

### **TECHTATVA 2023 - Catalysing Evolution**

Going by the tradition of Mighty Mighty MIT, bringing buzz to the campus from students across the country, showcasing their talents to the best in the established annual events of the institution Techtatva and Revels, this quarter too witnessed the extravaganza of the festive spirit. Techtatva 2023 was held on campus during 15-21 October with all its charm and vibrancy providing the students an experience to cherish for years to come. The range of competitions, the quality of participation and the diversity of events ensured that Techtatva 23 lived up to the expectations.



Continued on page 06

### Milan 2023: Fostering Industry-Academia Collaboration

Milan 2023, a Recruiter Meet was held at MIT Manipal during 03-04 November 2023 with overwhelming participation from 34 industries and over 60 officials as delegates. It marked a significant milestone in promoting collaboration between academia and industry helping in bridging the gap.

The event commenced with an inaugural session on 03 November featuring dignitaries from Manipal Academy of Higher Education (MAHE). Lt. Gen. (Dr.) M. D. Venkatesh, Vice-Chancellor of MAHE, delivered the keynote address emphasizing the pivotal role of industry-academia partnerships. He elaborated on how the MAHE ecosystem actively encourages and nurtures such collaborations, recognizing their significance in shaping education and innovation. Dr. P. Giridhar Kini, Registrar of MAHE, gave an overview of the MAHE Group and its endeavors. The Director, MIT, Cdr. (Dr.) Anil Rana, highlighted the remarkable accomplishments of MIT's students and faculty,



emphasizing the institution's ongoing collaborations across sectors to cultivate an environment of excellence and innovation. Dr Somashekara Bhat, Joint Director, MIT welcomed the guests and delegates to the event. The Associate Director of Placements, Dr. Sriram K.V. urged industry representatives for sustained collaboration, reaffirming the commitment to providing students with diverse career opportunities. Dr. Harish Kumar, Director of Corporate Relations MAHE, shed light on university commitment for a continued association of academia with the corporate world. The event included interactive sessions allowing industry

delegates to engage directly with students and faculty enabling an impactful dialogue between academia and industry representatives. The delegates also interacted with startup teams and students involved in major student projects at MIT, which served as a testimony to the institution's commitment to nurturing innovation and entrepreneurship.

### Institutions that transformed the educational landscape of the region

The Academy of General Education (AGE) founded in 1942, stands as a testament to the vision of its founder Dr. T M A Pai, Padmashri Awardee and the architect of modern Manipal. Colleges operating under AGE offer a diverse range of programs across arts, science, commerce, and professional courses. Institutions established by AGE are the preferred choice of the students for undergraduate studies as they have carved a brand for themselves. Students of these institutions have access to a vast array of resources, world-class faculty, and state-of-the-art facilities that enrich their learning experience. The alumni of these institutions are spread across the globe and have brought laurels through their achievement in diverse domains.

Here is a glimpse of the colleges under Academy of General Education.

### Mahatma Gandhi Memorial College, Udupi

Mahatma Gandhi Memorial College (MGM College), Udupi stands tall as a beacon of educational excellence in the heart of Udupi, Karnataka. Established in 1949 by the visionary Dr. T.M.A. Pai, the architect of modern Manipal, this institution has been a cornerstone of academic and infrastructural growth over the past seven decades. It is a premier Arts, Science, and Commerce College that has not only shaped the academic landscape but has also contributed significantly to the cultural history of coastal Karnataka. Run by the Academy of General Education, Manipal, MGM College is more than just a hub for academic pursuits. The institution places a strong emphasis on sports, cultural and other extracurricular activities, recognizing the holistic development of students. As it continues to evolve, Mahatma Gandhi Memorial College remains committed to providing quality education and opening new vistas in the educational landscape of Udupi.





### Bhuvanendra College, Karkala

Established in 1960, Bhuvanendra College in Karkala has been offering education in Arts, Science, and Commerce streams. The college is managed by Sri Bhuvanendra College Trust, nominated by the Academy of General Education, Manipal. Blessed by His Holiness Srimath Bhuvanendra Thirtha Swamiji of Kashi Mutt and visualized by Dr. T.M.A. Pai, the college stands amidst nature's greenery, providing an ideal setting for academic pursuits for the students of the region.





### Bhandarkars' Arts & Science College, Kundapura

Bhandarkars' Arts & Science College in Kundapura, supported by the Academy of General Education, Manipal, has been nurturing young minds since its inception in 1963. Established through a generous donation by Dr. A.S. Bhandarkar, then a practicing doctor in Bahrain, and with the collective efforts of Kundapura's leading citizens and Rotary Club, this institution has become one of the progressive colleges offering Arts and Science programs. It has played a pivotal role in fulfilling the educational needs of the region. The college continues to uphold its commitment to academic excellence, providing a conducive environment for students to thrive and achieve their potential.





### Vijaya College, Mulki

Vijaya College in Mulki, managed by the Academy of Higher Education, Manipal, has been empowering students since its establishment in 1963. Envisioned by local leaders and supported by Dr. T M A Pai, the college has grown into a renowned educational institution. Vijaya College has been catering to the needs of economically weaker sections of society and rural students.





### Sri Mahaveera College, Moodubidre

Founded in 1965 by the Academy of General Education, Manipal, and Sri Mahaveera College Trust, Sri Mahaveera College has been a beacon of hope for rural students seeking university education. Located in the serene surroundings of Moodubidre, the college was inaugurated in 1965, as a result of the visionary efforts of Dr. T.M.A. Pai and Late Sri S.N. Moodbidri. Offering programs in Arts, Commerce and Science, Sri Mahaveera College has consistently provided quality education over the years. The institution stands as a testament to the vision of its founders, fostering higher education in a rural atmosphere.





### Sri J.C.B.M. College, Sringeri

Founded jointly by the Academy of General Education, Manipal, and Bharathi Vidya Samsthe, Sringeri, Sri J.C.B.M. College is an ode to higher education in the remote area of Sringeri. Named after Sri Jagadguru Chandrashekhara Bharathi Mahaswamiji, the 34<sup>th</sup> Pontiff in the line of succession of Sri Sharada Peetha established by Sri Adi Shankaracharya the college has been providing quality education over the years. Standing on the banks of the sacred river Tunga in the midst of nature's bounty, Sri J.C.B.M. College has been a nurturing ground for aspiring minds in the region.





These educational institutions, each with its unique history and commitment to excellence, continue to shape the educational landscape of the region, fostering knowledge, skills, and holistic development among students. These educational institutions have played a pivotal role in making the coastal Karnataka a synonym for quality education and prosperity. Of late, Manipal Academy of General Education (MAHE), a flagship institution founded by Dr. T M A Pai, extended educational scholarship for the students studied in above institutions governed by AGE under a special scheme called Scholarship for Academy of General Education Students (SAGES). In addition, the meritorious students of these institutions are given a special provision in admission to the professional courses offered by MAHE. Through SAGES, a substantial number of students have been realising their dreams of acquiring professional education at MAHE, Manipal.

### **Polytechnic Colleges**

In addition to the above colleges, two other significant institutions that form a part of the initiatives of Academy of General Education and vision of Dr. T M A Pai are T M A Pai Polytechnic, Manipal and SNM Polytechnic, Mudubidri. The meritorious students of these colleges are offered scholarship benefits by MAHE to join engineering programs.





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### **CONTENTS**

| Events at MIT         | )6 |
|-----------------------|----|
| Faculty Achievements2 | 27 |
| Research Highlights3  | 33 |
| Students in Action3   | 37 |
| Alumni Matters        | 12 |

# Editor's Musings

Dear Reader,

Greetings from MIT, MAHE, Manipal...!

As we bid farewell to yet another calendar year, it is with great pleasure that we bring you the latest edition of "FOCUS", your gateway to the happenings at MIT Manipal. The last quarter has been nothing short of spectacular, marked by a series of events that have not only enriched our academic environment but have also fostered a sense of unity and pride among us.

One of the standout events of the quarter was the visit of our Distinguished Alumnus Shri Rajeev Chandrashekar, Honourable Minister of State for Electronics & Information Technology, and Minister of State for Skill Development & Entrepreneurship, Govt. of India on 17 October 2023 as the Chief Guest for the inauguration of TechTatva 2023. His insightful talk left an indelible mark on faculty members and students. Shri Chandrashekar's wisdom and experience resonated with our academic community, leaving the audience inspired and motivated to strive for excellence.

Tech-Tatva 2023, the much-anticipated annual techno-cultural fest, took center-stage with its array of special events, during 17-21 October 2023. It showcased the fusion of technology and creativity. Innovative competitions, insightful workshops, specially invited talks from eminent personalities and many more activities proved once again why Tech-Tatva is a highlight on our academic calendar.

MAHE Manipal successfully celebrated the 31st Convocation on November 18, 19, 25, and 26, 2023. During the momentous occasion, as many as 2524 UG, PG students, and PhD scholars from MIT, Manipal received their degree. The teachers, parents and peers of the graduating students from the audience gallery witnessed a new generation of professionals step into the world, equipped with knowledge and determination to make a meaningful impact on the society.

Milan 2023 Recruiter Meet, held at MIT Manipal during 03-04 November 2023, represented a noteworthy achievement in cultivating collaboration between academia and industry. The event witnessed participation of around 34 companies and a delegation comprising 60 officials.

The Gold and Silver reunion of our alumni held during 19 and 23 December 2023 respectively, was a heart-warming experience. Furthermore, reunion of Postgraduate Alumni was held on 15 December 2023. It was inspiring to listen to their success stories and learn from their journeys since leaving the campus. The bonds formed during their time here continue to thrive, creating a strong network of MIT Manipal professionals worldwide.

The spirit of innovation was alive and thriving during the Smart India Hackathon 2023 held during 19-23 December 2023, where bright minds (28 teams embarking on a coding journey that promised more excitement than debugging in its 36-hour duration) collaborated to solve real-world problems. The event showcased the ingenuity of our students and their ability to think critically in a rapidly evolving technological landscape.

The relaunch of the Vrindavan Garden near the Venugopalkrishna Temple at the MIT Campus was held on 18 December 2023. During the event, Emeritus Card for the retired faculty members was launched with its exclusive privileges. It symbolizes our commitment to recognizing and appreciating the contributions of our esteemed faculty and staff.

As we embrace the challenges and opportunities that the future holds, let us carry the spirit of camaraderie and excellence that define MIT Manipal. Together, we continue to build a community that not only excels in academics but also nurtures the holistic development of individuals.

Here is to a quarter filled with achievements, memories, and the promise of a brighter tomorrow.

Happy Reading...!

### **TECHTATVA 2023- Catalyzing Evolution**

TechTatva'23 with the theme "Catalyzing Evolution" was inaugurated by Mr. Rajeev Chandrashekhar, the Honourable Minister of State for Electronics and Information Technology and Minister of State for Skill Development and Entrepreneurship. Rajeev Chandrashekar, being a distinguished alumnus of MIT, Manipal added a special significance to the ceremony.



inauguration ceremony also witnessed presence of notable dignitaries from MAHE including Dr. H.S. Ballal, Pro-Chancellor, Lt. Gen. (Dr.) M.D. Venkatesh, Vice Chancellor, Dr. Narayana Sabhahit, Pro-Vice Chancellor (Science and Technology), Dr. P. Giridhar Kini, Registrar, Dr. Vinod Thomas, Registrar Evaluation and other esteemed guests. During this event, Mr. Chandrashekhar shared invaluable insights on entrepreneurship, governance, and technological advancements. His eloquent recollection of his college days at MIT created a nostalgic atmosphere that deeply resonated with the audience. His words bridged the gap between past experiences and current endeavors, serving as a wellspring of inspiration for the younger generation, motivating them to aspire for ambitious goals. Mr. Chandrashekhar, in addition to his inaugural address, participated in a dialogue with the student leaders on the stage. As a token of appreciation, the minister was felicitated by the leaders of MAHE and his alma mater on this occasion.



The central theme of "Catalyzing Evolution" encapsulated the collective journey of adapting to rapid technological advancements, emphasizing continuous improvement, groundbreaking innovation, and the convergence of various fields. Featuring a diverse range of workshops exploring leading-edge technologies, the event provided hands-on learning experiences. Experts and leaders from various organisations graced the occasion, offering insightful talks that shed light on the constantly evolving engineering and technology landscape.

During a dedicated segment, TechTatva 23 deeply examined the practical applications of catalyzing evolution in alignment with the 17 Sustainable Development Goals. The festival aimed to examine the delicate equilibrium between innovation and responsible implementation, acknowledging the inherent interdependence between technology and the environment. This equilibrium, prominently highlighted throughout TechTatva 23, proved pivotal in harnessing the swift pace of technological progress while addressing the associated challenges.





### The Manipal Conclave

The Manipal Conclave 2023 stood as the vibrant centrepiece of Tech Tatva 2023, featuring globally renowned personalities from diverse industries. These individuals not only shared their rich experiences but actively engaged in enlightening discussions, imparting invaluable insights to an eager audience. This year, the Conclave Line-up included: Mr. Chetan Bhagat, Mr. J Senthil Rangarajan, Mr. Rahul Dua and Miss Vedika Bhaia.

Mr. Chetan Bhagat's talk at the Conclave resembled the pages of an engaging self-help book "11 rules for life"authored by him. From his roles as a writer and judge on a dance show to embracing YouTube at 47, Mr. Chetan Bhagat has cemented himself as a seasoned player in the realm of success and his interaction with MIT students exemplified the persona that he carries.



Mr. J Senthil Rangarajan, representing the Electronics and Radar Development Establishment, emphasized the pivotal significance of radars in bolstering defence and security measures. Radars developed by LRDE play a vital role by adeptly scanning through air, land, and ocean, efficiently identifying and alerting about potential threats. Mr. Rangarajan elucidated on phased array radars, underscoring their critical importance in both defensive and offensive strategies.



Mr. Rahul Dua's address underscored the significance of having open minds and hearts, leveraging humor as a means to dismantle barriers and forge connections with diverse audiences. Drawing from his experiences on *Comicstaan*, he advocated for prioritizing experiences over achievements and highlighted the essential need for "fun" in life. Rahul Dua's perspective infused the conclave with liveliness and motivation, establishing a spirited tone for Techtatva's proceedings.



Miss Vedika Bhaia, a digital marketing enthusiast and budding entrepreneur, represented the success story of the contemporary online influence and data sharing. As a youthful entrepreneur, she crafted her triumph by delving into her enthusiasm for marketing. Initiated by a viral post on LinkedIn, she expanded her aspirations through networking and a committed drive to enhance her abilities.



Manipal Hackathon

In a world where enthusiasts embraced challenges eagerly, M# 2023 witnessed 28 teams embarking on a coding journey that promised more excitement than debugging in its 36-hour hackathon. The usual hum of cooling fans faded against the palpable heartbeat of the participants, keeping everyone on the edge of their seats in anticipation.



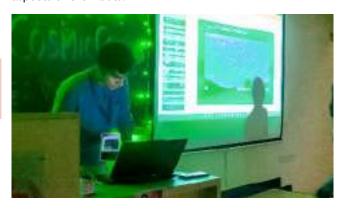
The only 'glitch' encountered during this intense coding marathon was the infectious laughter echoing through the venue, as participants had a byte-sized load of fun!





### **Technical Events**

TechTatva'23 presented a diverse array of captivating events and workshops, uniting students from various backgrounds in an exhilarating exploration of technology and innovation. Medtech Mayhem seamlessly blended microscopic exploration with courtroom debates, challenging participants to uncover nano-solutions to microscopic inquiries. This event provided a dynamic platform for intellectual engagement and legal thrillers. Robowars transformed a concrete ring into an arena where mechanical titans clashed fiercely with copper wires and nails. Teams, each exhibiting unwavering determination, engaged in a gripping battle, showcasing their robots' power and agility. Monopoly elevated the classic board game into a strategic challenge of product launches and market domination. Participants adorned themselves with top hats and monocles, channeling their inner capitalists in pursuit of success. Offroad Mayhem allowed participants to construct their RC Bots equipped with four wheels and basic mechanical components, manoeuvring through a complex series of obstacle tracks. This event evaluated participants' ingenuity through various checkpoints, testing different aspects of their bots.



Tesseract captivated participants with mind-twisting puzzles and an adventurous quest for a concealed key, drawing inspiration from the Marvel universe. This cosmic treasure hunt added an element of excitement and exploration to the event. Innoframe amplified excitement as teams delved into designing and implementing their versions of a chassis, revving up the challenge with no margin for error. Their designs underwent rigorous evaluation when the checkered flag dropped. Foxhunt immersed participants in the realm of electronics, offering a competition that involved bits and bytes themed around Chandrayaan. Combining quizzes, circuit designs, Arduinos, and treasure hunts, the event provided a comprehensive exploration of electronic knowledge. Vedanth 13.0 brought students together to craft androids with an affinity for apples, demonstrating their creativity and technical proficiency. Participants collaborated to conquer challenges and reprogram their androids for unique tasks. Quandary presented a corporate puzzle where major companies grappled with issues like plastic packaging. The event gathered industry giants for a debate, navigating the complexities of environmental responsibility and societal sensibilities.



Spanning categories like Acumen, Aeroverse, Arcus, Alacrity, Bizcomm, Code Red, Cosmicon, Epsilon, Escape Velocity, Fossify, Investigar, Kraftwagen, Mechanize, MIT-GPT, Mechatron, Robowars, Synapse, and Vedanth, TechTatva'23 showcased participants' prowess in intellectual debates, coding challenges, robotics battles, and innovative problemsolving.



Overall, TechTatva 23 celebrated the fusion of technology and culture through entertaining events showcasing the artistic side of technology enthusiasts. From the Manipal hackathon to robowars, the festival offered a stage for participants to display their abilities and resourcefulness. Beyond fostering academic growth, the festival cultivated a sense of community and camaraderie among participants.



### Smart India Hackathon (Hardware Edition) Grand Finale - 2023 Hosted at MIT, MAHE, Manipal

The prestigious Smart India Hackathon (SIH) Hardware Edition 2023 Grand Finale took place at MIT, Manipal during 19 - 23 December 2023. The All India Council for Technical Education (AICTE), New Delhi, selected MIT as the Nodal Centre for hosting this national-level hackathon in self-finance mode. The event is an initiative of the Ministry of Education's Innovation Cell.



The inauguration of the event was held on 19 December 2023. The Vice Chancellor Lt. Gen. (Dr). M. D. Venkatesh as the Chief Guest inaugurated the grand finale of event SIH 2023. Cdr. (Dr.) Anil Rana, Director, MIT, Dr. Somashekara Bhat, Joint Director, MIT and AICTE-appointed nodal center coordinators Mr. Kamal Singh and Ms. Poonam graced the occasion.

Vice Chancellor Lt. Gen. (Dr.) M.D. Venkatesh highlighted sustainable development goals, encouraged technology licensing with the Medical Device Hub-Manipal, and expressed gratitude for selecting MIT as the Nodal Centre. While Cdr. (Dr.) Anil Rana shared his Hackathon experience, Dr. Somashekara Bhat spoke about MAHE's legacy. The SPOC of SIH 2023, Dr. Cyril Joseph, Assistant Professor - Selection Grade, Department of Instrumentation & Control Engineering delivered the vote of thanks.



The hackathon attracted participation from 22 institutes with 179 participants, addressing problem statements from the Governments of Gujarat and Kerala, as well as the Ministry of Ayush. Participants tackled challenges from diverse organizations, including small-scale wind energy, smart toilet development, patient care systems in the health sector, and automatic drug dispensers. SIH-2023 featured a total of 234 problem statements, comprising 179 software challenges and 55 hardware challenges, garnering support from Central Ministries, State Ministries, Government organizations, and Industry partners. Teams comprising 6 members in each team with at least 1 female participant and guided by 2 mentors, showcased their innovative solutions.

The following teams were declared as winners by the designated jury for each problem statement given by the State government and Central Ministry.

- Team NIET Hacktastic six from Nehru Institute of Engineering & Technology, Coimbatore, TN - SIH 1503 (Ministry of Ayush)
- Team Hexa Titans from Vivekanandha College of Engineering for Women (Autonomous), Tiruchengod, TN
   SIH 1327 (Government of Kerala)
- Team Stimutech from KCG College of Technology, Chennai, TN - SIH 1361 (Government of Gujarat)
- Team STERI-SQUAD from Adamas University, Kolkata -SIH 1323 (Government of Kerala)



The concluding ceremony of SIH -2023 Grand Finale was held on 23 December 2023 with Dr. Vinod V. Thomas, Registrar (Evaluation), MAHE as the chief guest. In his valedictory address, Dr Vinod Thomas emphasized the importance of collaboration in engineering for creative problem solving and innovation. Cdr. (Dr.) Anil Rana, Director, MIT congratulated participants on their achievements and perseverance. Mr. Kamal Singh from AICTE appreciated the effective organisation of the event by the host and urged the participants to utilize grants and scholarships provided by AICTE to further their pursuits.

Participants, Jury and mentors expressed their heartfelt gratitude towards the conduction of SIH event and all the facilities provided by MIT, Manipal such as accommodation, food, medicine, laboratories and equipment.

Dr. Sucheta Kolekar, Assistant Director (Innovation & Incubation) & Nodal Center head MIT and Dr. Cyril Joseph, SPOC, SIH 2023 acknowledged the support of jury, participants and the concerned organisations for the overall success of SIH -2023.



### Seminar on Placements and Life in Manipal

A seminar titled "Placements and Life in Manipal" was organized at the Department of Information and Communication Technology, MIT, Manipal. The session was facilitated by Mr. Ram Rati, Alumnus, (Batch of 2021, CCE), Software Engineer at LinkedIn. The seminar provided detailed insights into the placement processes at Microsoft and LinkedIn. Dr. Smitha N Pai, HoD, Department of Information and Communication Technology provided her perceptions and appreciation on the contents of the session. Mr. Chetan Sharma, Assistant Professor-Senior Scale, Department of Information and Communication Technology coordinated the event.





# Cryptonite's annual celebration held in ICT Department

Cryptonite's annual celebration of Cybersecurity Awareness Month was held at the Dept. of Information Technology and Communication, MIT in the month of October 2023. This was held in collaboration with the MAHE-ISAC Centre of Excellence for Cybersecurity. The event involved a lineup of activities designed to engage individuals from diverse backgrounds in digital security. The session on cyber security was facilitated by an array of experts from industry, such as Meetali Sharma, Director - Risk, Compliance, and IT at SDG Corporation, Kaustubh Mangalwedhekar, Security Researcher at Microsoft, Sohom Datta, Security Researcher at North Carolina University, and Aman Priyanshu, Masters in Privacy Engineering from Carnegie Mellon University and Cynthia Maria, former intern at McKinsey & Company from

Microsoft. In the Poster Making Competition, participants were intensely engaged with cybersecurity education and creativity.

Adding an element of excitement, the Cryptober Scavenger Hunt invited participants on a captivating digital journey filled with cybersecurity puzzles and challenges. Cdr. (Dr.) Anil Rana, Director, MIT and Dr. Somashekara Bhat, Joint Director, MIT graced the inauguration of the event. The event drew together a diverse array of attendees from various disciplines.



Further as a part of the Cryptonite event, Prof. Nisha P Shetty, Assistant Professor -Senior Scale, Department of Information and Communication Technology, MIT Manipal delivered a talk on the crucial role of cybersecurity in daily lives.





Kunyalik Garg, the team leader of Cryptonite, highlighted the value of Scavenger Hunt, an entry-level Capture the Flag (CTF) event as he introduced fellow students to the thrilling world of CTF events and their significance in the cybersecurity realm.

# Guest Talk on Organizing the Thoughts and Results Towards a Possible Journal Publication

Dr. Chandrakanta Kumar, Vice Chair of IEEE Bangalore Society, delivered a guest talk titled "Organizing Thoughts and Results Towards a Possible Journal Publication:



The Life Cycle" on 23 November 2023. In his talk, Dr. Kumar covered the key aspects involved in preparing technical articles for journal publication. He highlighted key issues related to research, including domain selection, considerations regarding simulation and measurement, and the importance of focusing on fundamental concepts

before commencing the writing process. Dr. Kumar stressed the significance of efficiently organizing thoughts and results for a successful journal publication, advocating for meticulous documentation of methods and data collection, synthesizing key findings, and organizing them effectively. Dr. Poornalatha G, Additional Professor, Department of Information and Communication Technology introduced the guest, and Prof. Chethan Sharma, Assistant Professor - Senior Scale, Department of Information and Communication Technology delivered the vote of thanks.

### Guest Talk on 'Life Ahead...'

A guest lecture titled "Life Ahead" was delivered by Rishav Gupta, a senior iOS developer at Gojek and an alumnus of Department of Information and Communication Technology (CCE, 2019 Batch) on 07 November 2023. The lecture highlighted the opportunities and challenges in frontend development and generated discussions on mobile application development frameworks.



### A Guest Talk on Insights on Corporate Life

A guest talk titled "Insight on Corporate Life" was organized by the Department of Information and Communication Technology on 11 October 2023. Ms. Varsha, an alumnus of the department (CCE, 2022 Batch) delivered the talk that highlighted the distinctions



between academic settings and the corporate environment. Additionally, Varsha shared with the students her experience of working in the corporate field, offered advice on navigating company interviews, and outlined various criteria for securing placements in companies.

### A Special talk on Cloud Computing

The Department of Information and Communication Technology organized a special talk titled "Cloud Computing" on 08 November 2023. Mr. Ritesh Mittal, a Solution Architect at IBM, delivered a lecture on cloud computing. Dr. Manjula Shenoy, a Professor in the Department of I&CT, coordinated the event.

### Hands-On Workshop on Empowering Students in Electrical Characterization

The Department of Physics at MIT organised a hands-on workshop on "Electrical Characterization using Keithley Source-Measure Units" on 30 November 2023 in collaboration with Tektronix Bengaluru and Convergent Technologies India Private Ltd. The event drew active participation from students of Physics and various other departments from MIT. The workshop featured insightful discussions led by Mr. Navaneet Raghunath, Application Engineer from Tektronix, who covered diverse techniques for low and high resistance measurements, equipment configurations, and general practices tailored to specific applications. Additionally, Product Specialist Mr. Gururaj from Convergent Technologies India presented an array of models offered by Keithley/ Tektronix for these purposes.



During the second session, Mr. Navaneet Raghunath provided hands-on training to registered students using user samples. With the equipment available at the Central Characterization Lab in the Department of Physics, such as Dual-Channel Sourcemeters, Hall Effect Cards, and Nanovoltmeters, engineer from Tektronix demonstrated simple troubleshooting techniques. The participants interacted with the speaker and got to know the intricacies of electrical characterization for various materials and devices besides getting their doubts clarified.





### 31st Convocation of MAHE -November 2023

The 31st Convocation ceremony of Manipal Academy of Higher Education (MAHE), Manipal, took place at KMC Greens, Manipal, spanning four days from 18 to 19 November, and 25 to 26 November 2023.

During the event, Lt. Gen. (Dr.) Narendra Kotwal, SM, VSM, Director, and Commandant, Armed Forces Medical College (AFMC), Pune, was the Chief Guest on Day 1, while Dr. Rajeev Singh Raghuvanshi, Drug Controller General of India, graced the occasion as the Chief Guest on Day 2. On Day 3, Prof. (Dr.) T G Sitharam, Chairman, AICTE, New Delhi, was kind enough to be the Chief Guest, and Mr. Vinod Easwaran, Managing Director and Chief Executive Officer, Jio Payments Bank Mumbai, took on the role of Chief Guest on Day 4.

From MIT Manipal a total of 2524 candidates received the degree certificates which included, 1810 graduates, 499 post graduates and 215 research scholars.

| Program            | Received in<br>Convocation | Received in<br>Absentia | Total |
|--------------------|----------------------------|-------------------------|-------|
| UG<br>(B.Tech)     | 1296                       | 514                     | 1810  |
| PG(M.<br>Tech/MCA) | 353                        | 68                      | 421   |
| PG (M.Sc)          | 73                         | 5                       | 78    |
| Ph.D               | 134                        | 81                      | 215   |
| Total              | 1856                       | 668                     | 2524  |

























### **Professor Rajaram Oration 2023**

The Department of Computer Science and Engineering at MIT Manipal organized the *Professor Rajaram Oration 2023*, featuring Prof. Ajoy Kumar Ray Padmashri Awardee as the esteemed speaker.



Prof. A K Ray's lecture, titled "The story of a great journey in the realm of Machine Learning (1942 - 2023)," focused on various aspects of Artificial Intelligence (AI) with a special emphasis on applications related to pattern recognition. He delved into the history of AI, discussing feature extraction, classification, explainable AI, and Deep Tech AI, particularly in the context of medical imaging. Prof. A K Ray showcased real-world problems in medical imaging and text data, highlighting their relevance in project management and research. The audience, involving individuals from various engineering branches, gained valuable insights from his enlightening talk.

In his second lecture, titled "Where are we heading for? A critical analysis of New Education Policy," Prof. A K Ray provided a comprehensive analysis of the New Education Policy (NEP). He discussed multiple entry and exit policies within NEP and emphasized how the policy could contribute to improving the human development index of the country. The talks were an insightful blend of education and technology, leaving the audience enriched.



Earlier, the event commenced with a welcome address by Dr. Somashekara Bhat, Joint Director, MIT Manipal. Dr. Vinod V Thomas, Registrar Evaluation, MAHE Manipal, graced the occasion as the Guest of Honour and shared insights about Prof. S. Rajaram.

Cdr. (Dr.) Anil Rana, Director of MIT Manipal, delivered the presidential address, acknowledging the efforts of the Computer Science and Engineering Department. Dr. Krishnamoorthi Makkithaya HoD, CSE, extended the vote of thanks, while Deepthi S, Dr. Srikanth Prabhu, and Dr. Kishore B Faculty of CSE Department coordinated the event.

# 2023 International Conference on Recent Advances in Information Technology for Sustainable Development (ICRAIS 2023)

The 2023 International Conference on Recent Advances in Information Technology for Sustainable Development (ICRAIS 2023) held MIT, Manipal, during 06-07 November 2023 organized by the Department of Information and Communication Technology marked a significant global gathering. The conference aimed to provide innovative, self-reliant solutions for socially relevant and economically impactful strategies, focusing on the well-being of humanity and sustainable development. With 243 papers received across four tracks-soft computing, distributed computing, information security, and communication—the event served as a platform for researchers. The inaugural session featured Dr. Gang Li, Professor from Deakin University, Australia, as the Chief Guest, delivering a keynote talk on the "GANBLR Framework for Tabular Data Generation," stressing the importance of technology in enhancing sustainability.



The conference included four tracks with eight sessions of parallel paper presentations, covering diverse aspects of information technology and sustainable development. A total of 73 papers were selected for oral presentation. The conference witnessed insightful invited talks by esteemed speakers, including Dr.G K Patra, Chief Scientist, CSIR, Bangalore; Dr. Dilip Kumar Dalei, Scientist, DRDO Bangalore; Dr. Venugopal K R, Former VC, Bangalore University & IEEE Fellow; Dr. Jayprakash Thakur, Principal Engineer, Intel technologies Bangalore; and Dr. Vimal Bhatia, Professor, IIT Indore, providing a comprehensive perspective on diverse aspects of technology and sustainable development.

The event garnered sponsorship from prominent organizations such as DRDO, Canara Bank MIT Campus branch, SBI Manipal branch, and Instrumus Technologies Pvt. Ltd., along with technical support from IEEE Bangalore Section & IEEE Mangalore Subsection.

# 11th National Conference on Condensed Matter Physics and Applications (CMPA- 2023)

11th National Conference on Condensed Matter Physics and Applications (CMPA-2023) was held during 14-15 December 2023. Dr. Sudhindra Rayaprol, Scientist-G at UGC-DAE Consortium for Scientific, Bhabha Atomic Research Centre, Mumbai, inaugurated the event, setting the stage for a series of captivating talks and discussions. The event was graced by Dr. Narayana Sabhahit, Pro Vice Chancellor (Technology and Science), MAHE, Manipal, Sri M G Pandit from Canara Bank, Manipal, and Dr. Somashekara Bhat, Joint Director, MIT



During the inaugural function, Chief Guest Dr. Narayana Sabhahit emphasized the pivotal role of Physics in technical and basic science education, advocating for interdisciplinary research. Dr. Sudhindra Rayaprol explored applied research, shedding light on its role in finding practical solutions to existing problems. Dr. Somashekara Bhat, Joint Director, MIT, emphasized on the relevance of Condensed Matter Physics in both engineering and basic education. The conference featured three insightful invited talks, covering topics such as "Neutron Diffraction," "Waste to Wealth" in nanotechnology, and the design of affordable electrochromic smart windows.

The second day featured talks on entrepreneurship, advances in phosphors for photonic applications, development of thermoelectric generators, and intelligent packaging solutions in food and pharma industries.



The valedictory function on the second day featured Dr. Harish Kumar S, Director-Corporate Relations, MAHE, as Chief Guest. Dr. Ashok Rao, Associate Director - Research and Consultancy at MIT, Manipal, presided over the ceremony, and Dr. Sudha D Kamath, Convener of CMPA-2023, expressed gratitude to all participants for their enriching contributions. Dr. Gurumurthy S C, Co-Convener of CMPA 2023, delivered the vote of thanks.

### Manipal Institute of Technology Achieves National Recognition with Selection for '100 5G Labs Initiative' by Department of Telecommunications (DoT), Government of India

Manipal Institute of Technology (MIT), Manipal has been chosen by the Department of Telecommunications (DoT), Government of India, as one of the proud recipients of the prestigious "100 5G labs Initiative." The announcement was made during a virtual ceremony hosted by the Honourable Prime Minister Shri Narendra Modi at the Indian Mobile Congress (IMC-23), Pragati Maidan, New Delhi, on October 27, 2023.

This visionary program, a collaboration between Department of Telecommunications (DoT) and the Cellular Operators Association of India (COAI), saw the inauguration of 100 5G labs across various prestigious institutions in India. IMC-23, recognized as Asia's leading technology exposition, provided a global stage for this monumental event, bringing together thought leaders and innovators to showcase the latest in digital technology.



This recognition has positioned MIT, Manipal at the forefront of India's digital revolution in telecommunications. The 5G lab, comprising state-of-the-art equipment like 5G Stand Alone infrastructure, 5G SIMs, Dongles, IoT Gateway, Router, and an Application Server, will empower MIT Manipal to contribute significantly to the nation's 5G readiness. The ownership of these lab assets will remain with MIT Manipal, both during and after the completion of the project, ensuring long-term benefits and sustained innovation. This initiative marks a crucial step forward in India's journey towards embracing 5G technology, unlocking new horizons of innovation and growth across various sectors.

# International Conference on New Horizons in Civil Engineering (NHCE 2023)

Department of Civil Engineering organised International Conference on New Horizons in Civil Engineering (NHCE 2023) during 13- 14 October 2023, at MIT, Manipal. Prof. Wim Van den Bergh from Antwerp, Belgium inaugurated the conference. Cdr. (Dr.) Anil Rana, Director of MIT, Manipal presided over the inaugural event. Prof. Purushotham G Sarvade, Head of the Department of Civil Engineering, welcomed the participants to the conference.

The conference comprised 62 technical papers presented across 7 sessions that revolved around diverse themes. Participants included representatives from the University of Antwerp, Belgium and various universities of Karnataka, Telangana, West Bengal, Maharashtra, and Odisha. In addition to paper presentations, five invited talks on different topics in the field of Civil Engineering were organized during the conference.



The valedictory program was attended by Dr. Somashekara Bhat, Joint Director of MIT, Manipal. Dr. G.S. Dwarakish, a Professor from the Department of Water Resource and Ocean Engineering at NITK, Surathkal, Dr. Amaranath Reddy, a Professor from the Department of Civil Engineering at IIT Kharagpur, faculty members of MIT and participants.

The conference received sponsorship from various representatives in the field including AIMIL, APAAVANI, Premier Builders, and practicing civil engineers associated with the Association of Consulting Civil Engineers of D.K. and Udupi. Dr. Jagadeesha Pai B Associate Professor and Dr. Sandesh Upadhyaya, Assistant Professor-Senior Scale coordinated the conference.



### 2<sup>nd</sup> International Conference on Robotics, Control, Automation and Artificial Intelligence (RCAAI 2023)

The 2<sup>nd</sup> International Conference on Robotics, Control, Automation, and Artificial Intelligence (RCAAI 2023) was hosted by the Department of Mechatronics at Manipal Institute of Technology, Manipal, in association with the National Institute of Technology, Surathkal during 12- 14 October 2023.

The event was inaugurated by Mr. Subramanya Udupa, Scientist, ISRO, Bangalore. Cdr. (Dr.) Anil Rana, Director, MIT addressed the participants during the inauguration and highlighted the significance of conferences in keeping abreast of the development in the domain. Dr. D. V. Kamath, Professor and HoD of Mechatronics, MIT Manipal welcomed the gathering and gave a brief overview of the conference series.

Mr. Subramanya Udupa set the tone for the conference with an insightful opening keynote on the integration of robotics, control, automation, and artificial intelligence in space applications, including Chandrayana 1, 2, 3. After the first key note, Mr. Nishith Dulet Head, Sales Product Management, Bosch Rexroth discussed emerging trends in robotic automation, while Dr. Ravi Prakash Joshi ,Lead at Finger Vision Inc., Japan presented research on Al-enabled robotics for elderly care. Sushil S. Mane delved into the convergence of simulation and Al in mechatronic system design, showcasing a digital twin setup for automation—an emerging trend in the sector.



The second day commenced with a keynote address from Prof. Bishakh Bhattacharya of IIT Kanpur, who spoke on "Cognitive Robotics". Further, the day featured multiple tracks, including robotics and intelligent systems, industrial automation, IOT and cyber security, circuits, sensors, and biomedical systems, AI and its applications, and optimization techniques for industrial applications. Each track had two session chairs, comprising both internal and external experts. The final day featured a hands-on workshop on "Matlab for Robotics and Control" by Dr. Souvick Chatterjee (Senior Team Lead-Academic Partner and Customer Success, MATHWORKS) and Dr. Spandana, Senior Customer Success Engineer, MathWorks, that emphasized on the practical applications of the concepts discussed.

The International Society of Automation (ISA) supported the conference as a publicity partner, with sponsorship from Bosch Rexroth, IEEE GRSS, and Mathworks contributing to the seamless execution of the 3-day event. A total of 170 papers were presented during the conference. The event was coordinated by Dr. Asha C S, Dr. Pooja Nag, Dr. Shilpa Suresh, Dr. Raghavendra Rao P and Dr. Jeane Marina D'souza, faculty members from the department of mechatronics.



# National Level Conference on Advanced Materials for Environmental Sustainability-AMES-2023

The Department of Chemical Engineering at Manipal Institute of Technology, Manipal, Karnataka organized a Two-day National Level Conference on "Advanced Materials for Environmental Sustainability-AMES-2023" during 12-13 October 2023.

Professor N.N. Sharma, the Pro-Vice-Chancellor Strategy and Planning of MAHE inaugurated the conference on 12 October 2023. The inaugural event was graced by Guests of Honour Dr. Nitin K Labhsetwar, Chief Scientist at the National Environmental Engineering Research Institute (NEERI) Nagpur, and Mr. H.C. Sathyanarayana, GGM Technical Services at MRPL Mangalore. Professor Somashekara Bhat, Joint Director of MIT Manipal, presided over the function. Dr Balakrishna Prabhu, the Organizing Secretary and Head of the Chemical Engineering Department welcomed the gathering and Associate Professor Dr. Harshini Dasari, the Conference Convener proposed the vote of thanks. During the event, the speakers emphasized the pivotal role of materials/nanomaterials, energy, and biofuels in environmental sustainability.



On the first day of the conference, Dr. Nithin Labhsetwar, Chief Scientist at NEERI, delivered the keynote address on the topic 'Low-cost materials for cleaner energy and environmental applications.' Dr. Labhsetwar emphasized the crucial role of materials in the context of the environment and sustainability. Mr. Vishnu Sharma, Director of Aapaavani Environmental Solutions, Mangalore, delivered

the second guest talk titled "Exploring Nanotechnology for Environmental Sustainability." Mr. Sharma emphasized the significance of recycling waste plastics and converting them into useful products.



Dr. Ganapathi Ayappa delivered a lecture titled 'Developing Adsorbed Natural Gas Solutions for Transport: From Molecules to Vehicle' on 13 October 2023. This lecture was dedicated to the memory of Prof. P. G. Krishnamoorthy, who was a renowned professor in the Chemical Engineering Department. Mr T S Vishwanathan, Technical facilitator, lon Exchange Ltd gave lecture on the topic "Membranes in water and wastewater treatment" emphasizing the role of membrane technology in water and wastewater treatment.



As a part of the event AMES-2023, technical paper presentations, poster presentations and invited guest talks were organized. More than thirty participants from Manipal and other locations presented their technical papers and posters. The valedictory function featured Dr. K. Ganapathy Ayappa, Professor in the Department of Chemical Engineering at IISC, Bangalore as chief guest, and Mr. Harihara J, JGM-EHS and QC at MCF Ltd. Mangalore as the Guest of Honour. Cdr. (Dr.) Anil Rana, Director, MIT presided over the function. The conference was sponsored by ONGC-MRPL Ltd, BASF Ltd, and MCF Ltd. Mangaluru.

# Control Instrumentation Systems Conference (CISCON) 2023

The Control Instrumentation Systems Conference (CISCON) 2023, an annual event organized by the Department of Instrumentation and Control Engineering at MIT Manipal, commenced on 06 October 2023.

The conference, supported by grants from DRDO, CSIR (Government of India), and ARK Infosystems Chennai, was inaugurated by Mr. Satyanarayana H C, Group General Manager, Technical, Mangalore Refinery and Petrochemicals Limited. In his inaugural address, Mr. Satyanarayana H C emphasized the significance of updating knowledge and skills to align with cutting-edge technology in the industry. Addressing the participants during the event, Dr. Giridhar Kini P, Registrar MAHE, congratulated the department on consistently hosting the conference since 2004, providing visibility to the institution and creating a platform for students and faculty to network with contemporary researchers. Cdr.(Dr.) Anil Rana, Director of MIT Manipal, highlighted the importance of instrumentation and control in a multidisciplinary context and its role in advancing modern smart and intelligent gadgets.



Mr. Santhosh Gosavi, Head Indoor Testing at TATA Motors Pune, addressed the participants and encouraged them to engage with experts and researchers during the conference to stay abreast of recent developments in engineering and technology. A recorded message by Dr. Abhay Pashilkar, Director, NAL Bengaluru, marked the conference's official opening. Dr. Shreesha C, Head of the Department, extended a warm welcome, while Dr. Ramakrishna Kini provided an overview of the conference.

Out of over 160 submissions, 56 papers were accepted for presentation during the conference. All presented papers will be published as book chapters in the Scopus-indexed Springer Lecture Notes in Electrical Engineering. During the conference, special invited talks were delivered by Mr. Sathyanarayana H C, Mr. Santhosh Gosavi, Dr. Sudhesh Shivarasu (Professor from the University of Cape Town, South Africa), and Dr. Rammohan Reddy (Professor at NIT Surathkal). Co-convener Dr. Aneesha Acharya expressed gratitude to all the members during the concluding session.

### **Workshop on Design of Electric Vehicles**

The Department of Mechatronics, MIT, Manipal on aegis of IAC Electrical stream organized a one-week workshop on "Design of Electric Vehicles" in collaboration with the Solar Electric Vehicle Championship (SEVC) team. The workshop was held from 02-06 November 2023. The Youth Policy Advocate (YPA) group, the Automatic Control & Dynamic Optimization Society (ACDOS) group (a national member organization (NMO) of the International Federation of Automatic Control (IFAC)), and IAC Electrical Stream supported the workshop.

Dr. Somashekara Bhat, Joint Director at MIT, Manipal inaugurated the event on 02 November 2023. Dr. Y. Ras Mathew, Chairperson of SEVC, provided an overview of the workshop. Dr. D. V. Kamath, the organizing chairman of the workshop and Professor and Head of the Department of Mechatronics, briefed the participants about the relevance of the workshop. Dr. Nandineni Rama Devi, Director of MSAP highlighted the importance of sustainable development.



During the five-day workshop, a total of 20 sessions including hands-on were conducted by a team of resource persons comprising Dr. Y. Ras Mathew, Mr. Balaji K, Er. Bharath NB, and Mr. Karan Kamalakannan, all from the SEVC. Day 1 of the workshop focused on the introduction to EV technology, vehicle design, material and tire selection, wheel assembly, and solar electric vehicles. On Day 2, the sessions covered the design and analysis of suspensions, calculation and selection of transmission systems, motors, and motor controllers. Additionally, participants engaged in a hands-on session involving the solar electric vehicle platforms available at the student major project workshops of Solar Mobil and Team Manipal Racing (TMR). Day 3 delved into foundational concepts, brake design, parameter calculation, and live demonstrations on battery and battery management systems. Day 4 focused on the design aspects related to steering and roll cage development and live demonstrations. On Day 5, the workshop covered concepts such as modeling, simulation, and analysis of a roll cage in a hands-on session utilizing Ansys (Engineering Simulation Software).



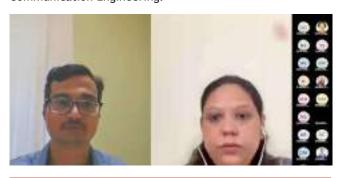
During the valedictory function of the workshop, Cdr. (Dr.) Anil Rana, Director, MIT, Manipal, graced the event as the chief guest. Dr. D. V. Kamath provided a comprehensive summary of the workshop proceedings. The SEVC team shared their perspectives on the workshop. The workshop was attended by a total of 123 participants. Dr. Vijay Babu Koreboina, Associate Professor, Dr. Ankur Jaiswal, Assistant Professor, Dr. Umesh Kumar Sahu, Assistant Professor and Dr. Kiran Dasari, Assistant Professor, Department of Mechatronics, MIT, Manipal coordinated the event.



# Academic Session on Leveraging Computer Vision and Artificial Intelligence Algorithms for Financial and Medical Applications

Department of Electronics and Communication Engineering MIT, Manipal organized a guest talk on "Leveraging Computer Vision and Artificial Intelligence Algorithms for Financial and Medical Applications" by Dr. Krati Gupta, Assistant Director at Acuity Knowledge Partners, Bengaluru. The session was held on 07 November 2023 in an online mode for undergraduate students as part of the program elective course on Motion and Geometry Based Methods in Computer Vision.

Dr. Krati Gupta, drawing upon her experience delivered her lecture highlighting the importance of implementing cutting-edge technologies such as large language models (LLM), natural language processing (NLP), machine learning (ML), and computer vision (CV) techniques to meet present day requirements. Dr. Krati in her lecture explained how machine learning and artificial intelligence play pivotal roles in various financial and medical applications. The interactive sessions helped the students to make connections between concepts taught in class and their practical applications in the industry. A total of twenty-one students enrolled in the Computer Vision course attended the session. The event was coordinated by Dr. Muralikrishna H and Dr. Anu Shaju, Assistant Professors in the Department of Electronics and Communication Engineering.



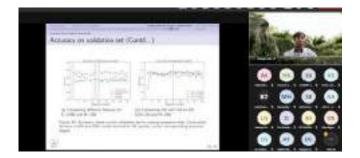
### **Guest Talk on Electric Drives for Automation**

Professor G. Bhuvaneswari, Department of Electrical and Electronics Engineering at Mahindra University (previously a Professor at the Electrical Department, IIT Delhi), delivered a guest talk on "Electric Drives for Automation" at the institute on 07 November 2023. The special lecture was organized by the Department of Mechatronics, MIT, Manipal.



### Guest Talk on Advancements in Sports Activity Recognition: A Focus on Cricket Stroke Localization and Recognition in Telecast Videos

Dr. Arpan Gupta, Assistant Professor at JK Lakshmipat University, Jaipur delivered a guest talk on 'Advancements in Sports Activity Recognition' at MIT Manipal on 19 October 2023. The talk was organized by the Department of Mechatronics in collaboration with IEEE-Robotics & Automation Society Student Branch Manipal. The talk centered on "Advancements in Sports Activity Recognition: A Focus on Cricket Stroke Localization and Recognition in Telecast Videos."



# Guest lecture on Modern trends in nuclear energy utilization and accelerators applications

Department of Physics, Manipal Institute of Technology organized a guest lecture on "Modern trends in nuclear energy utilization and accelerators applications" by Dr. Karel Katovsky, Associate professor at Brno University of Technology, Czech Republic on 26 October 2023. Dr. Katovsky provided a bird's eye view of nuclear program all over the globe.



The talk revolved around the history of nuclear program with crude reactors developed by Enrico Fermi in Chicago and natural reactor at South Africa. Dr Katovsky described the various generations of nuclear programs and current challenges in nuclear plant installation, the political hustle and public reaction towards the nuclear energy after the Fukushima nuclear accident. He spoke about the new generation small nuclear reactors its power output and feasibilities over the conventional nuclear reactors. He elaborated on different types of reactors, that are working and being installed all over the globe. Dr. Katovsky also spoke about the nuclear fusion reactors, its changes and present scenario. Dr. Sudha D Kamath. Head, Department of Physics felicitated Dr. Katovsky and thanked him for interacting with the faculty members and students of the department.



### Guest talk on Writing a Technical Paper for Conference or Journal Publications: Guidelines, Best Practices

The Mechatronics Department, on behalf of IEEE CAS, organised an insightful talk by Dr. P. V. Ananda Mohan (IEEE



Life Fellow) on Writing a Technical Paper for Conference or Journal on 03 October 2023. Dr. Mohan is a Fellow of IEEE (U.S.A), IETE (India), National Academy of Engineering (FNAE) and was the Chair of IEEE CAS Chapter, Bangalore since its inception till 2018. His session provided participants with valuable guidance on how to navigate the complex world of

research. The talk, attended by research scholars and students, was hosted by the department under the IEEE CAS society's student chapter.

# Guest talk on Mechanical Intelligence in Aerial Robots

Department of Mechatronics Engineering in collaboration with IEEE CAS and IEEE RAS, organized a special lecture by researcher Dr. Karishma Patnayak (M.Tech. IITB, PhD, Arizona State University, USA) on the topic Mechanical Intelligence in Aerial Robots - A New Paradigm for Robust Aerial Physical



Interaction. The lecture held on 16 November 2023 focused on diverse aspects of aerial robot research.

# Masterclass and interactive session with Professor from Deakin University, Australia

Department of Mechanical Engineering organised an interactive session with Associate Professor Dr. Michael Pereira from the Department of Mechanical Engineering at Deakin University, Australia on 11 October 2023. This session was held in line with the Memorandum of Understanding (MoU) between Manipal Academy of Higher Education (MAHE), Manipal, and Deakin University, Australia. Dr Michael Pereira conducted a masterclass on the topic "Developing critical engineering practice skills to help you become more employable" for the students of the department. Further, he briefed about Deakin University and the opportunities available for UG students of MAHE for their post graduation. About 75 students of the department participated in the event.



# Guest Lecture on Exciting Modern Physics Experiments

The Department of Electronics and Communication Engineering at Manipal Institute of Technology, MAHE, Manipal, hosted a Guest Lecture on "Exciting Modern Physics Experiments: Challenging Detector and Instrumentation Technologies" on 05 December 2023. The lecture was delivered by Dr. B. Satyanarayana, Scientific Officer (H) and Coordinator of the India-based Neutrino Observatory Project, Department of High Energy Physics, TIFR, and Visiting Professor at the Applied Science Department of the American College, Madurai. The talk highlighted on major global science projects currently operational or in development, focusing on significant contributions from Indian technology. The speaker drew the attention of the audience regarding the challenging opportunities awaiting young engineers.



### Guest Talk on Mangrove Forest Dynamics in Response to Climatic and Sea-level Changes along the Indian Coastline

Dr. Jyoti Srivastava, Scientist D, Birbal Sahni Institute of Paleosciences, Lucknow, delivered a talk on "Mangrove Forest Dynamics in Response to Climatic and Sea-level Changes along the Indian Coastline" to Ph.D. scholars and faculty members of Civil Engineering Department of MIT on 04 December 2023. The talk highlighted the significant impact of sea level fluctuations and climate change on coastal vegetation, particularly mangroves. Dr. Srivastava illustrated earth's climate changes over the last 25,000 years and future scenarios based on mangrove pollen in sediment cores from Indian coastline estuaries. Dr. K Balakrishna, Professor of Geology, welcomed the gathering, and Dr. Aditya Udayraj Joshi, Assistant Professor of Geology, proposed the vote of thanks. Discussions were held with faculty members and research scholars.



### Bhagvadgita classes at Sri Venugopal Temple

Bhagvadgita classes were organized at Sri Venugopal Temple in association with ISKCON, Mangalore during August-November 2023. The program comprised a total of 20 sessions. The program included assessment of learning in two parts covering nine chapters each. Assessment on the first nine chapters was administered during the sessions, followed by a final test for the remaining nine chapters on the concluding day. Certificates were distributed to the participants on successful completion of the course.



# Academic visit of BTech students & faculty from GMIT, Davangere

A team of 42 BTech students from Robotics and Automation specialisation accompanied by two faculty members from G M Institute of Technology Davangere, visited the Robotics Lab of Department of Mechatronics, MIT, Manipal on 11 November 2023.





# The Department of Media Technology organized a short-term course on animation on 28 October 2023

The course focused on 3D Animation by Dr. Devicharan R. A total number of 120 members attended the course. It was coordinated by Dr. Nagaraj Kamath H.



# NSS- MAHE-MIT organises Blood Donation camp on 02 October 2023

NSS-MAHE-MIT Unit I & II marked Gandhi Jayanthi by coordinating a Blood Donation Camp at MIT Food Court 1, in collaboration with SWO MIT, Students Council, Zolo, MIT Chief Warden Office, Lions Club Udupi, HDFC Bank, Abhayahastha Charitable Trust, and KH Blood Centre Manipal on 02 Ocotber 2023. Dr Somashekara Bhat, Joint Director MIT, Manipal inaugurated the drive and appreciated the efforts of the members and donors involved in the initiative. Dr Sharif from KMC KH Blood Center highlighted the importance of donating blood. 56 students participated in blood donation drive during the event. NSS Program Officer Dr Lakshman Rao P, Dr Poornima Bhagavath, Dr Asha CS and Dr Balakrishna Maddodi, MIT Administrative officer Sri Ratnakar Samant, LION'S CLUB UDUPI CHETANA President Ln Jagadish Acharya , Ln Arun Shetty, Abhayahastha Charitable Trust President Sri Satish Salian and HDFC Bank Mangalore Branch Manager Sri Putran facilitated the initiative on campus.





### Release of Booklet on Leh- Ladakh Visit

Lt. Gen. (Dr.) M. D. Venkatesh, Vice Chancellor MAHE released a booklet providing a report on the visit to Leh-Ladakh by the members of NSS Unit I & II from MIT Manipal on 11 November 2023. The team visited Leh-Ladakh during July-August 2023.



### **Centre for Outdoor Studies Activities**

The Center for Outdoor Studies, MAHE coordinated by Mr. Ganesh Nayak, Assistant Professor (Senior), Department of Instrumentation and Control Engineering organized a kayaking expedition for members on 04 November 2023. The team attempted to kayak to Fingerprint islands, off the coast of Kaup.



Centre for Outdoor Studies organised Pottery workshop for participants on 18 October 2023. A clay workshop was conducted at the field site in Katpady. A total number of of 11 students including 06 students from WGSHA participated in the workshop.



### Ek Tareekh Ek Ghanta' (ETEG) campaign under Swachhata Hi Seva 2023

The NSS UNIT I and NSS UNIT II of MIT, MAHE, participated in the 'Ek Tareekh Ek Ghanta' (ETEG) campaign under Swachhata Hi Seva 2023, emphasizing community involvement. This event took place on 01 October 2023 at the Students Plaza within the MIT Campus. NSS volunteers cleaned the campus from student Plaza to MIT quadrangle Academic Block 1. Students visited the hostel blocks and collected plastic waste and created awareness on the harmful effects of plastic pollution. A total of 36 students and all program officers participated in the program.







# Ten Sessions of Gender Sensitization Program at MIT, Manipal

MIT Manipal has successfully concluded ten sessions of its Gender Sensitization Program, a collaborative effort by the Office of Student Welfare, MIT, and the Department of Student Affairs, MAHE, in association with W20. The ongoing series aimed at combating gender stereotypes and promoting a gender-inclusive campus environment featured Dr. Karl Stephan B, Assistant Professor, Department of Philosophy, MAHE, Manipal as the lead speaker.



The comprehensive program, spanning multiple days and venues across the campus, addressed crucial aspects of gender sensitization. Dr. Karl initiated discussions on the understanding of gender, emphasizing that stereotypes are socially constructed norms rather than biological distinctions. The sessions explored prevalent stereotypes in society today, shedding light on their impact on various aspects such as families, relationships, education, and employment. The interactive discussions allowed students to recognize how gender stereotypes perpetuate inequality in diverse spheres of life.

Across ten sessions of the event, themes ranged from the history of Artificial Intelligence, exploring aviation technologies, to critical analyses of the New Education Policy, providing students with a holistic understanding of the multifaceted challenges and opportunities in the realm of gender sensitization. A total of 646 students participated, comprising 93 girls and 553 boys. Dr. Poornima Bhagavath, Assistant Professor (Selection Grade), Department of Chemistry, played a key role in coordinating the programs.



# Launch of IEEE Aerospace and Electronic Systems Society (AESS) Chapter

The launching ceremony of IEEE Aerospace and Electronic Systems Society (AESS) Chapter was held at MIT, Manipal on 09 December 2023 in virtual mode. The event, a significant milestone for the organization, gathered members, professionals, and enthusiasts from the aerospace and electronic systems community, emphasizing a steadfast commitment to advancing electrotechnology in these pivotal fields. Mr. Hathim Mohammad, AESS Chapter Chair, set a positive tone for the occasion with a warm welcome, outlining the objectives and goals of the newly established chapter.



The ceremony witnessed the presence of Mr. Puneet K Mishra, Scientist - SD at ISRO Satellite Centre, AESS Board of Governors Member, IEEE AESS Chair, IEEE Bangalore Section, Global Committees of IEEE Industry Engagement, IEEE APS, as the Chief Guest and Keynote Speaker. Mr. Mishra officially inaugurated the AESS Chapter, highlighting the importance of collaboration and innovation in advancing critical technological domains. Dr. Manish Varun Yadav, Assistant Professor-Senior Scale, Department of Aeronautical and Automobile Engineering, provided insightful closing remarks, expressing gratitude to participants, sponsors, and contributors. The ceremony concluded with AESS Student Member, Ms. Khushboo Daga, sharing optimism about the chapter's role in fostering innovation, facilitating knowledge exchange, and promoting professional growth within the aerospace and electronic systems landscape.

# IIC Activity conducted by the Mechanical and Industrial Engineering Department

A session on "Innovation, Entrepreneurship & Start-ups" with an aim to provide exposure to the innovation and entrepreneurship ecosystem of MAHE for PG students was organised at MIT, Manipal on 03 November 2023. The program, organized by the Institution's Innovation Council (IIC), focused on exposing postgraduate students from the Mechanical and Industrial Engineering Department to the resources available for innovation and startups. Dr. Vishwanath Managuli, the Program Coordinator and IIC Coordinator at MIT, led the initiative with the support of Dr. Sucheta Kolekar, IIC Institute Coordinator, who discussed the array of support schemes available to MAHE students.



The event featured insights from Dr. Y. Shrihari Upadhyaya, Former CEO, Manipal University Technology Business Incubator (MUTBI), who narrated the success stories of postgraduate and PhD students. The session included a demonstration of Blackfrog Technologies, an incubated company at MUTBI, founded by MIT Manipal students, showcasing their innovative product, Emvólio. The program

highlighted recent developments, government policies fostering innovation and entrepreneurship, facilities available at MAHE and the funding ecosystem offered by the Government of India for empowering students with knowledge and skills to embark on entrepreneurial journeys. The event witnessed participation of 26 students and 2 faculty members.



One more event was conducted on 11 November 2023 by IIC for students from the Mechanical and Industrial Engineering Department and other departments from the Mechanical stream to empower their entrepreneurial journey. The event focused on imparting a comprehensive coverage of the qualities essential for success in entrepreneurship and emphasized the significance of team building. The session explored schemes like Nidhi-EIR and Nidhi-Prayas, as a means of financial support. Dr. Y. Shrihari Upadhyaya provided an overview of bio-incubators across India and explained how such incubators could play a pivotal role in helping the startups to succeed. He also imparted valuable knowledge and guidance for their future endeavours in the entrepreneurial landscape.

### Guest talk on Emerging Technologies in Aviation

Department of Aeronautical & Automobile Engineering, MIT, Manipal, hosted a session on "Emerging Technologies in Aviation" featuring Mr. Rajat Hebbare, Lead Manufacturing Engineer in the Procurement team at GKN Aerospace, Netherlands, on 21 September 2023. Mr. Hebbare's comprehensive lecture explored the latest developments in aviation technology, with a focus on manufacturing. He provided valuable information regarding the current expectations of the aviation industry, particularly emphasizing the ongoing research in creating efficient and high-capacity aircraft inspired by nature to address existing challenges.



During the lecture, Mr. Hebbare highlighted on innovative concepts, such as redesigning aircraft to minimize

aerodynamic loading while enhancing seating capacity and comfort. Drawing inspiration from high-altitude bird flights, he presented the intriguing idea of wingless aircraft design. He also explained the concept of air taxis, envisioning a future where these vehicles could alleviate traffic congestion and reduce travel time, drawing inspiration from the flight patterns of bees and flies. In addition to offering valuable insights into career development and global exposure, Mr. Hebbare provided guidance on how students can enhance their employability and pursue their aspirations within the dynamic landscape of the aviation industry.

# Occupational Balance Awareness Session for Holistic Well-being

To address the critical need for maintaining a harmonious balance between professional commitments and personal well-being, the Department of Physics at MIT Manipal, organized an enlightening session on Occupational Balance. Mr. Amar Nishad, from the Department of Occupational Therapy at Manipal College of Health Professions (MCHP), MAHE was the resource person for the workshop held on 07 November 2023.

Drawing a diverse audience of 75 attendees, including students from various departments of MIT and participants from MCHP, the session provided practical insights into achieving a healthy balance in one's daily life. An hour long session included live demonstrations highlighting the importance of balancing different facets of life. Beyond highlighting the significance of occupational balance, the awareness session empowered participants with practical tools to implement those principles in their daily routines.

### Five-Day Workshop on AR-VR with Unity

The Department of Instrumentation and Control Engineering, MIT Manipal, in collaboration with ARK infosolutions, organised a five-day hands-on training on "AR-VR using Unity" from 27 November to 01 December 2023.



Led by industry expert Mr. Prasanth A from Mew Technology, Bangalore, the immersive training provided an extensive exploration of Augmented Reality (AR) and Virtual Reality (VR) with hands-on experiences utilizing various Moku Devices. The training program explored the intricacies of AR and VR applications, providing a detailed and practical understanding of Unity. The workshop aimed to equip

participants with valuable skills in the rapidly evolving fields of AR and VR, fostering innovation and expertise within the domain.





Dr. Shreesha C., Head of the Department for Instrumentation and Control Engineering, welcomed the gathering and introduced the course instructor, Mr. Prasanth A on the first day of the event.

# Students of Government Brennen College, Kerala Visit Physics Department

A group of forty-five students from Government Brennen College, Kerala, visited the Department of Physics, MIT, Manipal on 12 December 2023. The group, consisting of 33 BSc students and 12 MSc students, accompanied by four faculty members, engaged in an interactive session and explored various research labs in the department.



Dr. Sudha D Kamath, HoD of Physics welcomed the guests and provided an overview of MAHE and MIT and highlighted the facilities and activities of the department. Dr. Gurumurthy S C, Associate Professor in the Department of Physics, motivated the students to consider research in Physics as a career. The students visited various research labs, gaining insights into the instruments and ongoing research projects, while engaging with the department's research scholars. Dr. Bhaghyesh, Assistant Professor in the Department of Physics coordinated the program.

# Talk on Coping with Academic Responsibilities: Teaching, Research and Administration

Dr Raghuvir Pai, Professor in the Department of Mechanical & Industrial Engineering delivered a talk on "Coping with Academic Responsibilities: Teaching, Research and Administration" on 17 November 2023 for the benefit of faculty members of MIT Manipal.



In his talk, he highlighted the importance of research in higher education institutions along with teaching. From his vast experience as teacher, researcher and administrator, he gave tips to the faculty members to strike a balance among the three and achieve more to benefit both faculty and university. The talk was organized by the office of Associate Director(FD&W).

### Guest Talk on Shedding the Light on Future: Nightscape Technology Pioneers Eco-Friendly Illumination

Department of Electrical & Electronics arranged a guest talk on Shedding the Light on Future: Nightscape Technology Pioneers Eco-Friendly Illumination on 10 October 2023. Mr. Amrith Prabhu, Managing Director- Indian Subcontinent, Lumileds, India was the guest speaker.



Mr. Amrith Prabhu spoke on the transformative journey of the lighting industry and introduced the revolutionary Nightscape Technology, which promises to harmonize our lighting needs along with the preservation of natural ecosystem. Quoting from literature, he said that high levels of blue light content adversely affect wildlife, such as birds, insects, and turtles; disrupt the human circadian rhythm at night; and increase glare, which compromises visual acuity for motorists and pedestrians alike. Demonstration of LED fixtures of Different CCT and Nighscape technology was done to help the participants. Around 60 participants including students and faculty from various departments attended the talk.

# Guest Talk on Adaptive Driving Beam and Digital Beam

Department of Electrical & Electronics arranged a guest talk on Adaptive Driving Beam and Digital Beam on 10 October 2023. Mr. Amrith Prabhu, Managing Director- Indian Subcontinent, Lumileds, India was the guest speaker.



Mr. Amrith Prabhu highlighted the features of Lumileds light source designed for high-resolution direct-imaging projection systems with ultra compact built-in depth as required for advanced dynamic-beam capability for digital headlighting. He also spoke on its ability to combine multiple functions in a compact system, generate an infinite number of customized light distributions, superior contrast for perfect road projection, and sharp cut-off lines enhancing the safety of Motorists and pedestrians. A handson demonstration of State-of-the-art adaptive beam LED headlamp used in Automobile was also arranged. Around 50 participants from various departments including students and faculty members attended the talk.

### Memorandum of Understanding with organisations

- MIT Manipal, MAHE has signed an MoU with Quantumzyme, LLP, Bangalore. for fostering academic exchanges, initiate joint research endeavours, and undertake collaborative projects in computational simulations and biological and chemical sciences.
- MIT Manipal, MAHE has signed an MoU with CDAC to share their HPC facility over the cloud.
- MIT Manipal, MAHE has signed an MoU with Bazaarvoice Technology India Pvt. Ltd., Bangalore on 01 July 2023 for academic and research collaboration. The MoU is valid for 3 years.
- MIT Manipal, MAHE, has signed MOU with 3BIGS Co. Ltd.
- MIT Manipal, MAHE has signed an MoU with Samsung R&D Institute India Bangalore Private Limited, Bangalore on 01 June 2023 for pursuing industrial / application oriented research and engineering development activity under Samsung's PRISM program. The MoU is valid for 3 years.



### Visits to the Institute

- Professor Dr. T G Sitharam, Chairman, All India Council of Technical Education (AICTE), Govt of India visited MIT, Manipal on 25 November.
- Dr. E V Ramana Reddy, the Chairman of Karnataka Skill Development Authority (KSDA) Bangalore visited the institute and MAHE-ISAC CoE for Cybersecurity on 27 November.
- Dr. Ram Karan Singh, VC, The ICFAI University, Dehradun visited MIT, Manipal on 21 November.
- Ms. Neera Singh, State Head (I&C), BPCL visited MIT, Manipal on 21 November.
- **Dr. Pradeep Desai,** CEO of Thalesat Innovations Private Limited, visited MIT, Manipal in November.
- Mr. Naveen Kulkarni, CEO of Quantumzyme visited MIT, Manipal on 03 November.
- Dr. Bridget Mciannes, Associate Professor and Graduate Program Director at the College of Engineering - VCU visited MIT, Manipal on 26 October
- Dr. Karel Katovsky, and Prof. Surjit Mukherjee from Brno University of Technology [BUT] BRNO, Czech Republic visited MIT Manipal on 25 October.
- Prof. Ajoy Ray, Director JIS Institute of Advanced Studies & Research, former Director, IIEST Shibpur, former Professor, IIT Kharagpur and Padma Shri Awardee visited MIT Manipal on 30 November.
- Dr. Deepak Sharma, a Senior Laureate and Vice President overseeing Research and Development within Science Platforms at Reckitt, visited MIT on 12 October.
- Mr. Lax Madapaty, a former alumnus and faculty member of the MIT Manipal in the Department of E&C, who is currently serving as the Senior Vice President for Global Marketing at JPMorgan Chase & Co., visited MIT on 12 October.
- Professor Wim Van den Bergh, leading the Road Engineering Research Section and chairing the Section Infrastructure within the Department of Civil Engineering at the University of Antwerp visited MIT, Manipal on 12 October.
- Mr. Divyansh Mansukhani, a TEDx Speaker and a communicator of Science and Philosophy, visited MIT on 9 October.
- Mr. Vikas Shinde, DGM Talent Acquisition, and Mr. Abhishek Tayade, DGM Talent Acquisition & University Relations from TATA Motors visited MIT, Manipal on 7 October.
- Prof. Matt Folley, Director Applied Renewables Research Ltd., and Senior Research Fellow in the Centre for Built Environment Research (CBER), Queen's University Belfast visited MIT, Manipal on 02 December.

# FACULTY ACHIEVEMENTS

### **Enriching Institute Leadership Dimensions**

**Dr. Harish Kumar S,** Professor in Department of Chemical Engineering is appointed as Director -Corporate Relations for a period of two years from 01 Jul 2023.



**Dr. Kanthi,** Professor in Department of Electronics and Communication Engineering is appointed as Incharge Associate Director (Alumni Cell, Public & International Relations) from 01 Jan 2024.

**Dr. Sudha D Kamath,** Professor in Department of Physics is appointed Head of the Department for a period of two years from 01 Oct 2023.



**Dr. Srinivas Kini,** Professor in Department of Chemical Engineering is appointed as Head of the Department of Chemical Engineering for a period of two years from 01 Jan 2024.

**Dr. R C Shivamurthy,** Assistant Professor - Selection Grade in Department of Mechanical and Industrial Engineering is appointed as Assistant Director-Industrial Liaison, Placement & Practice School for a period of one year from 01 Jul 2023.





**Dr. Sampath Kumar V S,** Assistant Professor - Selection Grade in Department of Mathematics is appointed as Assistant Director-Academics for a period of one year from 21 Sep 2023.

**Dr. Yashwanth N,** Assistant Professor - Senior Scale in Department of Electronics and Communication Engineering is appointed as Assistant Director - Faculty Development & Welfare for a period of one year from 01 Jan 2024.





**Dr. Thirunavukkarasu I,** Professor in Department of Instrumentation and Control Engineering is appointed as Assistant Director - Doctoral Programs for a period of one year from 01 Jan 2024.

The tenure of **Dr. Shankaranarayana Bhat M**, Associate Director - Faculty Development and Welfare, MIT, Manipal is extended till 31 May 2025.





The tenure of **Dr. Raviraja**, Associate Director - Academics, MIT, Manipal is extended till 31 Jul 2024.

The tenure of **Dr. Ashok Rao**, Associate Director - Research and Consultancy, MIT, Manipal is extended till 30 Jun 2025.





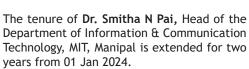
The tenure of **Dr. Sriram K V,** Associate Director - Industry Liaison, Placement & Practice School, MIT, Manipal is extended for three years from 01 April 2024.

The tenure of **Dr. Amrutharaj H Krishnan**, Head of the Department of Media Technology, MIT, Manipal is extended for one year from 24 Jul 2023.





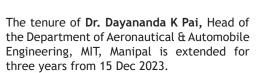
The tenure of **Dr. Balaji S,** Incharge Head of the Department of Biotechnology, MIT, Manipal is extended for three years from 01 Jan 2024.







The tenure of **Dr. Shreesha C**, Head of the Department of Instrumentation & Control Engineering, MIT, Manipal is extended for two years from 01 Jan 2024.







The tenure of **Dr. Chandrashekara S Adiga**, Head of the Department of Electrical & Electronics Engineering, MIT, Manipal is extended till 31 Dec 2024.

The tenure of **Dr. Dattaguru Vinayak Kamath,** Head of the Department, Mechatronics, MIT, Manipal is extended till 30 Sep 2025.



The Tenure of **Dr. Suma A Rao**, Head of the Department of Chemistry, MIT, Manipal is extended for three years from 01 Mar 2024.





The tenure of **Dr. Ashwini Bhat,** Assistant Director-Student Welfare is extended for one year from 01 Oct 2023.

The tenure of **Dr. Ishwar Bhiradi**, Assistant Director-Industrial Liaison, Placement & Practice School is extended for one year from 17 Sep 2023.



The tenure of **Dr Sandesh Upadhyaya K,** Assistant Director-Development is extended for one year from 17 Sep 2023.



The tenure of **Dr. Ashwin Kumar Devaraj,** Assistant Director-Academics, MIT, Manipal is extended for 1 year from 01 Jan 2024.

The tenure of **Dr. Ghanashyama Prabhu**, Assistant Director-Academics, MIT, Manipal is extended for one year from 01 Dec 2023.





The tenure of **Dr. V Thivaharan**, Assistant Director-Quality Assurance, MIT, Manipal is extended for 1 year from 07 Dec 2023

The tenure of **Dr. Vishwanatha H M** as Assistant Director-Quality Assurance, MIT, Manipal is extended for one year from 20 Oct 2023.





The tenure of **Dr. Dhanya Sunil**, Assistant Director - Doctoral Programs is extended for one year from 15 Jan 2024.

The tenure of **Dr. Shah Mohammed Abdul Khader,** Assistant Director - Inter Disciplinary Research & Consultancy is extended for one year from 15 Jan 2024.



The tenure of **Dr. Krishna Prakasha K,** Assistant Director-Alumni Cell, Public & International Relations is extended for one year from 01 Oct 2023.





Dr. Swati Varun Yadav, Assistant Professor, Department of Instrumentation and Control Engineering, Dr. Manish Varun Yadav, Assistant Professor (Senior Scale) Department of Aeronautical and Automobile Engineering and Dr. Ashish Chittora, Associate Professor, Department of Electrical & Electronics Engineering, BITS Pilani, Goa Campus got their patent application titled "Device and Method for Enabling Surface Wave Excitation and Detecting Faults







on a Transmission Line," published by Intellectual Property India on 13 October 2023.

Dr. Swati Varun Yadav, Assistant Professor, Department of Instrumentation and Control Engineering, Dr. Manish



Varun Yadav, Assistant Professor (Senior Scale) Department of Aeronautical and Automobile Engineering obtained a patent "Antenna application titled Apparatus for an Automated Defense Satellite" for publication



by Indian Patent Office.

Dr. Narendra Khatri, Assistant Professor in the Department of Mechatronics Engineering, was honoured with the "Best



Paper" award for his research paper titled "Detection of Acute Lymphoblastic Leukaemia Using CollateNet" at the 3rd International Conference on Technological Advancements in Computational Sciences (ICTACS - 2023) held in Amity University Tashkent, Uzbekistan, during

01-03 November 2023.

Dr. Narendra Khatri has successfully edited a book titled "Precision Agriculture for Sustainability: Utilizing Smart Sensors, Actuators, and Decision Support Systems." The coeditors of the book are Ajay Kumar Vyas, Celestine Iwendi, and Prasenjit Chatterjee.

Dr. Shiva Kumar, Professor, Department of Mechanical and Industrial Engineering was honoured with the Best Paper Award for his paper entitled "Comparative Performance and Energy Analysis of the Various Configuration Organic Packings Used in Evaporative Cooling"



presented at the conference RAiSE 2023, organised by the Department of Mechanical & Industrial Engineering, MIT, MAHE, Manipal in association with the School of Engineering and IT, MAHE Dubai, UAE held during 04 - 05 October 2023.

Mrs. Prathvi Shenoy, Assistant Professor, Department of Electrical and Electronics Engineering was honoured with the Best Paper Award for her paper entitled "Mathematical Models to Compare the Pharmacokinetics of Methadone, Burprenorphine, Tramadol, and



Tepandadol" presented at the conference RAiSE 2023, organised by the Department of Mechanical & Industrial Engineering, MIT, MAHE, Manipal in association with the School of Engineering and IT, MAHE Dubai, UAE held during 05 - 04 October 2023.

Mr. SARUN SOMAN, Assistant Professor - Senior Scale,



Department of Electrical & Electronics Engineering, was honoured with the Best Paper Award for his research paper titled "Personalized Estimation and Adjustment of Elbow Angular Displacement for Upper Limb Exoskeleton: An Approach Based on Fuzzy

Logic" at the IEEE conference held during 13-14 October 2023 hosted by Sahyadri College of Engineering and Management, Mangaluru.

Dr. I Thirunavukkarasu, Professor in the Department of Instrumentation & Control Engineering won the Best Paper award in the International Conference on Artificial Intelligence, IoT,

Computing and Data Analytics (AICTA 2023) held during 18-20 December 2023 at Computer Science and Engineering Department, Punjab Engineering College, Chandigarh India.

Dr. Harshendra N Shet K, Assistant Professor - Senior Scale,



Department of Electrical and Electronics Engineering was honoured with the Best Paper Award for his paper entitled "Comparison of Global Warming Potential of Alternate and Conventional Fuel Four-Wheeler Vehicles in India through Life Cycle Analysis" at the

conference AICTA 2023, organised by the Amritha Vishwa Vidyapeetham held during 16 - 15 December 2023.

Dr. Umesh Kumar Sahu, Dr. Ankur Jaiswal, Dr. Vijay Babu Koreboina, faculty members of Mechatronics and the editorial board of RCAAI-2022 have edited a book titled "Intelligent Control, Robotics, and Industrial Automation." This book includes articles related to intelligent control, IoT, machine vision, cybersecurity, circuits, and sensors. The papers were selected from RCAAI 2022 conference, at MIT from 24 to 26 November 2023.









**Dr. Abhimanyu Kumar Patro K**, Assistant Professor, Department of Mechatronics has successfully authored a





book on 'Cryptography and Network Security'. The book was published by Scientific International Publishing House. The book is co-authored by Dr. Harika. B, Mrs. M. Raju, and Dr. Narayanasamy Rajendran.

Dr. Dasharathraj K Shetty, Associate Professor in the Department of Data Science and Computer Applications, the Managing Director of Ganglia Technologies Pvt Ltd, operating within the dynamic ecosystem of Manipal GoK Bioincubator in Manipal, Karnataka, has been recognized with the Promising & Innovative Technology Company of the Year 2023 award in the Futuristic Product Development & Research category in Karnataka during the 22nd The Great Indian Entrepreneurship, Design, Business & Startup Awards & Conference 2023. The award was presented by Mr. Rajah Vijay Kumar, Scientist, and Innovator renowned for his portfolio of over 150 IPR assets, along with the well-respected Chartered Accountant Mr. K Raghu, former President of ICAI. Dr. Jayaraj Mymbilly Balakrishnan, Chairman, Ganglia Technologies Pvt Ltd and key members of the company's core Design Team- Ms. Shreyas Holla (MIT-Student), Prithvi Tilwani (former intern), and Sripathi Ranga Bhatta (MIT-PhD Scholar) were present during the occasion.



**Dr. Manjunath K N,** Associate Professor, Department of Computer Science & Engineering, successfully completed an



extensive, four-phase instructor-led training program titled ProGRANT - proposal writing for research grants. This comprehensive seven-month training was conducted by the University of Cologne and was sponsored

by the Federal Ministry for Economic Cooperation and Development, Germany, in collaboration with Deutscher Akademischer Austauschdient (DAAD). Notably, each participant received a grant of approximately 1,450 Euros from the German government. The concluding session of this training took place at Lalith Hotel, New Delhi. Dr. Manjunath K N was among the 30 selected participants chosen from a pool of 1200 applicants from India.

**Dr. Yogesh Pai P**, the Head of the Department of Humanities & Management conducted an interactive session on Data Analysis using SPSS and Academic Writing for the post-graduate students of Mangalore University in November 2023. He was a resource person in the ten-day long workshop held by Department of Post Graduate Studies and Research in Commerce, Mangalore University, Mangalagangotri, Mangalore during 20-30 November 2023. His session on 28 November focused on data analysis and academic writing.



**Dr. Sathish Shenoy** represented MIT Manipal at the International Conference on Business and Technological Advancement in Industrial Revolution 4.0 (ICoBTA-IR4.0) 2023 which was held during 03-04 October 2023. It was hosted by a consortium comprising seven partners with MIT Manipal being one of the partners. The conference witnessed the presence of several dignitaries including the Deputy Chief Minister of Sarawak, Malaysia.



Documentary on Yakshagana directed by Dr. Praveen Shetty, Assistant Professor, Dept of Humanities and Management,

MIT, Manipal and Mr. Nitesh Anchan, Research Associate, CISD, MAHE won the International Jury Award in International Short Film Festival on Cultural Tourism held in Varanasi from 1-3 December 2023. It was created by Centre for Intercultural Studies and Dialogue



(CISD), Manipal Centre for European Studies (MCES), MAHE. The film festival screened 94 short films officially selected from 44 countries.

In addition to this, the documentary is also selected for screening at the Sixth International Folklore Film Festival to be held in Thrissur, Kerala. Further, five documentaries created the project *Discerning India: Living Cultures of Tulunadu* received official selections at various international Film Festivals.

Dr. Balakrishna Maddodi, Associate Professor in the Department of Civil Engineering and the NSS Program Officer of MAHE-MIT NSS UNIT was honoured on the World Blood Donor's Day by the Udupi District Administration. He was also acknowledged for his remarkable contributions, having organized 50 Mega Blood Donation camps, and personally donating blood on more than 37 occasions.

As a Treasurer of Abhayahasta Charitable Trust, NSS program officer, and Rotarian, Dr. Maddodi was an integral part of a collaborative effort that successfully organized 173 camps, resulting in the mobilization of 20,000 units of blood, crucially benefiting those in urgent need.



The Abhayahasta Charitable Trust, under Dr. Maddodi's stewardship as Treasurer, was honoured with the Udupi District Kannada Rajyostava Award 2023, recognizing their selfless service to the community, particularly in providing blood and other essential healthcare services.

Dr. Maddodi is also actively engaged in various environmental activities, advocating for water conservation, addressing environmental concerns, promoting tree plantation drives, combating plastic pollution and microplastics, as well as raising awareness about drug abuse. Additionally, he organizes educational initiatives such as Career Guidance, Course Information sessions, NEP 2020 awareness drives, and offers free CET NEET coaching for PUC Government colleges in the Udupi District.

Dr. Vinay Kumar Jadoun, Assistant Professor - Senior Scale in Department of Electrical & Electronics Engineering, received Outstanding Young Professional Award in recognition of his outstanding contribution to IEEE MSS in the year 2023.



Dr. Anitha H, Professor, Department of Electronics and Communication Engineering (ECE) at MIT has been awarded the TMA Pai Endowment Chair position focusing on Multimodal Medical Image Registration.



Dr. Naresh Kumar Mani, Associate Professor in Dept of Biotechnology, Coordinator - Centre for Microfluidics, Biomarkers, Photoceutics & Sensors (uBioPS), received the Shri PK Das Memorial Best Faculty Award under Bioscience stream (Junior category) on 15 November from the Nehru Group of Institutions. This includes a memento and a cash prize of 10,000 INR. Out of 1548 applicants, 20 were selected for this award under different streams/domains.



Dr. Yashoda M. P., Professor, Department of Chemistry was honoured with the Best Paper Award for her paper



entitled "Versatile PVC-DDM Polymer: A Dual-Action Defence Against Gram Positive and Gram Negative Bacteria" presented at the conference RAiSE 2023, organised by the Department of Mechanical & Industrial Engineering, Manipal Institute of Technology,

MAHE, Manipal in association with the School of Engineering and IT, MAHE Dubai, UAE held during 04 - 05 October 2023.

Dr. Akansha, Assistant Professor, Department of Mathematics was honoured with the Best Paper Award for her paper entitled "Addressing the Impact of Localized Training Data in Graph Neural Networks" presented at the conference CERA 2023, organised by the IIT, Roorkee held during 27 - 29 October 2023.



Dr. Binay Kumar Tripathy, Assistant Professor, Department of Civil Engineering was honoured with the Best Paper Award for his paper entitled "Influence of ZnO Nanoparticles on Rural Rubber Wastewater Treatment using a Sequential Coagulation -Flocculation and Ultraviolet - assisted Fenton Oxidation" presented at the conference ICWT 2023, organised by the Asian University Alliance held during 04 - 07 December 2023.



Cdr. (Dr.) Anil Rana, Director, MIT Manipal was honoured with the title of "Leadership in Education" during the Education Hero- Award ceremony held on 01 November 2023 at Hotel Lalith Ashok, Bengaluru.



**Dr. Yogesh Pai P**, Professor & Head, Department of Humanities & Management, awarded the title of "Education Champion" during the **Education Hero- Award** ceremony held on 01 November 2023 at Hotel Lalith Ashok, Bengaluru.





**Dr. I. Thirunavukkarasu**, Professor, Department of Instrumentation & Control Engineering was honoured with the Best Paper Award for his paper entitled "System Identification of Batch Reactor using Machine Learning Technique" presented at the conference AICTA 2023,

organised by the Punjab Engineering College, Chandigarh held during 18 - 20 December 2023.

He was also honoured with the Best Paper Award for his paper entitled "Validation of Class of Nonlinear Controllers on Lab Scale Batch Reactor: Sliding Mode Controllers" presented at the conference ICCICS 2023, organised by the University of Lucknow held during 07 - 09 November 2023.

**Dr. Manohara Pai M M,** Senior Professor, Department of Information and Communication Technology, delivered a talk on Data Science, Industrial Automation, and Sustainability at The Bangalore Science Forum on 13 December 2023 at The National Education Society of Karnataka, Bangalore.





**Dr. Poornalatha G,** Additional Professor, Department of Information and Communication Technology, received a recognition as the IEEE Region 10 ETHICS CHAMPION award In September 2023.

Mrs. Chetana Pujari, Assistant Professor-Senior Scale, Department of Information and Communication Technology received the Best Paper Award for the paper titled "A user centric self- sovereign identity - based authentication framework for decentralized



data management in health care settings" at the conference ICRAIS 2023, organised by MIT, Manipal during 06 - 07 November 2023.

**Dr. Manjula C B,** Assistant Professor - Selection Grade, Department of Information and Communication Technology and **Dr. Girija Attigeri,** Associate Professor, Department of Information and Communication Technology, along with **Mr. Mahesh Inamdar,** Assistant Professor, Department of Mechatronics Engineering, led a two-day workshop on Artificial Intelligence and Machine Learning for the employees of Thermax at the Thermax Learning Academy in Pune held during 18-19 October 2023.







Every worthwhile accomplishment has its stages of drudgery and triumph: a beginning, a struggle and a victory.

- Mahatma Gandhi

# RESEARCH HIGHLIGHTS

### PhD Awardees: Faculty Members

Dr. Cenita, Assistant Professor-Senior Scale, Department of Computer Science & Engineering has successfully defended

her Doctoral thesis titled "Design and Implementation of Substitution and Hybrid Classification Techniques for Identifying Cardiac Disease" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 28 October 2023. The research work was guided by Dr. R Vijay Arjunan, Additional



Professor, Computer Science & Engineering, MIT, Manipal and co-guided by Dr. Prema K V, Associate Director, Professor & Head, Department of Computer Science & Engineering, MIT, Bengaluru.

Dr. Sharanappagouda Kadabinakatti, Assistant Professor, Department of Civil Engineering has successfully defended



his Doctoral thesis titled "Large-Scale Laboratory Demonstration Instrumented Free-Fall Penetration Test for Refined Estimation of In Situ Undrained Shear Strength" for the award of PhD degree by the Indian Institute of Technology Bombay on 09 November 2023. The research work was guided by Santiram Chatterjee Associate

Professor, Department of Civil Engineering IIT Bombay and co-guided by Dr. Santiram Chatterjee, Associate Professor, Department of Civil Engineering, IIT Bombay.

Devika Rani, Assistant Professor-Senior Scale, Department of Humanities & Management has successfully

defended her Doctoral thesis titled "Multilingual Education Models Karnataka, India: Learing from the European CLIL Experiment." for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 19 November 2023. The research work was guided by Dr. Neeta Inamdar,



Professor & Head, Manipal Centre for European Studies, MAHE, Manipal.

Dr. Vinay Madhusudanan, Assistant Professor, Department of Mathematics has successfully defended his Doctoral



thesis titled "Descending Endomorphisms of Groups and Associated Graphs" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 27 October 2023. The research work was guided by Dr. Sudhakar G, Professor (Retired), Department of Mathematics, MIT, Manipal.

Dr. Tanuja Shailesh, Assistant Professor- Selection Grade, Department of Computer Science & Engineering has defended her Doctoral thesis "Development and Implementation of Transformations from UML/MARTE Profile Specifications to PNML and Promela Models" for the award of PhD degree by Manipal Academy of Higher Education, Manipal, on 27 November 2023. The research work was guided by Dr. Ashalatha Nayak Professor Computer Science & Engineering, MIT Manipal and co-guided by Dr. Devi Prasad, consultant Software Design & Development, Manipal.



Dr. Archana Praveen Kumar, Assistant Professor- Senior Scale, Department of Computer Science & Engineering has



successfully defended her Doctoral thesis titled "Automatic Generation of Multiple Choice Questions to Evaluate Factual and Conceptual Cognitive Skills in E-Learning" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal, on 06 December 2023. The research work was guided by

Dr. Ashalatha Nayak Professor Computer Science & Engineering, MIT Manipal and co-guided by Dr. Manjula Shenoy K. Professor Department of Information & Communication Technology, MIT Manipal.

Dr. Nakul Sreedhar, Assistant Professor-Senior Scale, Department of Mechanical & Industrial Engineering has

successfully defended his Doctoral thesis titled "Experimental and Numerical Investigation on Thermal Performance of Natural Circulation Based Parabolic Trough Collector" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 11 December 2023. The research work was guided by



Dr. Arunachal U. Chandavar, Professor Department of Mechanical & Industrial Engineering MIT, Manipal.

Dr. Sridevi H, Assistant Professor-Senior Scale, Department of Civil Engineering has successfully defended her Doctoral



thesis titled "Development of Magnetic Nanoadsorbent for the Removal of 2,4-Dichlorophenoxyacetic Acid" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal, on 11 December 2023. The research work was guided by Dr. S Raja Additional Professor, Department of Chemical

Engineering. MIT Manipal and co-guided by Dr. Ramananda Bhat M, Professor, Department of Biotechnology, MIT Manipal.

Dr. Karthik B. M., Assistant Professor, Department of Mechanical & Industrial Engineering has successfully defended his Doctoral thesis titled "Aging Behavior of STIR-Cast AL7075-Nickel Coated Duralumin Powder Metal Matrix Composites" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on



### **Full-Time Research Scholars**

December 2023. The research work was guided by Dr. Sathyashankara Sharma, Senior Professor and Head, Department of Mechanical and Industrial Engineering, MIT, Manipal and Co-guided by Dr. Gowrishankar M C, Associate Professor, Department of Mechanical and Industrial Engineering, MIT Manipal.

**Dr. Jayashree T R,** Full-time Research Scholar in the Department of Computer Science and Engineering has successfully defended her Doctoral thesis titled "Development of Prediction Models for Reference Crop Evapotranspiration and Crop Yields Using Machine Learning Techniques" for the award of PhD degree



by the Manipal Academy of Higher Education, Manipal on 16 November 2023. The research work was guided by Dr. N. V. Subba Reddy, Former Professor, Computer Science and Engineering, MIT Manipal and co-guided by Dr. U. Dinesh Acharya, Professor, Computer Science and Engineering MIT Manipal.

**Dr. Abhishek Sadananda Madival,** Full-time Research Scholar in the Department of Mechanical and Industrial



Engineering has successfully defended his Doctoral thesis titled "Investigation of Mechanical and Thermal Properties of Rice Straw/Furcraea Foetida Composite and its Abrasive Water Jet Machinability Study" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 30 November 2023. The

research work was guided by Dr. Deepak D, Professor, Department of Mechatronics Engineering, MIT, Manipal and co-guided by Dr. Raviraj Shetty, Professor, Mechanical and Industrial Engineering, MIT Manipal.

**Dr. Ayana A,** Full-time Research Scholar in the Department of Physics has successfully defended her Doctoral thesis

titled "Structural, Optical, Electrical and Electromechanical Properties of La3+ and Nd3+ Doped Spray Pyrolyzed Zinc Oxide Thin Films" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 2 December 2023. The research work was guided by Dr. B V Rajendra, Professor, Department



of Physics, MIT, Manipal and co-guided by Dr. Pankaj Sharma, Professor, Department of Physics, MIT Manipal.

**Dr. Shreya Kanth,** Full-time Research Scholar in the Department of Chemistry has successfully defended her



Doctoral thesis titled "Synthesis and Characterization of Antimicrobial Polymers and Their Coating Studies" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 7 December 2023. The research work was guided by Dr. M. P. Yashoda, Professor, Department of Chemistry, MIT, Manipal

and Co-guided by Dr. Ananda K, Professor, Poorna Prajna Institute of Scientific Research, Bengaluru.

**Dr. Y. Shriraj Rao,** Full-time Research Scholar in the Mechanical and Industrial Engineering has successfully defended his Doctoral thesis titled "Investigation on Mechanical Properties and Hole Quality in Drilling of Hybrid Carbon Fiber Composites" for the award of PhD degree by the Manipal Academy of Higher



Education, Manipal on 9 December 2023. The research work was guided by Dr. Nanjangud Subbarao Mohan, Former Professor, Department of Mechanical and Industrial Engineering, MIT, Manipal and Co-guided by Dr. Nagaraja Shetty, Associate Professor, Department of Mechanical and Industrial Engineering, MIT Manipal.

**Dr. Kashmitha Muthamma,** Full-time Research Scholar in the Department of Chemistry has successfully defended her

Doctoral thesis titled "Synthesis and Characterization of Organic Luminophores for Anticounterfeiting Application" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 11 December 2023. The research work was guided by Dr. Dhanya Sunil, Professor, Department



of Chemistry, MIT, Manipal and Co-guided by Dr. Prakasha Shetty, Professor, Department of Chemistry, MIT Manipal.

**Dr. Y. Nithesh K,** Full-time Research Scholar in the Mechanical and Industrial Engineering has successfully defended his Doctoral thesis titled "Effect of The Addition"



of Copper and Zinc To A356 Aluminium Alloy And Its Surface Characteristics" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 19 December 2023. The research work was guided by Dr. Sathayashankara Sharma, Senior Professor and Head, Department of Mechanical and Industrial

Engineering, MIT, Manipal and Co-guided by Dr. Gowrishankar M C, Associate Professor, Department of Mechanical and Industrial Engineering, MIT Manipal and Dr. Rajesh Nayak, Associate Professor, Department of Mechanical and Industrial Engineering, MIT Manipal.

**Dr. Prapti Behera**, Full-time Research Scholar in the Dept. of Biotechnology has successfully defended her Doctoral

thesis titled "Biochemical Analysis of Melezitose Degrading Microorganisms from the Northeast Indian Fermented Bamboo Shoots" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 26 December 2023. The research work was guided by Dr. S.



Balaji, Professor and Head, Department of Biotechnology, MIT, Manipal.

Dr. Kirana Kumara P., Assistant Professor (Senior Scale) in the Department of Mechanical and Industrial Engineering at Manipal Institute of Technology, Manipal, has been granted with a patent on 25 October 2023 for his invention titled "A Surgical Simulator for Training Surgeons



in a Few Tasks Related to Minimally Invasive Surgery" by The Patent Office, Government of India.

Dr. Shreelaxmi Prashant, Associate Professor, Department of Civil Engineering, Dr. Muralidhar Kamath, Former Research Scholar, and Mr. Mithesh Kumar, Research Scholar at Manipal Institute of Technology, Manipal, have been granted with a patent on 16 November 2023 for their invention titled "Composition of a Binding Material and a Preparation Thereoff" by The Patent Office, Government of India.







Dr. Sathya Shankara Sharma, Senior Professor, Department of Mechanical and Industrial Engineering and Mr. Rajesh, Research Scholar at Manipal Institute of Technology, Manipal, have been granted with a patent on 11 December 2023 for their invention titled "Hybrid Heat Treatment Method for Age Hardenable Alloy Ferrous Metal Powder Reinforced Composites" by The Patent Office, Government of India.





Dr. Anish Kumar Warrier, Associate Professor, and Dr. K. Balakrishna, Professor, in the Department of Civil Engineering, were awarded a research grant of Rs. 93.15 lakhs by the Indian National Centre for Ocean Information Services (INCOIS), Ministry of Earth Sciences, Government of India, for their project entitled "Understanding the Biogeochemical Process and Dynamics of Pelagic Fishery Resources Off Udupi/Mangalore Region: Validation of the PFZ Advisory Data".





Dr. Raghuvir Pai B, Professor, Department of Mechanical & Industrial Engineering and a team of faculty members were sanctioned with a grant of Rs 49,08,811 by DST for their proposal on adjustable bearings in the field of automation technologies. The team headed by Dr. Raghuvir Pai B as PI and Dr. Shreesha C, Professor and Head, Department of Instrumentation & Control Engineering, Prof. Navaneeth Vernekar, Assistant Professor - Senior Scale, Dr. Ganesha A. Assistant Professor - Senior Scale, and Dr. Girish H, Assistant Professor from Mechanical and Industrial Engineering as Co-PIs worked on the proposal.











Dr. Hareesha K S, Professor in Department of Data Science & Computer Applications, currently International Centre for Director, Applied Sciences (ICAS) has received research funding of Rs. 8.5 Lakhs from DST Nidhi-Prayas. This funding support aims to advance the idea to the Proof of Concept (PoC) stage and subsequently to facilitate the development of a startup



Dr. Manjunath K N, Associate Professor, Department of Computer Science and Engineering and a team have been



for commercialization.









awarded the MRB Research grant of amount INR 8.821 Lakhs for their research proposal titled "AI based Rectal Cancer Detection and Classification". The team headed by Dr. Manjunath K N as PI and Dr. Surekha Kamath, Professor, Department of Instrumentation and Control Engineering, Dr. Rajagopal K V, Professor, Department of Radiodiagnosis and Imaging, KMC Manipal, Dr. Prathista Mathur, Professor, Department of Information Technology, School of Information Technology, Manipal University Jaipur and Ms. Sonal P Almeida (Research Scholar) at MIT Manipal as Co-PIs worked on the proposal.

Dr. Fayaz S M, Assistant Professor Selection Grade,



Department of Biotechnology, was a Co-PI in the ICMR grant of INR 2.18 Crores received by Dr. Somasish Ghosh Dastidar, KMC Manipal as a PI for the project "Validating the efficacy of novel formulations of in silico derived drugs that inhibit protein translation and Virgin

Coconut oil in preclinical models of Parkinson's disease". The other Co-Pls in the project are **Dr. Usha Yogendra Nayak** and **Dr. Yogendra Nayak** from MCOPS Manipal, **Dr. Sanjiban Chakrabarty** from MSLS Manipal, and Dr. Dinesh Upadhya from KMC Manipal.

**Prof.** Rajesh J published a research article titled "Efficient Adsorption of Cr (VI) onto Hematite Nanoparticles: ANN, ANFIS Modelling, Isotherm, Kinetic, Thermodynamic Studies, and Mechanistic Insights," in a high impact journal Chemosphere (Impact Factor: 8.8 and Cite Score: 13.3, a Q1 Journal).



Mr. Shaurya Rahul Narlanka, Assistant Professor, Department



of Civil Engineering published a research article titled, "Measuring energy access for livelihoods, lifestyles, and welfare: Validating the Hierarchical Energy Access Framework in India" in the Journal of Energy Research & Social Science. (Impact Factor: 6.7)

**Dr. Narendra Khatri,** Assistant Professor, Department of Mechatronics Engineering, and Mr. Saurabh Sudeep Chaughule, a student of Mechanical and Industrial

Engineering at MIT have been granted with a design patent titled "AUTONOMOUS SMART FARM VEHICLE FOR PRECISION AGRICULTURE" on 12 October 2023. The other coinventors are Dr. Rashmi Bangale, Dr. Sumit Pokhriyal and Dr. Sandeep Kumar.



Dr. Manohara Pai M M, Senior Professor, Department of



Information and Communication Technology has been awarded with a grant of Rs. 42.48 lakhs for the project titled "Exploratory research in Industrial Automation and IOT" by Schneider Electric, Bangalore.

**Dr. Manohara Pai M M,** is also been awarded with a grant of Rs. 67.7 lakhs for the project in the field of prediction of SOH and RUL, an estimations mode by Schneider Electric Pvt. Ltd. R&D Center, Bangalore.

**Dr. K Abhimanyu Kumar Patro**, Assistant Professor, Department of Mechatronics has been granted a design patent for "Artificial Intelligence Based Agriculture Health Monitoring System on 30 October 2023 by the Patent Office of the Government of India. Dr. Kailash Diliprao,



Dr. B. S. Deepa Priya, and Dr. Pothuraju Rajarajeswari are coinventors.

**Dr. K Abhimanyu Kumar Patro**, has successfully obtained a design patent titled "Solar Powered Mobile and Laptop Charging Station," received official approval on 11 October 2023 from the Patent Office of the Government of India. The coinventors include Dr. R. Dinesh, Mr. C. Somasankarappa, and Dr. P B Savitha.



**Dr.Sriharsha Hegde**, Associate Professor, Department of Aeronautical and Automobile Engineering obtained a patent titled "Magneto-Rheological Damper" from the Patent Office, Government of India. The co-investigators

include Mr. Vinod Raj H G, Bharat Reddy and Himanshu Mardikar.

**Dr. Nethaji S,** Assistant Professor - Selection Grade, Department of Chemical Engineering, **Dr. Kapil Sadani**, Associate Professor, Department of Instrumentation and Control, **Dr. Pooja Nag** Associate Professor, Department of Mechatronics Engineering, and **Dr. Chiranjay Mukhopadhyay**, Professor, Manipal Institute of Virology (MIV) received approval for funding of amount INR 1 crore 43 lakhs for the duration of 36 months by the Indian Council of Medical Research (ICMR). The project is titled "Technologies for screening and remediation of colistin and doxycycline from hospital effluents."







Research is to see what everybody else has seen, and to think what nobody else has thought

Dr. Albert Szent - Gyorgyi

#### **TechShila News**

Project DronAid participated in the Student Expo Competition at Manipal University Jaipur, on 01 October 2023. The event provided a platform for individuals or teams to showcase their completed projects, typically in the field of embedded systems. Out of the 49 teams participated, Project DronAid was adjudged as the first Runner's up, winning a cash prize of ₹5000.



The **Project DronAid** represented MIT at Mangaluru Technovanza 2023 hosted at UniCourt, Mangalore on 11 November 2023. MIT team developed a drone application aimed at delivering emergency medicines directly to specified locations. The event witnessed the participation of more than 80 startups from across Karnataka. DronAid team qualified through the first two online rounds, coming in the top 15, and was called in for the offline round to pitch the idea to Investors and Venture Capitalists attended from all over the country. MIT team's performance secured them a position among the top ten startups and garnered appreciation from the jury.



Team Karting Manipal, despite being a newcomer to the Indian Karting Race, demonstrated its calibre as championship contenders by securing an impressive second position in the rigorous rulebook test conducted in January 2023. It bagged 4<sup>th</sup> overall best team (in the combustion vehicle category) position in the competition held during 12-16 October 2023 at Buddh International Circuit, Noida. Out of 26 participating teams from India, Team Karting Manipal achieved the following accolades:

• Design Round (CV): 1st Position

• Business Plan and Cost Report: 2nd Position

• Weight Test: 2nd Position



**Team SolarMobil** launched the latest edition of their quarterly newsletter in the presence of Cdr (Dr.) Anil Rana, Director, Dr. Somashekara Bhat, Joint Director, Associate Directors and Faculty Advisors on 28 November, 2023.



Mr. Rajeev Chandrashekar, Minister of State for Skill Development and Entrepreneurship, Electronics and Information Technology, Government of India, visited the 21 stalls in the exhibition by students' major projects in the student activity centre on 17 October 2023 during Techtatva 2023. He complimented the efforts put up by the teams, in fulfilling their dreams and gave valuable inputs to the students. His interaction was a great morale booster for the teams from TechShila.



**Prof. (Dr.) T G Sitharam**, Chairman - AICTE, and chief guest during MAHE convocation, visited the students' major projects exhibition in the student activity centre on 25 November 2023. He appreciated the achievements of teams and congratulated them.



Mr.Vinod Eswaran, MD & CEO, Jio Payments Bank, Mumbai and chief guest during MAHE convocation, visited the students' major projects exhibition in the student activity centre on 26 November 2023. He was impressed by the teams' innovative ideas put into practice. Mr.Vinod Eswaran is an alumnus of MIT Manipal.



Ampalam Venkata Snehalatha, PhD Research Scholar, Department of Chemistry, received the Best Poster Presentation award at ICHE 2023.

**Dr. Anusha Prabhu,** a Research Associate affiliated with the "Centre for Microfluidics, Biomarkers, Photoceutics & Sensors," was selected to participate in the "Sakura Science Program" with a travel grant. As a part of this opportunity, she participated in "Biomedical Research Instrumentation workshop program"



scheduled during 11-17 December 2023, at the Department of Cardiovascular Physiology, Faculty of Medicine, University of Miyazaki, Japan.

**Ashutosh Jha**, a fifth-semester B.Tech. student of Department of Electronics and Communication Engineering



secured the First Prize for the top project in Intel Unnati Industrial Training- Summer 2023 in June 2023. The Intel Unnati Industrial Training- Summer 2023 was a national-level training initiative with approximately 2000 student participants engaged in real-time AI projects. Ashutosh received the Intel Unnati Cash Award of Rs.

30,000/ for his project, titled "Conquering Fashion MNIST with CNNs using Computer Vision". Mr Ashuthosh worked under the guidance of Dr. Anu Shaju Areeckal, Assistant Professor in Department of Electronics & Communication Engineering. Dr. Ritesh Bhat, from the Department of Mechanical and Industrial Engineering, served as the institute mentor for the project.

Aditya Goyal, a student of 1st year B.Tech - Mathematics and Computing, represented the Karnataka State Team at the 4th South India Senior National Roll Ball Championship 2023. Aditya achieved third position in the event held at Lawspet Indoor Stadium in Pondicherry during 21-22 October 2023.





Cryptonite, MIT, Manipal student team won Grand Finale of Smart India Hackathon 2023- Software Edition at Nodia Nodal Center on 20 December 2023. The team involved

Daksh Dadhania, (IT), Siddharth Mittal ((IT), Shreyansh Sankrit (CCE), Sriyans Ketavarapu (IT), Kumud Rathore, (CSAI), Dhruthi K (CSE).

**Dr. Nisha Shetty,** Assistant Professor - Senior Scale in the Department of Information & Communication Technology mentored the team. The team worked on the problem statement "PhishTrap: Al-Powered Anti-Phishing Browser Extension & App," organized by the National Technical Research Organization (NTRO), New Delhi. Their project implementation involved the creation of four distinct modules aimed at combating phishing attacks in real-time. Competing against six other teams representing diverse institutes and universities, "Cryptonite" emerged as the winner. Each team member was awarded with a certificate, and the team as a whole received a cash prize amounting to Rs. 1 Lakh.

Ripple Technologies, represented by Suyog Chougule, Ishayu Chakravorty, students of Mechatronics, Arpit Baj, and Thejus Surya M T, students of Electronics and Communication Engineering, Saurabh Chaughule, a student of Mechanical Engineering and Siddhartha Bhat, a student of Computer Science and Engineering obtained a grant totaling INR 7 Lakhs under the NIDHI PRAYAS scheme. The purpose of this grant is to facilitate the development of a Type-3 DC EV Charger. The team has worked under the guidance of Dr. Vijay Babu Koreboina, Associate Professor, Department of Mechatronics.



Yuvanshi Jain, a student of Mechanical Engineering participated in a two-day research paper event hosted at NITTE University in Karnataka. The research paper titled "Helical Milling of Ti6Al4V Alloy: Evaluation of Tool Wear and Surface Roughness" won the first position with a cash prize of ₹5,000.00.

Ms Nandini K K, Research Scholar in the Department of Electrical and Electronics Engineering MIT Manipal, received Best Paper Award for her Research Paper titled "A prospective study on Reliability Analysis



of Electrical Network with Electric Vehicle integration" in the 3rd International Conference on Intelligent Computing techniques for Smart Energy Systems held at Manipal University Jaipur, India, during 14-15 December 2023.

#### **Sports Achievements**

MIT- A and MIT-B Chess teams participated in the MAHE Inter-Collegiate Chess Competition hosted by KMC, Manipal during 06-07 October 2023. MIT- A men's team secured the first place while the MIT- B men's team secured the second place.





MIT-A and MIT-B teams secured first and second place respectively in the MAHE Inter Collegiate Table Tennis 2023-24 organized by PSPH, Manipal held during 11-12 October 2023.





MIT Men and MIT Women teams emerged as Champions in the respective MAHE Inter Collegiate Cross Country Race 2023-24 organized by KMC, Manipal on 15 October 2023.



MIT team emerged as the Overall Champions at MAHE Inter Collegiate Swimming 2023-24 organized by MCOPS, Manipal during 25-26 October 2023.



MIT-A and MIT-B Team secured first and second place respectively in the MAHE Inter Collegiate Badminton 2023-24 organized by MIT, Manipal held during 30-31 October 2023.



MIT- A and MIT- B Team emerged as winners and runners up position respectively in the MAHE Inter Collegiate Squash 2023-24 organized by MSAP, Manipal held on 02 November 2023.





MIT Women - A Team secured Runners up position in the MAHE Inter Collegiate Squash 2023-24 organized by MSAP, Manipal held on 02 November 2023.



MIT Women - A Team emerged as the winner in the MAHE Inter Collegiate Basketball 2023-24 organized by MIC, Manipal held during 03-05 November 2023.



MIT Men - A Team secured runners up position in the MAHE Inter Collegiate Basketball 2023-24 organized by MIC, Manipal held during 03-05 November 2023.



MIT team emerged as the Overall Champions at MAHE Inter Collegiate Boxing 2023-24 organized by MAHE, Manipal during 03-05 November 2023.



**Mr. Naman Bhat**, MIT, Manipal emerged as the Winner at South West Zone Inter University Boxing Championship 2023-24 organized by Chandigarh University, Punjab during 25- 27 December 2023.



Adityaraj Singha, a student of Computer and Communication Engineering, bagged the second position in Hockey at Revels '23, the National level Sports & Cultural fest of Manipal Institute of Technology.





#### Art by:

Meenakshi Acharia - Department of Biomedical Engineering and Nishtha Yadav - Department of Aeronautical Engineering

#### **Student Corner**

## Distant love seeks solace in the arms of uncertainty

With every ticking moment, time slows down. With every breath of fresh air, a dream is turned around. The sunsets as if the day has ended, but that's when we wake up to watch as the world moves on. Manipal is distant.

We gather around hoping to find something but return with a little bit of nothing. It's who we are but it's really not. Is it the people that are changing us or is it the time? Manipal is love.

We watch as the clouds pass by. A day hasn't gone by when we haven't thought about how we want to be everything but we can only try. What if we're just masking the uncertainty with loud music?

Manipal is solitude.

We Don't fit in but don't want to belong. The stories we write just blend into pages every time we get on to a plane until we finally don't look back and these moments just become memories and get lost in time.

Manipal is an emotion.

**Deepali vengala** 220924034 Biotechnology

## The First Time

Exhilarating, this feeling crept upon me,

Monsoon frolics, sandy beaches around,

New faces, new memories about.

What wrong could possibly be?

A new experience for me.

Pink, purple, orange and blue

Manipal skies above, the rainbow so true,

The rain smells ignited, Oh this feeling so new!

Ayush Acharya 220929332 Mechatronics

## Alumni Meets 2023 at MIT, Manipal

Alumni engagement 2023 of MIT Manipal witnessed the convergence of shared memories and discussion on future endeavours through the impactful annual Alumni Meets. In the month of December 2023, MIT Manipal hosted three alumni meets: PG Alumni Meet of Mechanical and Industrial Engineering, Golden Alumni Meet of 1978 and 1979 Batch, and Silver Alumni meet of 1998 Batch.

## PG Alumni Meet of Mechanical and Industrial Engineering

A symphony of intellect and nostalgia resonated during the PG Alumni Meet held at MIT, Manipal on 15 December 2023, uniting 66 accomplished alumni from M. Tech CAAD (Formerly CAMDA), M. Tech Engineering Management, M. Tech Manufacturing Engineering and M. Tech ATPES/TSES. The session witnessed profound discussions on placement strategies, internships for current students, and curriculum refinement. Mr. Vishwanath Nayak, Principal Engineer at Wipro-GE Healthcare Pvt. Ltd. and an alumnus of M. Tech CAAD, graced the occasion as Chief Guest. Dr. P Giridhar Kini, Registrar, MAHE and an alumnus of M. Tech Engineering Management, adorned the event as the Guest of Honour.



Golden Alumni Meet of 1978 and 1979 Batch



A nostalgic reunion unfolded as 33 distinguished alumni, accompanied by their families, celebrated the Golden Alumni Meet on 19 December 2023. Prof. D V S Iyer, Retired Professor from the Department of Civil Engineering, graced the event as the Chief Guest. Led by Mr. Daveji and Mr. Cherian, the gathering rekindled the memories of their formative years at MIT Manipal. Prof. D V S Iyer, a venerable

98-year-old veteran, regaled the audience with tales of building Manipal under the visionary guidance of the late Dr. T M A Pai.

#### Silver Alumni Meet of 1998 Batch

The Silver Alumni Meet, held on 23 December 2023, brought together 76 alumni and their families, spanning various branches. A meaningful interaction unfolded as they engaged with MIT administrators, recollecting about their shared experiences going back in time by a quarter-century. The attendees admired the developments they could see in the campus, and many pledged their support to the initiatives of their alma mater. **Mr. Prakash Divi** of Divi Laboratories led the alumni team. Prof. K Kamalaksha, the Chief Guest, was felicitated for his mentorship during their Manipal days, that left an indelible mark on many. The event also saw the participation of retired senior faculty who delightfully responded to requests of alumni.



These Alumni Meets rekindled cherished memories and forged stronger bonds between the institute and its alumni, fostering a spirit of continuous collaboration.

#### **Alumni Group Visits**

In addition to the scheduled Alumni Meets, MIT, Manipal welcomed several esteemed alumni groups throughout the year, fostering continuous connections and meaningful interactions. Here's a snapshot of these special visits:



Nineteen alumni from the Batch of 1983 visited MIT on 19 December 2023 and engaged with the institute's leadership.

Six alumni from the Batch of 2021 in the field of Electronics and Communication Engineering (ECE) revisited their alma mater on 05 May 2023.



Seven alumni from the Batch of 2011, M.Tech, visited MIT, Manipal on 05 September 2023.



Eight alumni from the distinguished Batch of 1983 in Civil Engineering visited the campus on 23 September 2023 adding a touch of nostalgia and wisdom to the ongoing academic discourse.



Thirty-five alumni from the Batch of 1983 convened at MIT on 02 December 2023 creating a powerful reunion and sharing of memories.



Five alumni from the Batch of 1973 visited the campus on 11 December and shared anecdotes from their academic journey and witnessed the evolution of their alma mater.



#### **Alumni Achievements**

Mr. Anand Verma, alumnus of MIT, Manipal (Printing Technology Engineering Batch of 2009) won the Gold Award in the Mass Challenge Switzerland 2023 competition. Mr. Anand Verma is the Co-founder and CEO of Perovskia Solar AG PEROVSKIA, a cleantech startup situated in Switzerland that specializes in customizable perovskite solar cells and has pioneered digital printing technology for manufacturing design-free perovskite solar cells.



Mr. Siddhant Vora, Brand Lead, at Ampere (Greaves Electric Mobility Pvt. Ltd.), Bangalore and alumnus of MIT, Manipal (Mechatronics Engineering Batch of 2015) received National Level recognition for Budding Marketing Professional, Pitch Marketing 30 Under Thirty.



Ms. Suma Khandige, Founder LightVista and alumnus (Electrical and Electronics Engineering Batch of 2003) has been appointed as the Membership Chair on LiDAI's Executive Committee.





Dr. Ravi Bapna, an alumnus of MIT, Manipal (Computer Science and Engineering, Batch of 1993), currently Academic Director, Carlson Analytics Lab at the University of Minnesota - Carlson School of Management was honoured with AIS Fellow Award. The AIS Fellow

Award recognizes individuals who have made outstanding contributions to the information systems discipline in terms of research, teaching and service. Mr Bapna was also previously associated with Indian School of Business, Hyderabad as Executive Director - Centre for IT and the Networked Economy (CITNE) during 2006-13.

Mr. Vishant Kothari an alumnus of MIT, Manipal (Mechanical Engineering Batch of 2007) is elevated to the position of Sr. Manager - School Bus Electrification and Battery Circularity at global Think Tank "World Resources Institute", New York.



Senergetics, a start up from Eindhoven, North Brabant, Netherlands, of which **Ms. Anitha** an alumnus of MIT, Manipal (Electronics and Communication Engineering) is



the Co-Founder & CTO has achieved recognition as one of the top 22 EU startups in climate tech, selected from a pool of 30,000 entries. The start up is developing a cutting-edge photonics sensing technology, specializing in providing non-intrusive, continuous

monitoring services for businesses operating within process industries.

#### **Alumni Visits**

- Mr. Lax Madapaty, Senior Vice President of Global Marketing at JPMorgan Chase & Co. and alumnus of MIT (Electrical Engineering Batch of 1992) and former faculty member in the Department Electronics & Communication, visited MIT on 12 October 2023.
- Dr. Subhamoy Mandal, Assistant Professor at IIT (Indian Institute of Technology) Kharagpur and alumnus of MIT, Manipal (Biomedical Engineering Batch of 2007) visited MIT on 7 October 2023.
- Mr. T. S Vishwanathan, Technical Facilitator at Ion Exchange(I) Ltd., and alumnus of MIT, Manipal (Chemical Engineering Batch of 1976) visited MIT on 13 October 2023.
- Mr. Vishal Bhargava, Director of Engineering, Core & Client Development Group at Intel and alumnus of MIT (Electronics and Communication Engineering Batch of 1995) visited MIT Manipal on 16 October 2023.
- Dr. Ganapathy Ayyappa, Professor, Indian Institute of Science, Bangalore and alumnus of MIT (Chemical Engineering Batch of 1984) visited MIT Manipal on 13 October 2023.
- Mr. Ratnesh Mehra, Director of Go To Market & Strategy at Oracle, Bengaluru and alumnus of MIT (Electronics and Communication Engineering Batch of 1995) visited MIT Manipal on 16 October 2023.

- Mr. Prakash D. Shah, Chairman of Khar Education Society, Mumbai and alumnus of MIT Manipal (Electronics and Communication Engineering Batch of 1972) visited MIT on 27 October 2023.
- Mr. Utsav Baliga, MSc in Aerospace Vehicle Design from Cranfield University and MTech in Avionics and BE in ECE from MIT Manipal, visited on 4 November 2023.
- Mr. K. Kiran Chandra, Founder & CEO of Usurp tec, Hyderabad, Telangana and alumnus of MIT (Mechanical & Manufacturing Engineering Batch of 2019) visited MIT Manipal on 11 November 2023.
- Mr. Prakash Divi, Vice President of Sales & Marketing at DIVIS LABORATORIES and alumnus of MIT, Manipal (Mechanical Batch of 1998) visited MIT Manipal on 23 November 2023.
- Mr. Kaushik Chavali, Senior Application Engineer Aerospace & Defence Engineer at Cadfem India and
  alumnus of MIT, Manipal (Aerospace, Aeronautical
  and Astronautical Engineering Batch of 2019)
  visited MIT Manipal on 11 November 2023.
- Mr. Ashok Bhat, General Manager at MED and Process Engineering, INCAP, Bengaluru and alumnus MIT Manipal (Electronics and Communication Engineering Batch 1990) visited MIT Manipal on 24 November 2023.
- Mr. Amartya Gupta, Founder & COO of CRE-AIDLABS and alumnus of MIT, Manipal (Mechanical Engineering Batch of 2019) visited MIT Manipal on 11 November 2023.
- Mr. Saketh Patil, EDM Associate at Novo Nordisk and alumnus of MIT, Manipal (Electronics and Communication Engineering Batch 2014) visited MIT Manipal on 22 November 2023.
- Mr. Subhendu Kesh, Head Digital & VP IT at JK Paper Ltd and alumnus of MIT (Computer Science and Engineering, Batch of 1989) visited MIT Manipal on 11 December 2023.
- Mr. Vishal V K, Software Designer at Philips, Bangalore and alumnus of MIT (Mechanical Engineering, Batch of 2016) visited MIT Manipal on 12 December 2023.
- Mr Nelson D'Souza, Project Manager at Philips Medical Systems, Canada and alumnus of MIT (Electronics and Communication Engineering, Batch of 1985) visited MIT, Manipal on 13 December 2023.

- Dr. Varadraj Prabhu Gurupur, Associate Professor, University of Central Florida and Mr. Prathamesh Pai, Web Developer at Transducent, both from Computer Science and Engineering, Batch of 2001 visited MIT Manipal on 23 December 2023.
- Alumni from Batch of 1973, Mr. Shailesh Desai (Electronics and Communication Engineering), Mr. Rashmin M Dogli (Mechanical Engineering), Mr. Haresh K Dholakia (Mechanical Engineering), Mr. Girish Vrajlal (Civil Engineering), Mr. Ramesh Nandu ((Electronics and Communication Engineering) visited MIT, Manipal on 12 December 2023.
- Alumni from Batch of 2020, Mr. Rohit Nayak, QA
   Automation Engg. at NXP India Pvt. Ltd, Mr. Pavan
   Nayak, Google Cloud Devops Engineer, Nives
   Solutions Pvt Ltd., Mr. Kausthubha K Rao, Software
   Developer at Onmobile Global Ltd., Ms Samyuktha
   Prabhu, Full Stack Software Engineer at Certivity
   GmbH visited MIT Manipal on 16 December 2023.
- Mr Clive D'Souza, Head of Partner Engineering at Google Cloud, USA and Ms. Asha Pai D'Souza, Public Works Director at the City of Woodinville, USA, both from from Civil Engineering Batch of 1998 visited MIT Manipal on 28 December 2023.
- Mr Yogeesh Pai, Head, Project Planning and Controls UPL Ltd, Mumbai and alumnus of MIT (Industrial &Production Engineering Batch of 2000) visited MIT Manipal on 29 December 2023.
- Mr. Pranay Kumar, Cloud Advisor & Delivery Lead at DXC Technology, Bengaluru and alumnus of MIT (Chemical Engineering, Batch of 2007) visited MIT, Manipal on 30 December 2023.
- Mr. Anant Tidke, Acme Construwell Pvt Ltd. and alumnus of MIT (Civil Engineering Batch of 1984) visited MIT Manipal on 30 December 2023.
- Mr. Reynold Carvalho, alumnus of MIT, Manipal (Mechanical Engineering Batch of 1984) visited MIT on 13 October 2023.
- Mr. Jyotishka Duttagupta, Mechanical Engineering Batch of 2023, visited MIT on 7 October 2023.
- Mr. Kapil Bhagavathul, Mechanical Engineering Batch of 2016 visited MIT on 10 October 2023.

- Mr. Ranjan Yadav, alumnus of MIT (Civil Engineering Batch of 2020) visited MIT Manipal on 20 October 2023.
- Mr. Narsim Bhat Buntva, alumnus of MIT, Manipal (Electronics and Communication Engineering Batch of 1983) visited MIT on 27 November 2023.
- Mr. Harsh Mehta, alumnus of MIT, Manipal (Information and Communications Technology Engineering Batch 2023) visited MIT on 11 November 2023.
- Mr. H. Raghavendra Hebbar, alumnus of MIT, Manipal (Industrial Production, 1983 batch visited MIT Manipal on 27 November 2023.
- Ms. Volety Sai Sirisha, alumna of MIT (Electronics and Communication Engineering Batch of 2021 batch) visited MIT Manipal on 05 December 2023.
- Mr. Puneet Srivatsava alumnus of MIT (Mechanical Engineering, Batch of 2005) visited MIT Manipal on 16 December 2023.
- Mr. Brajesh Jha, Senior Manager at IOCL and alumnus of MIT (Printing Technology Batch of 2005) visited MIT Manipal 19 December 2023.
- Mr Anilkumar S Software Development Manager, Amazon, Hyderabad and alumnus of MIT, Manipal (MTech - CSE, Batch of 2008) visited MIT Manipal on 06 November 2023.
- Mr. Suhas Prabhu, (Mechanical Engineering Batch of 1992) and Ms. Tripti Agarwal (Biomedical Engineering Batch of 2006) from TriVeda Capital visited MIT, Manipal on 09 December 2023.
- Mr. Zulphee Ismail, alumnus of MIT (Civil Engineering Batch of 1987) visited MIT Manipal on 11 November 2023.
- Mr. Sangeet Modi, alumnus of MIT (Industrial and Production Engineering, Batch of 1985) and winner of Blue Ribbon, and Dr TMA Pai Gold Medal visited MIT Manipal on 12 December 2023.
- Mr. Vinod Easwaran, MD & CEO of Jio Payments Bank, Mumbai, an Alumnus of MIT visited MIT, Manipal on 26 November 2023.

## APPRECIATION OF SERVICE

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



Dr Pradeep Kumar Shetty Additional Professor

Department of Mechanical and Industrial Engineering Date of Joining: 08-08-2007 Date of Superannuation 31-12-2023



Mr. Sundara Naik
Senior General Duty Worker
Department of Biomedical Engineering
Date of Joining: 22-04-1988
Date of Superannuation: 31-10-2023



Mr. Peter Mascarenhas
Senior General Duty Worker
Security
Date of Joining: 05-05-1987
Date of Superannuation: 30-11-2023

#### **VISION**

Excellence in Technical Education through Research, Innovation and Teamwork.

## **MISSION**

Educate students professionally to face societal challenges by providing a healthy learning environment grounded well in the principles of Engineering, Research, and Teamwork.

## **VALUES**

Discipline
Integrity and Trust
Holistic Learning
Ethics and Professionalism
Concern for Society and Environment

## **GOAL**

To be a world class technical institution fostering innovation, leadership and entrepreneurial spirit.



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