

MAHE Research Bulletin

Oct to Dec 2022



Manipal Academy of Higher Education (MAHE) is among the second top-ranked private university in India according to the Quacquarelli Symonds World University Ranking 2022. In the 18th edition of the rankings, MAHE figures in the 751-800 band, among 1,673 analysed universities and 1,300 institutions ranked from 93 countries. MAHE's performance was noted among the top 58 per cent in the rankings this time.

For the Quacquarelli Symonds (QS), World University Ranking, universities are evaluated on six performance indicators: academic reputation, employer reputation, student-to-faculty ratio, citations per faculty, international faculty ratio, and international student ratio. Four of the indicators are based on hard data, and the remaining two are based on major global surveys – one of the academics and another of employers – each the largest of their kind and for the 2022 Rankings, QS has analysed over 96 million citations from more than 14.7 million recorded publications, before evaluating 1,300 Universities.

Directorate of Research – MAHE, Manipal



In alignment with the vision of MAHE, the Directorate of Research facilitates and supports the research activities of MAHE. It aims at nurturing and promoting the research of global standards.

Vision:

V To nurture and promote research activities of global standards.

ission:

V I"To facilitate and contribute to research in all disciplines, thereby improving yield in terms of grants, research innovation, intellectual property, and publications."

Dbjectives:

- To identify research priorities and initiate programs.
- To seek research grants and promote focused research of national importance.
- To foster new collaborations and strengthen existing ones.
- To disseminate research findings in high-impact publications.
- To provide logistics for researchers to implement ideas.
- To support IP-related activities and Technology Transfer.

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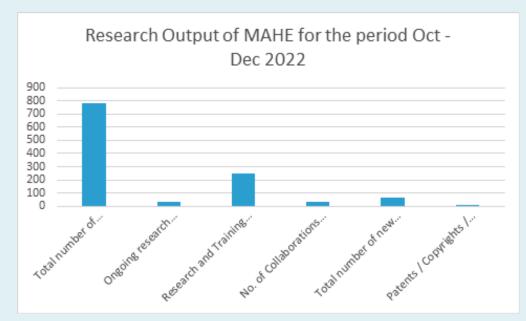
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PART 3:

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A. Info-graph of Research Activities during the period October – December 2022



B. Top publications for the period October – December 2022

Author Name	Institution	Name of the Journal (Publisher)	Month and Year of Publication	Journal Quartile Q1 (Top 10 Percentile)
Naga Thirumsh Chevala	Manipal College of Pharmaceutical Sciences	Scientific Reports	December 2022	91
Nanjangud Mohan	Manipal Institute of Technology, Manipal	Engineered Science	December 2022	99
Pinalkumari Chaudhari	Manipal College of Pharmaceutical Sciences	Carbohydrate Polymers	December 2022	98
Augustine B V Barboza	Manipal Institute of Technology, Manipal	Environmental Pollution	October 2022	97
Advith K Sridhar	Manipal Institute of Technology, Manipal	Journal of King Saud University, Engineering Sciences	November 2022	95
Nidheesh V R	Department of Atomic & Molecular Physics	Sensors and Actuators, B: Chemical	November 2022	98
Dr Shilpa Suresh	Manipal Institute of Technology, Manipal	Engineering Science and Technology, an International Journal	November 2022	97
Mr Harishkumar Kamat	Manipal Institute of Technology, Manipal	Engineered Science	December 2022	0.99

Author Name	Institution	Name of the Journal (Publisher)	Month and Year of Publication	Journal Quartile Q1 (Top 10 Percentile)
Dr Arunachala U Chandavar	Manipal Institute of Technology, Manipal	Applied Energy	November 2022	99
Dr Raja S	Manipal Institute of Technology, Manipal	Chemosphere	December 2022	97
Dr Asha Udaya Rao	Manipal Institute of Technology, Manipal	Engineered Science	December 2022	0.99
Samapth Suranjan Salins	Manipal Institute of Technology, Manipal	Journal of Building Engineering	December 2022	0.98
Sooraj Mohan	Manipal Institute of Technology	Energy	November 2022	0.98
Mr Suhas Y Nayak	Manipal Institute of Technology, Manipal	Engineered Science	December 2022	0.99
Mr Laxmikant G Keni	Manipal Institute of Technology, Manipal	Engineered Science	December 2022	0.99
Jesus Simal-Gandara	Universidade de Vigo	Food Chemistry	October 2022	0.97
Dr Mallikarjuna Rao c	Manipal College of Pharmaceutical Sciences, Manipa	Current Neuropharmacology	October 2022	0.96
Dr Raja s	Manipal Institute of Technology, Manipal	Chemosphere	December 2022	0.97
Louella Concepta Goveas	Nitte (Deemed to be University), NMAM Institute of	Bioresource Technology	December 2022	0.98
Mr Nithesh Naik	Manipal Institute of Technology, Manipal	Engineered Science	December 2022	99
Mr Vikash Kumar Jhunjhunwala	Manipal Institute of Technology, Manipal	Sensors	December 2022	91
Samyak Pandey	Manipal College of Pharmaceutical Sciences	Journal of NeuroImmune Pharmacology	December 2022	0.95

C. Patents filed during the period October – December 2022

Dinesh Upadhya, Shiva Kumara Reddy, Raviraja N S, Shailaja S, Kasturba Medical College, Manipal, have been filed a patent titled "A sustained release composition for inhibiting vascular endothelial growth factor comprising small extracellular vesicles" on 03-10-2022.

Mohammad Zuber, John Valerian Corda, Satish Shenoy B, Manipal Institute of Technology, Manipal, Leslie Edward S Lewis, Kasturba Medical College, Manipal have been filed a patent titled Ambu Bag Presser on 21-10-2022.

Kapil Sadani, Pooja Nag, Arthik Jain Manipal Institute of Technology, Manipal have been filed a patent titled system facilitating sensing, measurement of trans impedance and a method thereof on 13-10-2022

Rama Rao Damerla and Raashi Chauhan Kasturba Medical College, Manipal have been filed a patent titled Method for Identifying Single Nucleotide Variants and Structural Variants in DNA Sequences on 13/10/2022.

Unnikrishnan V K, Keerthi K, Sajan Daniel George Department of Atomic and Molecular Physics have been filed

a patent titled A Cost-Effective Method of Substrate Fabrication for Ultra-Trace Elemental Detection, And Uses Thereof' on 10/11/2022.

Krishnananda Prabhu R V , Kasturba Medical College, Manipal, have been filed a patent titled Device for Grating Food Items on 24/11/2022

Nagraj Kamath, Balaji Seetharaman, Ramnath Shenoy, Srinivas Shenoy Heckadka, Manipal Institute of Technology, Manipal have been filed a patent titled A composition forming a bio-plastic film and method thereof 25/11/2022.

Krishnananda Prabhu Rv , Kasturba Medical College, Manipal, have been filed a patent titled Air-Pressure Based Lantern'on 01/12/2022.

Sanjana Harlalka, Komal Smrithi, Manipal College of Dental Sciences, Manipal have been filed a patent titled Mouth Block for Performing Dental Treatment' on 05/12/2022.

Shubham Ram Ghag, Shivanand Bhushan, Sibi Oommen, Manipal College of Health Professions, Manipal Suhas Yeshwant Nayak, Jaideep J P, Manipal Institute of Technology, Manipal Sachin Vasanta Shet, Pareshkumar Manharbhai Prajapati, Suryanarayana Venkata Saraswatula and Subbaiah Venkata Kamatam Manipal College of Natural Sciences.

K Prathik Kamath, Indira K P K Prathik Kamath, Indira K P have been filed a patent titled A Composite Material for Radiation Shielding and a Method for Preparing the Composite Material on 19/12/2022.

K Prathik Kamath, Indira K P, Manipal Institute of Technology, Manipal have been filed a patent titled An apparatus for pulling a fishnet and a method thereof 21/12/2022.

Raghuvir Ballambat Pai, Shah Mohammed Abdul Khader, Swaminathan Meenatchi Sundaram, Girish Hariharan, Rakshath Poojari, Abhilash Hebbandi Ningappa Manipal Institute Of Technology, Manipal Sathyamangalam Venkatasubbu Ramesh, Manasa Bhandarkar, Harshitha Bangera Manipal College Of Health Professions, Manipal Manali Hazarika Kasturba Medical College, Manipal have been filed a patent titled In-vitro Test Setup for Measuring Performance of an Ocular Surface' on 31/12/2022.

D. Grants Office, Directorate of Research, MAHE, Manipal

Research has always been an area of predominant importance to Manipal Academy of Higher Education. In this Knowledge Era, MAHE has emerged as a Research & Innovation Driven University. Our Vision is to nurture and promote research activities of global standards. As of December 2022, we have total 267 ongoing research projects funded by leading government and non-government organisation like ICMR, DST, DBT, SERB and CSIR. With the State-of-the-Art research infrastructures, we have been able to generate 39 crores research funding for the FY 2021 to 2022. Of 217 patents filed till now, 11 belong to this quarter.

At Directorate of Research, MAHE we manage the entire grant management lifecycle, from pre-award planning to the post award reporting stage. It is a challenging, especially for early career researchers with the grant application process. However, one may effectively manage any difficult research programme if the right tools are at hand, proactive management is used, and a helpful workflow is in place. Our objective at DoR is to facilitate the smooth administration of research grant projects by complying to funding body and MAHE policy.

To administer the process of pre-award planning to the final reporting, the administration of the MAHE has set up the Grants Office (GO) centrally at DoR. The Grants Office managed by a Grants Coordinator. At GO, we strive to increase the quantity and quality of research funding while aiding academics and research scholars in enhancing the research outputs at MAHE.

In tandem with the objective, we are constantly updating new grants calls which can be accessed through Funding

Institutional, Grants Mgmt. portal and Research Management System (RMS) to help faculty and researchers. Additionally, the Grants Coordinator (GC) will serve as the applicant's single point of contact for all essential discussions about Finance, Legal, and HR. The GC will be serving as the liaison officer between the organization and the funders. At MAHE, on applying any research grant it is mandatory to update the project information in RMS portal.

Note: From now on, the Directorate of Research should receive any paperwork that needs to be signed by the Registrar in connection with applications for research grants. Send an email of the document in word format that needs to be signed by registrar to **grants.mu@manipal.edu**.

Contact Details:

Mr Royal Monteiro, Coordinator - Grants Office, MAHE, Manipal. DBT/Wellcome Trust India Alliance IRMI Research Management Fellow Email: grants.mu@manipal.edu

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A. Faculty and Institution Achievements

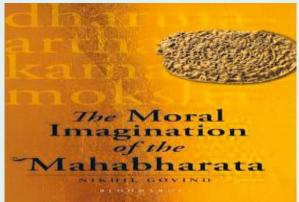
Mr. Tijo George, research scholar (PhD student: batch 2020), Human Resource Department, T A Pai Management Institute, MAHE, Manipal, received the Best Paper Award at International Conference on Advancements in People Management (ICAP 2022), Christ University, Bangalore from December 1-2, 2022. The paper that he presented is from the first part of his PhD work. His supervisor is Dr. Bhawana Maheshwari at TAPMI.

The conference has been conducted over the last five years on various themes. This year's theme was decoding Human Resources for Industry 5.0., which focused mostly on developing agile and resilient technologies that are more flexible and adaptable. Also, it is a human-centric model that focuses on talent, emphasizing sustainability, diversity, and empowerment. The conference was inaugurated by Dr Rishikesha Krishnan, Director of IIM Bangalore. There were eminent speakers on Industry 5.0 from various countries who delivered lectures on the relevance of Industry 5.0 in people management through a human resource management perspective.

There were more than 38 paper presentations by academicians and corporate experts, and the core areas of presentation were focused on HR Technology, sustainable strategies for a diverse and inclusive workforce, futuristic trends in HR, data-driven people strategies, and general issues in the human resource management and organization behavior in the post Covid-19 era. The participants were from more than 15 states in India; most were academicians, and a few were professors of practice from corporate. Thus, the award was won under conditions of intense competition and is indeed an achievement.

Prof (Dr) Avinash Dadhich, Director, MLS, MAHE Bengaluru Campus, Yelehanka Bengaluru, was invited as a speaker at the Artificial Intelligence (AI) Policy Summit, 2022, organized by ETH Zurich Center for Law and Economics and RegHorizon ETH Zurich provided 1500 Swiss francs (1,34,376.14 Indian Rupee) as financial for attending the summit from 10 to 14 October 2022.

Dr Nikhil Govind, Professor and Head, MCH, MAHE, Manipal published his book titled, "The Moral Imagination of the Mahabharata" by Bloomsbury India, on 30 Oct 2022



1. Dr Elsa Sanatombi Devi, Professor, Department of Medical-Surgical Nursing, Manipal College of Nursing Manipal received the National Florence Nightingale Award – 2021 on 7 November 2022, from the Honourable President of India at the Rashtrapati Bhavan, New Delhi.



2. Dr Linu Sara George, Professor and Head, Department of Fundamental of Nursing, Manipal College of Nursing Manipal awarded the Fellowship by the Faculty of Nursing and Midwifery of the Royal College of Surgeons in Ireland (FFNMRCSI) on 5 December 2022. The fellowship is one of the most prestigious professional qualifications awarded to nurses and midwives that will allow joining an extensive professional network across the world for research and event collaborations.



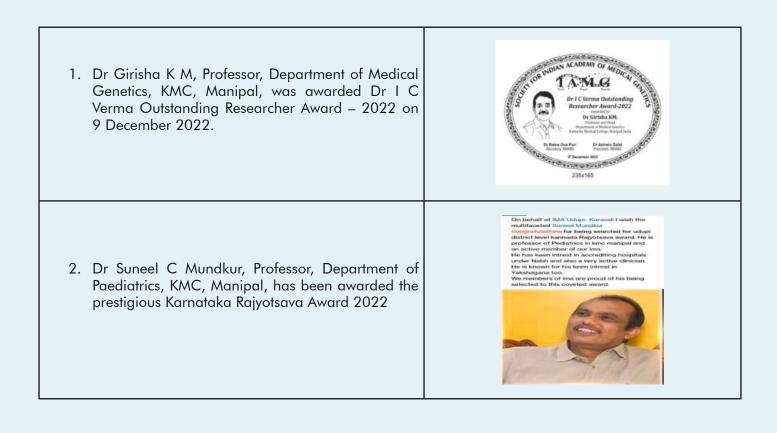
3. Dr Judith Angelitta Noronha, Dean Manipal College of Nursing, Manipal received Eminent Alumni Award from the Alumni Association (Silver Jubilee), Father Muller College of Nursing, Mangaluru, on 13 December 2022.



Dr Namratha, Dr Anjale and Dr Shashikiran, Senior lecturers, Department of Periodontology, Manipal College of Dental Sciences, Manipal, received MAHE Seed grant money of ₹50,000/- for the study "Formulation and evaluation of a novel mucoadhesive, drug-loaded film as a post-surgical periodontal dressing – An in vitro study" in October 2022

1. Dr Raghu Radhakrishnan, Professor, Department of Oral Pathology and Microbiology, Manipal College of Dental Sciences, Manipal, has been conferred with the title of Honorary Professor at the School of Clinical Dentistry, The University of Sheffield, Sheffield, UK for the duration of one year commencing from October 2022. He is currently working as a Welcome Trust DBT IA Fellow on the Research project "Epithelial Reprogramming of HOX genes by Epigenetic Mechanisms and its Implication to Oral Cancers".

Dr Sudheesh N, Assistant Professor, Manipal Institute of Virology, has been selected for GVN Rising Star Program 2022 to 2023.



- 3. Department of Orthopaedics, KMC, Manipal received Best Hospital Orthopaedic, South at the Economic Times Health Awards 2022 held in New Delhi on 17 November 2022
 4. Kasturba Medical College, Manipal, was awarded the Best New Clinical Toxicology Laboratory in a Hospital/Institute 2022, on 6 November 2022 at the 16 Annual National Conference of Indian Society of Toxicology, held at KMC, Mangalore
 - a. Dr Neelima Bayyapu, Associate Professor, Department of Computer Science and Engineering, Manipal Institute of Technology, MAHE, Manipal, is honored to chair the 29th IEEE International Conference on High-Performance Computing, Data, and Analytics-2022 held in Bangalore, India from 18 to 21 December 2022.



- b. Dr Aditya Udayraj Joshi, Assistant Professor, Department of Civil Engineering, Manipal Institute of Technology, Manipal, was awarded a research project titled "Strain distribution and provenance studies on uranium bearing Jaban meta-conglomerate and wacke of Proterozoic Champaner Fold Belt, western India: emphasis on tectonics of Rodinia supercontinent assembly" by DST-SERB under the Startup Research Grant. The total cost of the project is ₹20,60,872/- for a period of two years.
- c. Dr Shiva Kumar, Professor, Department of Mechanical and Industrial Engineering, Manipal Institute of Technology, Manipal, is Listed in the "World Top 2 per cent Scientists/Researchers" for the year 2021 in the field of Engineering by the list released by Stanford University (USA) and published by Elsevier indexed in Scopus.



d. Dr Maddasani Srinivasulu, Associate Professor (senior scale), Dept. of Chemistry, MIT, Manipal, is honoured with a National award (Bronze Medal Award) by the Indian Liquid Crystal Society (ILCS), Bengaluru, during the 29th National Conference on Liquid Crystals (NCLC-2022) held at CHRIST (Deemed to be University), Bengaluru under the auspices of the ILCS, on 8 December

2022 for his steady academic growth with notable scientific contributions in the field of Soft Matter, particularly Liquid Crystals. Also, he delivered the Bronze Medal award lecture entitled "Enhanced Mesomorphism through Hydrogen Bonding Interactions" during the conference.



- e. Dr Naresh Kumar Mani, Associate Professor, Department of Biotechnology, MIT, MAHE, received the first installment of 49.62 lakhs (out of 103 lakhs) from Reckitt Benckiser industrial grant.
- f. Dr Poornesh P, Assistant Professor-Selection Grade, Department of Physics, Manipal Institute of Technology, MAHE, Manipal has received approval for the research grant of 50 Lakhs from DST-SERB under core research grants scheme during Oct 2022.





Dr G Arun Maiya, Professor- Dept of Physiotherapy and Dean, Manipal College of Health Professions, MCHP, Manipal, will lead the MAHE- DST hub at Manipal. He has received a grant of approximately ₹25 crores (approximately) for the research activities.

Dr John Solomon M, Associate Professor- Sr Scale and Head, Dept of Physiotherapy, was invited as a speaker at the World Stroke Congress held at Singapore between 26 to 29 October 2022. He was also invited as a speaker at the World Congress for Neurorehabilitation (WCNR 2022) in Vienna between 14 to 17 December 2022.





Dr Selvam Ramachandran, Associate Professor, Dept of Physiotherapy, successfully completed the Master's level year of FAIMER-Keele Master's in Health Professions Education: Accreditation and Assessment with Distinction. He was awarded the International Fellowship in Medical Education (IFME) to pursue MHPE.



Dr Abraham Babu, Associate Professor, attended the AHA's Training Center Faculty Course at Parimala Medical College, Chennai (October 19 to 20, 2022) and is now one of the three TCF at Manipal AHA's International Training Center.

He has also been selected to be a "Fellow of the Heart Failure Association (FHFA)" of the European Society of Cardiology.

Dr Senthil Kumaran D, Associate Professor- Sr. Scale, Dept of Physiotherapy, attended and presented a paper titled "Upper Extremity Kinematics of a 3D Simulated Drinking Task in Acute To Sub-Acute Stroke Survivors In Comparison With Normal Individuals " at the World Stroke Congress held at Singapore between 26 to 29 October 2022.



Dr Saleena Ummer V, Professor, Department of MLT, has successfully completed the 02 years Fellowship program from July 2020 to July 2022 offered by MAHE-FAIMER International Institute for Leadership in Interprofessional Education (M-FIILIPE), MAHE, Manipal in collaboration with foundation for Advancement of International Medical Education and Research, Philadelphia, USA.

- Dr Ayan Kumar Pati, Professor, Pharmacology, was invited as keynote Speaker at National CME on Insulin and its analog-current updates conducted by Dr. B.C. Roy Multi-Speciality Medical Research Centre, IIT Kharagpur on 15 Nov 2022.
- Dr. Snigdha Awasthi SR, Psychiatry, presented a paper in Dr R B Davis Award Paper Presentation at JASCON 2022,CIP, Ranchi on 5th Nov, and he also presented a poster on OCD SYMPOSIUM at NIMHANS, Bangalore on 12 to 13 Nov 2022
- Department of Community Medicine and Research Cell, MTMC conducted a Research Methodology workshop for AHS on 1st October'2022 and a Research Methodology of MBBS students for ICMR STS projects on 12th December'2022.

B. Achievements by Research Scholars and Students

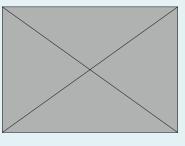
Ms Haneen, Mr Sadaf Afreen, and Ms Sanskriti Sanyal from MBBS batch-2021 qualified in Finals of All Indian Biochemistry Quiz-Energetics 2022 conducted by Lokmanya Tilak Municipal Medical College, Mumbai in which 39 colleges participated and secured 5 Position on 22 Dec 2022.

Ms Sre Ratha, PhD. Scholar, 1 year MCH, Institution name, MAHE, Manipal, was selected for the Short-Duration Intensive Training Program in Public Health Ethics from 1 October 2022 to 19 November 2022. This program is organized by



FMES' HEaL Institute (HEaL Institute) Mumbai; Center for Public Health, School of Health Systems Studies, Tata Institute of Social Science Mumbai (CPH-TISS); ICMR- National Institute of Epidemiology (ICMR-NIE), Chennai; Indian Institute of Technology Bombay, Mumbai (CPS-IITB) and Vidhayak Trust, Pune (VT).

 Dr Ananya Prabhu, 2 Year post-graduate student at MCODS, Manipal, MAHE, has received the SERB VRITHIKA internship on Health Technology from Dept of Data Science and Intelligent Systems at IIIT Dharwad from 12 Dec 2022 to 31 January 2023. 1. Dr Chouhan Siddharth, a Postgraduation student of the Department of Neurology, was awarded third place for poster presentation at the 88 MEDICON 2022, 28 to 30 October 2022.



- 2. Dr Aishwarya Kulkarni, Dr Joy Bhatt, Dr Vinayak Nigam and Dr Vishnu Bharadwaj, Department of Ophthalmology, were awarded First Prize at The Inter-Collegiate Opthalmology Quiz held at Yenepoya Medical College, Mangalore on 17 November 2022.
- 3. Dr V Madhumitha, a Postgraduate student of the Dermatology Department, was awarded the Best Thesis Presentation at CUTICON KN 2022, held at Belagavi, 11 to 13 November 2022.
- 4. Dr Mihika Singh, Postgraduate student, Department of Oto-rhino-Laryngology won a Prize for presenting a case report on an Aneurysmal bone cyst (ABC) of the maxilla in 11-year-old girl at the Paeditric ENT CME held at CMC Vellore, 2 to 3 December 2022.

Ms. Apoorva Jnana, PhD Scholar, Dept of Biotechnology, Manipal School of Life Sciences, MAHE, Manipal, received Best Poster Award at Antimicrobial Resistance and Microbiome under Changing Climate (AMRMIC 2022) conference held at Pondicherry from the 10 to 12 October 2022





Ms Chandni S, PhD Scholar, Dept of Biotechnology, Manipal School of Life Sciences, MAHE, Manipal, received Best Poster Award at Antimicrobial Resistance and Microbiome under Changing Climate (AMRMIC 2022) conference held at Pondicherry from the 10 to12 October 2022

Ms Debyani Samantray, PhD Scholar, Dept of Bioinformatics, Manipal School of Life Sciences, MAHE, Manipal, won third prize for Oral presentation at An International Conference on Combating Antimicrobial Resistance (CAMR-2022), held at Puducherry from 13 to 14 October 2022





Ms. Indira G, PhD Scholar, Dept of Biophysics, Manipal School of Life Sciences, MAHE, Manipal has received travel and registration awarded by OPTICA, OSA for poster presentation at In Frontiers in Optics + Laser Science (FiO+LS) 2022 conference from Oct 15 to 20, at New York, USA.



Ms Ishita Chakrabarty, PhD Scholar, Dept of Biophysics, Manipal School of Life Sciences, MAHE, Manipal has received travel and registration awarded by OPTICA, OSA for poster presentation at In Frontiers in Optics + Laser Science (FiO+LS) 2022 conference from Oct 15 to 20, at New York, USA.

Mr Sampara Vasishta, PhD Scholar, Dept of Ageing Research, Manipal School of Life Sciences, MAHE, Manipal, received Best Oral presentation at an International Conference on Proteins and Proteomics 2022 organized by Proteomics Society of India, CSIR-IICB-Kolkata from 3 to 5 November 2022

> Ms Aswathy S Nair, PhD Scholar, Dept of Ageing Research, Manipal School of Life Sciences, MAHE, Manipal has received Travel Award for poster presentation at the International Conference on Proteins and Proteomics 2022 organized by Proteomics Society of India, CSIR-IICB-Kolkata from 3 to 5 November 2022

Ms Nidhi S Mukundan, PhD Scholar, Dept of Plant Sciences, Manipal School of Life Sciences, MAHE, Manipal, won third prize for Poster presentation at the 2 International Conference by Biotechnology Society of Nepal (ICBSN) held from 17 to 19 December 2022.

Ms. Aswathy Nair, PhD Scholar, awarded ICMR Senior Research Fellowship for the project titled "Influence of homocysteine on neutrophil extracellular traps and its implications in stroke", from 3 December 2022 onwards under the guidance of Dr Manjunath B Joshi, Professor, MSLS.

Ms Sowmya Ramakant Prabhu, PhD Scholar, awarded ICMR Senior Research Fellowship under the project titled "Host MicroRNA mediated modulation of blood-stage infection of Plasmodium Falciparum malaria," from 15 November 2022 under the guidance of Dr Saadi Abdul Vahab, Professor, MSLS.

> Ms. Mythili Padavu, a 5 semester BSc Biotechnology student from Manipal School of Life Sciences, Manipal Academy of Higher Education, has won the First Prize in the BioQuiz -2022 National finals to become the BioQuiz National Winner 2022. The national-level quiz program was part of Asia's most prestigious Bangalore Tech Summit, organized by the Department of Electronics, IT, BT, and S&T, Government of Karnataka. It was virtually inaugurated by Shri Narendra Modi, Honourable Prime Minister of India.











BioQuiz 2022 was organized as part of the 25 edition of Bengaluru Tech Summit-2022 and was India's largest National Level Quiz on Biotechnology. It was held in three rounds: a preliminary round on 5 to 6 November, the Zonal round on 10 November, and the Grand Final Round was conducted on 18 November 2022.

Dr T S Murali, Professor, Department of Biotechnology, Manipal School of Life Sciences, MAHE, Manipal, was honored with the Prof K G Mukerji Memorial Award for Middle Aged Scientists at the 49 Annual Meeting of Mycological Society of India held at Guru Ghasidas Viswavidyalaya, Bilaspur, Chhattisgarh from 28 to 30 November 2022 at Bilaspur. (Presented online)

a. Dr Girisha S, MIT, Manipal, for successfully defending your thesis. Date: 20/12/2022. Topic: "Research title: Anomaly detection and tracking using UAV videos: A video analytics approach"



b. Ms Akshitha, PhD Research Scholar, Department of Civil Engineering, Manipal Institute of Technology, MAHE, Manipal, received the "Dr TMA Pai Gold Medal for Outstanding Research Publication" which was held during the Annual day on 8 November at Manipal Institute of Technology, MAHE, Manipal.



c. Mr Manan Bhatt, Ms Shambhavi Sinha, Mr. Amrit R. and Mr. George Paulson, B.Tech. 3rd-year students of Electronics and Communication Engineering, MIT, MAHE, Manipal, received the Second prize for the "Manipal Biotech Hackathon 2022", which was held online mode during 12 December 2022 to 22 December 2022, conducted by Manipal-Government of Karnataka Bioincubator and Manipal School of Life Sciences, MAHE, Manipal. Prof Aparna V and Prof Anu Shaju Areeckal, Dept of E&C, MIT, MAHE, Manipal mentored the team.



- d. Ms Ankitha Rao, Research scholar, Department of Electronics and Communication, MIT, Manipal, received a student travel grant award for the paper titled "CHALLENGES IN PACKAGING OF FLEXIBLE AND WEARABLE SUPERCAPCITORS AGAINST HUMIDITY VARIATIONS" at the 24th Electronics Packaging Technology Conference (EPTC 2022) held at Grand Copthorne Waterfront Hotel, Singapore, from 7-9th December 2022. The conference was organized by IEEE RS/EPS/EDS Singapore chapter. The work has been done under the guidance of Dr.Somashekara Bhat (Guide) and Dr. Shounak De(co-guide).
- e. Ms Pooja M, Dr TMA Pai Research Fellow, Dept. of Chemistry, MIT, Manipal bagged the Dewan Jawahar Lal Nayar prize for the best poster presentation during the 29th National Conference on Liquid Crystals (NCLC-2022) held at CHRIST (Deemed to be University), Bengaluru, during 8 to 10 December 2022. She presented a research paper entitled "Frustrated phases, rich phase sequences, re-entrant phases, and technologically significant mesophases in new liquid crystal dimers derived from cholesterol". Dr Maddasani Srinivasulu, Dept. of Chemistry, MIT is her research guide and Dr C V Yelamaggad, Scientist-F, Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru, is a co-guide for her doctoral studies.
- f. Ms Pallavi P, PhD, second year., Maths, MIT, BEST PAPER AWARD in the PURE MATHEMATICS category from Andhra Pradesh and Telangana State Mathematical Society (APTSMS) in their XXXI Annual Congress & International Conference held at National Sanskrit University (A Central University Tirupati) during 09 to 11 Dec 2022. The (oral) presentation was entitled: "On Lattice Vector Spaces over a Distributive Lattice," which was the topic broadly from Linear Algebra and its Applications.



- g. Ms Nayana (Dr TMA Pai PhD Scholar), Department of Biotechnology, MIT won the Frist prize in the oral presentation under the PhD section during the research fest held on account of KMC research day on 16 November 2022
- h. Ms Atheena P V (Dr TMA Pai PhD Scholar), Department of Biotechnology, MIT, awarded with best paper presentation award at ICHTR -2022 held at MAHE during 25 to 26 November 2022.
- i. Ms Swati M Pujar, (Ph.D., 2nd year) Department of Physics, MIT, MAHE, Manipal, received the best poster award at the 66th DAE Solid State Physics Symposium, which was held from 18 to 22 December 2022 at BIT, Mesra, Ranchi. [Poster Presentation].

Dr Suprabha B S, Professor and Head, awarded the Best paper award at the 3rd conference of the Indian Society of Paedodontics and Preventive Dentistry (ISPPD) at Peoples Dental College Hospital and Research Centre, Bhopal, Madhya Pradesh, from 24 to 26 November 2022 Dr Karthik Shetty, Professor, and Head, Department of Conservative Dentistry and Endodontics, won the best paper at the 37 IACDE National Conference, Bhopal, held from 17 to 20 to November 2022, for an original research paper titled "A retrospective study of unobturated canals in root canal treated maxillary first molars using cone beam computed tomography Dr Manuel Thomas, Associate Professor, Department of Conservative Dentistry and Endodontics, won the best paper at the 37 IACDE National Conference, Bhopal, held on 17 November 2022, for an original research paper titled "Effect of bleaching on color and surface topography of teeth with enamel caries treated with resin infiltration and remineralization." KRePSS- Karyo repairing protecting super sustainable virus, an imaginary virus that was capable of 7 innovative functions, was created by a team of interns(Dr Parthivee Sharma, Dr. Roopal Lal, Dr Shivali Yadav, Dr. Simran Agarwalla, and Dr.Kushaggr Rastogi) for "Model your Microbe competition" held at MMMC, Manipal on 8 October 2022. A team won second place and a cash prize of Rs.3000/ Guided by Dr Srikant N and Dr Mithun Pai The team (Dr Kushaggr Rastogi, Dr Akanksha Srivastava, Dr Simran Agarwalla, Lipika Sen)from MCODS Mangalore was shortlisted as one of the finalists in the competition in the 2022 frugal innovation case study conducted by the Australian National University Dr Giridharan G, Second Year, Postgraduate, Department of Oral Medicine and Radiology, MCODS, Mangalore, won the second prize in paper presentation for his paper titled "Morphological alterations of eustachian tube in maxillary sinusitis using CBCT" presented at the "33 IAOMR National Conference" held from 8 to 10 December 2022, organized by Kalinga Institute of Dental Sciences, Bhubaneshwar

Ms Ashitha Sreelakshmi, PhD Scholar, Dept of Speech and Hearing, MCHP won the Best Paper award in the poster category ICHTR-2022-Interdisciplinary Conference on Healthcare and Technical Research conducted by Manipal Academy of Higher Education, Manipal

Ms Reema Dsouza, MSc Echocardiography II year, Department of Cardiovascular Technology, MCHP, MAHE, Manipal, received the first prize in case presentation on the topic "A rare case of Cardiac Malignancy in

NHL" in IAE (Indian Academy of Echocardiography) which was held from 17 November to 20 November 2022 at Hyderabad.

> Ms Sumbaraju Sudheshna Lalitha, MSc Echocardiography II year, Department of Cardiovascular Technology, MCHP, MAHE, Manipal, received the second prize in an oral presentation on the topic "Ductal and Foramen Ovale flow pattern in Neonates" in IAE (Indian Academy of Echocardiography) which was held from 17 November to 20 November 2022 at Hyderabad.

Mr Sulfikar Ali A, Dept of Physiotherapy, attended and presented a paper titled "Effects of Game-Based Rehabilitation Interventions on Upper Limb Function and Activity Following Acute and Sub-Acute Stroke: A Systematic Review and Meta-Analysis" at the World Stroke Congress held at Singapore between 26 to 29 October 2022.

> Mr Ganesha Poojary – PhD student, presented his poster titled "An insight into the Exosome proteome in pulmonary arterial hypertension" and received a travel award at the 14th Annual Meeting of the Proteomics Society and International Conference on Proteins and Proteomics at CSIR-IICB, Kolkata November 3 to 5, 2022.

> He has also presented an abstract titled "Effects of Aerobic exercise training on bodyweight and cell free DNA in an animal model of pulmonary arterial hypertension" at the 9th Asian

Preventive Cardiology & Cardiac Rehabilitation Conference, Hong Kong (hybrid mode) on 26 to 27 November 2022.

Ms Akhila Satyamurthy, PhD Scholar, Dept. of Physiotherapy, MCHP, MAHE, presented an abstract titled "Early exercise Intervention in patients recovering from acute heart failure: a systematic review with mapping of evidence" at the 9th Asian Preventive Cardiology & Cardiac Rehabilitation Conference, Hong Kong (hybrid mode) on 26 to 27 November 2022.

Ms Yashshree Pandit, III semester MPT, Dept. of Physiotherapy, MCHP,

MAHE, presented an abstract titled "Does Risk stratification affect kinesiophobia in patients with acute coronary syndrome undergoing percutaneous coronary interventions?" at the 9th Asian Preventive Cardiology & Cardiac Rehabilitation Conference, Hong Kong (hybrid mode) on 26 27 November, 2022.











C. Awards and accolades

- Dr Ashim Mishra, Professor, Forensic Medicine, achieved Best research paper in the Faculty category (Dr Andre Award and Dr Balraj Award)at the 16 National Conference of Indian Society of Toxicology held at KMC, Mangalore on 5 and 6 Nov 2022
- Dr Shaswata Karmakar, Reader, and Dr Shashikiran, Senior lecturer, Department of Periodontology, Manipal College of Dental Science, MAHE, Manipal, were awarded the second prize in the contest for the Best Audiovisual Teaching material in December 2022.
- Dr Sharada Mailankody, Associate Professor Dept of Medical Oncology won the 3rd Prize at ISMPO Shri Vijay Batra Research Foundation Award 2022
 - Dr Anil Kumar M N, Associate Professor Dept of Psychiatry, won the 2 Prize, Dr P Raghurami Reddy Research Award-2022, at the 55 Annual Conference IPSOCON, held at Thiruvananthapuram, 14 to 16 October 2022
 - Dr Vinu Rajendran, Senior Resident Dept of Immuno-Hematology and Blood Transfusion won the 2nd place for Poster Presentation at TRANSCON-2022, organized by ISBTI, GMC, Jammu, during 11 to 13 November 2022.



- 4. Dr Shalini, Assistant Professor, was awarded the Best Case Presentation award at the 5th International Conference on Birth Defects 2022, JSS Medical College, Mysuru, November 21 to 23, 2022
- 5. Dr Rajesh P Nair, Associate Professor Dept of Neurosurgery, was awarded the CNS Foundation Award-2022 at the CNS Annual Meeting in San Francisco, California, on 10 October 2022
- 6. Dr Sadhana Holla, Assistant Professor, won Best Paper Presentation at ICHTR-2022, 25 to 26 November 2022
- 7. Dr Rekha, Dept of Obstetrics and Gynecology, was awarded a fellowship in recognition as ICOG fellow on 23 Jan 2022
 - a. Mr Anandh N, Asst. Prof Sr Sc, Department of Electrical and Electronics Engg., MIT, Manipal, was honored with the **Best Paper Award-Paper** Title "Smart Transformer Enabled Triple-Active Bridge Converter For Modern Data Centres" was presented during the 22nd National Power System Conference (NPSC 2022) and selected for Dr Ramamoorthy Best Paper Award in Power Electronics and Drives at IIT Delhi.

Dr Rakesh C V, Asst. Professor, Dept. of Speech and Hearing, MCHP won the Best paper award in the poster category in the ICHTR-2022-Interdisciplinary conference on Healthcare and Technical Research conducted by Manipal Academy of Higher Education, Manipal.

Ms Pratibha Todur, Incharge Head Respiratory Therapy, MCHP, MAHE, Manipal, awarded first prize in the scientific paper presentation of Rescare 2022 15 National Conference of IARC, Kochi on 2 and 3 Dec 2022.





Ms Jyothi Samanth, Assistant Professor Selection Grade, Dept. of Cardiovascular Technology, MCHP, MAHE, Manipal, has presented a paper titled "Role of Fetal Echocardiography at term pregnancy in the Prediction of adverse neonatal outcomes among diabetic pregnant women" in the "13 Manipal Cardiology Update" Conference held on 6 November 2022 and awarded FIRST PRIZE.

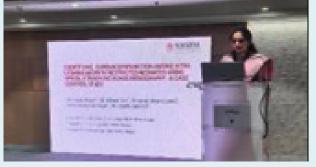
Mr Umesh Pai, Assistant Professor Selection Grade, Dept. of Cardiovascular Technology, MCHP, MAHE, Manipal, has presented a poster titled "Impact of RV pacing on LA strain among the permanent pacemaker implanted patients" under the Original article category in the "13 Manipal Cardiology Update" Conference held on 6 November 2022 and awarded FIRST PRIZE.





Ms Manjoosha M Assistant Professor, Dept. of Cardiovascular Technology, MCHP, MAHE, Manipal, has presented a poster titled "Comparison of RCA and LCX dominance in patients with inferior wall MI with reference to electrocardiographic, echocardiographic and angiography profiles" under Original article category in the "13 Manipal Cardiology Update" Conference held on 6 November 2022 and awarded Second Prize

Ms Vidya Nayak, Assistant Professor Selection Grade, Dept. of Cardiovascular Technology, MCHP, MAHE, Manipal, has presented a paper titled ": Identifying early cardiac dysfunction among Intra uterine growth restricted neonates using speckle tracking echocardiography" in the "Indian Academy of Echocardiography" Conference held from 17 November to 20 November 2022 at Hyderabad and awarded First Prize



- Dr Ravi Kumar Gupta, Associate Professor, Department of Mechanical Engg, MIT Bengaluru, was honored with the Best Paper award at International Conference on Recent Advances in Modeling and Simulation Techniques in Engineering and Sciences [RAMSTES-2022] held at Manipal University, Jaipur from 9 Nov to 11 Nov 2022.
- Dr Gerald Deepak, Assistant Professor, Department of Computer Science and Engg, MIT Bengaluru, was honored with Outstanding Paper Award in the Iberoamerican Knowledge Graphs and Semantic Web Conference in the Applied Semantic Intelligence Session held at Universidad Camilo José Cela, Madrid, Spain



A. Quarterly report of MAHE SRF activities (October- December 2022)

MAHE Students Research Forum (MAHE-SRF) is a robust and upbeat student-centric body that facilitates the active involvement of undergraduates, postgraduates, and research scholars of the constituent institutions of MAHE. MAHE-SRF is dedicated to developing research interests among students and is functional under the guidance of Lt Gen (Dr) M D Venkatesh, Honourable Vice Chancellor, MAHE.

Objectives of MAHE-SRF:

- To foster research interest in undergraduate and postgraduate students and to inspire them to take up research as a career.
- To create a network of students among constituent institutions of MAHE to promote and facilitate interdisciplinary research.
- To promote entrepreneurship and innovation among MAHE students.
- To organize research activities.
- To sensitize all the students about MAHE incentive policies for research.

MAHE-SRF provides various opportunities and platforms for scientific interactions and networking in multidisciplinary areas across institutions. It additionally caters to opportunities for interdisciplinary collaborative work amidst eminent researchers by organizing summer school activities, webinars, and conferences. MAHE is functional under the aegis of the Directorate of Research (DoR), MAHE, Manipal. MAHE-SRF 2022 was established in January, including doctoral research scholars from the constituent institutions of MAHE. This body has a core team of 23 students from the Manipal, Mangalore, and Bangalore campuses. The current President of the forum is Mr Jobin K from Prasanna School of Public Health (PSPH), Manipal. The Vice Presidents are Mr Sanket Ledwani from the Department of Commerce (DOC), Manipal, and Ms. Saniya Mariyam Rasheeka from Kasturba Medical College (KMC), Mangalore. This year MAHE-SRF has three major events, namely: MAHE PhD Conclave - 2022, Summer School Program - 2022, and Interdisciplinary Conference on Healthcare and Technical Research – 2022 (ICHTR). In addition to the major events, we have monthly activities taking place. These events primarily involve academic lectures, invited talks, poster and oral competitions, and workshops.

Interdisciplinary Conference on Healthcare & Technical Research (ICHTR-2022): 25 to 26 November 2022

In the last quarter (October to December 2022), the MAHE-Student Research Forum, under the aegis of the Directorate of Research, Manipal Academy of Higher Education (MAHE) planned and organized the "Interdisciplinary Conference on Healthcare & Technical Research (ICHTR-2022)". This year's conference marked the tenth edition of ICHTR since its establishment in 2013. The organizing committee received a total number of 413 paper submissions from various disciplines (Health Sciences, Technical Sciences, Management Sciences, and Life Sciences). After a thorough review, 197 abstracts were shortlisted for oral and poster presentations.



Inaugural function of ICHTR-2022 on 25 November 2022

The inaugural program of ICHTR 2022 was commenced by Lt (Gen) Dr MD Venkatesh, Vice-Chancellor, Manipal Academy of Higher Education (MAHE) at the MIT Library Auditorium, MIT, Manipal. The welcome and event overview was given by Mr Sanket Ledwani, Vice President of MAHE-SRF.

For the opening ceremony, Lt Gen (Dr) M D Venkatesh, Vice Chancellor of MAHE in Manipal, and Dr Dilip G Nayak, Pro-Vice Chancellor of MAHE's Mangalore Campus, were the chief guest and guest of honor, respectively. Several distinguished guests attended the event, including Dr Satish Rao, Director of Research, Dr Santhosh B V, Deputy Director Technical Research, Dr Bharti Chogtu Magazine, Deputy Director of Health Sciences, and Dr Vasudha Devi, Deputy Director, Centre for Doctoral Studies. More than 200 (number of people) comprising the Heads of Institutions (HOIs), Heads of Department (HOD), Faculty & Staff, research scholars, postgraduates, undergraduates, and other attendees were present for the inaugural function. The vote of thanks was given by the Vice President of MAHE-SRF Saniya Mariyam Rasheeka, PhD Scholar, KMC Mangalore.

Keynote sessions:

Keynote session delivered by Mr Sagar Earthling ... on Day 1 of ICHTR 2022





Keynote session delivered by Prof Madhav Das Nalapat ... on Day 2 of ICHTR 2022

Scientific sessions day 1 and 2:





Scientific sessions at ICHTR 2022

Valedictory function of ICHTR 2022 on 26 November 2022

The Valedictory Function was held on 26 November 2022 at MIT Library Auditorium, MIT, Manipal. The Guest of honor for the event was Dr Anil Rana, Director, MIT, Manipal, and Dr B Unnikrishnan, Dean, KMC, Mangalore. The report of the conference program was given by the General Secretary of MAHE SRF, Ms Megha Nataraj, PhD Scholar, MCHP, MAHE, Manipal. The "Best Presenter Award

2022" results were announced by Dr Anil Rana, Director, MIT, Manipal, and Dr B Unnikrishnan, Dean, KMC, Mangalore. This year, the "F1000 Best Presenter Award" was announced to (Number of) presenters by Dr Bharti Chogtu, Deputy Director of Health Science. The vote of thanks was given by the President of MAHE-SRF, Mr Jobin K, PhD Scholar, PSPH, MAHE Manipal. The participation certificates were distributed to all the presenters of ICHTR 2022.

"Best Paper Award" winners of ICHTR 2022



Organizing committee of ICHTR 2022



Editorial Team

- 1. Dr Satish Rao B S, Director Research, MAHE, Manipal.
- 2. Dr Bharti Chogtu Magazine, Deputy Director Research (Health Sciences), MAHE, Manipal.
- 3. Dr Santhosh K V, Deputy Director Research (Technical Sciences), MAHE, Manipal.
- 4. Dr. Manthan D Janodia, Professor and Head, Department of Pharmacy Management, College of Pharmaceutical Sciences, MAHE, Manipal.
- 5. Dr Mukesh H. V., Associate Professor, Department of Commerce, MAHE, Manipal

