

# NATIONAL TECHNOLOGY DAY AND MIT FOUNDATION DAY

National Technology Day is celebrated every year on May 11 to highlight the achievements of engineers and scientists in the field of technology and science. This day is marked as the anniversary of Pokhran nuclear tests of 1998 and India's technological advancements. May 11 is also coincidentally, the MIT Foundation Day.

This year, the MIT Foundation Day and National Technology Day were jointly organized by Manipal Institute of Technology (MIT) and Manipal Universal Business Incubator (MUTBI), Manipal. Cdr (Dr) Anil Rana, Director inaugurated MIT Open Day as the part of the celebrations and highlighted the importance of the National Technology Day.



Dr Somashekara Bhat, Joint Director, MIT, said it is a very special day to all MITians. Around 245 high school and PUC students from coastal Karnataka visited MIT on this occasion and were exposed to various ongoing research & innovative student projects. The participants gained a different perspective of the applications of technology, and appreciated the role of various branches of engineering in the betterment of society.



In the programme held at the MIT Library auditorium, former Directors of MIT were the special invitees. Brig. Dr S S Pabla, former Director, MIT, and former Pro VC, MAHE, was the Chief Guest. Dr PLNG Rao, Pro VC (Quality Assurance & Health Sciences), MAHE, former Directors of MIT - Dr B Raghuvir Pai, Dr Vinod V Thomas and Dr D Srikanth Rao were the Guests of honor. Dr PLNG Rao launched the Start-up Story in website and MIT promo video.

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#### MAHE MANIPAL FIGHT NIGHT: BOXING

The Manipal Academy of Higher Education unveiled its maiden, first of its kind Mega Boxing Event - Fight Night Boxing Contest at the MIT Student Plaza on 8 April 2022. The event witnessed the participation of prominent boxers of national and international fame. The theme of the event, "Punch it before it knocks you out", aimed at creating awareness on substance abuse.



The grand event was kicked off by three-time WBC Asia title holder and first Indian boxer in WBC world ranking, Neeraj Goyat, in the presence of Cdr (Dr) Anil Rana, Director, MIT. Dr Vinod Nayak, Secretary, Sports Council-MAHE; Mr S P Kar, Director, PR, Media and Social Media Cell-MAHE; Prof Balakrishna Rao, Director-IT & Digital-MAHE; Dr Geetha Maiya, Director-Student Affairs-MAHE; Mr Vittaldas Bhat, Director, Purchase-MAHE; Col Prakash Chandra, Director, General Services-MAHE along with other MAHE officials and students participated in the event.



All well-conceived ideas implemented with great dedication, devotion and dynamism get people's support and co-operation.

Dr. T. M. A. Pai

### MANNUPALLA TO MANIPAL - AN EPIC SAGA

#### A PIGMY THAT GREW UP TO BE A GIANT

The ability to create a newer path when the laid out path gets murkier differentiates a visionary from the ordinary. The innovative actions of our revered founder Dr TMA Pai, the chief architect of modern Manipal, is a testimony to this. Stories abound about the pioneering ideas of Dr Pai. Being far ahead of their times, they eventually paved towards making transformative changes in the society at large.

One such story that is etched in the memory of the people of the region is the story of 'Pigmy Scheme' that revolutionised the idea of 'Savings' among the people. It is a story about how a society can redefine itself when conventional notions are re-examined with a visionary outlook. Those were the times when people practised the idea that saving is what remains after spending from their earnings. The pigmy scheme by Dr Pai turned the idea around by convincing people that earnings minus savings is what is available for spending.

The idea of 'pigmy saving' has an interesting beginning. Sources narrate that once Dr Pai, while working at his Clinic, found an old lady with a simple fever to be having no money to pay for the routine medicine given to her. Dr Pai did lend her money to buy the medicine, but a thought began to bother him: How is that people do not have even such small savings?

Dr Pai deeply felt he must devise a method to make the local people save at least a small part of their earnings. That is when he conceived the Pigmy Deposit Scheme, that would in the long run, have a far-reaching impact on the lives of the people around. The idea was to mobilize small savings from all possible income groups regularly. A depositor had the flexibility of making these pigmy deposits daily, weekly or monthly as per one's convenience. People could deposit as little as 25 paise daily, which at the end of seven years would accumulate to ₹700, at a simple interest of 3.5%. Dr Pai appointed door-to-door deposit collectors who would visit the depositors at home, as per their committed frequency, to collect these deposits. Very soon the scheme gained wide acceptance as it demonstrated the importance of thrift and savings to the people in the region.

The Syndicate Bank took its birth during this period in the late 1920s. The bank was started with an initial capital of ₹8,000 and despite the continued efforts to attract the investors, the rich were reluctant to buy the shares of the Bank, and the poor stayed away from investing. In fifteen months of its starting, only 484 shares of the Bank had been bought. At this time to offer security to the shareholders, Dr Pai insured his own life for Rupee One lakh. He also travelled extensively in the region to persuade both the poor and the rich to support his venture.

It is at this juncture in the year 1928, that Dr Pai introduced the path-breaking concept of 'pigmy banking'. The motto "No man is too small for our bank" was adopted by the Syndicate Bank which was willing to accept deposits in dribbles of five rupees and also advance loans in the same measure through the branches it opened in remote areas of the region.

The overwhelming success of the pigmy deposit scheme was followed by numerous heart touching stories of ordinary people, many of them daily wage earners and street vendors, depositing small amounts of money with a hope to build their dream house, or perform their daughter's wedding. In one instance, it was reported that a poor woman fainted in disbelief upon hearing the amount she had saved up, and in yet another, a woman had built a house using the savings, and named it the 'Pigmy House'!

Dr TMA Pai's experiments with pigmy banking as early as 1928 resonates clearly with the acclaimed ideas on savings propagated by the Nobel prize winning American economist Richard H Thaler in 2017. Dr Pai's vision was multi-layered: at once, it addressed the issues of finance, unemployment and education. The enduring tale of pigmy banking is a testimony to the fact that in every problem, Dr Pai unearthed a ray of hope, and in every set back, Dr Pai discovered the power of resilience.

#### Sources:

- Kamath M V (2000), Syndicate Bank: a people's bank, Manipal: Manipal Press.
- Thingalaya N K (1999), The Banking Saga History of South Kanara Banks, Mangalore: Print Shoppe.
- Agrawal, Amol, Before Thaler there was Pai.

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# Editor's Musings

Dear Reader,

Greetings...!

It is with immense pleasure that we present to you this Edition of FOCUS - MIT Newsletter. This issue carries the noteworthy achievements of our students, staff, and faculty during the second quarter of the year 2022. It also covers the newsworthy happenings at the Institute and the Campus during the same period. With the Campus populated to its full capacity, post pandemic, the Institute is brimming with activities, both curricular and extra-curricular, and there is never a dull moment!

This quarter witnessed an important event - the NAAC Peer Team visit during May 23-25. For the three days, we had about twelve experts drawn from across the country, going through our processes and practices for the purpose of accreditation. MIT, being an important constituent Unit of MAHE, participated in the accreditation process. I am extremely happy to convey that MAHE received the highest Grade A++. MAHE Central Team has put up an untiring effort to realize the goal set for themselves. The constituent Units extended their whole-hearted support in submitting and showcasing the contents as per the NAAC criteria. It was a great learning experience for all of us.

I am also happy to convey that the following four programs of MIT, viz., Automobile Engineering, Computer & Communication Engineering, Industrial & Production Engineering, and Aeronautical Engineering have been reaccredited for the next three years (2022 - 2025) by the NBA, based on the assessment by experts that was held on 3<sup>rd</sup> June 2022.

Further, in this issue, the regular featured article under the title, "A pigmy that grew up to be a giant," attempts to capture the beginning of one of the pioneering concepts introduced to the world of small savings by our revered Founder Dr TMA Pai. A scheme that changed the lives of millions of the marginalized section of our society, giving them hope of a better tomorrow.

Happy Reading...!

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The student major projects, one of the prides of MIT Manipal, is renamed as "TechShila". Unveiling of this name was done by Chief Guest Brigadier (Dr) S S Pabla. Pavan Kumar Thota, student of 4<sup>th</sup> Semester Chemical, who suggested the name in an open competition held for the purpose, was suitably rewarded with a trophy and a certificate during the event.



Dr D Srikanth Rao, Director Planning & Monitoring, MAHE released Coffee Table Book on Major Student Projects - TechShila. On this occasion the office of Associate Director R&C arranged for recognizing the Grant (extra Mural) and Patent Holders.

The Awards for Best Researcher, and Excellent Research Performance of various departments of the Institute were also given away. Dr Sudha D Kamath, Professor, Department of Physics bagged the Best Researcher Award.



While the Department of Physics was awarded for excellent research performance, Department of Chemistry came a close second.





Chief Guest Brig. Dr S S Pabla appreciated this initiative and remembered the initiatives the leadership took to enhance the capacity and capability of MIT. All the former Directors of MIT remembered the days during their leadership tenure, and congratulated the present team on this initiative. Convener, Dr Raghavendra Holla, Associate Professor, Department of Civil Engineering rendered the Vote of Thanks.

Dr Vinod V Thomas, Registrar Evaluation, MAHE and also the former Director, MIT unvieled the "start-up wall of fame" symbolically at the Innovation Center. To mark this momentous event, a sapling was planted by the dignitaries near the Hostel Block No. 2.





On the same day, in the afternoon, the initiation of a Webinar Series was done by Dr B Raghuvir Pai, Professor Department of Mechanical and Manufacturing Engineering and former Director, MIT. The maiden talk of this series was delivered by Dr Murthy Dharmapura, Associate Professor - Research, on the topic, "Importance of interdisciplinary research approaches to advance renewable energy technologies."

# **EVENTS AT MIT**

#### MANIPAL ENTREPRENEURSHIP SUMMIT

The 5<sup>th</sup> edition of "Manipal Entrepreneurship Summit (MES) 2022", a flagship event of MAHE, was held successfully from 17 March to 2 April 2022 at MIT. Various online programs like webinar on Metaverse, case study analysis of start-ups / companies, debate on various topics related to economics, interactive sessions with entrepreneurs and workshop on design thinking & entrepreneurship were held during the summit.

"Entrepreneurship is a journey of perseverance till you succeed and beyond," was the collective message conveyed by the successful MAHE alumni entrepreneurs. They were participating in a panel discussion on 'Essentials of Entrepreneurship' as part of the programme.



Seven alumni entrepreneurs from various institutes of MAHE participated in the panel discussion and deliberated on the governmental support available to start-ups & incubators, importance of innovation & entrepreneurship in Higher Education Institutions, and the need for aspiring youngsters to begin their entrepreneurial journey in view of the conducive ecosystem currently prevailing in the country.

Entrepreneurs from pharmaceutical, hospitality, agritech industries, consulting & investment firms and social enterprise participated as resource persons in the two-day long finale of MES 2022.

In his keynote address, Dr Narasimha Bhat, CEO & Founder, Manipal Dot Net, Manipal, stressed the need to unleash the innate talent in the present day youngsters. He also advised them to enjoy their entrepreneurial journey through relishing, rejoicing and regaining. Dr Bhat emphasized that the secret to success is to believe in oneself and always work with a good intent.

In his inaugural address, Vice Chancellor of MAHE, Lt. Gen. (Dr) M D Venkatesh, cited the example of Manipal's development as the outcome of

entrepreneurial journey of our founder Dr TMA Pai. He further continued that human development around our campuses at Manipal, Sikkim and Jaipur shows the Manipal model of entrepreneurship.

Considering the recent development of MAHE alumni showing interest in having their start-up operating from Manipal, the Vice Chancellor, called upon the alumni to come forward and make the best use of the MAHE ecosystem towards their entrepreneurial journey.

Earlier during the programme, in his opening remarks, Cdr (Dr) Anil Rana, Director, MIT, pointed out the natural ecosystem that prevails in Manipal, and also urged the budding entrepreneurs to make best use of the National Policy on Innovation & Start-up for Students & Faculty.

MES is an annual flagship event of MAHE jointly organized by MIT, Entrepreneurship Cell (ECell) of MIT, Manipal Incubators, Alumni Relations, Innovation Center and Corporate Relations of MAHE.

With the intent of creating awareness among students, faculty, alumni and others, MAHE started organizing MES beginning 2016. During the years gone by, more than fifty entrepreneurs and other industry experts have participated in the various editions of MES.

In the finale held during 1-2 April, panel discussion and narration of stories by entrepreneurs, pitch by students & start-ups and Innovation Mela were organized. More than 60 innovators / start-ups participated in the Innovation Mela which attracted a good number of visitors.



The event was co-sponsored by KNND Associates, Bengaluru, SoftPro Business Solutions, Udupi and Sri Durga Laboratory Equipment Supplies, Mangaluru.

#### RAMKRISHNA BAJAJ NATIONAL QUALITY AWARD

Manipal Institute of Technology received the prestigious IMC Ramkrishna Bajaj National Quality Award (IMC-RBNQA) in the Leadership Category in Mumbai on 30th April 2022.

This honor was conferred on our Institute for its excellence in academic and research quality with a sustained focus on overall student development, concern for the environment and safety, community service and human resource management.

The IMC-RBNQ award is a recognition of the unique model of learning practiced at the institute: experiential learning by the students and the whole-hearted support for their innovation and entrepreneurial pursuits by the institute.

At the glittering award ceremony held in Mumbai, Cdr (Dr) Anil Rana, Director, MIT was delighted to share the platform with the former ISRO Chairman Dr K Sivan, who was the recipient of the prestigious Dr Juran Quality Award.



#### RECOGNITON OF STUDENT ACHIEVEMENT: TEA WITH DIRECTOR

The Office of Student Welfare, MIT, organized "Tea with Director" programme on 11 May in Sir M V Seminar Hall. Dr Nagraj Katagi, Associate Director Student Welfare, MIT welcomed the gathering and introduced the objective of the event.



Cdr (Dr) Anil Rana, Director MIT addressed the gathering and congratulated the winners and achievers. He expressed his happiness in stating that MIT students have shown a remarkable inclination towards goals outside the academic sphere also, thereby developing their all-round personality.

Dr Somashekara Bhat, Joint Director, spoke about the inception of this programme and the importance of recognizing the achievements of students and staff. Dr Priyanka Kakade Desai and Dr Poornima P Kundapur (Assistant Directors-Student Welfare) were the

organizer and Master of Ceremony of the event, respectively.

Overall, 54 students were awarded certificates for their achievements in hackathons, competitions, and registered start-ups.



#### LAUNCHING OF E-BIKE - A GREEN INITIATIVE

MIT has formally launched Electric bicycles on 30 April 2022. Honourable Vice-Chancellor of MAHE was the chief guest during the official launch. CEO of Indeanta, Faculty of MIT and MIT Student Council members were present during this event. MIT has signed MoU with Indeanta E-mobility pvt. ltd. for making electric bicycles and buggies available at MIT campus. As per MoU Indeanta will provide: vehicles, operator awareness, software and cloud service. Students have expressed their happiness towards this green initiative.



#### EDUCATIONAL TRIP TO HALL OF FAME, LEH AND INDIAN NAVAL ACADEMY, EZHIMALA

MIT, Manipal organized a motivational cum educational trip for NCC cadets to the prestigious armed forces establishments. Eleven cadets had an opportunity to visit the Hall of Fame (HOF) at Leh and 28 cadets witnessed Passing Out parade at the Indian Naval Academy (INA), Ezhimala, Kerala.

A proud alumnus of MIT, Pratyush Anand (B.Tech in Instrumentation and Control Engineering 2017-21 Batch), participated in this Passing Out parade and got commissioned into the Indian Navy as a Sublieutenant on 28 May 2022. He inspired the cadets with his insights and experiences. (Sub Lieutenant Pratyush Anand in Mufti Dress in photo below).



Eighteen boy cadets and 10 girl cadets visited the INA on 27 and 28 May 2022. Eleven boy cadets had the opportunity to visit Leh, from 1 to 4 June 2022. The objective of the trip was to motivate and inspire NCC cadets to take up a career in the Armed Forces. The trip also provided insights to the cadets about the work culture, regimental training at the INA, Ezhimala and the army transit camp at Leh.

The Hall of Fame at Leh is a museum, constructed and maintained by the Indian Army. This museum is built in the memory of the soldiers who lost their lives

#### INDUSTRIAL VISIT

The Department of Mechatronics organized an industrial visit on 10th May to Manipal Technologies Limited Unit 5 - Commercial Printing Unit, Shivalli Industrial Area, Manipal for the M.Tech students of Industrial Automation & Robotics. A total of twenty students along with three faculty coordinators joined the visit. Students were exposed to the various processes like procurement of raw materials, production and printing of books, periodicals, etc.





during the Indo-Pak war in 1947-48. The building comprises of 2 floors, on the ground floor there is information about the courageous soldiers and gallantry awardees. A segment is devoted to the Siachen glacier. The top floor has ammunition and equipment that have been detained by the Indian Army during its battles with the Pakistan army.

The Indian Naval Academy at Ezhimala is the defence service training establishment for the Indian Naval Service and the Indian Coast Guard officer cadre, located in Ezhimala, Kannur district, Kerala. It conducts basic training for all officers inducted into the Indian Navy and Indian Coast Guard. Established in May 1969, it is Asia's largest and the world's third-largest naval academy with a 2,452-acre site and the naval base depot, INS Zamorin, and the naval hospital, INHS Navjivani.

#### WORLD ENVIRONMENT DAY CELEBRATION

World Environment Day was celebrated at MIT Campus on 5 June. The occasion was graced by Cdr (Dr) Anil Rana, Director, MIT, Dr Nagaraj N Katagi, Associate Director Student Welfare, Prof (Col) Madhav M Shanbhag (retd.) of Rotaract Club, Dr Pramod, Hostel Block Warden, Mr Avinash and Mr Mithun from Food Court and mess respectively, and Mr Ashok Rao, Deputy Chief Security Officer. Saplings were planted to mark the occasion.



#### THREE-DAY WORKSHOP ON MACHINE LEARNING CONCEPTS

The Department of Instrumentation and Control Engineering organized a three-day workshop on "Machine Learning concepts for modelling and control of Nonlinear Systems" from 27 to 29 June 2022. The workshop was sponsored by the Science and Engineering Research Board (SERB), Department of Science and Technology, Govt. of India, and the Indian Society of Systems for Science and Engineering.

The workshop was inaugurated by Dr Ravindra D Gudi. Dean Alumni and Corporate affairs, IIT Mumbai. Dr Gudi stressed the relevance of such workshops to understand the difference between the various advanced computational techniques, and the related critical issues. Dr Jagadeeshan Prakash, Dean, MIT Chennai, Annamalai University, Dr Shrinivasa Palanki, Chair, Chemical Engineering West Virginia University, Dr Prashant Mhaskar, Professor, McMaster University, Dr Papa Rajan, MIT Chennai, delivered special talks on recent applications of machine learning concepts. Dr I Thirunavukkarasu, Associate Professor-Senior Scale,



and Dr Ramakrishna Kini, Assistant Professor-Senior Scale, Department of I&CE, MIT and Dr V I George, Retd Professor, MIT Manipal, delivered special lectures in the workshop. More than 50 participants from across the country, including scientists from ISRO, attended the workshop. Cdr (Dr) Anil Rana, Director MIT, Dr Somashekara Bhat, Joint Director MIT, and Dr Shreesha Chokkadi, Professor and Head, Department of I&CE graced the occasion. Prof Bipin Krishna, Assistant Professor-Senior Scale, Department of I&CE, was the co-convener of the event.

#### TWO-DAY WORKSHOP ON ROBOTRON

Department of Mechatronics organized a two-day workshop 'Robotron' at the institute on 24 & 25 May 2022. The workshop aimed at giving the participants a first-hand experience of two robots: the IRB 2600 and the COBOT by UR5. The workshop was organized in offline mode at the Robotics lab. The workshop comprised of involved presentation participants, an introduction to the two different robots, detailing the 6 Degrees of Freedom of each robot, and session on the safety measures and the safety features of the two robots. The participants were then divided into two separate groups. While one group understood the working of the IRB 2600, the other group dealt with the mechanics of the UR5.

#### NINE-DAY WORKSHOP ON YOGA

MIT-FoA Faculty Club organized a nine-day Yoga workshop from 2 to 13 May, 2022. The workshop was attended by about twenty members of the Club. Mr Bajrang Lal Chaudhary was the resource person for this workshop. The event was held at the MIT-KEF R & D Centre. Mr Bajrang Lal Chaudhary demonstrated a number of voga asanas, stating their benefits to the human body and mind.

During the valedictory ceremony, the resource person Mr Bajrang Lal Chaudhary was felicitated by the President of the Club Dr (Cdr) Anil Rana, Vice President Dr N Ramadevi, Secretary of the Club Dr K Arathi Bhat, along with other office bearers.



The participants were introduced to the TURTLE BOT. A total of 60 students had registered for the workshop.



#### TWO-DAY WORKSHOP ON ANIMATION

A Two-Day workshop on "Introduction to Animation and New Age Immersive technologies in AVGC sector" was organized by the Department of Media Technology in online mode on 13 and 14 of June 2022. This workshop was organized in association with ABAI (Association of Bangalore Animation Industries), AVGC (Animation, Visual Effects, Gaming and Comics) COE (Centre of Excellence) Bangalore which offers Government / National Skill Development Corporation (NSDC) approved and certified skill development courses on Animation, Game Development, Visual Effects, and Comics Designing.

The workshop imparted hands-on training on BLENDER software and introduced the New Age Immersive technologies in AVGC sector. The speakers at this event were Devicharan R, Assistant Professor - Senior Scale, Department of Media Technology and Mrs Shiji Sunil, Centre Head, AVGC - Centre of Excellence, Bangalore. A total of fifty participants from all over India participated in the workshop.

#### MIT E-CELL ANNIVERSARY

On the occasion of the completion of one year of the E-Cell at MIT, Dr Narasimha Bhat, founder and CEO, Manipal Dot Net, Manipal, delivered a special talk to the members of E-Cell on 25 April 2022 at Smriti Bhavan in Manipal. In his address to the students, Dr Bhat highlighted the spirit of entrepreneurship and its importance. He emphasized on the role played by our revered Founder Dr TMA Pai in developing the area around Manipal. Dr Bhat also brought out the differences between entrepreneurship and start-up. About 30 students of the E-Cell attended the talk.



The event was held in association with the Academy of General Education, Manipal.

#### MIT- GE HEALTHCARE: MUTUAL COLLABORATION

Manipal Institute of Technology signed an agreement with GE Healthcare on a mutual collaboration. As a part of this agreement, GE Healthcare would provide projects to BTech and MTech students of the Institute and provide one-time project funding for each project.



#### MOA WITH "INFORMATION SHARING AND ANALYSIS CENTRE"

MAHE, Manipal, has signed a Memorandum of Association (MoA) with the Information Sharing and Analysis Centre (ISAC), which is a public-private partner of Ministry of Education, Computer Emergency Response Team (CERT-IN), MeitY (The Ministry of Electronics and Information Technology), Govt. of India, All India Council for Technical Education (AICTE) and other Public Sector and Corporate Bodies. It aims at advancing the cyber security capacity building and at training 1,00,000 professionals for empanelment in National Security Database (NSD) program and Clean Exit, Ethics at Workplace.

This collaboration leads to an establishment of a Centre of Excellence (CoE) for Cybersecurity at MIT.

The CoE will provide NSD certifications on various courses related to Cybersecurity to develop Cybersecurity professionals. Dr Balachandra, Professor, Department of Information and Communication Technology, MIT is the coordinator of the Centre.



#### AGREEMENT SIGNED: MAHE AND BUCOLIC KAILASH AGRITECH AND FMCG PVT LTD

Memorandum of Understanding was signed between MAHE and Bucolic Kailash Agritech and FMCG Pvt Ltd, Maharashtra on 22 April 2022 for a period of three years. The purpose of the collaboration is to have a mutual cooperation in innovation & research, product & process development at MIT Manipal. Dr Ravilla Dilli, Associate Professor, Department of E&C, MIT, Manipal is the contact person.

#### MIT-FOA FACULTY CLUB MEMBERS ADD THEIR BIT TO THE "CLEAN BEACH" INITIATIVE

On Sunday, 10 April 2022 a group of MIT-FOA Faculty Club members spent their morning along the shores of the Arabian Sea in cleaning the Malpe Beach. It was their way of being a part of the "Clean Beach" initiative that aims at creating awareness towards the need to keep our beaches clean. Along with the members of VSO, MAHE and Student Council MIT, 30 members of the Club including 5 children enthusiastically took part in cleaning the beach near the Manipal Guest House at Malpe. President of the Club Cdr (Dr) Anil Rana and Vice-President Dr Somashekara Bhat inspired the members by leading

from the front. The beach walk that followed had a good number of enthusiastic participants, who echoed to spread the message, "Keep the Beaches Clean."



## **FACULTY ACHIEVEMENTS**

#### MIT TEAM'S PATENT GETS APPROVAL

The patent titled "A Dental Chair Integrated Curing Light Apparatus" filed through the Innovation Centre, MAHE in the Year 2013 has been granted on 20 July 2022. This was a collaborative work with Dr Lokendra Gupta, Former Faculty MCODS, Manipal.

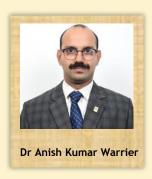
The team who filed the patent comprises: Dr Lokendra Gupta, Professor, Department of Dental and Prosthetic Surgery, MPMMCC, TATA Memorial Centre, Varanasi, Dr Kumar Siddarth, CEO, Wellbe Private Limited, Bengaluru, Dr Poornesh P, Assistant Professor - Selection Grade, Department of Physics, MIT, and Dr Divya Mishra, Private Practitioner.



#### RECEIVES AN AWARD FOR RESEARCH PUBLICATION

Dr Anish Kumar Warrier, Associate Professor, Department of Civil Engineering, received an award for his research publications during the year 2020-21 from Vision Group on Science and Technology, Department of Electronics, Information Technology, Biotechnology and Science & Technology, Bengaluru, Government of Karnataka, on 29 April 2022.

The award was given away by Dr C N Ashwathanarayan, Minister for Electronics, IT, Bt, Science & Technology, Skill Development, Government of Karnataka.



#### **RECEIVES OUTSTANDING SERVICE AWARD 2021**

Dr Manjunath K N, Associate Professor, Senior Member-IEEE, Department of Computer Science & Engineering, has received an outstanding service award 2021 from IEEE Mangalore Sub-Section (MSS).

As a Senior Member of IEEE, he has been associated with the MSS since its inception (2013). He was involved with volunteering activities such as trainer in FDP, knowledge sharing to students, conference committee member (IEEE DISCOVER), session chair, workshop resource person, and event judge.



#### RECEIVES ISSS UG SUPERVISOR AWARD

Dr Selvakumar M, Assistant Professor - Selection Grade, Department of Chemistry has received ISSS UG Supervisor award for the project tilted "Sensitivity Tuned PANI/Graphite Nanoparticle based Humidity Sensor Powered by Cu/Graphite Micro-Supercapacitor with PVA/PVP Polymer Electrolyte" from Department of Aerospace Engineering, Indian Institute of Science, Bengaluru on 26 March, 2022. Achintya Dutta, third year, Electronics and Communication Engineering received ISSS UG Student award for the same project.



#### FILES THREE PATENTS

Dr Gautham Jeppu, Associate Professor, Department of Chemical Engineering, and his team filed 3 patents titled "An additive mixture for enhanced biogas production", "An apparatus for generation of biogas" and "A portable filter straw for water purification."

Dr Gautham Jeppu, and his team were granted a fund of ₹10,000 by KSCST for their work on "Solar assisted biogas production."



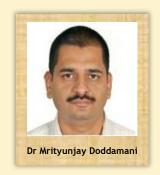
#### RECEIVES RESEARCH GRANT FROM AR & DB, DRDO, NEW DELHI

Department of Mechanical & Industrial Engineering has received a research grant worth of ₹47.96 Lakhs from AR & DB, DRDO, New Delhi for the research proposal titled, "Design, development and rotor dynamic analysis of Optimized Stack-structured Permanent Magnet Bearings" (OSPMB).

Dr Siddappa I Bekinal, Associate Professor, Department of Mechanical & Industrial Engineering is the Principal Investigator. Dr Vijay G S, Professor, Department of Mechanical & Industrial Engineering, MIT, and Dr Mrityunjay Doddamani, Assistant Professor, NITK Surathkal are the Co-Investigators.

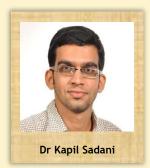






#### RECEIVE RESEARCH GRANTS FROM C-DAC KOLKATA, Meity, AND AICTE





Dr Pooja Nag, Assistant Professor - Senior scale, Department of Mechatronics and Dr Kapil Sadani, Assistant Professor-Senior Scale, Department of I&CE secured a research grant ₹11.97 Lakhs for their proposal titled, "Optic fiber sensors for rapid detection of amatoxins in mushroom samples from Northeastern India," from the C-DAC KOLKATA, MeitY for the period 2022-23.

The researcher duo also received another grant of ₹21.38 Lakhs for their proposal titled, "Optical sensors for detection of bacterial and fungal infections," from AICTE.

#### RECEIVES GRANT UNDER IDEA2POC GRANT SCHEME

Dr Harish Kumar J R, Associate Professor, Electrical and Electronics Engineering received a grant worth ₹18,00,000 (Rupees Eighteen Lakhs) for Idea / Project under IDEA2PoC Grant Scheme (Elevate 2021) of Karnataka Start-up Policy, KITS, Department of Electronics, IT, Bt and S&T, Government of Karnataka.

This grant is expected to give a tremendous boost to their start-up INFYUVA Tech. Solutions Pvt. Ltd, currently incubated at MUTBI, Manipal.



#### RECEIVES WORKSHOP GRANT FROM SERB, GOI

Dr I Thirunavukkarasu, a Senior Member of IEEE, and Associate Professor - Senior Scale, Department of Instrumentation and Control Engineering has received a workshop grant worth of ₹125000/- from the Science & Engineering Research Board (SERB), Department of Science and Technology, Government of India in May 2022.



#### SAMSUNG PRISM PHASE-3 RESULTS

Dr Ramya S, Associate Professor, Department of Electronics & Communication and Prof Govardhan Hegde, Assistant Professor - Selection Grade, Department of Computer Science & Engineering CSE worked on the worklets "Kids-safe Classifier for Websites" and "Video Object Tagging" respectively.

The worklets received 'Certificates of Excellence,' and were awarded monetary benefits in the form of Amazon gift vouchers. The Faculty Mentors and the Student Teams received vouchers worth \$300 and \$600 each, respectively. Total Value of Vouchers disbursed to Excellence Teams: ₹1,32,860.





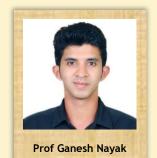
#### SELECTED FOR SERB INTERNATIONAL RESEARCH EXPERIENCE

Dr Anitha H, Professor, Department of Electronics & Communication Engineering, has been provisionally selected for the SERB International Research Experience for the year 2022-2023 supported by the Science and Engineering Research Board (SERB), a statutory body of the Department of Science and Technology, Government of India.

The fellowship has been approved for a maximum duration of 6 months under Dr Jayaram K Udupa, PhD at Radiologic Science in Radiology, Medical Image Processing Group Department of Radiology University of Pennsylvania, USA with a monthly fellowship equivalent to USD 3000.



#### RECEIVES FELLOWSHIP FOR MARINE ECOLOGY PROGRAM IN BAJA CALIFORNIA



Prof Ganesh Nayak, Assistant Professor - Senior Scale, Department of Instrumentation & Control Engineering was awarded a scholarship to attend Marine Ecology Program in Baja California which is also known as the aquarium of the World. The scholarship for the program (1-10 April, 2022) was awarded based on the exemplary work carried out by Prof Nayak in the field of outdoor adventure activities for students using the coastal region as the base.

Prof Nayak has been running an outdoor program (of 6-week duration) for students of MIT Manipal called the Adventurer since 2019. This is an after-class program offered once each semester. During the program students are trained in endurance bicycling with an

aim to promote environmental stewardship like Leave No Trace Principles, Rainforest Ecology, etc. During 2020-21, Prof Nayak developed a program on coastal systems of Udupi. He used kayaking to access mangrove forests in the estuaries of the Papanashini River at Katapadi.

During the fellowship at USA, Prof Nayak learnt educational models to engage with students in natural environment, learnt techniques for data collection, and received opportunity to network with environmental educators from the United States. In the coming semester, he proposes to offer two programs to students: one based on the western ghats, and another based on coastal ecology. Both these programs are proposed to be offered through the Centre for Outdoor Studies planned at MIT, Manipal.

#### RECEIVES FELICITATION FROM UDUPI DISTRICT ADMINISTRATION

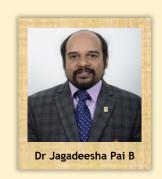
Udupi District Administration felicitated Prof Ganesh Nayak, Assistant Professor, Department of Instrumentation & Control Engineering and International Cyclist on the World Bicycle Day on 3 June recognizing his contribution to the field of the world of cycling.



#### SHORTLISTED FOR ATTENDING ISRO - NNRMS SPONSORED PROGRAM

Dr Jagadeesha Pai B, Associate Professor, Civil Engineering, has been shortlisted for attending the eight-week long ISRO - NNRMS Sponsored Program for University Faculty (9 May - 1 July, 2022).

Dr Pai is one of the 34 participants selected from across the country.



#### INDIAN EDUCATION & EDTECH SUMMIT-2022, NEW DELHI

Dr Dasharathraj K Shetty, Associate Professor, Department of Humanities & Management, MIT, was the Lead speaker in the session titled "The Impact of Skill Development in the Growth & Development of Indian Economy," held on 28 May 2022 at the Indian Education & Edtech Summit-2022, New Delhi. Prof Anil D Sahasrabudhe, Chairman-AICTE, inaugurated the Indian Education & Edtech Summit-2022-Delhi and delivered the Keynote address.



The other panelists were Dr Indrajit Bhattacharya, Director, National Accreditation Board for Education and Training (NABET) - Quality Council of India and Mr Shubhajit Jagdev, Co-Founder & CEO, EduSkills. Dr Indrajit Bhattacharya is an alumnus of MIT, Manipal.

#### Other Events: Dr Dasharathraj K Shetty

- conducted a training session on "Human Factors in Customer Decision making" for the employees (managerial cadre) of Everest Group, which has its headquarters in New Delhi. The event held on 30 May was conducted in a hybrid mode with participants interacting with the facilitator both offline and in the online mode.
- was a resource person for a three-day workshop on Business Model Canvas from 4 to 6 April at Department of Electronics & Communication Engineering at St Joseph Engineering College (SJEC), Mangaluru.
- participated in a panel discussion on the 'State of Indian Economy' in the 4<sup>th</sup> Edition of Mangaluru Lit Fest on 8 April.
- moderated the sessions on "Machine Learning/ Deep Learning-Based Medical Systems (Applications)" during the virtual conference on 29 and 30 April, organized by Amrita Institute of Medical Sciences, Kochi (AIMS) and National Institute of Medical Statistics (ICMR-NIMS).

Dr Balakrishna Maddodi, Assistant Professor-Selection Grade, Department of Civil Engineering, participated in the Indian Education Summit and had a discussion with AICTE Chairman Prof Anil D Sahasrabudhe. He also actively took part in a discussion on higher education challenges and implementation of the New Education Policy.











#### LETTER OF APPRECIATION FROM THE CHAIRMAN OF IDST

Dr Pramod Balwantrao Salunkhe, Associate Professor and Dr Srinivas G, Assistant Professor-Senior Scale, Department of Aeronautical & Automobile Engineering received a letter of appreciation from the Chairman of Institute of Defence Scientists and Technologists (IDST), Bengaluru regarding successful conduct of first semester classes for MTech (Defence Technology) students at MIT.





#### **INVITED AS CHIEF GUEST**

Dr Karunakar A Kotegar, Professor and Head, Department of Data Science & Computer Application was invited as the Chief Guest for "Administrative Professional Day 2022" organized by Netra Jyothi Institute of Allied Health Sciences and Paramedical Sciences, Udupi on 28 April.

In another event, Dr Karunakar A Kotegar was invited as Chief Guest for a One-day Workshop on "National Education Policy" organized by Udupi Sri Admar Matha Educational Council, Udupi on 19 April.



#### **INVITED SPEAKER**

Dr Poornima Panduranga Kundapur, Associate Professor, Department of Data Science & Computer Application, was invited as a speaker for the session "Competencies for online teaching" organized by the Indian Orthodontic Society, JSS Dental College and Hospital, Mysore on 1 June.

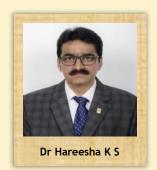






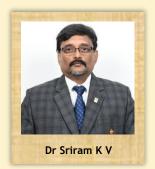


#### **ENRICHING INSTITUTE LEADERSHIP DIMENSIONS**



**Dr Hareesha K S**Director
International Centre for Applied Sciences

Dr Hareesha K S, Professor and the former HoD, Department of Data Science and Computer Application, is appointed as the Director - International Centre for Applied Sciences (ICAS) with effect from 1 May 2022. Dr Hareesha K S succeeds Dr Radhakrishna S Aithal who served as Director of ICAS from 1 February 2016 to 30 April 2022.



**Dr Sriram K V**Associate Director
Industry Liaison, Placement and Practice School

Dr Sriram K V, Associate Professor, Department of Humanities and Management is appointed as Associate Director-Industry Liaison, Placement and Practice School with effect from 1 April 2022. Dr Sriram succeeds Dr Harish S Kumar who served in this position from 1 January 2018 to 31 March 2022.



Dr Gururaj Rao H V Assistant Director Academics

Dr Gururaj Rao H V, Associate Professor, Department of Electrical and Electronics Engineering is appointed as Assistant Director - Academics with effect from 14 March, 2022.



**Dr Asish Oommen Mathew**Assistant Director
Industry Liaison, Placement & Practice School

Dr Asish Oommen Mathew, Associate Professor, Department of Humanities & Management is appointed as Assistant Director-Industry Liaison, Placement & Practice School, with effect from 5 May 2022.



Dr Sucheta Kolekar Assistant Director Innovation and Incubation

Dr Sucheta Kolekar, Associate Professor, Department of Information & Communication Technology is appointed as Assistant Director-Innovation and Incubation, MIT Manipal with effect from 11 June 2022.



#### Manipal Institute of Technology, Manipal had a different name until 1974

The institute was inaugurated on 11 May, 1957 by the then Chief Minister of Mysore, Sri S Nijalingappa with the name 'Manipal Engineering College (MEC)'. It has a unique distinction of being the first selffinanced engineering college in India. Initially, lecture classes were held at the Kasturba Medical College, Manipal campus before the infrastructure was ready at its present campus (AB1) towards the end of 1957.

The institute started its operations with 25 staff members with one under-graduate program in Civil Engineering. Later in 1974, it was our founder, Dr TMA Pai's visit to Massachusetts Institute of Technology, in Boston, USA, that engendered the idea of renaming the institute as 'Manipal Institute of Technology (MIT)', with a vision to emerge as a quality engineering institute of the East. The vision did turn real with the committed efforts of dedicated MIT fraternity over the years. MIT Manipal celebrated its Silver Jubilee in the year 1982, Golden Jubilee in 2007 and Diamond Jubilee in the year 2017.

1957: MEC, Karnatak University 1965: MEC, Mysore University 1980: MIT, Mangalore University

1998: MIT, Visvesvaraya Technological University (VTU)

2000: MIT, Constituent Unit of MAHE

2003: MIT, Academic Autonomy & 10-Point Credit system Number of UG branches in 1957 : 01 Number of students admitted in 1957 : 45 Number of PG Programs started in 1989 : 03 Number of UG/PG branches in 2022 : 19/32 Number of UG/PG student intake in 2022 : 2570/960 Number of Heads of Institute who led MIT

MIT Manipal has evolved as one of the premier engineering institutes and emerged as a prominent constituent unit of MAHE an Institution of Eminence as accorded by MHRD, Government of India in July 2018.

#### PhD AWARDEES: FACULTY MEMBERS



#### Dr DIANA OLIVIA

Assistant Professor - Selection Grade, Department Information & Communication Technology has successfully defended her Doctoral thesis titled "Prediction of Clinical Status and Triaging in Mass Casualty Incidents Using QOS-Aware Routing Protocol and

Optimization Framework" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 9 April 2022. The research work was guided by Dr Ashalatha Nayak, Professor and HOD, Department of Computer Science & Engineering MIT, Manipal and coguided by Dr Mamatha Balachandra, Associate Professor Senior Scale, Department of Computer Science & Engineering, MIT, Manipal.



#### Dr SANTHOSH KAMATH

Assistant Professor - Senior Department Information & Communication Technology has successfully defended his Doctoral thesis titled "SDN Based Traffic Management for OTT Cellular **Applications** in Networks" for the award of

PhD degree by the Manipal Academy of Higher Education, Manipal on 26 May 2022. The research work was guided by Dr Sanjay Singh, Professor, Department of Information & Communication Technology MIT, Manipal and co-guided by Dr M Sathish Kumar, Electronics Professor, Department of Communication Engineering, MIT, Manipal.



#### Dr VEENA MAYYA

Assistant Professor-Senior Scale, Department of Information & Technology Communication successfully defended her Doctoral thesis titled "AI-based clinical decision support systems using multimodal healthcare data" for the award of PhD degree by the

: 22

National Institute of Technology Karnataka, Surathkal on 9 June 2022. The research work was guided by Dr Sowmya Kamath S, Assistant Professor (Grade I), Department of Information Technology, Surathkal.



#### Dr B KISHORE

Assistant Professor - Selection Department Grade, of Computer Science Œ Engineering has successfully defended his Doctoral thesis "Local titled **Based Approaches** for the Classification of **Texture** 

Images" for the award of PhD degree by the Sri Chandrasekarendra Saraswathi Viswa Maha Vidyalaya on June 10, 2022. The research work was guided by Dr V Vijava Kumar, M.S.Engg.(USSR), PhD, Former Professor of JNTU Hyderabad, Professor (Department of CSE & IT), Dean (Research & Development and Department of CSE & IT), Anurag University, Hyderabad.

#### PhD AWARDEES: FULL TIME RESEARCH SCHOLARS



#### Dr SOUMYA J BHAT

Full-time Research Scholar in the Department of Instrumentation and Control Engineering has successfully defended her Doctoral thesis titled "Design of Fault-Tolerant Localization and Deployment Method for Wireless Sensor Networks with Irregular Terrains" for the award of PhD degree by the Manipal Academy of Higher

Education, Manipal on 04 April 2022. The research work was guided by Dr Santhosh K V, Associate Professor - Senior Scale, Department of Instrumentation & Control Engineering, MIT, Manipal.



#### Dr NEERADA MEENAKSHI WARRIER

Full-time Research Scholar in the Department of Biotechnology has successfully defended her Doctoral thesis titled "Deciphering the Role of Survivin in Human Glioblastoma Cancer Stem Cells" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 23 May

2022. The research work was guided by Dr Praveen Kumar, Assistant Professor - Selection Grade, Department of Biotechnology, MIT, Manipal.



#### Dr DEEKSHITHA S NAYAK

Full-time Research Scholar in the Department of Electrical and Electronics Engineering has successfully defended her Doctoral thesis titled "Performance Analysis of Solar PV Fed BLDC Drive Based Mixer Grinder" for the award of PhD degree by the Manipal Academy of Higher

Education, Manipal on 08 April 2022. The research work was guided by Dr Shivarudraswamy R, Professor, Department of Electrical and Electronics Engineering, MIT, Manipal.



#### Dr NAGARJUN PRABHU

Full-time Research Scholar in the Department of Mathematics has successfully defended his Doctoral thesis titled "A Study on Labeling and Equitable Coloring of Graphs" for the award of PhD degree by the Manipal Academy of Higher Education, Manipal on 28 May 2022. The research work

was guided by Dr Pradeep G Bhat, Professor, Department of Mathematics MIT, Manipal and co-guided by Dr Devadas Nayak C, Associate Professor, Department of Mathematics, MIT, Manipal.



#### Dr ELTON DYLAN NAZARETH

Full-time Research Scholar in the Department of Mechanical & Industrial Engineering has successfully defended his Doctoral thesis titled "Steady State, Transient and Stability Behavior of Coupled Natural Circulation Loops" for the award of PhD degree by the Manipal Academy of Higher Education,

Manipal on 23 April 2022. The research work was guided by Dr Arunachala U Chandavar, Professor, Department of Mechanical & Industrial Engineering, MIT, Manipal.



#### Dr ANITA D SOUZA

Full-time Research Scholar in the Department of Physics has successfully defended her Doctoral thesis titled "Investigations on the Structural and Physical Properties of Bi3+ Substituted (La/Pr) Srmn03 Nanoparticles" for the award of PhD degree by the Manipal Academy of

Higher Education, Manipal on 1 June 2022. The research work was guided by Dr Mamatha D Daivajna, Assistant Professor - Selection Grade, Department of Physics, MIT, Manipal.



#### Dr ANUP BHAT B

Full-time Research Scholar in the Department of Computer Science & Engineering has successfully defended his Doctoral thesis titled "Design and Development of Efficient Algorithms for Mining High Utility Itemsets" for the award of PhD degree by the Manipal Academy of Higher

Education, Manipal on 23 April 2022. The research work was guided by Dr Harish S V, Professor, Department of Computer Science & Engineering, MIT, Manipal and co-guided by Dr Geetha Maiya, Professor, Department of Computer Science & Engineering, MIT, Manipal.



#### Dr SANGEETHA D N

Full-time Research Scholar in the Department of Chemistry has successfully defended her Doctoral thesis titled "Synthesis and Characterization of Porous Carbon-Based Composites for Electrochemical Applications" for the award of PhD degree by the Manipal Academy of Higher

Education, Manipal on 6 June 2022. The research work was guided by Dr Selva Kumar M, Assistant Professor - Selection Grade, Department of Chemistry, MIT, Manipal.

## **RESEARCH HIGHLIGHTS**

# KUNDAPUR MOHAN AND LATA BHANDARKAR MERIT-CUM-MEANS SCHOLARSHIP

Ms Nimitha S Prabhu, Research Scholar, Department of Physics and Mr Sooraj Mohan, Research Scholar, Department of Mechanical and Industrial Engineering received the Kundapur Mohan and Lata Bhandarkar Merit-Cum-Means Scholarship for PhD scholars for the year 2021-22. The Scholarship comprises a certificate and ₹50,000 in cash.





# BEST PH.D. PRESENTATION AWARD AT MAHE PHD-CONCLAVE 2022

Mr Prashanth Barla, full-time research scholar in the Department of E&C Engineering has secured the Best PhD Presentation Award during MAHE PhD-Conclave 2022 held from 27 to 28 May 2022 at Manipal Academy of Higher Education, Manipal.

Mr Barla is working under the guidance of Dr Vinod Kumar Joshi, Associate Professor, Department of Electronics & Communication Engineering, and Dr Somashekara Bhat, Professor, Department of Electronics & Communication Engineering and Joint Director, MIT.

Mr Prashanth Barla

## STUDENTS IN ACTION

#### AERO MIT TEAM SECURES WORLD RANK # 2 AT VAN NUYS, CALIFORNIA

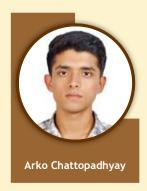
AeroMIT, the aeromodelling and aerial robotics team of MAHE finished 1<sup>st</sup> in the Design Report, 2<sup>nd</sup> in the Oral Presentation held in a virtual mode, 2<sup>nd</sup> in the Mission Performance held in offline mode in Van Nuys, California. It also received an additional award for being the only team with the fastest 100-meter sprint leading to an overall achievement of World Rank No. 2.





#### TEAM AMIGO MIT - WINNER AT THE REGIONAL SUMMIT OF HULT PRIZE FOUNDATION

After winning the On Campus Program, team Amigo went on to participate in the South Asia level Regional Summit conducted on 6 and 7 May, where they were declared winners. Team Amigo will now be a part of the Global Accelerator Program which will be a six- week long program at HULT International School of Business, Boston. Winners of this competition will receive a prize money of USD 1,000,000 and will be pitching the start-up to the former US President Mr Bill Clinton. Team Amigo members include Arko Chattopadhyay, BTech in Mechatronics 2022, Enrique Ferrao, BTech in Mechatronics 2022, Pranav Reddy, BTech in ECE 2022 and Priyanshu Gupta - BTech in ECE 2023.









#### MIT STUDENT TEAM BAGS FIRST PRIZE IN E-YANTRA ROBOTICS COMPETITION 2021-2022

A third-year BTech student team of MIT secured first prize in the Dairy Bike (DB) theme in the e-Yantra Robotics Competition 2021-2022, hosted by IIT Bombay. The team involved Kallol Saha (Mechatronics), Ashwin Disa (Aeronautical), Tanaya Gupte (Mechatronics) and Srujan Kulkarni (Mechatronics)









#### **TEAM MANIPAL RACING - COMBUSTION AT BAJA SAE INDIA 2022**

Team Manipal Racing won numerous accolades at the prestigious Baja SAE India 2022 held at the NATRAX facility, Indore, MP.

#### mBaja Static Results 2022

(130 Participating Teams)

2<sup>nd</sup> in Manufacturing

6<sup>th</sup> in Design (8<sup>th</sup> in physical presentation)

9th in CAE (3rd in physical presentation)

6th in Static Presentations Overall

#### mBaja Dynamics Results 2022 (NATRAX)

(81 Participating Teams)

3rd Fastest lap in Endurance (Raftaar Award)

5<sup>th</sup> in Acceleration

8th in Maneuverability

Highest scoring 2 Wheel Drive Team Overall

12th Overall for Baja India 2022



#### **ELECTRIC EBAJA 2022 COMPETITION**

Team Manipal Racing-Electric student project team participated in the most prominent national level competition for ATV racing BAJA SAEINDIA in the electric category held at NATRAX, Indore from 1-5 June, 2022. A few achievements leading up to the race: First Team to clear Technical Inspection (Both Electrical and Mechanical) and Car E19 (TMR-E's car) was chosen as the inaugural car for the event.

#### Overall Results:

(72 participating teams)

Endurance Race: 3<sup>rd</sup> Position Overall eBAJA: 5<sup>th</sup> Position Innovation Event: 2<sup>nd</sup> Position Design Validation Event: 2<sup>nd</sup> Position Acceleration Event: 5<sup>th</sup> Position

CAE Event: 7th Position

#### PROJECT MANAS - AUVSI SUAS 2022

Project MANAS, AI and Robotics club of MIT participated in Unmanned Vehicle Systems International (AUVSI)'s 20<sup>th</sup> Annual Student Unmanned Aerial Systems Competition (SUAS) held at St. Mary's, Maryland, USA, between 15 to 18 June 2022.

The team was ranked:

2<sup>nd</sup> in Technical Video Presentation 10<sup>th</sup> in Technical Paper Submission 18<sup>th</sup> in Mission Demonstration

The team secured an overall rank of 18<sup>th</sup> worldwide amongst 71 international teams. Being the team's first attempt at the competition, the performance was highly appreciated by the judges and competition organizers.

#### **ROBOTICS & CIRCUITS TEAM ACHIEVEMENT**

Robotics & Circuits Team secured 12<sup>th</sup> position in the International Online Event "Virtual RobotX Competition VRX 2022" held in April 2022.







#### BAJAJ FIN: HACKRX 3.0 1st RUNNER UP

Team Elixir won the 1st Runner Up in the HackRx 3.0 - Annual Hackathon by Bajaj Finserv held on 25 & 26 June at Pune. Members of Team Elixir are Harsh Adwani from Computer and Communication Engineering, Kushagr Sharma from Computer and Communication Engineering, Gokul P from Electronics and Communication Engineering, and Navya Gupta from Computer Science and Engineering.









#### TEAM MIT SECURES SECOND POSITION AT THE GOOGLE GIRL HACKATHON

Team MIT, CodeforSupport, comprising Shriti Chandra (3<sup>rd</sup> year, ECE), Rhea Adhikari (3<sup>rd</sup> year, CSE), and Ishika Gupta (3<sup>rd</sup> year, ECE) has secured the second position nationally at the Google Girl Hackathon conducted by Google India. The Hackathon consisted of 3 technical rounds: 1. A competitive programming Online Test wherein all 3 members had to individually qualify for the hackathon. 2. Design document round - Presented a complete solution to the chosen problem statement, including a technical solution, implementation process and a business plan. 3. Prototype Phase - Submitted a working prototype of the solution. In the final presentation, the team presented the solution, including the working prototype to a panel of 7 judges from Google India. Product - InTouch was the solution developed. The team took up the problem statement "Digital Literacy and Assistance for the Elderly" and the team developed an in-app solution with custom object detection and voice overlays to help acclimatize the senior citizens to the ever evolving technology rumble. The team received Second position nationally, out of 5000+ teams. Prize awarded include - USD 500, PPO Interview offers with Google, and Swag Rewards.







#### FIRST RUNNER-UP AWARD AT RANSFUSION MEDICINE HACKATHON

Shyam Sundar Bharathi and Ajay Rajendra Kumar, BTech CSE, led by Dr Anand Deep Shukla and Dr Srikant G of MCODS Manipal, received 2nd place /the First Runner Up for their app "Smart Donor". The team received a certificate of appreciation and a cash prize of ₹10,000 in TM hackathon. Transfusion Medicine Hackathon was organised by Asian Association of Transfusion Medicine - India Chapter, Innovation Centre, MAHE and Department

of Transfusion Medicine, Kasturba Medical College, Manipal. The motive was to trigger the process of creative ideation in transfusion medicine and to develop innovative solutions to practical problems such as mobilising first-time donors, retention of donors, and improving mobilisation of female donors. The app 'Smart Donor' acts as a virtual smart card for donors and makes the donation process flawless and intuitive. It also heavily rewards regularity and referrals, through medical benefits or through shoutouts (leaderboard and social media). The app comes with a plethora of features that makes donation fun and trendy. A messaging service is provided for donors without smart phones that interact with the same database, or even a physical card on request.





#### MIT PACMANBYTES TEAM ENTERS THE TOP 10 TEAMS

PacManBytes Team consisting of Chandraraj Singh (Mechanical Engineering), Harshit Yaduka (Computer and Communication Engineering), and Anmol Agarwal, (Computer and Communication Engineering) has been selected

as one of the top 10 teams pan India in ZS Associates Campus Beats Tech Challenge.

ZS Campus Beats Challenge is a pan India case challenge held during 3 March to 22 March 2022 and is aimed at testing the analytical and problem-solving skills.







#### ISET SCHOLARSHIP RECEIVED

Shatakchi Sahay, B.Tech in Information Technology and Pratyaksh Gupta, B.Tech in Electrical and Electronics Engineering, received a scholarship for ISET to Singapore through Kalyani E-Cell Pitchathon competition. International Start-up Enrichment Tour (ISET) is an initiative of LWT wherein start-ups and start-up enthusiasts from pan India would travel together to an International destination and participate in various brainstorming discussions and activities related to start-ups. In addition to this, the start-ups will get a chance to mingle with international start-ups on this journey.

# Shatakchi Sahay



# PRESTIGIOUS GENERATION GOOGLE SCHOLARSHIP APAC 2022 RECEIVED

Kushi Kapoor and Ishita Saha, students of IV sem B.Tech Data Science Engineering received the prestigious Generation Google Scholarship APAC 2022.





# IASC-INSA-NASI SUMMER RESEARCH FELLOWSHIP RECEIVED

P V Hanukrutha, III Year B.Tech Chemical Engineering obtained the IASc-INSA-NASI Summer Research Fellowship in 2022 under Prof Abbasi in Pondicherry University. She has also excelled in Sports bagging a bronze medal in Revels 2022 and overall championship in Athletics team.





#### **KADAMBI SCHOLARSHIP FOR THE YEAR 2020-21**

Sukrita A Panigrahi, IV year B.Tech. Electronics and Communication Engineering Department won the Kadambi Scholarship Award for the year 2020-21. The Scholarship comprises of ₹30,000 and is awarded to the final year student who excels in both academics and sports.

**KSHITIJ BANG** of 3<sup>rd</sup> year B.Tech. Chemical Engineering won the MIT IDEATION competition organized by Innovation Centre, Manipal with the theme 'Reduce, Reuse and Recycle'. He and his team developed a mini plastic model to make a unit to convert plastic to fuel.

GAGAN GOANKAR of 2<sup>nd</sup> year BTech E & C secured First place in 'Eastern Vocal (Solo)' competition at UTSAV 2022.

**DIMITRA SHENOY** of 3<sup>rd</sup> year B.Tech., Chemical Engineering secured the 2<sup>nd</sup> position in the Badminton Tournament held at NITK, Surathkal, held on 11 and 12 March 2022 She also secured the 1<sup>st</sup> position in Revels 2022 Badminton tournament.

**KAVIT KALPESH VORA** of 3<sup>rd</sup> year B.Tech. Chemical Engineering won 2<sup>nd</sup> place in Revels'22 squash singles and 1<sup>st</sup> place in tennis Revels'22 team event.

**SHRIVIDYA** of 3<sup>rd</sup> year B.Tech. Chemical Engineering won 1<sup>st</sup> place in Women's Basketball tournament during Revels'22. She is the Team Captain of the Women's Basketball team.











## REMEMBERING KK @ REVELS 22 ...

The Student Plaza was abuzz with anticipation and excitement as students gathered for the announcement of the Pro-show line up. Revels'22 was making a comeback after two years in the regular offline mode! The assembly waited with bated breath as the organisers unveiled the names of the artists who were going to enthral us this year. The crowd erupted into a chorus of "Wohohoho" that we have come to associate so closely with the one and only singing legend—KK.

The evening transformed into a mini-concert because the only way to celebrate the joy of his arrival was by singing our hearts out. In the weeks leading up to Revels, all anybody could talk about was the man whose songs we grew up listening to—KK himself would be coming to our college to perform for us! Tickets for the show sold out within hours. While he has admirers of all age groups, KK's connection with college students is a unique one. His youthful and evergreen voice holds a special place in the heart of every youngster who grew up in the 90s and 2000s. Be it love, heartbreak, pain or uncertainty, KK has sung songs which we can relate to in every phase of our life.

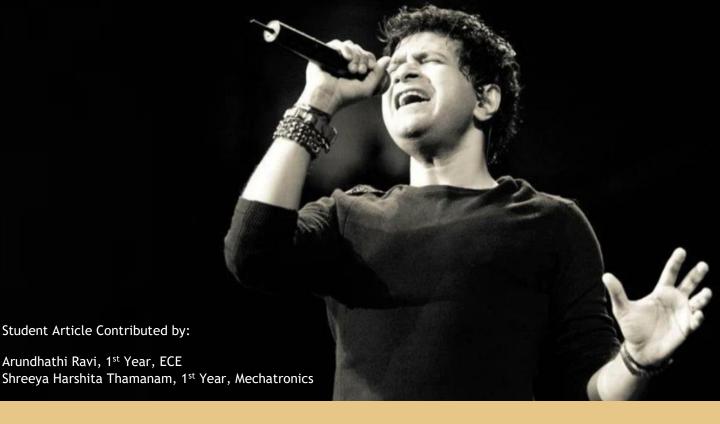
His breakthrough songs from his debut album 'Pal', Yaaron and Pal, have become the go-to anthems for every graduation and farewell ceremony.

Despite never having received any formal musical training, KK became the voice of expression for an entire generation. He sang around 3500 advertisement jingles in the 90s before finally getting his big break.

The day finally arrived, and students stood in the scorching sun to collect their concert bands. Those in the first and second year were going to experience an offline college fest for the first time. For many, it was their first concert, and what a first it was!

The collective chant of "KK! KK!" echoed throughout the ground as the audience eagerly waited for him to arrive. His energy and stage presence was unmatched as he serenaded the crowd with his chart-topping hits and truly made it a night to remember.

People clung to their friends and loved ones as they immersed themselves in his soulful and passionate voice. The atmosphere turned bittersweet as the evening ended, and the crowd thanked KK for one of the best nights of their lives with a thunderous round of applause. Students walked out with hoarse throats, smiles, and tears of joy—a testament to the truly delightful evening. Such was the pull Krishnakumar Kunnath had on his audience even after an illustrious career of 20 years. Rarely does an artist come into the world touching so many lives with one's art, as KK. The ability to transcend time and culture is a testament to his passion and artistry. KK is no longer with us, but his art shall live on with us forever.



## **ALUMNI MATTERS**



MIT Alumnus Initiates 'Arpit Jain Best Researcher Scholarship'

Mr Arpit Jain, an alumnus of the institute (Information and Communication Technology, 2009) has donated ₹400000/-towards setting up of a research scholarship to encourage the

young minds to delve deeper into research at the institute. MAHE has agreed to match the similar amount, and the accumulated interest is to be utilized for awarding annual scholarship to a maximum of four students of the department of Information and Communication Technology.



Declared as Top 50 Women Leaders of San Francisco for the Year 2022 by Women We Admire Ms Deepa Bajaj (1993, CSE) Vice President - Data Engineering & Analytics, is a Digital transformation leader who thrives at the intersection of

technology, product development and innovation. She is well known for her entrepreneurial and strategic leadership. She has 28+ years of experience in leading Data Platform Engineering, Enterprise Data Strategy, Merger & Acquisition Integrations, Global Customer Analytics and Finance Operations at PayPal, eBay, Bank of America, Time Warner Cable, and Oracle Corporation. Women We Admire, The Book and Periodical Publishing agency, New York has announced her as one of the top 50 Women Leaders of San Francisco for the year 2022.



Nokia Mobiles.

Elevated to Vice President - Asia Pacific and China at HMD Global Mr Ravi Kunwar, an alumnus of MIT (1993, Mech. Engineering), has been elevated recently as Vice President - Asia Pacific and China at HMD Global, a Finnish mobile phone manufacturer of



Software & Data Engineering, Cyber Security Functions and Enterprise Architecture at Universal Music, eBay Inc., Bank of America, Time Warner Cable, and Oracle Corporation.



Managing Director & NIS Country Leader at Nidec Control Techniques India Pvt Ltd

Mr Sudeep Edakkattu an alumnus of 1994 Batch E&E has recently taken charge as Managing Director & NIS Country Leader at Nidec Control Techniques India

Pvt Ltd. Prior to this new responsibility he was associated with Honeywell as Growth Leader - Renewable Energy, Energy Storage, and Distributed Assets South Asia.



Sector, IBM India.

New Horizons at EY India Technology Consulting Practice Mr Harsh Kumar, an alumnus of MIT (1996, Mech. Engineering) has recently joined EY India Technology Consulting Practice. Prior to this Harsh was associated as Partner and Executive Director - Distribution and Industrial



Chairperson of the India Chapter Honeywell

Ms Mythili Belle Kamath an alumnus of MIT (BTech in Electronics and Communication, Batch of 2002) has been appointed by Honeywell India as Chairperson of the India Chapter Honeywell Women Employee

Network. Mythili is associated with Honeywell since 2002 and she is currently Director - Flight systems COE, Aerospace at Honeywell, Bengaluru, Karnataka.

Flying Branch of the Indian Air Force









Four proud alumni (03 NCC Girl cadets and one non-NCC cadet) of MIT have made it into the Flying branch (SSC course) of the Indian Air Force. Photo from left to right: Ex-JUO Tanushka Singh from Electrical and Electronics Batch 2018-2022, ex-sergeant Tanya Singh from Electronics and Communication Engineering Batch 2018-2022, ex-Sergeant Sonali S from Civil Engineering Batch 2018-2022 and C Karthik Reddy from Aeronautical Engineering Batch 2018-22. It is a proud moment for all of us.

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## **MIT NEWS BITES**

 Department of Chemical Engineering organized a workshop on "Statistical Discovery for Chemical Engineering Using JMP Academic Suite" on 03 and 04 April 2022. Dr Muralidhara Anandamurthy, from JMP Academic Team, India was the key speaker at the event.

JMP Academic Suite software license is available now for students and faculty members of university campus of MAHE, Manipal.

 The Department of Chemistry, MIT Manipal, organized an interactive session on "What is green hydrogen and why do we need it?" on 22 April for post graduate students.

Dr Murthy Dharmapura, Associate Professor - Research, Department of Chemistry, MIT Manipal was the resource person at the event. Dr Dharmapura is closely associated with the national-level consortium on Green Hydrogen: Evolution to Revolution. He is working on innovating new materials and technology toward sustainable and scalable green hydrogen generation.

 Department of Civil Engineering organized a training programme on "Rainwater Harvesting" in association with Udayavani, Manipal on 27 May at MIT-KEF R&D Centre, MIT. The key objective of the training was to create awareness among the public particularly the farmers about the importance of "Rainwater harvesting".

Dr Lathashri U A, Associate Professor and Dr Radhika Bhandary, Assistant Professor from the department coordinated the training program along with Dr Narayana Shenoy, Professor in Civil Engineering Department.







- Department of Chemical Engineering organized the "MAHE-CLASS-OF-94 Golden Jubilee Lecture" on the topic "Exciting opportunities in AI/ML in Chemical Engineering" on 01 April 2022. Prof Ravindra D Gudi, Dean-Alumnus and Corporate Relations & Institute AI/ML Chair at IIT Bombay, was the guest speaker. He provided a glimpse into the intersection of the two fields, Artificial Intelligence/Machine Learning and Chemical Engineering, and highlighted its various applications in the industry.
- Department of Mechatronics organized an expert talk on "The Role of Chemical Engineers in Semiconductor Industry" by Mr V Ramakrishnan, Director, Module Engineering, Global Foundries, Singapore (1990 Batch of B.Tech Chemical Engineering MIT) on 7 May 2022.
- Department of Mechatronics organized webinar on, "Introduction to IoT & Smart Robotics" on 22 May 2022.
   Mr Suraj Jaiswal, an active researcher and IoT enthusiast was the resource person at the Webinar. A total of 82 participants attended the session.

- Department of Biomedical Engineering and IEEE EMBS Manipal Chapter conducted Technical Webinar on "Introduction to Neurotechnology & Brain Computer Interfaces" by Harrison Canning, Founder, The BCI Guys, Writer, Blackrock Neurotech on 27 May 2022. A total of 35 participants attended the webinar.
- Department of Civil Engineering conducted ACHIEVERS TALK on 28 May 2022 by CIVIL PEER PROGRAM, a department supported student organization. Divyansh Shukla, one of the 30 students across India to get admitted in early M.Tech program, IIT Gandhinagar and Mihir Rambhya, Managing Director of Expify, a start-up from the Civil Engineering Department were the main speakers at the event.
- Department of Mechatronics organized an expert talk on, "Signal conditioning for sensor networks". The talk was delivered by Dr P V Ananda Mohan, Life fellow IEEE on 28 May 2022.
- Department of Media Technology organized a month long National Level Creative Photography Competition 2022 from 1 May to 1 June 2022. The competition comprised of five categories: Nature, Portrait, Street, Urban & Special Effect. Participants from various parts of the country submitted their entries in each category. Certificate of Recognition was awarded to the winner of each category. Prof Pranav S Joshi, Assistant Professor was the convener of the event.
- Staff Team from MIT won the second prize in 'Staff Variety Entertainment' competition at UTSAV 2022.





#### APPRECIATION OF SERVICE

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

Mr STANLEY OSWALD MABEN
Associate Professor-Senior Scale, Department of Electronics & Communication Engineering



Date of Joining: 01-02-1985
Date of Superannuation: 31-05-2022

**Dr ARUN SHANBHAG**Professor,
Department of Biomedical Engineering



Date of Joining: 01-01-2017
Date of Superannuation: 31-05-2022

Dr RAMESHA C Professor, Department of Mathematics



Date of Joining: 24-08-1987 Date of Superannuation: 30-06-2022

#### Mr RAMADAS SHANBHAG Senior Clerk Office



Date of Joining: 06-02-1984 Date of Superannuation: 31-05-2022

Ms VIDYA KAMATH
Senior Clerk
Department of Civil Engineering



Date of Joining: 01-04-1987

Date of Superannuation: 31-05-2022

Mr DEVADAS PRABHU P
Senior Technician, Department of
Information & Communication Technology



Date of Joining: 22-07-1989

Date of Superannuation: 31-05-2022

Mr RAMESH NAYAK Senior General Duty Worker Academic Section



Date of Joining: 18-04-1991
Date of Superannuation: 31-05-2022

Mr SATISH SHETTIGAR
Senior Electrician
Maintenance Department



Date of Joining: 30-10-1992 Date of Superannuation: 31-05-2022

Ms SUMITHRA PRABHU
r House Keeping Staff, Department

Senior House Keeping Staff, Department of Aeronautical & Automobile Engineering



Date of Joining: 01-11-1992 Date of Superannuation: 30-04-2022

#### **VISION**

Excellence in Technical Education through Innovation and Teamwork.

#### **MISSION**

Educate students professionally to face societal challenges by providing a healthy learning environment grounded well in the principles of engineering, promoting creativity, and nurturing 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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