

Manipal Academy of Higher Education

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Faculty work

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Fall 12-1-2021

**MIT Newsletter-SPECIAL RELAUNCH EDITION-December 2021**

Anil Rana Dr.

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MANIPAL INSTITUTE OF TECHNOLOGY  
MANIPAL  
(A constituent unit of MAHE, Manipal)



 **FOCUS**

*Special*

*Edition*



MIT Newsletter

December 2021

**SPECIAL RELAUNCH EDITION**

## Cdr. Dr. Anil Rana takes over as the 11<sup>th</sup> Director of MIT

Cdr. Dr. Anil Rana took charge as the new Director of Manipal Institute of Technology (MIT) on 16 July 2021. On behalf of MIT family, Team Focus congratulates Dr. Rana and extends a warm welcome to him as the new Head of the Institution. Dr. Rana succeeds Dr. D Srikanth Rao who completed his tenure as Director of MIT, Manipal. Team Focus wishes to join the MIT family in complimenting Dr. D Srikanth Rao for being a true leader and steering the institute commendably for close to four years.

Dr. Rana is a former Indian Navy Commander from the engineering branch who has a record of distinguished service both in the Navy and in the field of education. He graduated from the Naval College of Engineering, Lonavala in 1992. He then obtained his Masters from IIT Delhi, and PhD from IIT Mumbai. Post his Naval service, Dr. Rana served as Professor (Mechanical Engineering) JECRC University, Jaipur from 2012 to 2013. He then served as Associate Dean (Higher Education and Research) and Professor of Mechanical Engineering at the prestigious Fiji National University, Fiji Islands from 2013-2018. Dr. Rana served as Dean (Academics) and Professor at the Symbiosis Skills and Professional University, Pune from 2018 to 2019. He then served as Dean and Professor, Faculty of Manufacturing at the Bharatiya Skill Development University (BSDU), Jaipur from April 2019 to February 2021.



The handing over ceremony was held on 16 July 2021 in the presence of Lt. Gen. (Dr.) M. D. Venkatesh, the Vice Chancellor MAHE, Dr Narayana Sabhahit, Registrar MAHE, Dr. Somashekara Bhat, Joint Director, MIT and the members of Team MIT. The Vice Chancellor Lt. Gen. (Dr.) M. D. Venkatesh, welcomed Dr. Rana to the fold of MAHE family and wished him all the success. He expressed the view that the institute would achieve greater heights under his leadership.

A special felicitation was held to honour the outgoing Director Dr. D Srikanth Rao. The Vice-Chancellor showered praise for the exceptional leadership shown by Dr D Srikanth Rao, during his illustrious tenure at MIT. Dr Narayana Sabhahit, Registrar, MAHE, reminisced how Dr. Rao was an integral part of the institute in his journey of 32 years in making meaningful contribution throughout. Dr. Sabhahit welcomed Dr. Anil Rana, the new Director of MIT and assured him all the support from the MAHE administration.

Dr. D Srikanth Rao welcomed Cdr. Dr. Anil Rana the new Director and wished him all success in taking MIT to greater heights. He highlighted the academic achievements and the administrative credentials of Dr. Anil Rana. He also assured that the dedicated faculty, staff and the students would provide great support and cooperation to the new Director. Dr. Rao expressed his gratitude to the Chancellor and the leadership at MAHE, for their support during his tenure.

Dr. Anil Rana, the new Director MIT thanked MAHE leadership for reposing faith in him and also complimented Dr. D Srikanth Rao for creating a wonderful working culture at MIT which would help him settle down in the new role quickly. He reiterated that he has been a team player and he liked to work on the ground with his team.

## Message from

## DIRECTOR

*It gives me immense pleasure to announce that MIT has revived its periodical newsletter "FOCUS" from the last month of the current year. The COVID pandemic had an adverse impact on our academic activities and tested our endurance to its limits. It was the grit, determination and perseverance of all our staff, teaching and non-teaching, and that of our beloved students that helped us to continue marching on. It was the resurgence of the resolute that has helped us gather news on a host of our activities including achievements of staff and students, research excellence and many more. However, for the purpose of standardization we are keeping only the news from July 16 to December 10, 2021 as focus of this current newsletter.*

*The FOCUS newsletter is being re-initiated with at least two major objectives: firstly, it is to serve as a tool for cross-information on our staff and student achievements, research, institute news, events etc across various departments of this behemoth of an institution. Without this cross information, departments in a huge organization like MIT would end up working in isolation, reducing its effectiveness and at the same time increasing cost through duplication of efforts. Secondly, the newsletter will serve as a source of motivation through inspiration from the achievements and success stories of the peers. At the same time, it will serve as a repository of all the major events and achievements in the institute.*

*The newsletter is being put together by a team of dedicated editors and team members who have worked selflessly, against time and have done a remarkable job of putting together a lucidly compiled newsletter that, I am sure, will be discovered to be of immense value by all the staff and students of MIT.*

*I wish the entire team a Great Success for the times to come! JAI HIND.*



“

*The newsletter will serve as a source of motivation through inspiration from the achievements and success stories of the peers.*

”

**Cdr. Dr. Anil Rana**



*Message from*

## **JOINT DIRECTOR**



*Office of Education Technology Cell, functioning under Associate Director (Faculty Development and Welfare), used to operate as the Department of Continuing Education and Student Counselling at the institute. Apart from organizing various activities as mandated by the Institute, the department published a monthly newsletter – FOCUS. The newsletter reported the activities in the campus, and also the faculty, staff and student achievements. I fondly recall the times I wrote Editorial to this newsletter as the center head.*

*Later, as per the NBA requirement, every department began to publish the department newsletter. With the decentralization of the activity, focus on FOCUS gradually faded leading to the absence of a central data repository. However, with prominence given to the grading of the Institutions by various ranking agencies, having the right data at right place has become all important. If creation of online portal in the name of Central Data Repository (CDR) through the office of Associate Director - Quality Assurance is one such attempt, reviving the newsletter through the office of Associate Director (Faculty Development and Welfare), is one more attempt in this direction.*

*I am delighted that once again FOCUS will focus on campus activities, faculty, staff, and student achievements at MIT, Manipal. Apart from this, do not forget to go through the humorous quotes interspersed among the pages to make you smile and ponder.*

*Each one of us is a newsmaker in our own way. We would like to see our name and our news figuring in the newsletter. In case we have missed you in the relaunch edition, please make sure that, we do not miss you in the forthcoming editions. Please share your news by sending a mail to [focus.mit@manipal.edu](mailto:focus.mit@manipal.edu). All the best to the entire editorial team. You have done a splendid job.*

*Happy reading...*

“

*I am delighted that once again FOCUS will focus on campus activities, faculty, staff, and student achievements at MIT, Manipal.*

”

**Dr. Somashekara Bhat**



# Editor's Musings



Dear Reader,

History is replete with major thinkers and philosophers who have waxed eloquent on the importance of education. Beginning with the ancient gurukul system to the present day online system, education has been an important means of transforming people, and in the process, education itself has evolved in its purpose and mode of delivery to suit the needs of the changing times.

In the present day context, all teachers worth their salt, and basking in the delight of having been in a noble profession, wouldn't by any means be amused by the following quote, "Education is an admirable thing, but it is well to remember from time to time that nothing that is worth knowing can be taught." Celebrated Irish writer Oscar Wilde who this quote is attributed to, wrote these lines in the later part of the nineteenth century. It is well known that the writer was a confirmed maverick who revelled in his idiosyncratic views towards life. While still reflecting on this disquieting quote, yours truly chanced upon a book titled, "All I really need to know I learned in Kindergarten," by Robert Fulghum, an accomplished American writer. The cheekily titled best seller, first published in the late 1980s, went on to inspire numerous other books in the same genre.

As teachers serving in the area of higher education, we may find the above two accounts to be bordering on being irreverent, if not downright appalling. But then aren't all such views, however non-conformist they may seem, meant to interject and disrupt, all with a good intent? Well, the views of Aristotle on education should come as a respite. The great Greek philosopher is believed to have said, "It is the mark of an educated mind to be able to entertain a thought without accepting it".

Should there be a pantheon of nation-builders, then I would say with great conviction that teachers would find a place at the top. Let us all reset our focus on our commitment towards the noble cause of our profession.

In the pages that follow, you will find a brief summative account of the various activities held at the Institute, along with the achievements made and accolades received by our MIT family during the last six months. Collating this massive data has been an enormous effort, a herculean task made a lot easier by our student contributors.

My sincere commendations to Team FOCUS on a job well done. Happy Reading...!

“

*Should there be a pantheon of nation-builders, then I would say with great conviction that teachers would find a place at the top.*

”

**Dr. B. H. V. Pai**



# EDITORIAL TEAM

## PATRONS

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*Director, MIT*

**Dr. Somashekara Bhat**  
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### Top Row (Left to Right):

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# ACKNOWLEDGEMENT

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- Ankita Veerabahu** (Data Science and Engineering)  
**Aparajita Singh** (Information and Communication Technology)  
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# Events at MIT

## STUDENT INDUCTION PROGRAM AND ORIENTATION 2021

Student Induction Program for the newly admitted students 2021-22 was organized at Manipal Institute of Technology, Manipal during September- October 2021. The program, aligned with the features outlined by the AICTE, was aimed at providing an entry point to the newly joined students to the fold of engineering education on campus. The following is a brief outline of the program:

13<sup>th</sup> Sept 2021

### ORIENTATION

for lateral entry students

13<sup>th</sup> to 18<sup>th</sup> Sept 2021

### BRIDGE COURSE

for lateral entry students

20<sup>th</sup> Sept to 1<sup>st</sup> Oct 2021

### IMMERSION PROGRAM

for International students

04<sup>th</sup> Oct 2021

### ORIENTATION

program for B.Tech students

5<sup>th</sup> to 9<sup>th</sup> Oct 2021

### FAMILIARIZATION

Program for B. Tech Students

11<sup>th</sup> to 16<sup>th</sup> Oct 2021

### FAMILIARIZATION

on Creativity, Problem Solving & Innovation (CPI)

The Formal Orientation Program for B.Tech Students, held on 04 October 2021 set the tone for the process of familiarisation for the newly admitted students. The event was held in online mode for the students of MIT, Manipal and MIT, Bangalore Campus, in the presence of illustrious guests and MAHE leadership.

The event was inaugurated by Vice-Chancellor, Lt. Gen. (Dr.) M D Venkatesh (Retd.) by lighting the lamp and offering floral tribute to our founder Dr. T M A Pai. The Chief Guest for the event, Mr. Sanjay Goel, Executive Vice President & President, Asia Pacific at American Tower, Singapore highlighted the need to develop the skills for the future.



The Guest of Honour, His Excellency Mr. Kamlesh Prakash, High Commissioner of Fiji provided an overview of the relevance of higher education in the modern world and stressed on the role of budding engineers in shaping the world. Lt Gen (Dr) M D Venkatesh, (Retd) Vice Chancellor, MAHE elaborated on the vision of MAHE and urged the students to realise their potential being students of the inspired organisation. Cdr. Dr. Anil Rana, Director, MIT, Manipal, briefed the students on the commitment of the institute to help students to take right step towards a successful journey. Dr. Jagannath. K, Director, MIT, Bengaluru provided an overview of Bangalore campus in his address. Dr. Somashekara Bhat, Joint Director, MIT, Manipal welcomed the students to the fold of MIT, Manipal campus and Dr. Raviraja Adhikari Associate Director (Academics), MIT, Manipal briefed about the academic process on campus. Dr. Nagaraj Katagi Associate Director (Student Welfare), MIT, Manipal provided an overview of student activities at MIT, Manipal. This event marked the symbolic beginning of familiarisation program and it was followed with a meticulously planned induction program. Areas covered during Familiarization Program: Curriculum Highlights, Student Support & MIT Library, Placement, Campus Familiarization, Innovation & Start-ups, Learning beyond classrooms, Internationalization & Student Exchange, Universal Human Values, Research Opportunities, Student major projects and clubs. The entire program was coordinated by Dr. Purushotham G. Sarvade, Professor and Head, Civil Engineering, MIT.

## Seven Day Faculty Development Program on Creativity, Problem Solving and Innovation

July 20-27, 2021: A seven-day Faculty Development Program (FDP) on Multiple Strategies for “CREATIVITY, PROBLEM-SOLVING, AND INNOVATION” was conducted using online platform. This course was donated by Dr. Anil S Patel, an internationally acclaimed and renowned multidisciplinary R & D Expert to MAHE following an MOU. He was also supported by the Faculty of Management Studies (FMS) at the Charotar University of Science and Technology (CHARUSAT), Gujarat.

The FDP was jointly organised by the Office of the Associate Director, Faculty Development & Welfare (FDW) MIT, and Anil & Asha Patel Endowment Fund at CHARUSAT, Gujarat.

The FDP was conducted to build the capacity of faculty to teach the course for first year B.Tech. Fifty two faculty members from different departments of MIT Manipal participated in the seven-day workshop. The main resource person was Dr. Anil S Patel, who had joined from Seattle, USA and was facilitated by Dr. S. N. Bhat, the Associate Director (FD&W), and his team at MIT.



## Five Day Faculty Development Programme on Blockchain Technology & its Applications in Virtual Mode

December 6-10, 2021: A five-day Faculty Development Programme on Blockchain Technology and its Applications was organised by Department of Computer Science & Engineering, MIT, Manipal in virtual mode.

This event was sponsored by AICTE-ATAL, New Delhi. Around 160 participants from across the country had enrolled for this programme. Dr. Rajkumar Buyya, Professor, School of Computing and Information Science, Melbourne, Australia was the Chief Guest for the inaugural programme. He elaborated on the applications of Blockchain and its relevance in Healthcare, IoT, and Bitcoins. Cdr. Dr. Anil Rana, Director, MIT Manipal in his presidential remarks focused on the evolution of Blockchain as a modern and relevant technology. Dr. Harish Sahu, DRDO, New Delhi was the reviewer for the Faculty Development Programme.

Dr. Krishnamoorthi Makkithaya, Professor, Department of Computer Science & Engineering, co-ordinator of the programme welcomed the gathering. Dr. Narendra V G, Associate Professor (Senior Scale), co-ordinator of the programme presented an overview of the FDP. Dr. Srikanth Prabhu, Associate Professor (Senior Scale) was the master of ceremony.



“

Knowledge is knowing tomato is a fruit; wisdom is not putting it in a fruit salad.

Unknown

”

## Five Day Faculty Development Program on Recent Advancements in Sustainable Energy Storage & Conversion

October 25-29, 2021: The five day ATAL sponsored online FDP was conducted by Chemical Engineering Department and coordinated by Dr. S. Shanmuga Priya, Associate Professor (Senior Scale). Around 130 faculty members from different Institutions of the country participated.

The inauguration was held on 25<sup>th</sup> October 2021 in MS Teams platform. The Chief Guest of the event, Dr. Chandrashekar Sharma, Assistant Professor, Department of Chemical Engineering, IIT Hyderabad provided insights into the importance of energy storage. The Guest of Honour, Dr. M Premalatha, Professor and Head, Department of Energy and Environment, NIT, Trichy shared the importance of the energy conversion. The inaugural function was presided over by the Director Cdr. Dr. Anil Rana. The co-coordinator of ATAL FDP, Dr. Anindita Laha, Assistant Professor, provided the overview.

## International Conference on Artificial Intelligence, Computational Electronics and Communication System (AICECS 21)

October 28, 2021: The First International conference on Artificial Intelligence, Computational Electronics and Communication System (AICECS) was held at MIT, Manipal in October 2021. Due to the impact of COVID-19, this conference was organized in virtual mode. AICECS attracted people working in diverse fields: Artificial Intelligence, Computational Electronics and Communication System. The conference was designed to create a platform for researchers from academia and industry, practicing engineers, and students. AICECS 2021 invited full-length original research contributions from engineering professionals from industries, R&D organizations, academic institutions, government departments, and research scholars from across the world.



The AICECS 2021 Conference received 149 submissions, from various institutes across the globe, 78 were selected for full presentation at the conference. Dr. A Unnikrishnan, Retd. Associate Director, Naval Physical and Oceanographic Laboratory (NPOL), Kochi delivered the key note address on the topic “As we look at Artificial Intelligence, Computational Electronics and Communication system.” Mr. Sadaranga Shanbhag, Senior Development Leader (SDL) in electronics for robotic vacuum cleaners, Consumer Experience organization at Electrolux AB, Sweden delivered another key note address on the topic “Present Trends in consumer electronics. The other key note address was delivered by Dr. Prashantha Kumar H., Assistant Professor, Electronics and Communication Engineering, National Institute of Technology Karnataka (NITK) – Surathkal on the topic “Radio Architectures: Classical to Modern”. Dr. Suresh Balanethiram, Assistant Professor in the Department of Electronics and Communication Engineering at National Institute of Technology Puducherry delivered the key note lecture on “Electrothermal Modeling of Semiconductor Devices”.

# CURRICULUM CONCLAVE 2021

*A series of events was held to facilitate the curriculum revision to be held in 2022. The first among them was Manthan followed by Chinthan.*

## MANTHAN

Manthan was an inaugural effort to provide a direction regarding the orientation of the curriculum from the batch of 2022 for BTech in various engineering disciplines at MIT.

The purpose of Manthan was to discuss and deliberate on various aspects of evolving a curriculum structure in line with the guidelines set by the regulatory bodies, industry needs, and academic feedback. This was designed to give departments an insight into the expectations set by the institute for designing a detailed curriculum that will stay relevant to meet the challenges of the next decade. This was a day-long event held in physical mode. The Registrar Evaluation Dr. Vinod V Thomas, Director of MIT Cdr. Dr. Anil Rana, Joint Director of MIT Dr. Somashekara Bhat, Associate Directors and Assistant Directors were a part of the event. Dr. Somashekara Bhat welcomed the gathering which was followed by opening remarks on the curriculum 2022 by Cdr. Dr. Anil Rana.

Dr. Vinod Thomas presented the best practices to be followed while designing a curriculum to meet the growing demands of the ever-changing technological world. Dr. Raviraja Adhikari, the Associate Director of Academics shared his thoughts on the B.Tech curriculum 2018 based on the inputs received from an academic audit of various engineering disciplines.

This was followed by a group discussion on the following topics.

- Enhancing Student Engagement
- Relooking at the Curricular Components
- Ranking & Regulatory Compliance
- Promoting Research, Innovation & Entrepreneurship at UG Level



The highlights of the group discussion were presented. Dr. Adhikari then presented the curriculum model based on the discussions.

Cdr. Dr. Anil Rana delivered his concluding remarks. Dr. Shankaranarayana Bhat, Associate Director (FD&W) gave away the Vote of Thanks.

## CHINTHAN

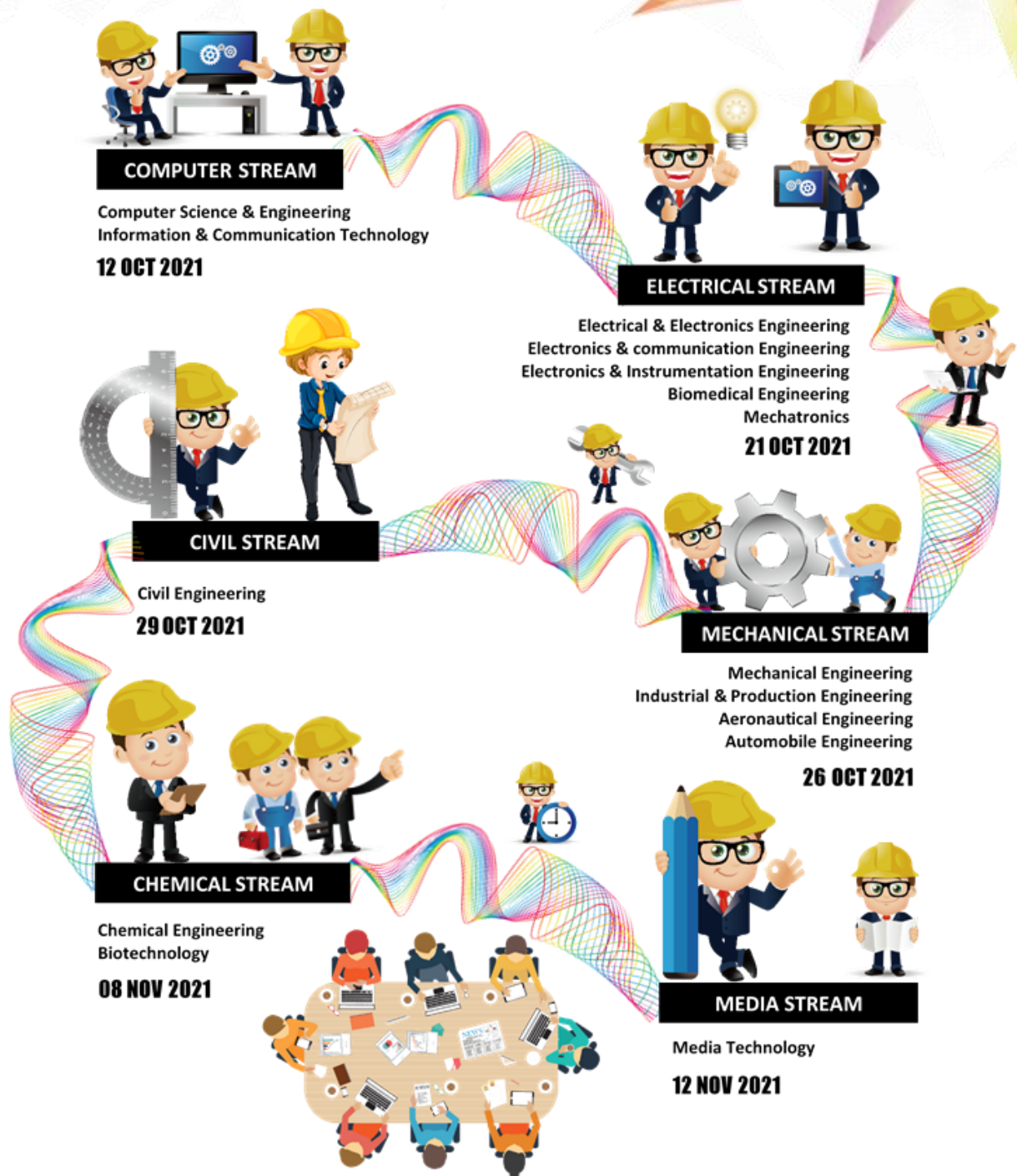
Chinthan was a preliminary event to the Curriculum Conclave 2021. It was organized by the Office of the Faculty Development and Welfare under the leadership of Dr. Shankaranarayana Bhat, Associate Director (FD&W), on behalf of the Institute. The day long event took place on 8<sup>th</sup> October 2021, in online mode using MS Teams. Chinthan was an inaugural effort to provide direction to the curriculum 2022 for B.Tech in various engineering disciplines at MIT Manipal. Experts from the industry and academia presented their views on the curriculum revision. This was followed by a panel discussion which consisted of experts from academia, industry and college alumni. Following this, Curriculum Conclaves were held for the various engineering streams as per the schedule given below.

“

If you tell the truth, you don't have to remember anything.

Mark Twain

”



In each conclave Dr. Shankaranarayana Bhat, Associate Director (FD&W), delivered the welcome address and the inaugural address was given by University Official. Experts from the industry and academia presented their views on Engineering Curriculum and the Industry expectations from a graduate engineer. There were presentations from alumni, students and faculty members on their Dream Curriculum. There was also poster presentation from students and faculty members of the respective streams.

This was followed by Group Discussions among students as well as faculty members on the given topic. The draft of B.Tech Curriculum 2022 was presented by the Dr. Raviraja Adhikari, Associate Director (Academics). The Director of MIT, Cdr. Dr. Anil Rana gave the concluding remarks while the Joint Director, Dr. Somashekara Bhat proposed the Vote of Thanks.

## Engineers' Day Celebrations



September 15, 2021: Our nation celebrates 15<sup>th</sup> September to commemorate the birth anniversary of the visionary Indian Engineer, Sir Mokshagundam Visvesvaraya, a Bharat Ratna awardee.

MIT, Manipal celebrated Engineers' Day on 15<sup>th</sup> September 2021 in honour of the engineer par excellence.

'Late Prof. P V Bhandary Memorial Oration' was also conducted on the same day. In memory of Late Prof P V Bhandary, erstwhile Principal of MIT and Pro-Vice-Chancellor of MAHE, his family members and admirers conduct an oration series on a selected theme every year on Engineers Day.

The fourth oration in the series was held at MIT, Manipal. The Chief Guest of the event was Dr. M. S. Valiathan, Padma Shri and Padma Vibhushan Awardee, and a National Professor of Research Government of India, and Honorary Advisor, MAHE. The Guest of Honour was our former Director and Pro Vice Chancellor, MAHE, Brig (Dr.) S. S. Pabla, Pro-Chancellor at Bharatiya Skill Development University Jaipur. The event was presided over by Cdr. Dr. Anil Rana, Director, MIT.

## MoU between Manipal Institute of Technology, Manipal and Institute of Defence Scientists and Technologists (IDST), DRDO

October 29, 2021: Memorandum of Understanding is signed between MIT Manipal and Institute of Defence Scientists and Technologists (IDST), DRDO, Ministry of Defence (MoD), in collaboration with All India Council for Technical Education (AICTE) for starting a regular Master of Technology (M.Tech) Program in Defence Technology from Academic Year 2021-22.

The main objective of this advanced PG program is to envisage interest among young aspiring engineering graduates to pursue their professional career in research, technology and product development related to defence and national security.



## Online Session on the Topic Information Processing Techniques for Mobile Sensing Applications at Scale

September 24, 2021: An online session on the topic "Information Processing Techniques for Mobile Sensing Applications at Scale" was conducted at MIT by TCS on 24<sup>th</sup> September 2021 in online mode using MS Teams. This session highlighted the applications of IoT systems in real-world problems. The Office of Faculty Development and Welfare facilitated this event. The main resource person was Dr. Prasanth, scientist in TCS Research and Innovation at TATA Consultancy Services Ltd., Bangalore. Office of the Associate Director (FD&W) facilitated the event for the benefit of students and faculty members.

“

Light travels faster than sound. That's why some people seem bright until they talk!

Unknown

”

## FIT INDIA “Gradient Cycling Challenge”

September 25, 2021: As a part of the Fit India Movement, Gradient Cycling Challenge was organized at the MIT campus. The participants were allowed to participate in both rounds which consisted of two different tracks. Medals were awarded to the winners after both rounds. The number of participants was restricted to 25 in order to adhere to the COVID Protocols. Marathons and a few other events were conducted previously under the same movement.



## SOCIO ICHOR - Blood Donation Digital Platform Initiative

October 23, 2021: MIT, Manipal students in collaboration with KMC, Manipal have launched a new platform Sociio Ichor which aims to connect blood donors with patients in need of blood. The platform also displays Live requests of the patients who are in need of blood and its components. The potential donors can register themselves on the platform to get connected to the patients in need. The platform, Sociio Ichor, has put all the digital privacy measures in place to keep the donors and receivers' information safe. Starting from Manipal, the team envisions to spread across the nation and implement blood delivery system in its future plans.



Sociio Ichor platform was launched by the Pro-Chancellor of MAHE, Dr. HS Ballal . The team of Sociio Ichor consists of Manorath Khanna, Mohammed Dilshaad Uzair, Abhishek Gupta, Pratik Shewkani, Amulya Kollipara, Insha Manowar, Nivedita Singh, and Yash Aryan, each bringing a unique skill set to the table.

The event was witnessed by the Pro-Chancellor - Dr. HS Ballal, Vice Chancellor - Lt. Gen (Dr.) M.D. Venkatesh, Registrar - Narayana Sabhahit, Director of MIT - Cdr. Dr. Anil Rana, Joint Director, MIT - Dr. Somashekara Bhat, Medical Superintendent, KMC - Dr. Avinash Shetty, Associate Dean of KMC - Dr. Anil Bhat, HoD of Immunohematology, KMC - Dr. Shamee Shastry, Director of Student Affairs, MAHE – Dr. Geetha Maiya, Deputy Director, Student Affairs - Dr. Veena Maben, Director of PR & Media Cell - Mr. S. P. Kar, Chief Innovation Officer - Dr. Arun Shanbhag, and Faculty Advisor - Dr. Alapati Vittaleswar.



# Faculty Achievements

## Dr. HARISHKUMAR J. R.

Dr. Harishkumar J. R., Department of E&E, received a grant of ₹1830000 for a duration of 36 months under Teachers Associateship for Research Excellence (TARE). The grant is provided to the area of Research in Image processing and artificial intelligence powered solutions for eye-care.



Dr. HARISHKUMAR

## Dr. MAMATHA BALACHANDRA & Dr. SRIKANTH PRABHU

“Samsung PRISM has announced Certificate of Excellence” to 2 worklets mentored by MIT Manipal lead by Dr. Mamatha Balachandra and Dr. Srikanth Prabhu of Computer Science and Engineering Department. Samsung also announced a reward for their achievement.



Dr. MAMATHA



Dr. SRIKANTH

## Dr. POOJA NAG

Dr. Pooja Nag, Assistant Professor, Senior Scale, Mechatronics Engineering, received a grant from DST Nanomission for her Project in collaboration with IIT-Bombay for a total amount ₹1.3 crores.



Dr. POOJA

“ Respect your teachers. They passed their examination without Google.



### **Ms. PRATHVI NAYAK**

Ms. Prathvi Nayak, Assistant Professor in the Department of Electrical & Electronics won the first position in Kanaka Keerthana Gangothri singing competition. This competition is all about rendering Keerthana written by Kanakadasa at Mangalagangothri, Mangalore University, Mangalore. She has won this award for the third time.



**Ms. PRATHVI**

### **Dr. TIRUNAVUKKARASU**

Dr Tirunavukkarasu, Associate Professor (Senior Scale), Department of Instrumentation & Control Engineering, MIT Manipal has worked in the area of Parameter Estimation of Non-Linear system and control design at Department of Aerospace Engineering, Indian Institute of Science, Bangalore during 1<sup>st</sup> October 2020 to 31<sup>st</sup> March 2021 under the supervision of Prof. Radhakant Padhi, Professor, department of Aerospace Engineering, Indian Institute of Science, Bangalore.



**Dr. TIRUNAVUKKARASU**

### **Dr. MANJUNATH K. N.**

Dr. Manjunath K N, the faculty of CSE has received the reviewer status for the A\* category at the prestigious 24<sup>th</sup> International conference "MICCAI 2021" to be held in Strasbourg, France. This conference accepts the papers only from medical engineering, clinical engineering, and the radiology domain with an acceptance ratio of 10-15%.



**Dr. MANJUNATH**

### **Dr. VIJAYA BABU**

Dr. Vijaya Babu was a member of the team Gnathodynamometer which got selected in the Grand Challenge 2021 i.e. Hackathon conducted by Manipal Government of Karnataka Bioincubator. The team was represented by the members from Mechatronics Department, MIT, MCODS Manipal, and MSAP.



**Dr. VIJAYA**

### **Dr. UMESH KUMAR SAHU**

Dr. Umesh Kumar Sahu, Assistant Professor, Mechatronics Engineering, received the Best Paper Award for the Paper, “Deep Reinforcement Learning Controller for Vision-Based Serial Flexible Link Manipulator”, in 2021 International Symposium of Asian Control Association on Intelligent Robotics and Industrial Automation (IRIA), IIT, Goa, India., 20-22 September 2021.



**Dr. UMESH**

### **Dr. NARESH KUMAR MANI & Dr. UJJWAL VERMA**

Dr. Naresh Kumar Mani and Dr Ujjwal Verma received the Best Publication Award for the paper titled ‘Inkjet Printing of paraffin on Paper offers low-cost point-of-care diagnostic for pathogenic fungi’ at Manipal Centre for Infectious Diseases.



**Dr. NARESH**

### **Dr. Ramya S.**

Dr Ramya S from E &C Dept received the grant of \$3945 from IEEE Humanitarian Activities Committee (HAC) and IEEE Special Interest Group on Humanitarian Technology (SIGHT), for the project titled “Tele-based speech therapy for children with language disabilities during COVID-19 pandemic”. It is a collaborative work with Dr Sudhin Karuppali, Associate Professor, Department of Audiology & Speech-Language Pathology, KMC Mangalore. Two students from E & C, MIT, Manipal and two students from Department of Audiology & Speech-Language Pathology, KMC Mangalore are also involved. The Project aims to help children with language disabilities in the age between 2 and 6 years.



**Dr. UJJWAL**



**Dr. RAMYA**

“ Teaching kids to count is good, but teaching them what counts is better.

## Dr. TUNGESH G. M.

Dr. Tungesh G. M., Department of Humanities & Management has been awarded with 'International Distinguished Academician Award-2021' by the Centre for Professional Advancement, UK in 2021.



Dr. TUNGESH

## Dr. BALAKRISHNA S. MADDODI

Dr Balakrishna S. Maddodi, Department of Civil Engineering was conferred the prestigious Udupi District Rajyotsava Award-2021 for Social Work by Udupi District Authorities. He received the award from - Minister for Energy, Kannada and Culture Govt. of Karanataka Sri V. Sunil Kumar. Udupi District - District Collector Sri Kurma Rao M, IAS, Superintendent of Police Sri N Vishnuvardhan, IPS and MLA Sri Raghupathi Bhat were present on the occasion.



Dr. BALAKRISHNA

## DID YOU KNOW



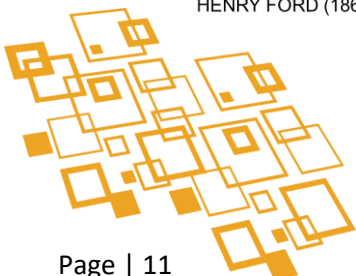
As a relaunch initiative, it was decided to have a logo designed along with the conventional digital font for the text FOCUS. The new LOGO was selected among eight logo designs by a panel selected by Director, MIT. The following is a brief description of the logo:

MIT at the core of the logo forms the heart of the FOCUS and enables two-way Communication with the four C shaped strokes around it symbolically forming an interlocking, and interconnecting four verticals - faculty, student, research and events happening at MIT. Logo looks like an atom and represents the vibrancy and cohesiveness of the four verticals. It portrays progressiveness, teamwork and collaboration.

Color plays a vital role in defining logos. Black color was selected after long deliberations. Black is traditionally seen as the symbol of professionalism and solemnity. It elicits feelings of elegance, discipline, substance, power and presents itself as very modern and polished outlook. Often uncomplicated in design, black logos demonstrate independence, simplicity, and dignity. Black makes for a striking and potent logo.

“any color so long as it is black”

HENRY FORD (1863-1947)



# PhD AWARDEES FACULTY MEMBERS



Date of Award: 27 July 2021

## Dr. Giridhar Kamath B.

“Purchase Intention and Word-of-Mouth for the Sponsor Brands of Indian Premier League Teams”

**Guide :**

Dr. Simon George, Professor and Former Dean,  
T. A. Pai Management Institute (TAPMI), Manipal

**Co-Guide :**

Dr. Shirshendu Ganguli, Associate Professor,  
T. A. Pai Management Institute (TAPMI), Manipal

**Dept. Registered for PhD :**

T. A. Pai Management Institute (TAPMI), Manipal



Date of Award: 05 November 2021

## Dr. Guruprasad

“Investigation on Performance Improvement of A Ldo Voltage Regulator”

**Guide :** Dr. Kumara Shama, Professor,  
Department of Electronics and Communication Engineering,  
Manipal Institute of Technology, Manipal

**Dept. Registered for PhD :**

Electronics and Communication Engineering, MIT



Date of Award : 22 November 2021

## Dr. Bhagya R. Navada

“Design and Implementation of an Intelligent Technique for Detection and Diagnosis of Pneumatic Actuator Fault Using Multi-Sensor Framework”

**Guide :** Dr. Santhosh K. V, Associate Professor,  
Department of Instrumentation and Control Engineering, Manipal  
Institute of Technology, Manipal

**Dept. Registered for PhD :**

Instrumentation and Control Engineering, MIT



Date of Award: 12 October 2021

## Dr. Ramakrishna Kini K.

“Multivariate Process Monitoring Using Multi-Scale Version of Independent Component Analysis”

**Guide:**

Dr. Muddu Madakyaru, Associate Professor,  
Department of Chemical Engineering,  
Manipal Institute of Technology, Manipal

**Dept. Registered for PhD:**  
Chemical Engineering, MIT



Date of Award: 13 November 2021

## Dr. Manjula C. Belavagi

“Efficient Intrusion Detection System Using Traffic Logs in Wireless Sensor Networks”

**Guide:**

Dr. Balachandra, Professor,  
Department of Information and Communication  
Technology, Manipal Institute of Technology, Manipal

**Dept. Registered for PhD:**  
Information and Communication Technology, MIT



Date of Award: 21 October 2021

## Dr. Radhika Bhandary P.

“Stability Analysis of Embankments on Consolidating Soil Using Finite Element Method and Genetic Algorithm”

**Guide:**

Dr. A. Krishnamoorthy, Professor, Department of Civil  
Engineering, Manipal Institute of Technology, Manipal

**Dept. Registered for PhD:**  
Civil Engineering, MIT

Date of Award: 01 October 2021



## Dr. Subhash Acharya

“Synthesis and Characterization Of Magnetorheological (MR) Fluid for Different Engineering Applications”

**Guide :** Dr. Hemanth Kumar  
Associate Professor, Dept. of Mechanical Engineering,  
NITK Surathkal

**Dept. Registered for PhD :**  
Mechanical Engineering, NITK, Surathkal

## PhD AWARDEES RESEARCH SCHOLARS

Date of Award: 19-07-2021



## Dr. Syam Krishna

“Non-contact Assessment of the Cardiovascular Function in Zebrafish Larvae”

**GUIDE:** Dr. Ramesh R. Galigekere

**Dept. Registered for PhD:**  
Biomedical Engineering

Date of Award: 16-07-2021



## Dr. Sumaiya Pathan

“Development of Algorithm for the Detection of Glaucoma Using Geometric and Texture Features from Retinal Images”

**GUIDE:** Dr. Preetham Kumar  
**CO- GUIDE:** Dr. Radhika M. Pai

**Dept. Registered for PhD:**  
Information & Communication Technology



**Date of Award: 06-08-2021**

## Dr. Riya Thomas

“Synthesis & Characterization of Doped and Composite Thermoelectric Materials for Low and Near Room Temperature Applications”

**GUIDE:** Dr. Ashok Rao

**Dept. Registered for PhD:** Physics



**Date of Award: 11-10-2021**

## Dr. Niyam Dave

“Production of Bioethanol from Marine Macroalgae”

**GUIDE:** Dr. V. Ramesh

**CO-GUIDE:** Dr. V. Thivaharan

**Dept. Registered for PhD:** Chemical Engineering



**Date of Award: 29-10-2021**

## Dr. Sarvajith M. S.

“Developing Phthalocyanine Based Supramolecular System for Sensing Application”

**GUIDE:** Dr. Fasiulla

**Dept. Registered for PhD:** Chemistry



**Date of Award: 15-11-2021**

## Dr. Sojan A. Zachariah

“Experimental & Numerical Investigations into the Effect of Low-Velocity Impact Response & Damage Morphology in Hybrid Composites”

**GUIDE:** Dr. Dayananda Pai K

**CO-GUIDE:** Dr. Satish Shenoy B.

**Dept. Registered for PhD:** Aero & Auto



Date of Award: 19-11-2021

## Dr. Shruthi

“Studies on Modular Equations and Its Applications Influenced by Ramanujan”

**GUIDE:** Dr. Srivatsa Kumar B. R.

**Dept. Registered for PhD:** Mathematics



Date of Award: 19-11-2021

## Dr. Girija K. P.

“Equit Able Labeling and Spectra of Graphs”

**GUIDE:** Dr. Pradeep G. Bhat

**CO-GUIDE:** Dr. Devdas Nayak C. | Dr. Sabitha D'Souza

**Dept. Registered for PhD:** Mathematics



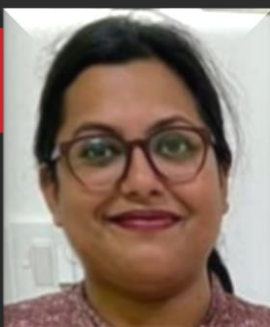
Date of Award: 29-11-2021

## Dr. Rajesh

“Hybrid Heat Treatment for Eutectoid Steel Powder Reinforced Ai-Zn-Mg Alloy Composites”

**GUIDE:** Dr. Sathyashankara Sharma

**Dept. Registered for PhD:** Mechanical



Date of Award: 08-12-2021

## Dr. Deblina Das

“Production and Optimization of Inulinase Enzyme”

**GUIDE:** Dr. M. Ramananda Bhat

**CO-GUIDE:** Dr. S. Raja

**Dept. Registered for PhD:** Biotechnology





# Students in Action

## MIT Team bags Runners Up position at UQ Engineering Design Challenge 2021: Flood Resilience in India



A team of five - Mr. Hrisheekesh S Sharma, Mr. Ashrith S. P. Kenja, Mr. Atma Jyothi, Ms. Rithu Maria and Ms. Riya Maria, Civil Engineering, MIT Manipal students and two academic mentors, secured the Runners Up position at UQ Engineering Design Challenge 2021: Flood Resilience in India, an initiative by the School of Civil Engineering and Faculty of Engineering, Architecture and Information Technology, University of Queensland, Australia. The team, guided by Dr. Lathashri U A and Dr. Anish Kumar Warriar, Associate Professors, Department of Civil Engineering, presented their design on “Modular Underground Storm Surge Reservoir model for Udupi” at the challenge Finale, where they bagged the Runners Up position.



## Adobe India WIT 2022 Scholarships

Two students of MIT, Manipal, Ms. Supriti Vijay and Ms. Kumud Lakara of Department of Computer Science and Engineering secured the prestigious Adobe India WIT 2022 Scholarship.



Scholarship will cover the funding towards tuition fee for the remainder of the award recipient's university education ending in the academic year 2023, opportunity for Summer Internship at Adobe India in 2022, Mentoring by a senior technology leader from Adobe and travel to Grace Hopper Conference India, including participation fees.



### Start-up – ALLSKIR

Mr. Atharv Tendolkar ECE Batch 2022 MIT, Manipal & Mr. Amit Choraria ECE Batch 2022 MIT, Manipal have founded a start-up called ALLSKIR. This venture was developed to Customize Edge Computing & Internet of Things solutions for users across multiple domains.

### Theme winners of Immers-Ed Global Hackathon organised by Oxford University

Student Team of MIT comprising Suryanshyam Tiwari, Manisimha Verma Manthena, Ankit Yadav became the theme winners of Immers-Ed Global Hackathon organised by Oxford University. Theme of their project Environmental Sustainability will get funding and mentoring opportunity from Oxford University.



### Formula Manipal and Formula Manipal Electric cumulatively bagged five awards in the Virtual Season of 2021-2022

Team Formula Manipal participated in the CV Category and Team Formula Manipal Electric participated in the EV Category in the Formula Bharat or FS (Formula Student) India. The Virtual Competition required the teams to submit a diverse range of documents within a stipulated deadline that explained the various materials and systems implemented while manufacturing the vehicles. Formula Manipal and Formula Manipal Electric cumulatively bagged five awards in the Virtual Season of 2021-2022.



- EV Design Concept Event **2<sup>nd</sup>**
- Overall EV Category Event **2<sup>nd</sup>**
- CV Design Concept Event **3<sup>rd</sup>**
- Overall CV Category Event **3<sup>rd</sup>**
- Rev-It Virtual Racing Event **4<sup>th</sup>**



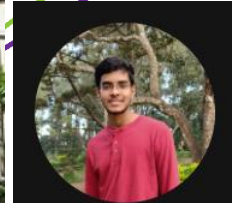
People often say that motivation doesn't last. Neither does bathing - that's why we recommend it daily.

Zig Ziglar



## Team Manipal Racing Electric secured overall 3<sup>rd</sup> position - BAJA SAEINDIA 2022

Team Manipal Racing Electric has secured overall 3<sup>rd</sup> position in the preliminary round of the BAJA SAEINDIA 2022 in the EBAJA category, out of 76 participating teams.



PRANAV J NAIR

Team Captain



AKASH BABARIA

Vice Captain

## Mars Rover Manipal bagged the 3<sup>rd</sup> position - International Rover Design Challenge (IRDC)

Mars Rover Manipal bagged the 3<sup>rd</sup> position out of 32 teams from 4 countries in the 2nd edition of the International Rover Design Challenge (IRDC). The second edition of The International Rover Design Challenge (IRDC) was organized by the Mars Society South Asia (MSSA). MSSA is the official chapter of The Mars Society for the South Asian region. The Mars Society is the world's largest, most influential space advocacy organization dedicated to the human exploration and settlement on Mars.



## "Team AAINA" won the Mood Indigo Competition held at Jain University



## Team MIT visits ATAL Tunnel

A team of Civil Engineering students of MIT Manipal, under the Leadership of Prof. Balakrishna K, undertook a study tour to Atal Tunnel - Rohtang Pass. AICTE sponsored the Tour under the YUVAK Scheme (Youth Undertaking Visit for Acquiring Knowledge (Yuvak)).



The students were introduced to the safety measures adopted and another hidden tunnel beneath the Atal Tunnel exclusively used as an escape route.

“ Arguing with a fool proves there are two.

Doris M. Smith



## Manipal BioMachines Team Wins Bronze Medal in the iGEM

Manipal BioMachines team lead by Anooshka Pareddy secured a bronze medal in the iGEM (International Genetically Engineered machine) competition. This year the project focused on making a biopesticide that is modular in approach, i.e., with modifications.



## MIT student participation at eYantra, IIT Bombay

MIT 2020-21 students were the highest participants in India for e-Yantra Robotics Competition (eYRC) held at IIT Bombay in 2021. Ayush Mittal and Krithik S, students of Dept. Electronics and Communication Engineering Department have won 3rd Position in e-Yantra Robotics Competition (e-YRC) 2020-2021.

## App designed by Rahul Nair approved by Apple App Store

An app designed for conducting and visualizing statistical quality analysis on the iPhone by Mr. Rahul Nair, a student of Media Engineering has now been approved by the AppStore and is live for everyone to download. This app allows users to visualize variations in print quality using X-Bar and R-chart analysis and calculate equipment efficiency using OEE analysis. This app was developed under the guidance of Mr. Ramakrishna Nayak, Assistant Professor, Department of Media Technology, MIT



## Mohammad Dilshad secured the Best Paper Award at ScTACE 2021

Mohammad Dilshad, a student of Chemical Engineering received the Best Paper Award for his paper titled 'Removal of Phenol from Waste Water using Locally available Waste Material' at the International Conference Sustainable Construction Technologies and Advancement in Civil Engineering.



## Suhani Dhumne Won the War of Superstars at IIM Bangalore 2021

Ms. Suhani Dhumne, Department of Information & Communication Technology has won the War of Superstars at IIM Bangalore 2021. She has won the solo dance competition “Get Set Go.”



## Varun Kabra features in The Economic Times list of top 87 brightest engineering students

Mr. Varun Kabra, Department of Information and Communication Technology featured at the 4<sup>th</sup> Edition of Economic Times Campus Stars. After four gruelling rounds of competing with over 40,000+ students from more than 2000 universities, the top 87 finalists made it to the 'ET Campus Stars Class of 2021'.



Before borrowing money from a friend, decide which you need the most.

Unknown



# Student Research Stories

## Shamanth R. Nayak K.

Computer and Communication Engineering

**Award:** MITACS Globalink Internship Award 2021 from University of Lethbridge, Alberta, Canada

**Journal Paper:** Traffic flow prediction Models- A review of deep learning techniques, Cogent Engineering.

**Conference Paper:** Secure Sharing of Text-Based Data Using Hybrid Encryption Algorithms in a Client-Server Model, 2021 Fourth International Conference on Electrical, Computer and Communication Technologies (ICECCT).



**SHAMANTH**



**SURABHI**

## Surabhi Aswath

Chemical Engineering

**Journal Paper:** 'Atomistic Investigations of Polymer-Doxorubicin-CNT Compatibility for Targeted Cancer Treatment: A Molecular Dynamics Study' Journal of Molecular Liquids (Impact Factor – 6.1)

**Review Paper:** 'A review on allopathic and herbal nanofibrous drug delivery vehicles for cancer treatments' published in Biotechnology Reports (Impact Factor – 4.9)

**Review Paper:** Responsible Computer Vision Workshop, CVPR 2021. 'Recent advances in electrospun allopathic anti-cancerous drug delivery systems' Materials Today: Proceedings

**Conference Presentation:** Removal of Contaminants from Water using Magnetic Nanoparticles, Separation Process Category at National level conference, SCHEMCON-21

**Conference Poster:** Recent studies on the efficiency of electrospun nanofibers for ocular drug delivery' at an International Virtual Symposium 2021 organised by UKICRS (United Kingdom and Ireland Control Release Society)

## Gokul P

Electronics and Communications Engineering

**Award:** Mitacs Globalink Internship Award 2021 from Queen's University, Kingston, Canada

**Journal Paper:** Gokul P., H. Kulkarni and P. S. Baweja. An improved PSO approach for multi-robot target search. Springer book on Robot Operating System, Studies in Computational Intelligence Series, 2021.

**Conference Paper:** Gokul P., H. Kulkarni, P. S Baweja. BlockMapping: A Blockchain based Multi-Robot Exploration. IROS 2021- Blockchain applications in robotics and automation.



**GOKUL**



**AKHIL**

## Akhil Bonagiri

**Electronics and Communications Engineering**

**Conference Paper:** Bonagiri A, Biswas D, Chakravarthy VS, "Modelling a Central Pattern Generator using capacitively coupled Nano-oscillators", 30th Annual Computational Neuroscience Meeting, CNS 2021.

**Journal Paper (Under Review):** Bonagiri A, Biswas D, Chakravarthy VS, "Coupled Memristor Oscillators for Neuromorphic Locomotion Control: Modelling and Analysis", IEEE Transactions on Neural Networks and Learning Systems. (Impact Factor – 8.7)

## Achintya Dutta

**Electronics and Communications Engineering**

**Journal Paper:** A. Dutta, R. Nayak, M. Selvakumar et al., "Graphite/Copper Nanoparticles Based High-Performance Micro Supercapacitor with Porous Wet Paper-Based PVA-PVP Blend Polymer Electrolyte", Materials Letters, 295, 129849, 2021. (Impact Factor = 3.45)

**Journal Paper (Under Review):** A. Dutta, A. Nirmale, R. Nayak, M. Selvakumar, S. Bhat, P. Selvaraj et al., "Geometric Design Optimization of Low Resistance Polyaniline/Graphite Humidity Sensor for Flexible Contactless Sensing and Breath Monitoring", Measurement. (Impact Factor = 3.9)

**International Conference Paper:** A. Dutta, D. Rajasekharan and Y. S. Chauhan, "Compact Model Parameter Extraction Using Modular Q Learning for Nano - Scale Transistors", 5<sup>th</sup> IEEE International Conference on Emerging Electronics, New Delhi, 2020.

**Patent Filed:** Screen Printed Nanoparticle based Flexible 3 cm X 1.3 cm High Current Density Micro Supercapacitor with Polymer Blend Electrolyte. Indian Patent in Flexible Electronics.



**ACHINTYA**



**SAHIL**

## Sahil Khose

**Information & Communication Technology**

BERT based Transformers lead the way in Extraction of Health Information from Social Media Published in proceedings of NAACL 2021.

Semi-Supervised Classification and Segmentation on High Resolution Aerial Images Accepted at Tackling Climate Change with ML workshop at NeurIPS 2021.

Extraction of Color Information from Images for Generation of Colored Outlines and Sketches Accepted at New in ML workshop at NeurIPS 2021.

A Studious Approach to Semi-Supervised Learning Accepted at ICBINB workshop at NeurIPS 2021.

Age-Related Macular Degeneration using Semi- Supervised Learning Submitting to IEEE TMI journal Aug 2021.



Laughing at our mistakes can lengthen our own life.  
Laughing at someone else's can shorten it.

Cullen Hightower







# Research Highlights

## LISTED IN THE TOP 2 PERCENTILE OF RESEARCHERS IN THE WORLD

Stanford University released a list that represents the top 2 percentile of the most-cited scientists in various disciplines across the world on 19th October 2021. The exhaustive list has 1,00,000 persons with nearly 2000 Indians in it.

This database includes the top 2 percentile of scientists in the world from different fields based on standardized citation indications. These include information on the number of citations, H -Index, co-authorship, and a composite indicator. The results were recently published in PloS Biology, and they have been classified into 22 scientific fields and 176 sub-fields in the report.

This research and database has been published by Elsevier titled "Updated Science-wide Author Databases of Standardized Citation Indicators" Three faculty members from Manipal Institute of Technology **Dr. Raghavendra U** (Dept of Electronics and Instrumentation), **Dr. Raja** (Dept. of Biotechnology), **Dr. Tanweer** (Dept of Electronics and Communication) have been listed in the top 2 percentile of researchers in the world, as per a list published by Stanford University, USA.



Dr. TANWEER



Dr. RAGHAVENDRA



Dr. RAJA

## Ms. TAPATEE SAHOO

AMU Prize 2021 (by the Indian Mathematical Society) awarded for research work titled "Partial Order in Modules over Matrix Nearings" to Tapatee Sahoo, research scholar in the Department of Mathematics doing her research under the guidance of Dr. Kunchan Syam Prasad, Professor, Department of Mathematics, MIT. This award is the HIGHEST in the presentations category of IMS.



Ms. TAPATEE

## Dr. ANISH KUMAR WARRIER

The Vision Group on Science and Technology, Govt. of Karnataka has honored Dr. Anish Kumar Warriar with the Award for Research Publications-2021. Dr. Warriar is an Associate Professor of Geology in the Department of Civil Engineering, Manipal Institute of Technology. He is also the Coordinator of the Centre for Climate Studies (MAHE). Dr. Warriar's research interest includes the study of the past climate of Antarctica and southern India, microplastic pollution in coastal water bodies, and soil genesis. To his credit, Dr Warriar has 40 publications in peer-reviewed scientific journals (Q1 and Q2) with a cumulative impact factor of 101.36.



Dr. ANISH

## Dr. KAPIL SADANI

Dr. Kapil Sadani from the Department of Instrumentation & Control Engineering, has been honoured with the Naik and Rastogi Award for excellence in Ph.D. Research for the year 2019-2021 for outstanding research contributions in partial fulfilment of the requirements for the degree of Doctor of Philosophy from the Indian Institute of Technology Bombay. This award was announced at the 59th Convocation of the Institute, held on 7<sup>th</sup> August 2021.



Dr. KAPIL

## Dr. KAPIL SADANI & Dr. POOJA NAG

Faculty members from Manipal Institute of Technology, **Dr. Kapil Sadani** from the Department of Instrumentation & Control Engineering and **Dr. Pooja Nag**, from the Department of Mechatronics, to the Indian Institute of Technology, Bombay for doctoral studies, have developed a simple portable sensor that can detect trace levels of antibiotics in water and food, with **Prof. Soumyo Mukherji**, IIT-B. The sensor was tested with milk, meat and wastewater samples and its performance was comparable to the current gold standard approach involving advanced chromatography coupled mass spectroscopic methods. This presents an incredible opportunity to quality control departments of food and water processing companies to test the compliance of their product at point of use at a substantially low testing cost of around 30-35 INR per sample. The study has been published in ACS Analytical Chemistry. The researchers have applied for a patent and are awaiting approval.



Dr. POOJA



It takes considerable knowledge just to realize the extent of your own ignorance.

Thomas Sowell



## Dr. UJJWAL VERMA

A publication by Dr. Ujjwal Verma, Department of Electronics & Communication Engineering, in RSC Advances has been selected for the Manipal Center for Infectious Diseases (MAC ID) affiliated best publication award. This interdisciplinary work involved experts from microbiology (Dr. Prakash, KMC Manipal), microfluidics (Dr. Naresh Mani, MIT, and Dr. Nandgopala, IIT KGP), and image processing (Dr. Ujjwal Verma). Their research has highlighted the importance and the utility of employing 'thread' as a cost-effective and biodegradable way of identifying *Candida albicans* and *Escherichia coli* through a pH-based colorimetric assay.



Dr. UJJWAL



Dr. HARISH

## Dr. HARISH KUMAR J. R.

Healthcare products developed by Dr. Harish Kumar J R and team at INFYUVA Tech Solutions Pvt. Ltd (a startup working in the digital health domain and incorporated by Dr. Harish Kumar last year), MUTBI, Manipal, showcased their innovative products in "Mangaluru - A strategic IT destination" event on 29 October 2021. This Mangalore Tech Summit is part of 'Beyond Bangaluru' organized by the Department of IT-BT, Govt. of Karnataka.



Ms. KOENA

## Ms. KOENA MAJI & Ms. SURABHI ASWATH

Ms Koena Maji and Ms Surabhi Aswath won Second Prize under Separation Processes Category at National Level Paper Presentation contest SCHEMCON-2021 held during 22-23 October 2021 for their paper titled "Removal of Contaminants from Water using Magnetic Nanoparticles" under the guidance of Dr. Anindita Laha, Assistant Professor, Department of Chemical Engineering.



Ms. SURABHI



# Alumni Matters

## AIR VICE MARSHAL NIKHIL RAMESH CHITNIS

An alumnus of MIT (Mechanical Engineering batch of 1984) Air Vice Marshal Nikhil Ramesh Chitnis was recently conferred the Ati Vishisht Seva Medal by the President of India at the Rashtrapati Bhavan.



## KARTIKEYA CHAURASIA

Kartikeya Chaurasia, an NCC Cadet from the Civil Engineering Department, has joined the Indian Army through the Short Service Commission (Technical) (Men) entry. He has also been recommended for the Indian Airforce (Administration and Logistics).



## Dr. IBRAHIM KHALEEL

Dr. Ibrahim Khaleel, an alumnus of MIT (Aeronautical Engineering) has received an opportunity to work at the NASA research center as a post-doctoral fellow. He is sponsored by The Marie Curie Organization for the research activities he would undertake under the Full Camp project. He will work on improving the technical capacity for launching space projects.



## Mr. GAURAV AGARWAL

Mr. Gaurav Agarwal (1992-1996) an alumnus of MIT, Manipal (First batch Bio-Medical Engineering), MD, IITPL - Innovation Imaging Technologies Pvt. Ltd. and Director - Innvolution Healthcare, Bangalore has received two awards in 2021:

- Award for the most influential leader in MEDTECH by MedGate Today
- IGHM Custodians of Humanity Award for his immense dedication and contribution in the continued war against COVID 19



“

The optimist proclaims that we live in the best of all possible worlds; and the pessimist fears this is true.

Unknown

”

## Mr. VIVIAN GOMES

Mr. Vivian Gomes, an alumnus of Electrical and Electronics Engineering batch of 2001, was featured in Forbes magazine. He was recognized by White Page International for being among the top 50 marketing and communications leaders in India in 2021.



## Ms. SUNDARI PAI LUTS

Ms. Sundari Pai Luts an alumna of MIT (Printing & Media Technology) currently senior Manager, Global Supplier Diversity at Bristol Myers Squibb, has established multiple programs to help improve diversity across every level of the organization. She mentors and advocates for diverse suppliers, employees and community partners.



## Mr. VINOD EASWARAN

Mr. Vinod Easwaran, a student of Electronics and Communication Engineering (Batch 1990) was appointed as Managing Director & CEO, Jio Payments Bank Ltd.



## Ms. SAISRI AKONDI

Ms. Saisri Akondi, Founder and CEO of Axolotl Health, Hyderabad, a student of Biomedical Engineering (Batch 2014) won the Top Innovator Award in # Phicexpo at HITEXLTD, Hyderabad in November 2021.



## Mr. MADHAV NAIR

Mr. Madhav Nair, Country Head- India, Mashreq Bank, student of Electrical and Electronics Engineering (Batch of 1993) is elected as the Deputy Chairman of Indian Banks Association 2020-21.





*This section portrays a student perspective of campus life. Anu and Manu are two newbies exploring Manipal. Watch this space for more hilarity in the forthcoming issues!*



Some cause happiness wherever they go; others whenever they go.





# News Bites

## One Day Workshop on ART OF SUCCESSFUL GRANT WRITING

September 28, 2021: The office of Associate Director (R&C) organized a One Day Workshop on “Art of Successful Grant Writing”. The aim of the workshop was to motivate faculty members to engage in quality research through external funding, to provide insights on writing a successful research grant application and to provide hands-on training in writing a research grant proposal. All the departments nominated two to three faculty members and in total 40 faculty members attended the workshop. The workshop covered topics including an overview on various funding agencies along with experience sharing by faculty who have successfully received externally funded research projects. The workshop concluded with a panel discussion involving the speakers and participants.



## Workshop on Research Areas in Physics

November 16, 2021: A one-day workshop was organized by the Department of Physics on the topic of Research Areas in Physics. The workshop was conducted with the aim to deliver a brief introduction on some unconventional but highly active research areas in Physics by experts. In the talk, the speakers expounded on different research problems, challenges and the future scope of the domains.

## Biomedical Engineering & Instrumentation Workshop

October 30-31, 2021: A two-day workshop titled ‘Bioengineered 1.0’ was conducted in online mode. The topics focused on IoT applications in Healthcare and Fundamentals of ECG and EEG.

## Technical Talk on Overview of Graph Signal Processing

November 13, 2021: Department of Electronics and Communication Engineering organised a technical talk on Overview of Graph Signal Processing. Dr. Kaushani Mazumdar delivered the special talk.

## Webinar on Medical Device Development

September 11, 2021: IEE EMBS Student Chapter of Manipal, in association with Dept. of Biomedical Engineering, MIT and School of information Sciences, organised a webinar on Medical Device Development.

### **Ms. PREETI MOHANTY**

Ms. Preeti Mohanty, Assistant Professor, Dept. of Instrumentation and Control Engineering became the Winner of Women Singles in the MAHE Staff Badminton Tournament 2021 held at Mangalore Campus. Ms. Preethi also won the Mixed Doubles Runner Up Event.



**Ms. PREETI**

### **Mr. AKSHAY M J**

Mr. Akshay M J, Assistant Professor, Dept. of Information and Communication Technology bagged the Mixed Doubles Runner Up prize along with Ms. Preethi Mohanty in the MAHE Staff Badminton Tournament 2021 held at Mangalore Campus.



**Mr. AKSHAY**

### **Dr. PRATEEK JAIN**

Dr. Prateek Jain, Assistant Professor, Dept. of Electrical and Electronics Engineering became the Men Singles Winner in the MAHE Staff Badminton Tournament 2021 held at Mangalore Campus.



**Dr. PRATEEK**

### **Mr. ASHOK RAO**

Mr. Ashok Rao, Chief Security Officer, MIT bagged the Men Singles Runner Up prize in the above 45 years age group category in the MAHE Staff Badminton Tournament 2021 held at Mangalore Campus.



**Mr. ASHOK**

### **Dr. GURUMURTHY S C**

Dr. Gurumurthy S C, Assistant Professor- Selection Grade, Department of Physics, MIT won the First Prize in Inter-collegiate Chess tournament MAHE.



**Dr. GURUMURTHY**

### **Dr. SRIPATHI PUNCHITHAYA K**

Dr. Sripathi Punchithaya K, Professor, Department of Physics MIT secured third Prize in Inter-collegiate Chess tournament MAHE.



**Dr. SRIPATHI**

“

I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail.

Abraham Maslow

”



## GUEST LECTURE ON “A New in Election Method for Co-located Distributed System with Applications to Wearable Devices

September 29, 2021: Department of Biomedical Engineering organised a special Guest Lecture on “A New in Election Method for Co-located Distributed System with Applications to Wearable Devices”. Dr. S. Ravishankar, Founder & Director, Gray Cells Health Technologies, LP Bangalore delivered the special lecture.

## TECHNICAL TALK ON Applications and Challenges of Industrial IoT

October 23, 2021: Technical talk on Applications and Challenges of Industrial IOT, was organized by IEEE WiE, Mangalore Subsection in association with Department of ECE, MIT Manipal and IEEE Student Branch Manipal.

## BLOOD DONATION CAMPAIGN

31 October 2021: The Rotaract Club of Manipal(MIT) and Kasturba Medical College (a constituent hospital of MAHE) organized a blood donation campaign. The noble cause of blood donation was carried by a total of more than 160 people, and the process went on for nearly six and a half hours. The campaign had seven steps in total. With step one as registration, followed by counselling., a medical checkup was carried out to check the blood pressure and other vitals, after which the blood group was confirmed. The donor then registered and proceeded to donate their blood. Cdr. Dr. Anil Rana, Director MIT, too participated in the campaign along with other members of the institution.



# Appreciation of Service

MIT, Manipal recognizes the immense contribution of the following personalities who retired from service.



**Dr. Gicy M Koor**  
Professor  
Department of Civil Engineering

Joined : 11 June 2007  
End of PRE : 31 October 2021



**Ms. Shaila Bai**  
Senior Accountant  
Finance Dept

Joined : 22 Sept 1994  
Retired: 30 Sept 2021



**Mr. Kalu Naik K.**  
Senior General Duty Worker  
Computer Science Dept

Joined : 27 July 1989  
Retired: 30 Nov 2021



**Ms. Aruna**  
Senior Clerk  
Administrative Office

Joined : 23 Sept 1993  
Retired: 30 Sept 2021



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