

(Accredited by NAAC with A+ Grade, An ISO 9001:2015 Certified Institution) (A Unit of Rajalaxmi Education Trust®, Mangalore-575001) Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi

# **RESEARCH COUNCIL**

# **ANNUAL REPORT - 2023**

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### 1. Research Council for the Year 2022-23

Sr. No	Role	Name and Designation
1	Chairperson	Dr. Prashanth C M
2		Dr. Vinayambika S Bhat, Dean, Quality Assurance & Prof. & HoD of ECE
3		Dr. Anand S N Prof. & HoD of AE
4		Dr. Ganesha Mogaveera, Professor and Head, Dept. of Civil Engg
5		Dr. Babu Rao K, Professor, Dept. of CSE
6	Member	Dr. Shreeja Rajesh, Associate Professor, Dept. of Information Science & Engg.
7		Dr. Shivaramu H T, Sr. Assistant Professor, Dept. of ME
8		Dr. Bindu Madhavi J, Assistant Professor, Dept. of Mechatronics
9		Dr. Maryjo M George, Assistant Professor, Dept. of Al & ML
10		Mr. Sandeep Seetaram Naik, Assistant Professor, Dept. of CSE(IoT & CS)
11		Dr. Vineetha Telma D'souza, Associate Professor & HoD, of Chemistry
12		Dr. Vasanth Kumar S, Sr. Assistant Professor, Dept. of Mathematics
13		Dr. Raghavendra Sagar, Associate Professor & HoD of Physics
14	Member Secretary	Professor, Dept. of CSE, Dean R&D



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#### 2. Overview

Mangalore Institute of Technology & Engineering (MITE) has made significant progress during the year 2023 in its research activities. Currently, MITE host 16 research guides recognized by VTU, Belagavi to supervise PhD Scholars for the doctoral degree from VTU and other universities.

Seven research scholars joined various research centers to pursue their Ph. D Degree and five research scholars registered under MITE research centers have successfully defended their PhD thesis during the years 2023.

The faculty of MITE published 139 full-length papers in Scopus/Wos and other indexed journals. MITE faculty also published 3 books and contributed for 6 book chapters with national/international publisher.

Internal Quality Assurance Cell (IQAC) & MITE Research Council organized Faculty Development Program on Writing Effective R&D Project Proposals & Funding Opportunities from Government Scientific Departments from 8th July to 10th July 2023.

MITE also received a research grants from Karnataka State Council for Science and Technology, an external funding agencies. Dr. Dr. Ezhilmaran G, Assistant Professor from the Dept. of Aeronautical Engineering Department received a fund for a project titled "Study of supersonic jets using passive control methods".

Research Council of MITE has taken the decision in the Research Council (RC) meeting held on 24/7/2023 to create a platform for peer learners of the Institution and allow them for productive discussions in the scholarly group and network. Since then every 4th Saturday of the month 'Peer-Learners-Meet' program is being conducted to motivate all doctorates and research scholars of the Institution, to make use of this forum and actively participate and present their ideas, research status, feedback on active work in this knowledge exchange base.

# MITE Invent Solutions

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## 3. Research Progress Details

**Table 1:** The details of research centers, researchers and the progress made during the year 2023.

Sr. No	Details of Research activities		
1	No. of VTU, Belagavi recognized research centers in MITE	07	
2	No. of Research Guides recognized by VTU, Belagavi in MITE	16	
3	No. of PhD Scholars registered in MITE research centers	31	
4	No. of PhD's awarded	05	
5	No. of Ongoing Funded Projects in MITE	05	

Table 2: Current status of PhD scholars registered under MITE research center.

Research Center	Coursework in progress	Course work completed	Comprehensive viva completed	Thesis submitted
Civil Engineering	1	-	3	-
Computer Science and Engineering	2	-	4	-
Mechanical Engineering	3	2	4	-
Electronics Communication & Engineering	4	-	-	-
Mathematics	2	-	1	-
Chemistry	-	1	-	1
Physics	1	-	1	1

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**Table 3:** The details of Scholars awarded and submitted their PhD thesis during the Year-2023.

SI. No	Name of Scholar	Guide	Research center	Title of Thesis
1	Kirankumar M V	Dr. M Lokesha	ME	Condition Monitoring of Bearings using Wavelet Analysis and Artificial Intelligence
2	Sujeshkumar	Dr. M Lokesha	ME	Automatic Fault diagnosis in belt using wavelet analysis and neural network
3	Aysha Shabana	Dr. Asha Crasta	Mathematics	Computation and Stability Derivatives of Oscillating Cones and Ogives in Supersonic/Hypersonic Flow
4	Jatadhara	Dr.T K Chandrashekar	ME	Study on Combustion and Emission of Waste Plastic Oil as Bio-fuel in I.C Engine
5	Sushma S	Dr.T K Chandrashekar	ME	Studies on optimization of air cooled heat sink for different geomtries and thermal nano coatings to enhance the heat transfer in electronic devices

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#### 4. Publication Details

**Table 4:** The details of department-wise publication for the Year-2023.

SI. No	Department	No of publications	Scopus indexed	Other
1	Chemistry	1	1	-
2	Computer Sci. & Engg.	41	4	37
3	Computer Sci. & Engg IOT	2		2
4	Electronics & Comm. Engg	37	1	36
5	Information Science & Engg.	13		13
6	Mathematics	3	2	1
7	Mechanical Engg.	23	4	19
8	Mechatronics	13	2	11
9	Physics	6	5	1
	Total	139	19	120

**Table 5:** The details of department-wise conference proceedings, books and book chapters published during the Year -2023.

SI. No	Department	No of Proceedings	No. of Book	No of Chapters
1	Computer Sci. & Engg.	-	3	4
2	Electronics & Comm. Engg	1	-	-
3	Information Science & Engg.	-	-	1
4	Mechanical Engg.	-	-	1
	Total	1	3	6



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#### 5. Activities Conducted

1. Title : Writing Effective R&D Project Proposals & Funding Opportunities from

**Government Scientific Departments** 

Dates conducted : July 8<sup>th</sup> to 10<sup>th</sup>, 2023

Keynote Speaker : Dr P R Hariharan, JA (Technical), DSIR,

Ministry of Science & Technology, Govt. of India.



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# 6. Status of Funded Projects

**Table 6:** Details of the funded projects during the year 2023.

SI. No	Title of project	Principle Investigator	Grant Agency	Current status	Grants mobilized (in Lakh)
1	Technology-based agriculture sensors	Dr. Venkataramana Bhat P	Vision group of Science and Technology (VGST), Govt. of Karnataka	Completed	40.00
2	Sustainable Grey water Management System using Phytoremediation Technique	Dr. Jayaprakash M C	Vision group of Science and Technology (VGST), Govt. of Karnataka	Completed	05.00
3	Quality Improvement & Up- Gradation of the Existing Fish Meal and Fish Oil Industries and Extraction of Bio-diesel & Fishnure in Ecofriendly environment from their products	Dr. Lokesh	Karnataka Council for Technological Upgradation	Ongoing	42.00
4	Improvement of Industrial Wastewater Treatment Process through Robust Controller Design	Dr Vinayambika S Bhat (PI), & Dr Sukhwinder Sharma (Co-PI)	Vision group of Science and Technology (VGST), Govt. of Karnataka	Ongoing	2.97
5	Experimental Investigation on Behavior of GPC Bloch Arches and Validation Using ANN	Dr. Ganesh Mogaveera (PI) & Prof. Anusha Jain (Co-PI)	Visvesvaraya Technological University	Ongoing	10.00
6	Development of Humanoid Robotic Arm based Personal Massager withHuman Tuch	Dr. Sukhwinder Sharma (PI) & Dr. Pradeep B S (Co-PI)	Visvesvaraya Technological University	Ongoing	8.00
7	Study of supersonic jets using passive control methods	Dr. Ezhilmaran G	Karnataka State Council for Science and Technology	Ongoing	4.97

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#### **Institution Grants for Research 7.**

Table 7: Details of funds allocated from the Institution towards the improvement of research infrastructure.

Cr. No.	Department	Funds allotted (Rs)		
Sr. No		Research Infrastructure	Amount utilized	
1	Civil Engineering	3,00,000	Procurements under progress	
2	Computer Science and Engineering	3,00,000	Procurements underprogress	
3	Electronics & Communication	3,00,000	1,15,619/-	
4	Mechanical Engineering	3,00,000	Procurements under progress	
5	Mathematics	1,00,000	Procurements under progress	
6	Chemistry	1,00,000	Procurements under progress	
7	Physics	1,00,000	Procurements under progress	

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