655271° Long 77.036587° 30/01/2025 02:50 PM GMT +05:30

#### A) Incentive Norms for Paper Publications

S.No.	Description	Standard Incentive	Enhanced Incentive			
1.	Publications of Papers in Scopus Indexed Journals	Rs. 3,000/-	Rs. 6,000/-			
2.	Publications of Papers in SCIE Indexed Journals	Rs. 5,000/-	Rs. 10,000/-			
3.	Publications of Papers in Top 25 Percentile Journals (Q1)	Publications of Papers in Top 25 Percentile Journals (Q1) Rs.7,500/- Rs.15,000/-				
4.	Faculty members who are currently working in MCET who published article with MCET affiliation are only eligible for incentive.					
5.	Revised incentive will be distributed from January 2025 onv	wards per Cale	endar Year.			
6.	A faculty member who published more than one paper in a calendar year will receive enhanced incentive as mentioned above. Those who published only one paper in a calendar year will receive standard incentive.					
7.	<ul> <li>Author Positions eligible for incentives:</li> <li>First 6 Author Positions for Q1 Journals</li> <li>First 5 Author Positions for SCIE Journals</li> <li>First 4 Author Positions for Scopus Journals</li> <li>Incentive amount mentioned per article will be equally distributed among Maximum</li> <li>of First Three MCET authors, of the above-mentioned positions of Journal articles.</li> </ul>					

**B) Incentive Norms for IPR** 

S.No.	Type of IPR	Description	Incentive Amount
1.		<ol> <li>Granted Patent with inventors and all from our institution</li> <li>With financial support from our institution</li> </ol>	Rs.15,000/-
	Granted Patent	<ol> <li>Granted Patent with inventors and all from our institution</li> <li>Without any financial support from our institution</li> </ol>	Rs.8,000/-
		Granted Patent with inventors limited to first 5 members (including members from other institutions)	Rs.6,000/-
2.	Granted Design	<ol> <li>Granted Design with inventors and all from our institution</li> <li>Without any financial support from our institution</li> <li>Granted Design with inventors and all from our institution</li> <li>With financial support from our institution</li> <li>Granted Design with inventors limited to first 5 members (including members from other institutions)</li> </ol>	Rs.1,000/-
3.	Registered Copyright	Applicant(s) and Author(s) should only be from "MCET"	Rs.1,000/-
4.	Registered Trademark	Registered Trademark should only be from "MCET"	Patent office Charges only

#### C) Norms for Sharing of Incentive for External Funded Projects

S.No.	Nature of External Fund	Range	Incentive Amount		
		>50 Lakhs	Rs. 2,00,000/-		
	Research Funding	>30-50 Lakhs	Rs. 1,00,000/-		
	(Proposals related to research	>20-30 Lakhs	Rs. 90,000/-		
1.	only)	>15-20 Lakhs	Rs. 80,000/-		
<u>-</u> .	(MODROBS, TNSCST	>10-15 Lakhs	Rs. 70,000/-		
	projects, Seminar Grants etc.,	>5-10 Lakhs	Rs. 50,000/-		
	are not considered)	>3-5 Lakhs	Rs. 40,000/-		
		2-3 Lakhs	Rs. 20,000/-		
	The above incentives are to be shared as follows				
	Descr	Percentage of Share			
	Principal investigator & Fac Co-PI-30%; Other	80%			
2.	Department supporting staff involved in the project		15%		
	If the department supporting staff not involved in project		10% to PI & 5% to Office		
	MCET Office, Central	5%			
	50% of the incentives are to be distributed upon receiving first installment and the remaining 50% are to be issued after successful submission of Utilization Certificate				

#### D) Norms for Sharing of Consultancy Revenue

	Description	Perc	entage of Share		
Net revenue	Institution resources are utilized	60:40 ratio 60% to institution, 40% as incent			
received for consultancy	Institution resources are not utilized	40:60 ratio 40% to institution, 60% as incent			
Norms for distribution of Incentive					
Description			Percentage of Share		
Faculty team members handling the consultancy			75%		
Department sı	pporting staff involved in the consul	tancy work	15 %		
MCET Office, Central Office and HR Office			10 %		

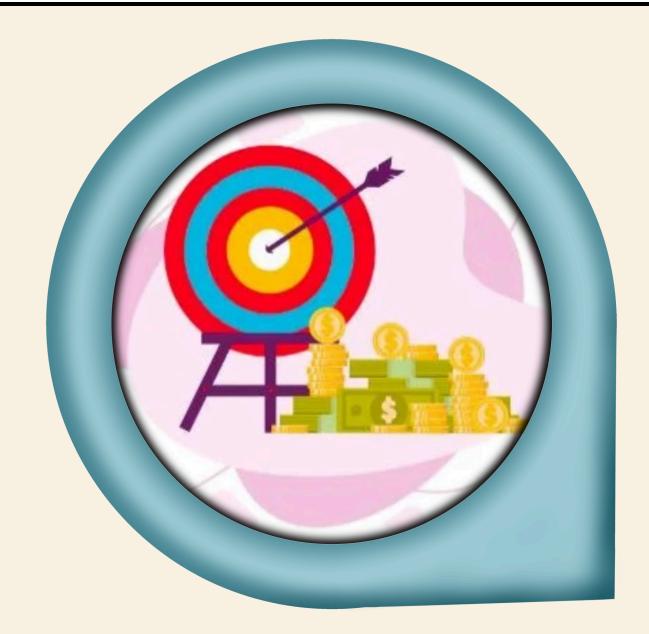
E) Norms for Reimbursement of Registration Fee for Online Courses

#### Norms

Participation in online courses only through NPTEL, SWAYAM, COURSERA platforms are considered. Yearly claim per faculty for maximum for 2 courses is Rs 2,200/-

OD will be provided to attend selective online course exams. Maximum 2 days/faculty/year

Faculty members (Experience less than 5 years) are encouraged to complete modules under National Initiative for Technical Teachers Training through online mode. NITTT modules (8) incur totally Rs. 10,000 (Rs.2000 for one-time registration and Rs. 1000 for each module) for completion. Faculty members can claim 30% of total amount after first year of registration another 30% at the end of second year and remaining 40% at the end of third year. Faculty members passing the module in first attempt are eligible for claim.



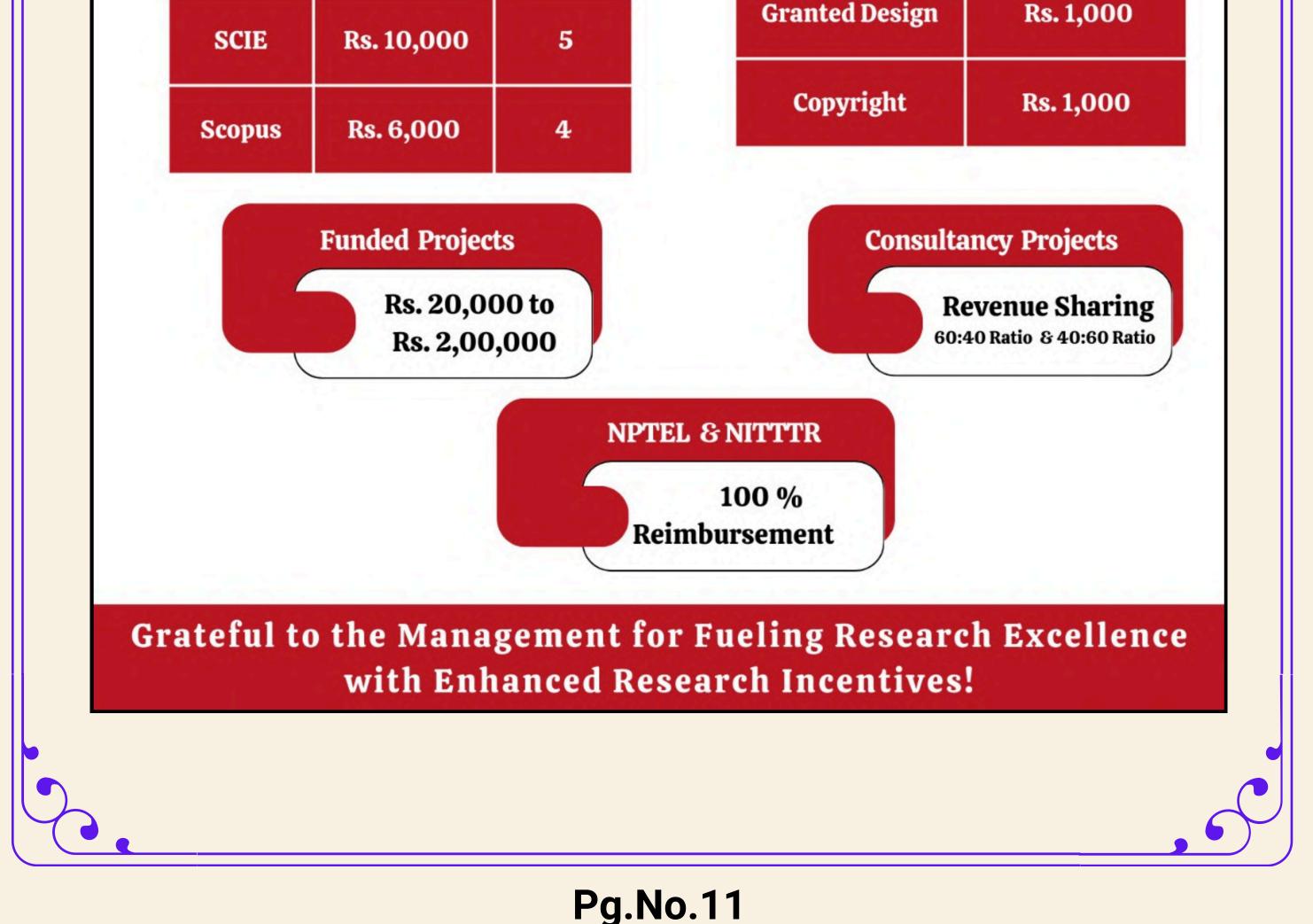
#### **Illustration for Paper receiving Standard Incentive/Enhanced Incentive**

		Incentive receiving Author			Standard Incentive/
S.No.	Category			3rd Author	Enhanced Incentive
1.	Number of	+	1+	1+	Enhanced Incentive
2.	publications in a	1+	1+	1	Standard Incentive
3.	Calendar Year	1+	1	1+	Standard Incentive
4.	(Publications jointly with other author(s), alone or same author(s))	1	1+	1+	Standard Incentive
5.		Ι.	1	1	Standard Incentive



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2. Incentive Norms Restructuring: Proposed Revisions and Guidelines **Dr. MAHALINGAM** M COLLEGE OF ENGINEERING AND TECHNOLOGY Established in 1998 • An Autonomous Institution Since 2011 Pollachi, Coimbatore **OFFICE OF DEAN RESEARCH & INNOVATION ENHANCED RESEARCH INCENTIVE Intellectual Property Journal Publications Rights** Author Enhanced Enhanced Type of **Type of IPR** Position Incentive Journal Incentive (Upto) **Granted Patent Rs. 15,000** Q1 **Rs. 15,000** 6



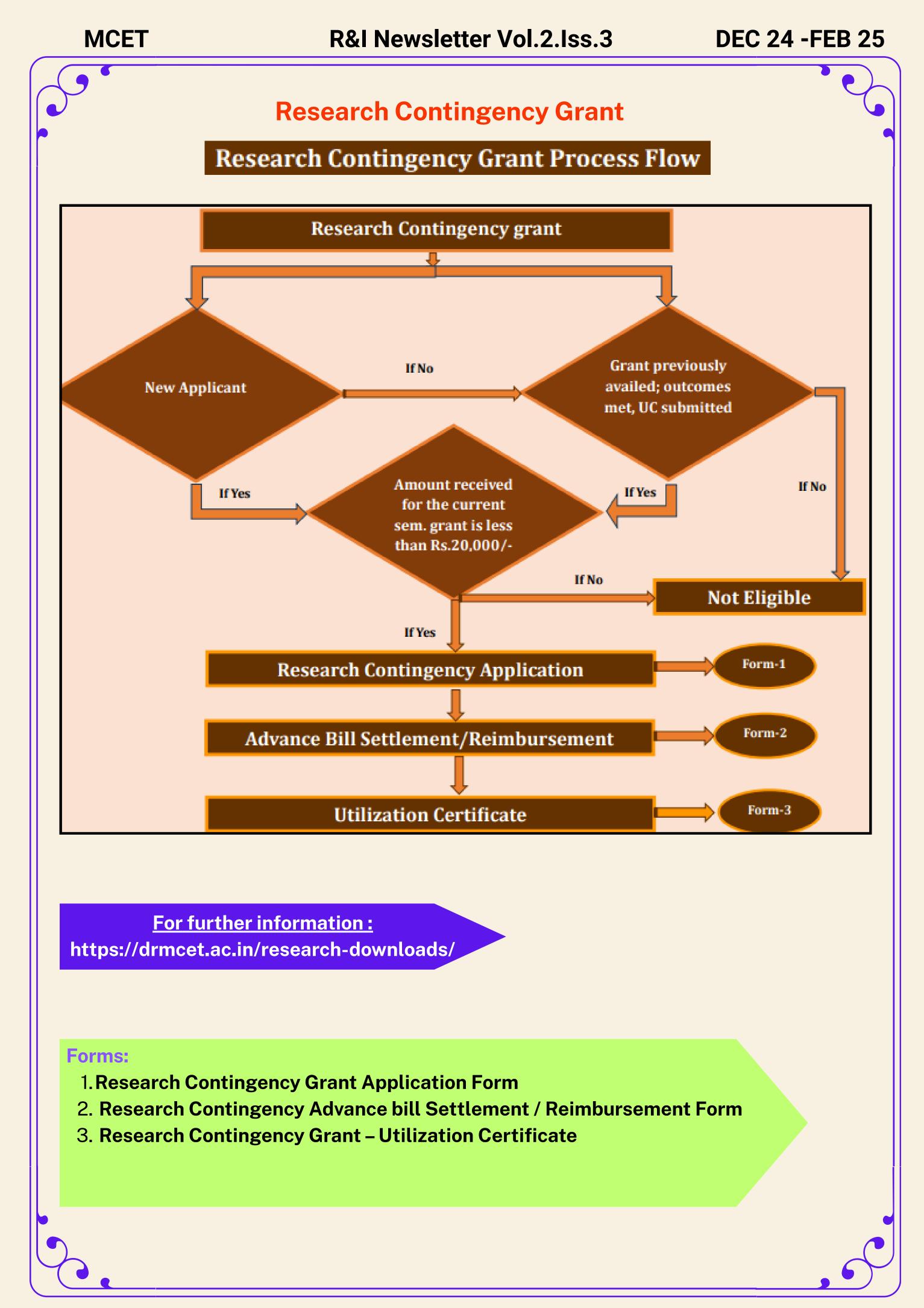




Our Management is pleased to sanction Research Contingency Grant Scheme to improve research output in various streams. Proposal for Allocation of Research Contingency Grant:

A total of Rs. 15 lakhs is proposed for the financial year (FY), with allocations as follows:

- Rs. 3 lakhs each for S&H and Mechanical Engineering
- Rs. 2 lakhs for Automobile Engineering
- Rs. 1 lakh for Civil Engineering
- Rs. 50,000 flat allocations for all other departments



## **3. Strategic Discussion on External Grant Applications**

Dr. S. Ramakrishnan, Dean R&I, led a strategic meeting on February 12, 2025, to enhance the institution's approach to external grant submissions. To enhance research and innovation activities, the Office of Dean Research and Innovation has initiated a focused effort on securing research grants from external funding agencies.



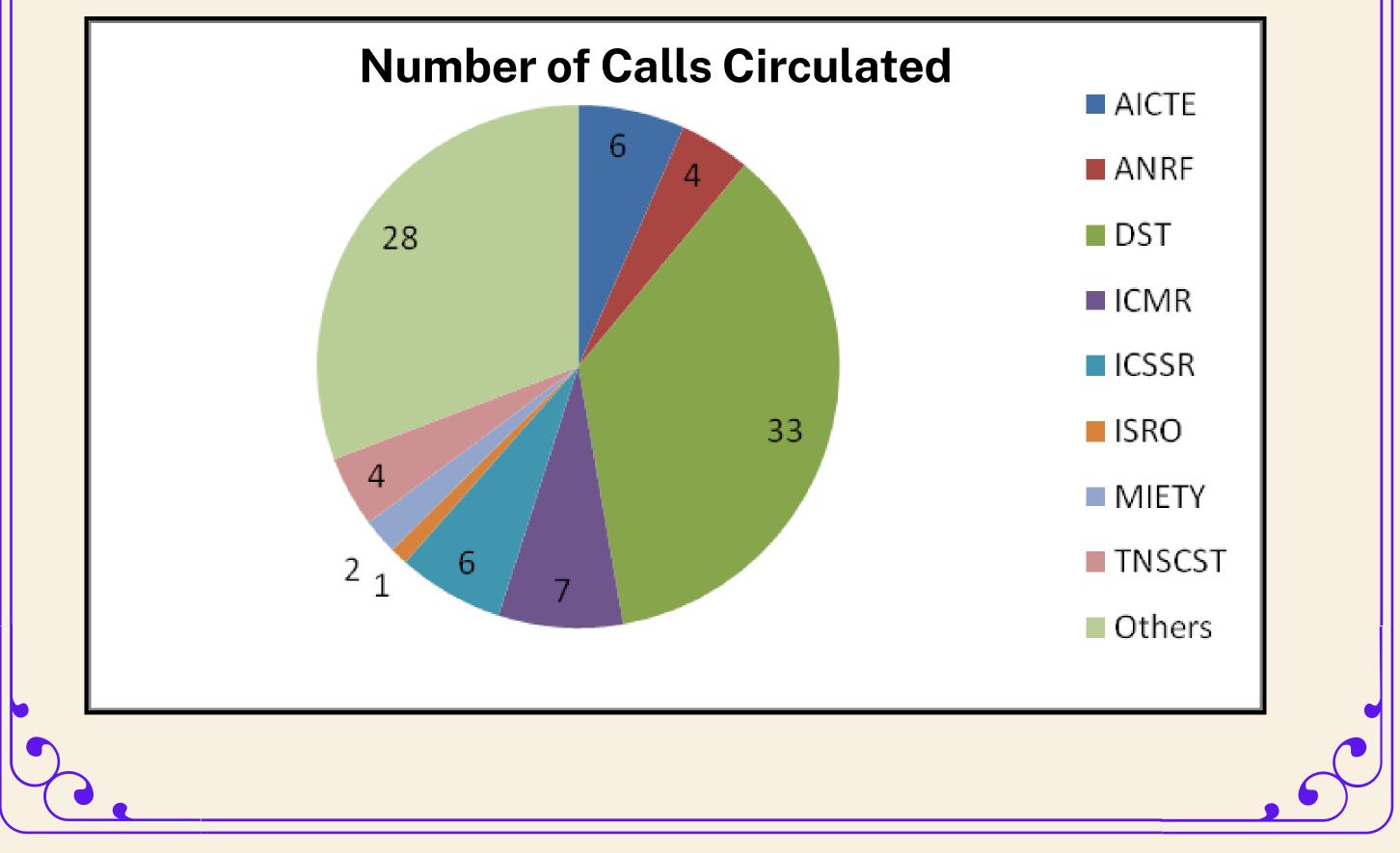
- Faculty members from each department have been identified to pre-prepare and submit project proposals to suitable funding schemes.
- The primary objective is to secure research grants and consistently maintain a minimum of two ongoing funded projects per department each year.
- Identified faculty members will align project proposals with their research expertise.
- All proposals will be reviewed by the research committee, preferably with the involvement of an external expert, before submission to funding agencies.

Makkinampatti, Tamil Nadu, India Block A, A, Annamalai Nagar, Makkinampatti, Tamil Nadu 64 Lat 10.655656° Long 77.036584° 12/02/2025 02:33 PM GMT +05:30

CPS Makkinampatti, Tamil Nadu, India Block A, A, Annamalai Nagar, Makkinampatti, Tamil Nadu 6 Lat 10.655676° Long 77.036606° 12/02/2025 02:33 PM GMT +05:30 Number of faculty members identified per department : Mechanical - 03, AI&DS -01 Automobile - 03, CSE - 02 Civil-01, MCA - 01 EEE - 02, IT - 02 ECE - 02, S&H - 07

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<b>3. Strategic Discussion on External Grant Applications</b> Total Number of Call For Proposals circulated: 03 Total Number calls disseminated/ assigned: 91				
Agency	No. of Calls Circulated			
AICTE	6			
ANRF	4			
DST	33			
ICMR	7			
ICSSR	6			
ISRO	1			
MIETY	2			
TNSCST	4			
Others (DOTE, National Commission for Women, HORIZON, HawkWatch	28			



# **3. Strategic Discussion on External Grant Applications**

#### **Tentative Schedule:**

**Processes planned for Research grant proposal preparation and submission:** 

S.No.	Description / Activity	Schedule / Planned during
1	Preliminary discussion meeting	12 <sup>th</sup> Feb 2025
2	Submission of basic details pertaining to	18 <sup>th</sup> Feb 2025
	proposals (as per the attached template)	
3	First draft pre-preparation of research	First Week of March 2025
	grant proposal and submission to Office	
	of Dean RI	
4	First review for research grant proposal	First week of March 2025
	(by External Expert)	
5	Second draft proposal submission	Third week of March 2025
6	Second / Final Review for research grant	Fourth week of March
	proposal (by External Expert)	2025
7	Submission of final proposal to identified	First week of April 2025
	& suitable funding agency	



# **4.** Advancing Consultancy Impact: A Collaborative Discussion

Dr. S. Ramakrishnan, Dean R&I, led a comprehensive meeting on February 13, 2025, aimed at strengthening the institution's consultancy initiatives. The session focused on enhancing faculty involvement, streamlining processes, and expanding industry partnerships to maximize impact. Faculty members actively participated, sharing insights on challenges, potential growth areas, and ways to streamline consultancy operations.





The meeting ended with key action points, reaffirming the commitment to strengthening consultancy services and fostering meaningful partnerships between educational institutions and industry.

### **5. Internal R&D Projects Review Session**

On February 15, 2025, Dr. S. Ramakrishnan, Dean of Research and Innovation (R&I), convened an in-house R&D Faculty Members Meeting to review and assess the progress of ongoing research initiatives. The meeting aimed to evaluate current projects, identify areas for improvement, and strategize future research directions to enhance the institution's research capabilities.



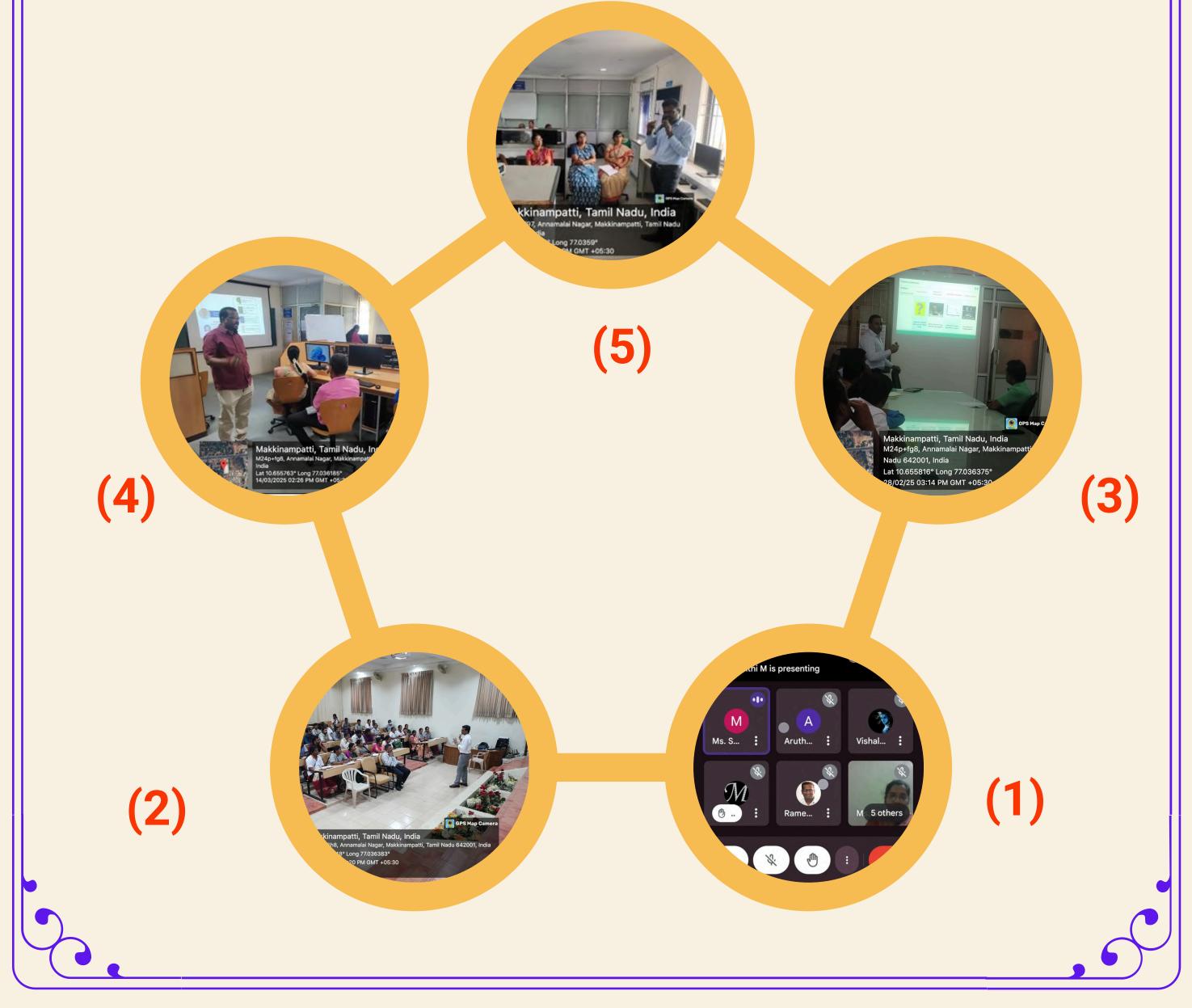


**GPS Map Camera** 

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# **Knowledge Sharing Sessions Conducted**

S.No.	Name of the Event	Resource Person	Date & No. of Participants
1	Research Challenges and Possibilities	Dr.M.Shanthi, Assistant Professor, Department of Science & Humanities, Karpagam College of Engineering, Coimbatore.	07.12.2024 & 8 (Online)
2	Research Proposal Writing	Dr.K.Ragavan, Associate Professor/Electrical Engineering, IIT Gandhinagar	08.02.2025 & 76
3	Electric Vehicles – Challenges and Opportunities	Dr. Vimal Jayaseelan, Founder & CEO, Hygge Mobility Pvt.Ltd., Bengaluru	28.02.2024 & 7
4	Research Trends using Deep Learning	Dr. Venkatesan M, Associate Professor, Department of Computer Science and Engineering, NIT, Puducherry	14.03.2025 & 36
5	Research aspects in Networking and Cyber Security	Mr.Ramakrishnan Nataraj Cyber Security Analyst and Trainer, ERP Next	27.03.2025 & 13



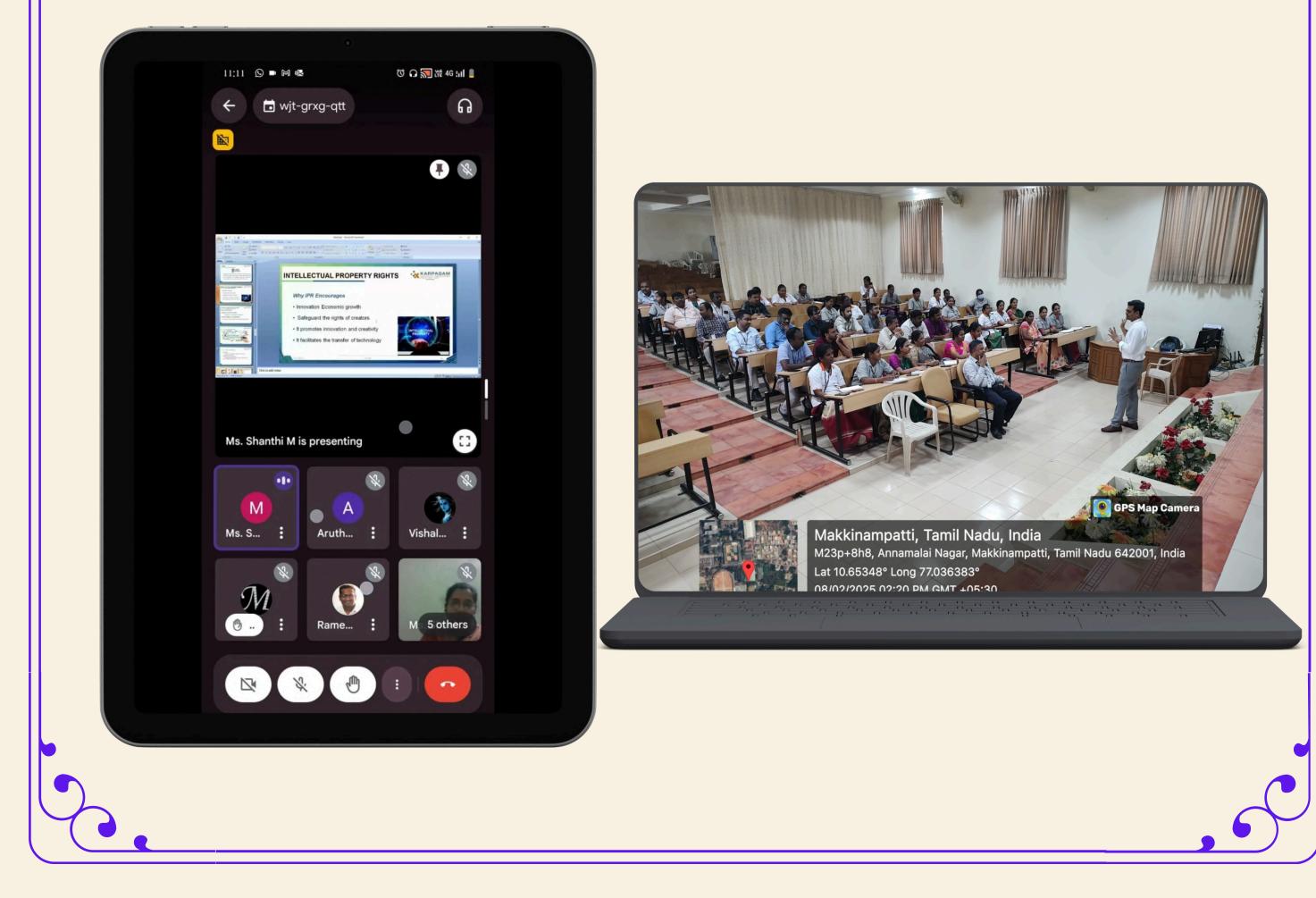


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Dr.M.Shanthi, Assistant Professor, Karpagam College of Engineering, Coimbatore Topic: Research Challenges and Possibilities

Dr.K.Ragavan, Associate Professor, IIT Gandhinagar Topic: Research Proposal Writing





#### DEC 24 -FEB 25



All are cordially Invited !!!



All are cordially Invited !!!

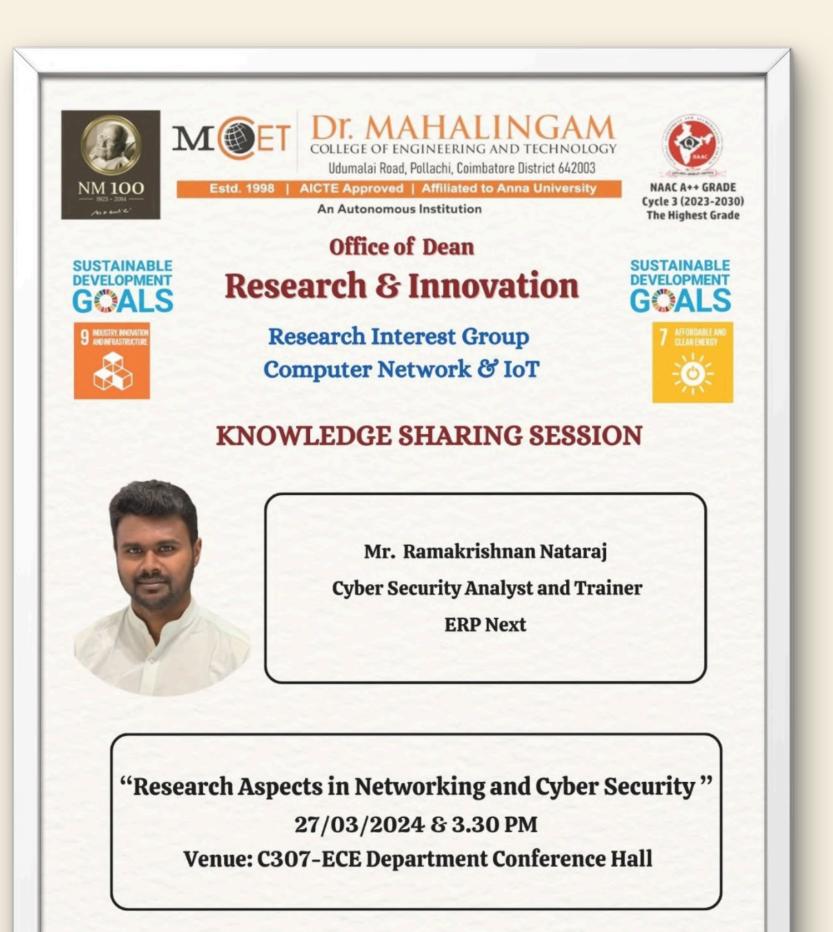






**DEC 24 -FEB 25** 

# **Knowledge Sharing Sessions Conducted**

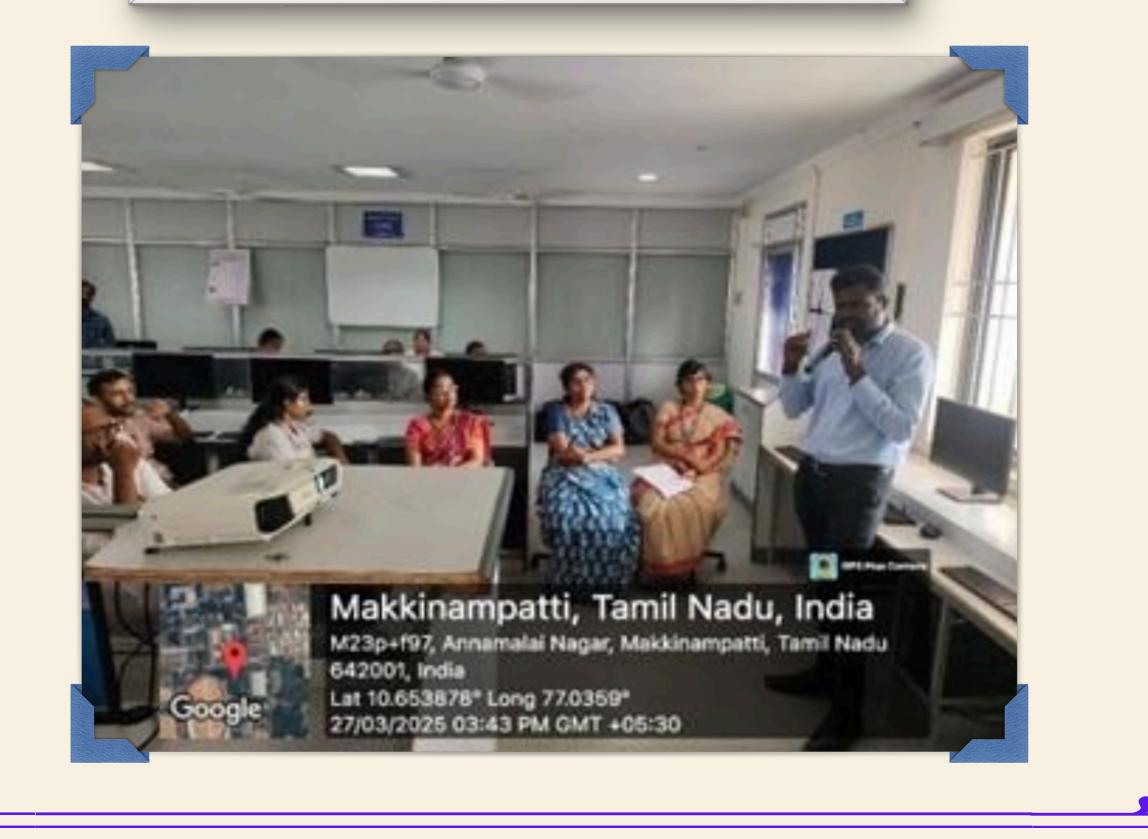


Organizers: Ms. R.Sherine Jenny, AP(SS), ECE Mr R.Muthubharathi AP(SS)/EEE

#### All are cordially Invited !!!

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# RESEARCH

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# INTEREST

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# GROUP



(RIG)				
S.No.	Title	Name of the Resource Person (MCET faculty members)	Date	
1	Effective Cardiovascular Diseases Prediction using Machine Learning Techniques	Mr.Prabhu K, AP(SS)/ CSE	03 DEC 2024	
2	Dissemination of High End Workshop on "Deep Learning for Biomedical Signal Processing"	Dr. C.Moorthy, AP(SS) /ECE	12 DEC 2024	
3	Data Science and Advanced Machine Learning Exploration using Python	Dr.N.Suba Rani, Assoc. Prof./CSE Dr. S. Nithya, Assoc. Prof./AI&DS Mr. M. Vijayakumar, AP/AI&DS	18 DEC 2024	
4	Workshop on Transforming Healthcare with AI	Mr.M.Manoj kumar, AP/CSE	19 DEC 2024	
5	Microsoft Azure Al	Ms. G.Gayathri, AP/CSE Ms. A.Jayalakshmi, AP/CSE	20 DEC 2024	
6	Al Applications and Practical Insights	Mr.R.Karthick, AP(SS) /CSE	21 DEC 2024	
7	Software Security: 24 Deadly Sins of Software Programming	Mr.K.Prabhu, AP(SS)/CSE Ms.G. Umamaheswari, AP/CSE	21 DEC 2024	
8	Electric Vehicle Technology	Mr.S. Mahalingam, AP/Auto	08 JAN 2025	
9	Mathematics in Machine Learning	Dr.R.Ramesh, AP(SG)/Maths Dr.T.Muthu Kumar, AP/Maths	08 JAN 2025	
10	A Review on Algorithms used in Antenna design for wireless system	Ms.S.Abiramasundari, AP/ECE	14 FEB 2025	
11	Challenges in Designing Antenna for Real-time and Human Implantation	Ms.K.C.Raja Rajeswari, AP/ECE	15 FEB 2025	
12	Design Of Emotion Recognition System Using EEG Signals	Mr.A.Shafeek, AP (SS) /ECE		
13	Investigation of polymer composite in Additive Manufacturing	Mr.N.Dhamodharan, AP/Auto		
14	Interpretation of Material Characterization Instruments	Mr. R.Vishnurameshkumar, AP(SS) /Auto	17 FEB 2025	
15 16	Phytoremediation Research Seminar on "PVD Methods for Thin film Deposition and its Applications"	Mr. S. Dineshkumar, AP/Civil Dr V Regina Delcy, AP/Physics	21 FEB 2025	
17	Hands-on: Ethical Hacking - Capturing Passwords and visited websites using ARP Spoofing attack with Bettercap tool	Dr.N.Senthil Madasamy, Assoc. Prof./CSE	22 FEB 2025	
18	DC TO DC Converter For Renewable Energy Applications	Mr. M. Saravanakumar, AP(SS) /EEE		
19	Design for Manufacturing using Creo	Dr. K.Sakthivadivel - AP(SG) /Auto Mr. N.Dhamodharan - AP/Auto Dr. M. Jayaraj - AP(SG) / Mech Dr N.Balamurali - AP / Mech	27 FEB 2025	

#### **R&I Newsletter Vol.2.Iss.3**

### **DEC 24 -FEB 25**



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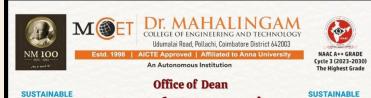
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#### **R&I Newsletter Vol.2.Iss.3**

### DEC 24 -FEB 25



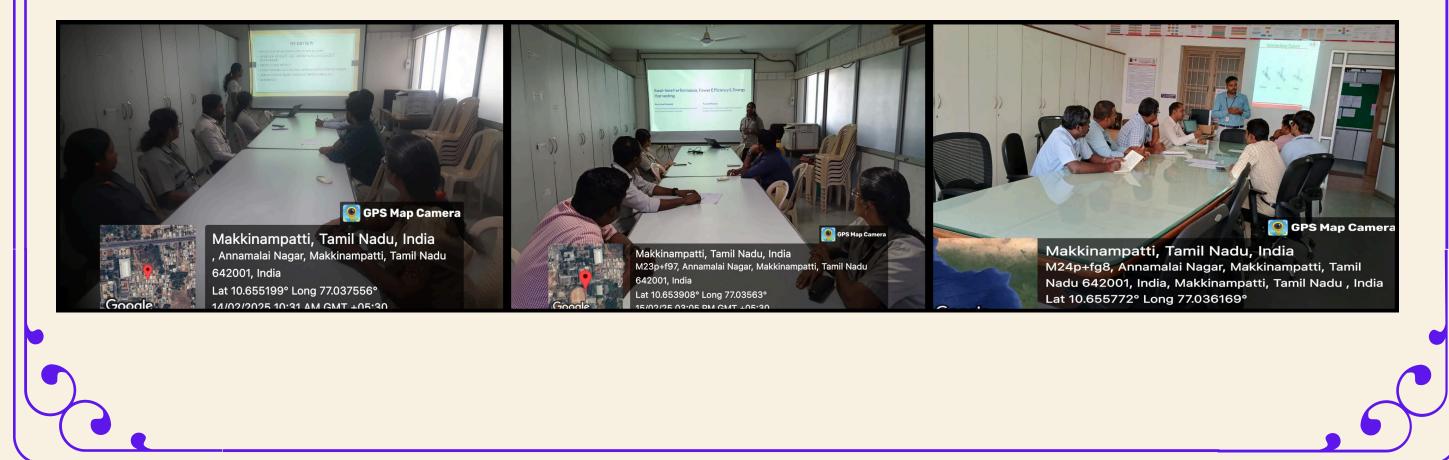








DEVELOPMENT GOALS	<b>Research &amp; Innovation</b>	<b>GOALS</b>					
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	<b>Research Interset Group</b>	7 AFFORDABLE AND CLEAN ENERGY					
	Materials, Design and Manufaturing						
	<b>RESEARCH SEIMINAR</b>						
	Mr.N.Dhamodharan						
	Assistant Professor						
	Department of Automobile Engine	ering					
	Dr. Mahalingam College of Engineer	ring and					
	Technology, Pollachi						
( "Inve	stigation of polymer composite in Ac	lditive					
	Manufacturing "						
200	15/02/2025 & 3.00 PM						
	Venue: A421						
Organizers: Dr.S.K.Ashok, AP(SG)/Auto Mr.M.Padmanaban, AP(SS)/Mech							
	All are cordially Invited !!!						
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#### **R&I Newsletter Vol.2.Iss.3**

#### DEC 24 -FEB 25

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"Design for Manufacturing using Creo" 27/02/2025 & 3.00 PM Venue: A421

Organizers: Dr.S.K.Ashok, AP(SG)/Auto Mr.M.Padmanaban, AP(SS)/Mech All are cordially Invited !!!

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**DEC 24 - FEB 25** 

# **DETAILS OF PATENTS GRANTED/ PUBLISHED/FILED**





# **DETAILS OF PATENTS GRANTED/ PUBLISHED/ FILED**

## **DETAILS OF DESIGN REGISTERED**

S.No.	Application No.	Name of the Inventors	Title of the Patent	Date of Publication
1	431367-001	Mr.V.D.Tamilarasan, AP(SS) - AUTO Dr. D.Shanmugam, Prof. & HoD - AUTO Mr. R.Vishnu Ramesh Kumar AP(SS) - AUTO Mr. M. Mahendran, AP(SS) - AUTO Mr.M.Ponmurugan, AP(SS) - AUTO Mr. S.Mahalingam, AP - AUTO Mr. Bavithran K, Student of Mech (UG) Mr. Pughalarasan, Student of Auto (UG)	Electric All-terrain vehicle roll cage	04/12/2024
2	431663-001	Ms. Mithuna R, AP - AIML	Smart WIFI LED Ceiling Light	
3	428379-001	Ms. A.Saranya, AP - MATHS	Smart telematics systems for enhanced vehicle communication	12/06/2024
4	429908-001	Dr. Balamurali, AP -MECH Dr. S.V. Gurupranes, AP -MECH Mr. J. Nagarajan, AP - EEE Mr. M. Lohit, Student of Mech Mr. R.S. Sharveshwaran, Student of Mech	Integrated tea maker and Bread toaster device	13/12/2024
5	434986- <mark>0</mark> 01	Mr. J. Dinesh kumar, AP - MECH	Split Casting High speed pump	23/12/2024
6	422509-001	Dr. M.Jayaraj, AP(SG) - MECH D r.N.Shanmuga Sundaram AP(SG) - MECH Mr.K.Vijayakkannan, AP(SS) - MECH	Double Vacuum Blower for Cleaning Coir Pit Blocks	27/12/2024
7	432524-001	Ms. Jeslin Benita Ponnarasi, AP - CYS	Device for attack detection in Digital forensics	





S.No	Application	Name of the Inventors	Title of the	Date of Filed (F)/
·	No.		Patent	Published (P)

1	2024410637 28	Dr.C.Moorthy, AP - ECE Mr.V.Gurunathan, AP - ECE Ms.T.Sathiyapriya, AP - ECE Mr.A.Shafeek, AP - ECE Ms.S.Thilagavathi, AP - ECE	Voice Activated Smart Wearable Device for Women Safety using Machine Learning	06/12/2024 (P) 23/08/2024 (F)
2	2025410032 24	Pooja P Raj, AP(SS) - AIDS	Utilizing blockchain for enhanced security and transparency in library transactions	24/01/2025 (P) 14/01/2025 (F)
3	2025440043 38	Ms.M.Rubha, AP - MCA Dr.R.Muthusami, ASP & HOD - MCA	Smart system for Agricultural Renaissance (SAR)	31/01/2025 (P) 20/01/2025 (F)
4	2023410468 34	Dr.P.Vivekanandan, Prof & Head - AIML Guru Dharsan T, Student of AIML Mrs.V.Shanmugaveni, AP - CYS Ms.M.Bhagavathi Priya, AP - VLSI Mr.M.Sakthivadivel, AP (SS) - CYS	Programmable smart kitchen container	24/01/2025 (P) 14/01/2025 (F)
5	2025410089 97	Dr. S. V. Gurupranes, AP - MECH	Bio-material- based air filtration system	14/02/2025 (P) 04/02/2025 (F)
•				

LIST OF PATENTS - FILED/PUBLISHED								
S.No.	Application No.	Name of the Inventors	Title of the Patent	Date of Filed (F) Published (P)				
б	2025410092 88	Ms. P. Vanjipriya, AP - ECE Dr. S. Raja Rajeshwari, AP(SS) - MCA Mr. N.S Madhumohan, Student of ECE Mr. K.A. Sreeram, Student of ECE Mr. C.N. Balmurali, Student of ECE Ms. Nivetha R P, Student of MCA Ms. Boomika P, Student of MCA Ms. Janavi T, Student of MCA	Driver drowsiness detection system and method thereof	14/02/2025 (P) 04/02/2025 (F)				
7	2025410092 99	Mr. Sreejith S Nair, AP(SS) - MECH Dr. Rama Thirumurugan, Prof & Head - MECH Dr. M. Jayaraj, AP(SG) - MECH Mr. R. Dharaneesh, Student of Mech Mr. A. Rajiv Sanjai, Student of Mech Mr. V. Suthirkumar, Student of Mech	Suspension Based Air Compressor System	14/02/2025 (P) 04/02/2025 (F)				
8	2025410093 14	Mr. K. S. Mithun Kumar, Student of Auto Mr. S. Yaswanth, Student of Auto Mr. D. Gokulakrishnan, Student of Auto Ms.S. Pavithra, Student of Auto Ms. J Lathika, Student of Auto Ms. K Navinaa, Student of Auto Mr. M. Mahendran, AP(SS) - AUTO Mr. V D Tamilarasan, AP - AUTO	Aeroponics- Integrated Hydroponics Agriculture System with IoT and AI-Based Automation	14/02/2025 (P) 05/02/2025 (F)				
9	2025410106 86	Mr. M. Mahendran, AP(SS) - AUTO Mr. Saran N, Student of Auto Mr. Mehulkrishna M, Student of Auto Mr. Elladurai S, Student of Auto	Portable Forklift System with Integrated Weighing Mechanism for Material Handling	14/02/2025 (P) 08/02/2025 (F)				



			OF PATENTS GRANTED/ PUBLISHED/ FILED ST OF COPY RIGHTS FILED/REGISTERED			
S.No.	Application No.	Name of the Inventors	Title of the Patent	Date of Registered (R) / Filed (F)		
1	L- 158295/2024	Mr.L.Hubert Tony Raj, AP - EEE Dr.M.Kaliamoorthy, Prof - EEE Dr.K.Uma Maheswari, AP(SG) - EEE Mr.K.Manikandan, AP - EEE Dr.T.Anand Kumar, AP (SS) - EEE	Elementary experiments on electronics using python and tinkercad	12/12/2024 (F		
2	2866/2025- CO/L	Mr.R.Govindaraj, AP - IT	Python master class zero to hero	25/01/2025 (T		
3	2867/2025- CO/L		Full stack web dev road map	- 25/01/2025 (F)		
4	L- 160034/2025	Ms.S.C.Lavanya, AP (SS) - CSE Mr.P.Boopathi Rajan, AP (SS) - CSE Dr.A.Noble Mary Juliet, ASP - CSE Ms.B.Suganya, AP (SS) - CSE	Workbook on "Introduction to Big Data"	28/01/2025 (R		



**R&I Newsletter Vol.2.Iss.3** 

**DEC 24 - FEB 25** 





## **RESEARCH PUBLICATIONS**

### **Journal Article Publications**

- Johnson William, J., I. Manohara Babu, and G. Muralidharan. "Spherical Bismuth Iron Oxide Nanostructures as Battery-Type Negative Electrode for Supercapacitor Applications." Journal of Electroanalytical Chemistry 978 (February 2025): 118869. <u>https://doi.org/10.1016/j.jelechem.2024.118869</u>. *Indexing: Q1, SCIE.*
- Shanmugapriya, P., T. Sathesh Kumar, S. Kirubadevi, and P. Venkata Prasad. "IoT Based Energy Management Strategy for Hybrid Electric Storage System in EV Using SAGAN-COA Approach." Journal of Energy Storage 104 (December 2024): 114315. <u>https://doi.org/10.1016/j.est.2024.114315</u>. *Indexing: Q1, SCIE.*
- Naveen, Michael Roger, Logesh Kamaraj, and Hariharasakthi sudhan Ponnarengan. "Sustainable Optimization of Compression Molding Parameters for High-performance Titanium-based Fiber Metal Laminates with Graphene-enhanced K Evlar/Jute Fibers." Polymer Composites, February 6, 2025, pc.29582. <u>https://doi.org/10.1002/pc.29582</u>. *Indexing: Q1, SCIE.*
- 4. Baluchamy, Anbarasan, Murugapoopathi Saravanamuthu, Shanmuga Sundaram Natarajan, and Sakthi Rajan Chandramurthy. "Analysis of Energy, Exergy, and

Emissions in a Diesel Engine Powered by Cotton Silk Seed Oil Biodiesel with Varying Injection Timings." Environmental Science and Pollution Research, January 29, 2025. https://doi.org/10.1007/s11356-025-35957-9. *Indexing: Q1, SCIE.* 

- Ramkumar, T., V. K. Sudha, M. Selvakumar, and P. Muthusamy. "Prediction of Tribological Performance of Ti-3Al-2.5 V-xWC Composite Using Machine Learning Models." Journal of Materials Engineering and Performance, December 10, 2024. <u>https://doi.org/10.1007/s11665-024-10532-4</u>. *Indexing: SCIE.*
- Thangavel, Nithyanandhan, Naveen Kumar Shanmugavel, Manickaraj Karuppusamy, and Ramakrishnan Thirumalaisamy. "Friction and Wear Behavior of Premixed Reinforcement Hybrid Composite Materials." Matéria (Rio de Janeiro) 29, no. 4 (2024): e20240552. <u>https://doi.org/10.1590/1517-7076-rmat-2024-0552</u>. *Indexing: SCIE*.

### **RESEARCH PUBLICATIONS** Journal Article Publications

- Ashok, S.K., D. Shanmugam, S. Ponni Alias Sathya, and M. Jayaraj. "Effect of Process Parameters on the Corrosion Characteristics of Friction Stir Welded Aluminum Alloy AA2014-T6." The Aeronautical Journal, January 8, 2025, 1–15. <u>https://doi.org/10.1017/aer.2024.133</u>. *Indexing: SCIE*.
- Vasudevan, Mangottiri, and Narayanan Natarajan. "Towards Achieving Sustainable Bioplastics Production and Nutrient Recovery from Wastewater—a Comprehensive Overview on Polyhydroxybutyrate." Biomass Conversion and Biorefinery 15, no. 2 (January 2025): 1729–48. <u>https://doi.org/10.1007/s13399-022-02399-z</u>. *Indexing: SCIE.*
- Dhengare, S. W., V Sharun, M. Mariappan, and Pothamsetty Kasi V Rao. "Development and Characterization of Red Matta Rice Husk Derived Si2N2O Bioceramic-Epoxy Nanocomposite Coating for Damage and Barrier Protection of Building Materials." Biomass Conversion and Biorefinery 14, no. 24 (December 2024): 32403-12. https://doi.org/10.1007/s13399-023-04905-3. *Indexing: SCIE.*
- 10. Ponnarengan, Hariharasakthisudhan, Sivakumar Rajendran, Vikas Khalkar, Gunapriya Devarajan, and Logesh Kamaraj. "Data-Driven Healthcare: The Role of Computational Methods in Medical Innovation." Computer Modeling in Engineering & Sciences 142, no. 1 (2025): 1–48. <u>https://doi.org/10.32604/cmes.2024.056605</u>. *Indexing:*

### SCIE.

- 11. Hariharasakthisudhan, P., K. Logesh, Sathish Kannan, R. Sivakumar, and K. Sathickbasha. "Optimizing The Process Parameter Of Abrasive Water Jet Machining Against Sub-Surface Delamination Of Nanoclay Modified Glare Laminates." Surface Review and Letters, December 17, 2024, 2550086. <u>https://doi.org/10.1142/S0218625X25500866</u>. *Indexing: SCIE*.
- 12. Kannan, Sathish, Hariharasakthisudhan P, K Logesh, M Varatharajulu, Kk Thomas, and Salman Pervaiz. "Studies on Surface Roughness and Axial Thrust Force of Drilled Holes in Mg-Zn-Ca Bio-Medical Alloy." Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science 239, no. 2 (January 2025): 432–48. <u>https://doi.org/10.1177/09544062241285216</u>. *Indexing: SCIE.*
- 13. Vishalatchi, K., Rajesh Kumar D, T. Sathiyapriya, and V. Gurunathan. "A Low-SAR Four-Element Antenna for ISM/NR78 Band Applications." International Journal of Electronics, January 10, 2025, 1–15. <u>https://doi.org/10.1080/00207217.2025.2450736</u>.
   Indexing: SCIE.

### **RESEARCH PUBLICATIONS** Journal Article Publications

14. Gopal, V., Sethumathavan Vadivel, P. Sujita, Vaiyapuri Soundharrajan, B. Saravanakumar, and P. A. Periasamy. "Unveiling the Power of Hexagon-Shaped KCu7S4 towards Hydrogen Evolution Reactions and Supercapacitor Electrodes: A Bi-Functional Approach." Ionics, February 13, 2025. <u>https://doi.org/10.1007/s11581-025-06136-0</u>. *Indexing: SCIE*.

- 15. Chandran, Radhakrishnan, and Rajendran Irusa Gounder. "Assessing the Performance and Characteristics of Biomass Oil by Fast Pyrolysis of Coconut Outer Shell and Its Blends." Biomass Conversion and Biorefinery, February 21, 2025. <u>https://doi.org/10.1007/s13399-025-06662-x</u>. *Indexing: SCIE*.
- 16. P. Rathika, S. Yamunadevi, P. Ponni, V. Parthipan, and P. Anju. "Developing an AI-Powered Interactive Virtual Tutor for Enhanced Learning Experiences." International Journal of Computational and Experimental Science and Engineering 10, no. 4 (December 22, 2024). <u>https://doi.org/10.22399/ijcesen.782</u>. *Indexing: Scopus.*
- Kanagaraj, R., N. Krishnaraj, J. Selvakumar, and J. Ramprasath. "Implementation of Multi-Label Fuzzy Classification System Using Topic Detection Data Set." Procedia Computer Science 252 (2025): 15-24. <u>https://doi.org/10.1016/j.procs.2024.12.003</u>.

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- 18. Sathickbasha Katharbasha, Hariharasakthisudhan Ponnarengan, Varun Kumar Arulvizhi, Venkata Ramarao Mutyala, Sivakumar Chandramohan, "Effect of Potassium Titanate Fibres and Metal Sulphides in the Tribological Behaviour of Brake Friction Composites." Tribology and Materials 3, no. 3 (2024): 108–17. <u>https://doi.org/10.46793/tribomat.2024.014</u>. *Indexing: Scopus.*
- Deepan Kumar, Sadhasivam, Vishnu Ramesh Kumar R, Boopathi M, R Manojkumar, Gobinath R, and Vignesh M. "FPGA Implementation of HLS Crypto Accelerators for Embedded Security in Autonomous Vehicles," 2025-28-0205. Chennai, India, 2025. <u>https://doi.org/10.4271/2025-28-0205</u>. *Indexing: Scopus.*
- 20. Vigneshkumar, M, G Gokilakrishnan, Sreejith S Nair, A Sivalingam, Muthukumar Marappan, and Suriya Shaffi Bhat. "Analysis of the Use of Nano-Engineered Composite Energy Retention Materials in Eco-Building Layouts." Journal of Physics: Conference Series 2925, no. 1 (December 1, 2024): 012012. <u>https://doi.org/10.1088/1742-6596/2925/1/012012</u>. *Indexing: Scopus.*

### **RESEARCH PUBLICATIONS** Journal Article Publications

21. Dr.S.Bhaggiaraj, Mr.A.Vishnuprasath, Dr. Karthik, Dr. C. Thiripura Sundari, "Computer Vision and Deep Learning based solution for Supporting Multi-Sensory Impairment", Journal of Technology, National Taiwan University of Science and Technology December 2024. <u>https://doi.org/18.15001/JOT.2024/V12I10.24.779</u>. *Indexing: Scopus.* 

- 22. Anbarasan Baluchamy, T. Rajkumar, P. Soundar Rajan, J. Venkatesh, "Effect of Methylester and Diesel Blends on Engine Evaluation in Real World Driving Conditions", International Journal of Vehicle Structures and Systems, Vol. 16 No. 4, December 2024. <u>https://doi.org/10.4273/ijvss.16.4.17</u>. *Indexing: Scopus.*
- 23. Kumar, G. Pranay ; Sashikkumar, MC ; Krishnakumar, S. ; Kumar, N. Dharani ; Kalaivanan, P. ; Gupta, Sheifali ; Vivek, S, "Sonolysis Enhanced Sulphate Radical Oxidation System For Effective Contaminant Removal In Industrial Park Wastewater", Oxidation Communications, 47(4), 900 – 908, December 2024. *Indexing: Scopus.*
- 24. E, Kungumaraj., Suganya . R, Kousalya . S, Senthilkumar. L, Lathanayagam .E, and Priya. K.M. "Mathematical Modelling of Hepatitis C with Fuzzy Nano Topological

Spaces." SSRN Electronic Journal, 2025. <u>https://doi.org/10.2139/ssrn.5091619</u>. *Indexing: Scopus.* 

### **Books Published**

- Mr.R. Govindaraj, "The React Blueprint: Build Your Way from Beginner to Pro", Amazon, ASIN: B0DS9K4JBS.
- Mrs. M. Masilamani, Mrs. T. T. Nandini Devi, Dr. M. Pushpa, Ms. T. R. Priyadharshini and Mrs. R. Latha, "Data Mining And Data Warehousing: Principles & Practical Techniques", Priyam Publications, ISBN: 978-81-983281-6-8.

### **RESEARCH PUBLICATIONS Book Chapters Published**

- Arockia Christopher, A. B., M. Sivakumar, A. S. Muthanantha Murugavel, S. Priyatharsini, J. Angeljuliee, and P. Revathi. "Refined RSA Encryption Algorithm to Safeguard Privacy in Healthcare Data." In Innovations in Cybersecurity and Data Science, edited by Syed Muzamil Basha, Hamed Taherdoost, and Cleber Zanchettin, 271-82. Algorithms for Intelligent Systems. Singapore: Springer Nature Singapore, 2024. https://doi.org/10.1007/978-981-97-5791-6\_21.
- Devipriya, C., G. Nandan, K. Yuvaraaj, and E. Ranjith. "Synthetic Data Generation for Business and Medicine With AI and Quantum Networks:" In Advances in Computational Intelligence and Robotics, edited by Christo Ananth, Osamah Ibrahim Khalaf, and Jose Anand, 383–400. IGI Global, 2024. <u>https://doi.org/10.4018/979-8-3693-8135-9.ch023</u>.
- Janani, D., S. Ramakrishnan, V. Rithanya Priya Dharshini, R. Niranjana, and K. Keerthikaa. "Predicting Chronic Kidney Disease Stages Through Ensemble Machine Learning Techniques." In Advances in Data and Information Sciences, edited by Shailesh Tiwari, Munesh C. Trivedi, Mohan L. Kolhe, and Brajesh Kumar Singh, 1127:311-20. Lecture Notes in Networks and Systems. Singapore: Springer Nature Singapore, 2024. https://doi.org/10.1007/978-981-97-7360-2\_27
- 4. Kalaivani, P., S. Ramakrishnan, S. J. Nithesh, A. Jayapradeep, and Vaishag S. Menon.

"User Segmentation with RFM Analysis and K-Means Clustering for Play Store Database via Machine Learning." In Advances in Data and Information Sciences, edited by Shailesh Tiwari, Munesh C. Trivedi, Mohan L. Kolhe, and Brajesh Kumar Singh, 1127:241-53. Lecture Notes in Networks and Systems. Singapore: Springer Nature Singapore, 2024. https://doi.org/10.1007/978-981-97-7360-2\_21.

- Meenachi, L., K. T. S. Vijayaragavan, A. Deepak, and T. Roshan Karthick. "AI Mapping for Rapid Disaster Assessment." In Advances in Data and Information Sciences, edited by Shailesh Tiwari, Munesh C. Trivedi, Mohan L. Kolhe, and Brajesh Kumar Singh, 1127:289-98. Lecture Notes in Networks and Systems. Singapore: Springer Nature Singapore, 2024. <u>https://doi.org/10.1007/978-981-97-7360-2\_25</u>.
- 6. Rajan, Sherine Jenny, and Sudhakar Radhakrishnan. "VLSI Implementation of Secured S-Box Design for Light-Weight Block Ciphers in Low Area Applications." In Proceedings of International Conference on Intelligent Vision and Computing (ICIVC 2023), edited by Apu Kumar Saha, Harish Sharma, and Mukesh Prasad, 20:84–93. Proceedings in Adaptation, Learning and Optimization. Cham: Springer Nature Switzerland, 2024. <u>https://doi.org/10.1007/978-3-031-71391-0 7</u>.

### **RESEARCH PUBLICATIONS Book Chapters Published**

- Rajeshwari, K. C. Raja, S. Dharani, and K. R. Gokul Anand. "Design of Dual-Band Funnel-Shaped Microstrip Patch Antenna with Excitation Arms for 3-30-GHz RFID Application." In Proceedings of the 1st International Conference on Recent Advancements in Materials Science and Technology, Volume I, edited by P. Sakthivel, Mangalaraja Ramalinga Viswanathan, and K. Ravichandran, 414:413-20. Springer Proceedings in Physics. Cham: Springer Nature Switzerland, 2024. <u>https://doi.org/10.1007/978-3-031-69970-2\_32</u>.
- Ruban, S., S. Prabagar, C. Moorthy, J. P. Manimozhi, M. Robinson Joel, and G. Manikandan. "Making Clinical Decisions to Treat Patients by Using Health Information Technology:" In Advances in Healthcare Information Systems and Administration, edited by Ben Othman Soufiene and Chinmay Chakraborty, 87–112. IGI Global, 2024. https://doi.org/10.4018/979-8-3693-6294-5.ch004.
- Sathya, S. Ponni Alias, Oruganti Jagadeesh Naidu, S. Sanjay, and V. Saravanan. "The Efficient Prediction of Diseases Using Machine Learning Algorithm." In Advances in Data and Information Sciences, edited by Shailesh Tiwari, Munesh C. Trivedi, Mohan L. Kolhe, and Brajesh Kumar Singh, 1127:321-30. Lecture Notes in Networks and Systems.
  - Singapore: Springer Nature Singapore, 2024. https://doi.org/10.1007/978-981-97-7360-2\_28.
- Sathya, S. Ponni Alias, S. S. Muhammed Safwan, T. A. Archuthan, and S. Yogeshwar. "Revolutionizing Indian Elections: Introducing Blockchain to Ballot Based Voting." In Advances in Data and Information Sciences, edited by Shailesh Tiwari, Munesh C. Trivedi, Mohan L. Kolhe, and Brajesh Kumar Singh, 1127:277-88. Lecture Notes in Networks and Systems. Singapore: Springer Nature Singapore, 2024. <u>https://doi.org/10.1007/978-981-97-7360-2\_24</u>.
- Shanmugapriya, A., S. Parveen, N. Chithra, G. Kalaiarasi, and S. Govindarajan. "Synthesis, Thermal Reactivity, and Antioxidant Activity of Aminoguanidinium Benzene Tricarboxylates." In Proceedings of the 1st International Conference on Recent Advancements in Materials Science and Technology, Volume I, edited by P. Sakthivel, Mangalaraja Ramalinga Viswanathan, and K. Ravichandran, 414:135–47. Springer Proceedings in Physics. Cham: Springer Nature Switzerland, 2024. <u>https://doi.org/10.1007/978-3-031-69970-2\_11</u>.

### **RESEARCH PUBLICATIONS Conference Publications**

- A, Balamanikandan, Jalendiran J, Saravanakumar M, Sakthivel, Venkataramanaiah N, and Ankala Satya Prabha. "Home Automation Using Cloud and IOT." In 2024 10th International Conference on Electrical Energy Systems (ICEES), 1–5. Chennai, India: IEEE, 2024. <u>https://doi.org/10.1109/ICEES61253.2024.10776822</u>.
- Mohanraj, B, S M Suba, C R Subiksha, Paramesh Sumithra Sree, M Priya, and R Prabhu. "Facilitating Seamless Communication through Voice-Enhanced Sign Language and Gesture Recognition with Random Forest Classifier and Graph Convolution Networks." In 2024 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS), 1101–8. Erode, India: IEEE, 2024. https://doi.org/10.1109/ICSSAS64001.2024.10760461.
- Musthafa, A. Syed, R. Sujatha, P. Jessie, R. Mithuna, R. Mekala, and A. Vijay. "A Python Based Machine Learning Framework for Eye Blink Detection with BlueEye Technology." In 2024 International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS), 1516–21. Bengaluru, India: IEEE, 2024. https://doi.org/10.1109/ICICNIS64247.2024.10823324.
- R, Ramesh, Dharani S, Gokul Anand K R, Vakula V, and Sree Vidhya S. "RFID-Based Automatic Mask Dispensing System Using IoT." In 2024 3rd International Conference on Automation, Computing and Renewable Systems (ICACRS), 537–41. Pudukkottai, India: IEEE, 2024. <u>https://doi.org/10.1109/ICACRS62842.2024.10841649</u>.
- Ramani, U., J Rini Angeline Vinshia, T. Manjula, G. G. Sreeja, S. Abirami, and M. Thilagaraj. "Design and Implementation of an IoT Enabled Bionic Arm Gesture Control Robot Using Embedded System." In 2024 5th International Conference on Data Intelligence and Cognitive Informatics (ICDICI), 252–55. Tirunelveli, India: IEEE, 2024. https://doi.org/10.1109/ICDICI62993.2024.10810908.
- Reetha, P. Roy Sudha, S Joseph, N. Pandeeswari, R Anitha, and S. Jebarose Juliyana. "An Improved Energy Management Model for IoT Devices Using Deep Learning." In 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT), 1-6. Kamand, India: IEEE, 2024. https://doi.org/10.1109/ICCCNT61001.2024.10724146.

### **RESEARCH PUBLICATIONS**

### **Conference Publications**

 Shanmugapriya, A., A. Sangeetha Devi, M. Gomathi, and G. Kiruthika. "Adaptive Voltage Regulation System with GSM Integration and Enhanced Disaster Mitigation Strategies." In 2024 8th International Conference on Electronics, Communication and Aerospace Technology (ICECA), 68-74. Coimbatore, India: IEEE, 2024. <u>https://doi.org/10.1109/ICECA63461.2024.10800902</u>.





### DEC 24 -FEB 25



## CONSULTANCY ACTIVITIES CARRIED OUT



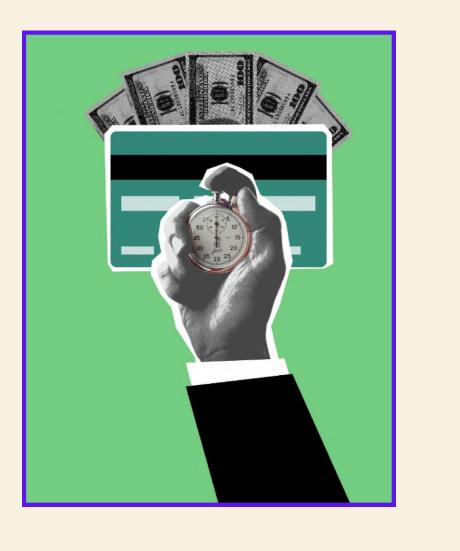
### **CONSULTANCY ACTIVITIES CARRIED OUT**

S. No.	Name of the Faculty/Consultants	Date	Department	Name of consultancy Project/CorporateTraining Program	Consulting/Sponsoring Agency	Revenue Generated in Rs.
1.	Dr. K. Srinivasan, Mr. M. Sudharsanan& Mr. A. Manikandan			Consultancy charges received towards testing of Bricks & Fly Ash Bricks.	M/s. SKS Groups, KVK Complex, Negamam Old Bus Stand,Pollahci	6000
	Dr. K. Srinivasan& Mr. M. Sudharsanan	18-02-2025	Civil Engineering	Consultancy charges received towards material test for the work of construction of retaining wall and foot path work.	The Commissioner , Valparai Municipality, Coimbatore	3000
3.	Dr. Mariappan& Mr. A. Manikandan	08-02-2025		Testing charges for Cube test M30 Grade on 05.02.25.	Contriad Infra LLP	1000
4.	Dr. K. Srinivasan& Mr. M. Sudharsanan	08-01-2025		Charges received towards Design proof checking - Retaining Wall		4500



CONSULTING SPECIALIZED MANAGE&DEFLOY





MCET

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### DEC 24 -FEB 25





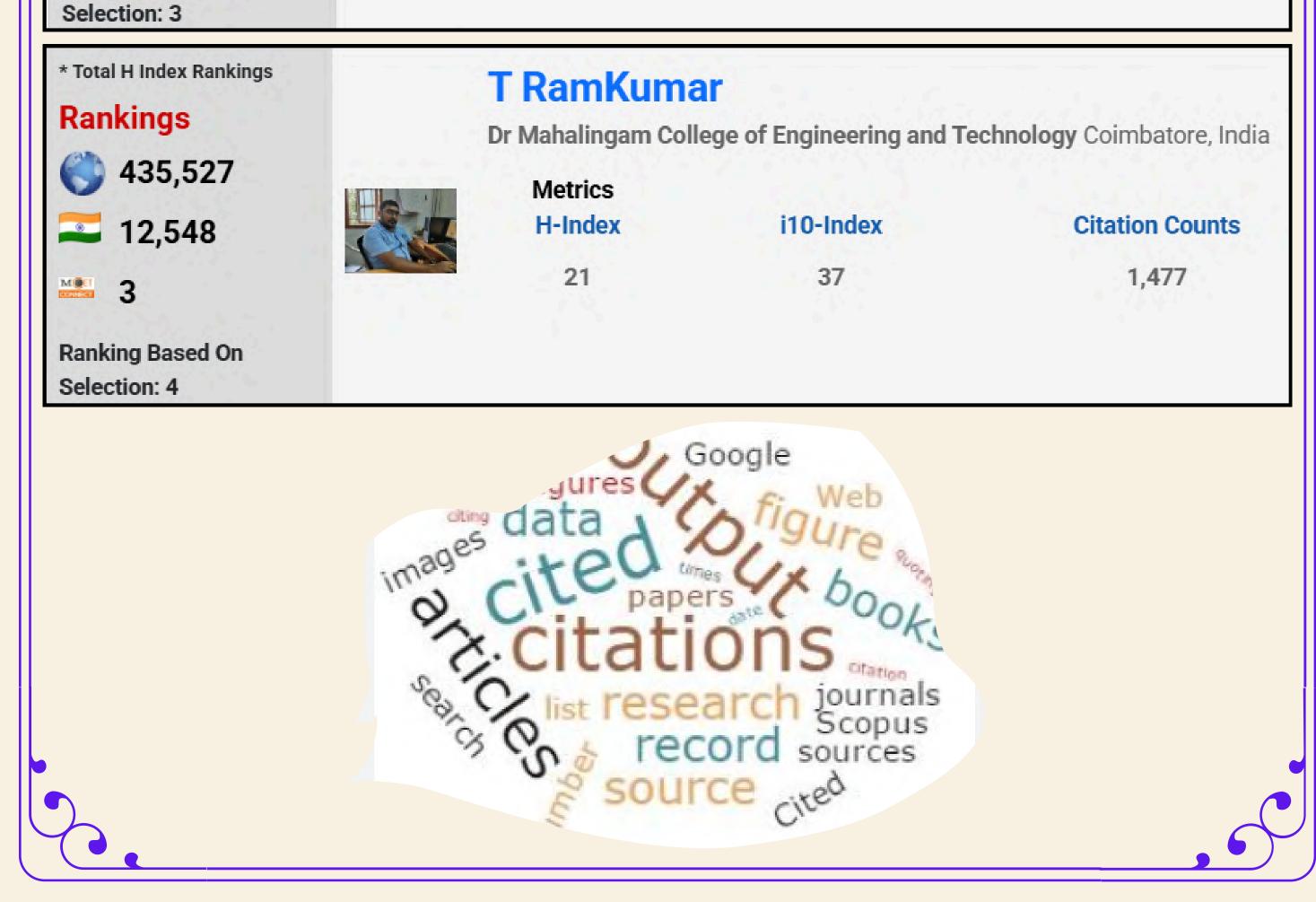
DEC 24 -FEB 25

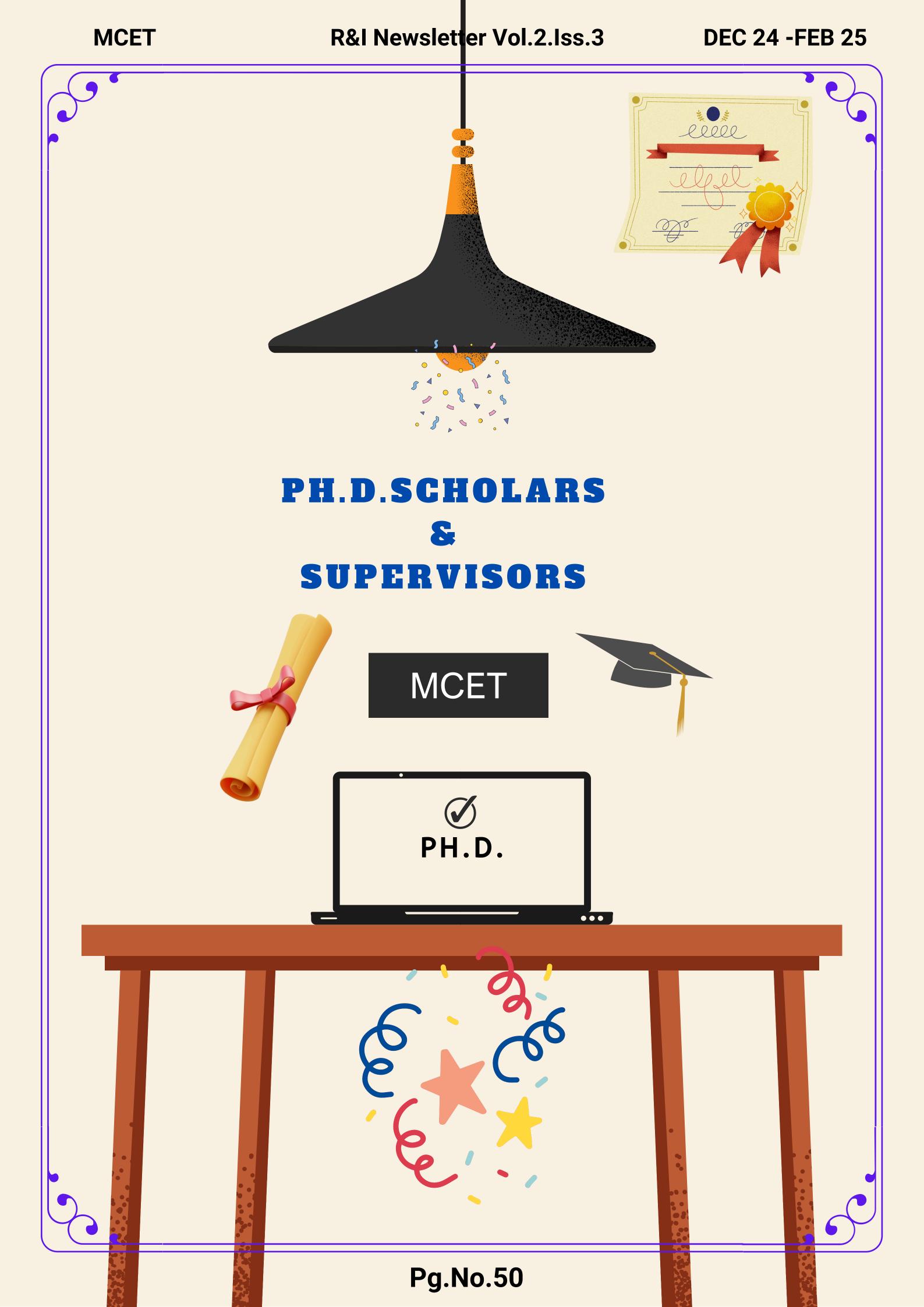
	CITATIONS	
DR. MARKENWARK MARKENWARK COLLEGE OF ENGINEERING AND TECHNOLOGY Relightensing Technical Minute		ing and Technology
Faculty / Scientist   Faculty / Scientist   216     Principal   1   Dean   1   Head of the   Department   2   Professor	Scholarly Resources     Publications   1214     Patents   Value	669170Citations6415
DepartmentsCentral Library(2)CSE(1)Department of Artificial(11)Intelligence and Data(11)ScienceDepartment of Automobile (14)EngineeringDepartment of Civil	Image: A constraint of the cons	<ul> <li>Publications</li> <li>Interconnected V 2 O 5 Nanoporous Network for High</li> <li>Author: Saravanakumar</li> <li>B;Purushothaman</li> <li>K.K.;Muralidharan G.</li> <li>293 Citation</li> <li>293 Citation</li> <li>430 Citation</li> </ul>



### DEC 24 -FEB 25

CITATIONS					
AD Scientific Index	2025 Scientist Rankings	University Rankings	Subject Rankings	Country Rankin	
* Total H Index Rankings Rankings (287,241		<b>ishnan</b> College of Engineering	g and Technology (	Coimbatore, Inc	
<ul> <li>6,931</li> <li>1</li> <li>Ranking Based On Selection: 2</li> </ul>	Metrics H-Index 28	i10-Index 54	C	itation Counts 2,580	
* Total H Index Rankings Rankings 382,356	B Saravan Dr Mahalingam C	akumar College of Engineering	g and Technology (	Coimbatore, Inc	
<ul> <li>10,409</li> <li>2</li> <li>Ranking Based On</li> </ul>	23	i10-Index 36	C	itation Counts 2,064	



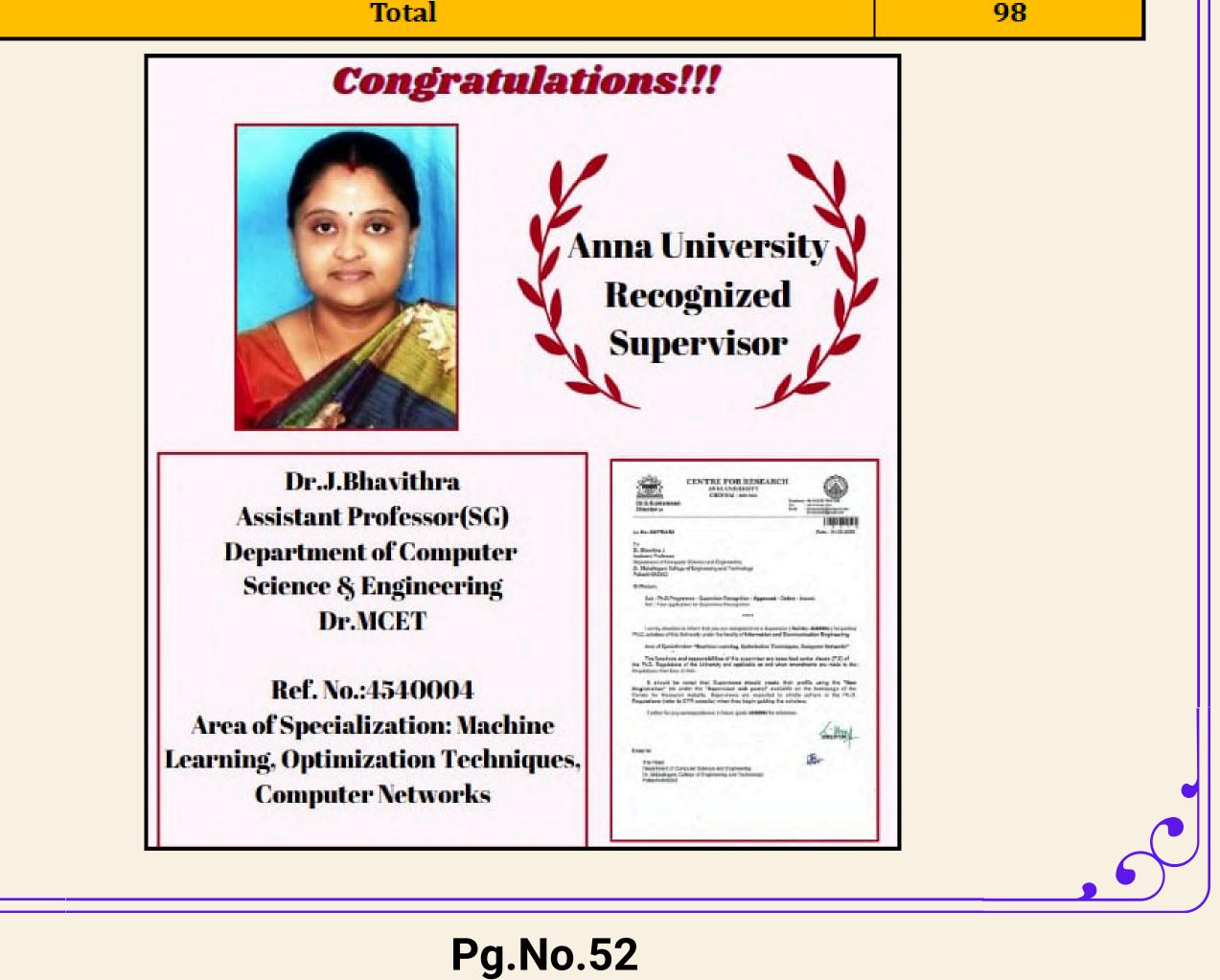




	Research Particulars C	Count
	Number of Research centres	7
	Number of Supervisors	45
	Number of Completed Scholars	98
	Number of Ongoing Scholars	148
D S.No.	etails of Ph.D. Supervisors as on FE Name of the Department	B 2025 No. of Supervisors
1.	Information Technology	4
2.	Computer Science and Engineering	4
3.	Electrical and Electronics Engineering	9
4.	Electronics and Communication Engineering	5
5.	Electronics Engineering (VLSI Design & Technology)	1
6.	Mechanical Engineering	7
7.	Automobile Engineering	4
8.	Civil Engineering	2
9.	Artificial Intelligence and Data Science	1
10.	Artificial Intelligence and Machine Learning	1
	Master of Computer Applications	1
11.		6
11. 12.	Science and Humanities	, in the second se



, D	PH.D.SCHOLARS & SUPERV etails of Ph.D. Completed Scholars as o	
S.No.	Name of the Department	No. of Completed Scholars
1.	Automobile Engineering	4
2.	Civil Engineering	5
3.	Mechanical Engineering	11
4.	Mechatronics	1
5.	Information Technology	12
6.	Computer Science and Engineering	10
7.	Artificial Intelligence and Machine Learning and Cyber Security	2
8.	Master of Computer Applications	3
9.	Electronics and Communication Engineering	11
10.	Electrical and Electronics Engineering	21
11.	Electronics and Instrumentation Engineering	2
12.	Science and Humanities	16
	Total	98



**Review Meetings - Ph.D. Scholars** 

Half Yearly Progress Presentation Schedule of MCET ongoing

Ph.D. Scholars

Academic Year : 2024-2025

Venue: R&I Conference Hall

**Review Committee Members:** 

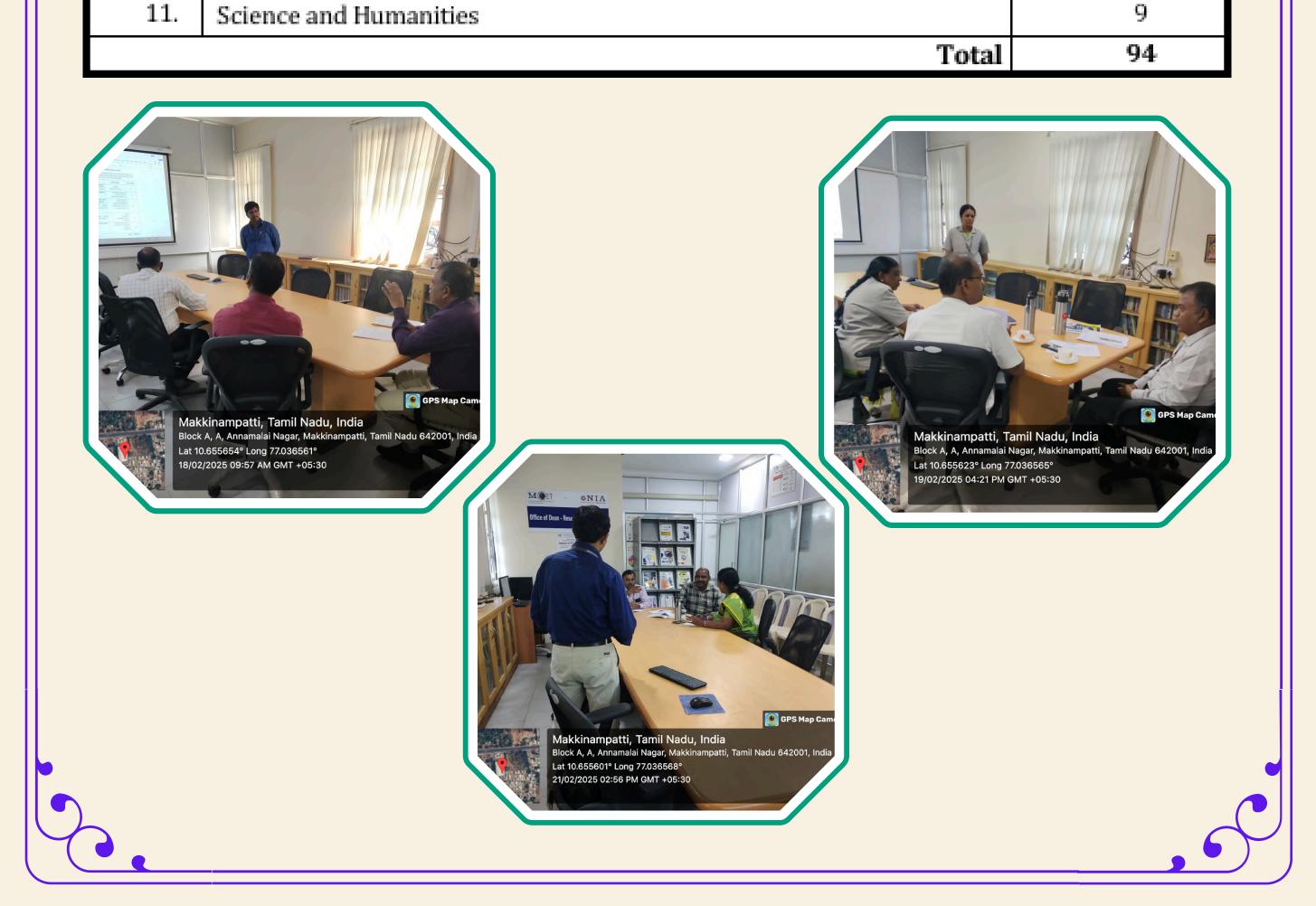
- Dean Research & Innovation
- HoD of the Scholar
- Supervisor of the Scholar (if Internal)

**Date:** 

17.2.2025 to 22.2.2025

**No. of Participants: 94** 

S.No.	Department	Count
1.	Automobile Engineering	7
2.	Mechanical Engineering & Mechatronics	8
3.	Civil Engineering	8
4.	Information Technology	12
5.	Artificial Intelligence and Data Science	4
6.	Artificial Intelligence and Machine Learning & Cyber Security	6
7.	Computer Science and Engineering	16
8.	Electronics and Communication Engineering	11
9.	Electrical and Electronics Engineering	11
10.	Electronics and Instrumentation Engineering	2





**DEC 24 -FEB 25** 

## AWARDS & RECOGNITIONS



















by Government of India

Dr.S.Ramakrishnan DEAN - R & I

> "This prestigious recognition is a testament to your exceptional expertise"

Dr.K.N.Vijeyakumar **Professor & Head - VLSI** 

For being nominated as a Member of the **Executive Council of the VLSI Society of India's Tamil Nadu Chapter for the year 2025** 

### **CERTIFICATE OF APPRECIATION**

Dr.K.N.Vijeyakumar Dr. Mahalingam College of Engineering and Technology, Pollachi has been nominated as a member of the Executive Council of the VLSI Society of India's Tamil Nadu Chapter (VSI-TN) for the year 2025.

atya Gupta

hip

MCET

**R&I Newsletter Vol.2.Iss.3** 

### **DEC 24 -FEB 25**





### MCET

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**DEC 24 -FEB 25** 





**DEC 24 -FEB 25** 



### MCET

**R&I Newsletter Vol.2.Iss.3** 

### DEC 24 -FEB 25





### **DEC 24 -FEB 25**







TOP PERFORMING MENTOR

Dr. M. KALIAMOORTHY,

Professor, EEE Electronic Systems Design: Hands-on Circuits and

PCB Design with CAD Software

CERTIFICATE

OF APPRECIATION

is awarded to

N. SENTHIL MADASAMY

DR. MAHALINGAM COLLEGE OF ENGINEERING AND TECHNOLOGY POLLACHI, TAMIL NADU

in recognition of his/her role as mentor for the NPTEL Online Certification course

ENVIRONMENT AND DEVELOPMENT

JUL - DEC 2024

60-74

8

40-59

6

Certified (Score in %)

75-89

1

>=90

Toppers

0

Score (in %)

<40

4

Mentees

Present

19

PROF. ANDREW THANG NPTEL Coordinator

IIT Madras

Pg.No.62

Mentees Enrolled

23



DEC 24 -FEB 25









### **AWARDS & RECOGNITIONS**

Under the expert guidance of Ms. S. Thilagavathi, Assistant Professor (Senior Scale), Department of ECE, MCET, a team of second-year ECE students, "Quantum Dots" developed an innovative solution aimed at improving road safety. They secured the 3rd Prize under the Student Category, receiving a cash award of ₹50,000, at the event held at Sri Krishna College of Engineering and Technology, Coimbatore, on 8th–9th February 2025. Project title: "AI-Powered Intelligent Driving Assistant with V2V Communication and Accident Prevention System" The team members included Arun Dharsaun A, Manoj Venkatesan M, and Kamali Sri D.

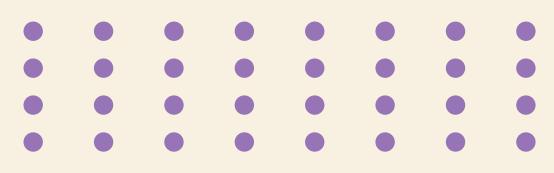




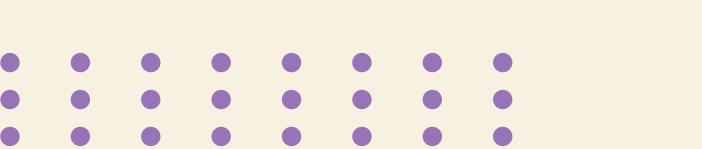
S.No.	DEPARTME		Articles Rev		NAME		
					JOURNAL/ ]	PUBLISHER	
1	Information Technology		Dr.S. Ramakrishnan, Dean R&I		IEEE Access		
2			Dr.L.Meenachi, HoD, IT		1. Cluster Computing 2. Machine Learning- Springer		
3	Automobile Engineering		Dr.K.Sakthivadivel			al	
4			R Sherine Jenny		Physica Scripta	L	
5	Electronics & Communication Engineering		Dr.G.Soundarya		<ol> <li>Progress In</li> <li>Electromagnetics</li> <li>Research</li> <li>ICETEA2025</li> <li>Green Revolution in</li> <li>Electronics Engineering and Networks Conference 2025</li> </ol>		
6	Mechanical Engineering		Dr.T.Ramkumar				
7	S&H		-		Journal of Physical Chemistry		
	Partici	oatio	n of Faculty as a	Resour	ce Person		
S.No.	Name of the Faculty		c Delivered in the Event	-	Venue	Date of the Guest Lecture Program	
1	Dr. A.Noble Mary Juliet	Intro t learnin				14.01.2025	
2			Metamaterial inspired antenna for biomedical applications		Karunanidhi Of Technology	27.12.2024	
3	Dr.G.Soundarya	Smart Healthcare: Trends in Telemdeicine, Wearable and Healthcare IOT		-	orld College of ng, Coimbatore	14.02.2025	
4	Dr.V.K.Sudha	Designing an outcome based Curriculum, Teaching and Learning Strategies in OBE		College, O	ni Engineering Coimbatore	04.02.2025	
5	Dr. M.Kaliamoorthy	Power Electronic Applications To Electric Vehicles		Ramaiah University Of Applied Sciences, Bangalore		19.12.2024	
6	Dr. B.Saravanakumar	Nanos	nsition Metal Oxide tructures for apacitor Applications	Kongunadu Arts and Science College, Coimbatore		21.02.2025	
7	Dr.B.Poorani	-	ng in Harmony: The role mmar in effective		Visalakshi or Women,	26.02.2025	

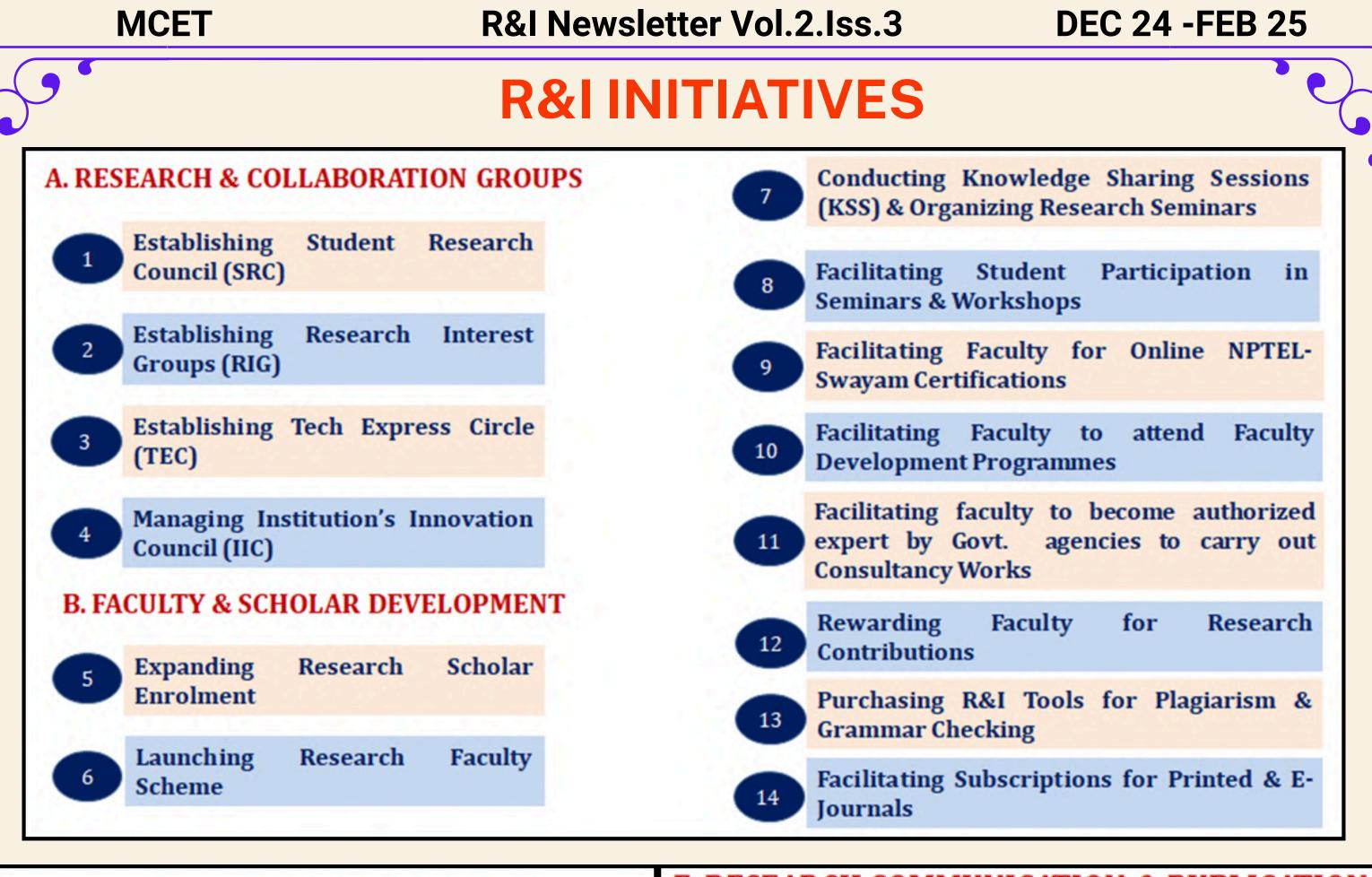


### **DEC 24 -FEB 25**



# **R&I INITIATIVES**





### **C. RESEARCH REVIEW & MONITORING**

Periodic Review of Departments' R&I Activities

### **E. RESEARCH COMMUNICATION & PUBLICATION**





15

Periodic Review of Ongoing External & In-house Funded Projects and Consultancy Works

18 Coordinating Data Analysis of Research & Professional Practice Parameter of NIRF

### **D. RESEARCH INCENTIVES & SUPPORT**



20

Coordinating Cash Incentive Distribution to faculty members for Research Contributions

Developing In-house talent pool, providing Technical & Financial support for IPR Management



Identifying & Sanctioning In-house R&D Projects for Faculty members and Students



Facilitating Revenue Sharing for Consultancy Works



Updating Research information periodically in institution webpage

**Bi-monthly MCET** 

Research





Circulating Call for Proposals for external grants



**Publishing Research Process Handbooks** 



Developing process flows, templates and forms for various R&I activities





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Preparing Annual reports for RIG, SRC, KSS and Annual report of R&I activities



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CONTACT

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