



MANIPAL
ACADEMY of HIGHER EDUCATION
(Institution of Eminence Deemed to be University)

MAHE Research Bulletin

Jan – March 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 to nurture and promote research on global standards.

Vision:
To nurture and promote research activities of global standards.

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

- O**bjectives:
- 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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Part I

A. MAHE Research Data Network Visualization

The Manipal Academy of Higher Education (MAHE) has been greatly involved in all spheres of research that are aligned with the United Nations Sustainable Development Goals.

This has been the effect of numerous international and national collaborations. MAHE has a well-established network of international collaborations, as is visible from the PURE portal (see below).



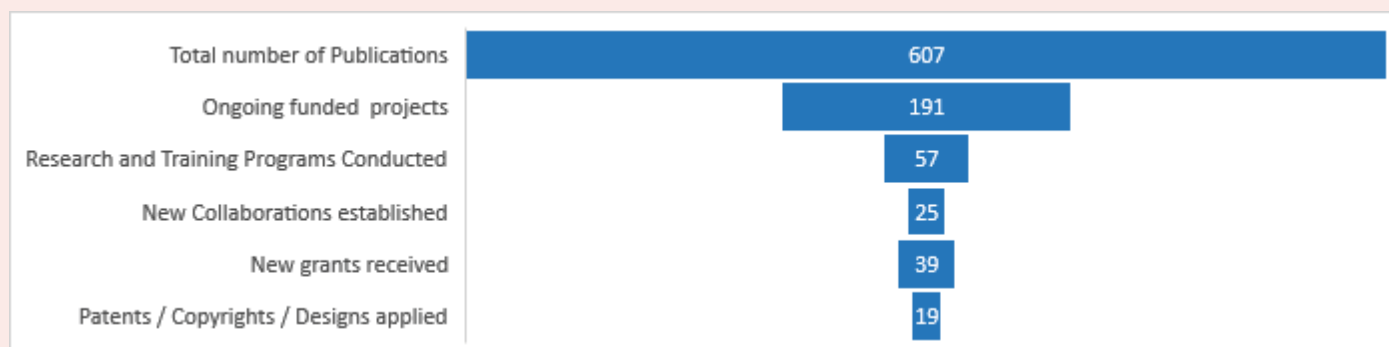
Considering the last four-year period (2018 to the present),



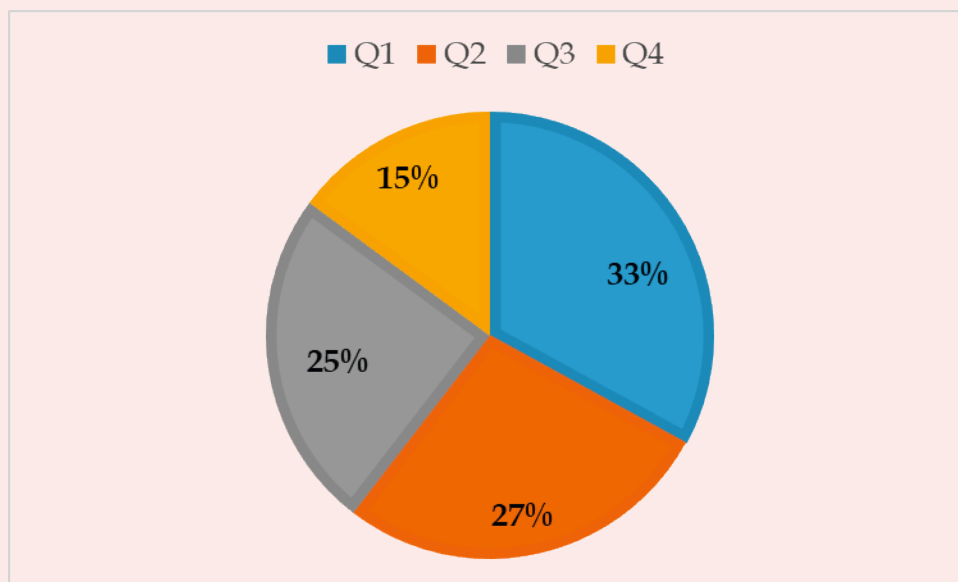
26 per cent of MAHE publications involve international collaborations, and 30.6 per cent involve only national collaborations. The papers with international collaborations have done tremendously better (field weighted citation impact, FWCI 2.42) than those with only national or institutional collaborations (FWCI 0.71 and 0.41, respectively). The University of New South Wales (Australia), Johns Hopkins University (USA), Karolinska Insitutet (Sweden) and Mayo Clinic, Rochester (USA) have been the leading international collaborators, while the All India Institute of Medical Sciences, Yenepoya University, National Institute of Mental Health and Neurosciences, Postgraduate Institute of Medical Research and Indian Institute of

Science Bangalore are the top collaborating institutions in India.

B. Info-graph of Research Activities during the period January – March 2022



C. Quartile Distribution of Publication for the period of January – March 2022



D. Top publications for the period of January – March 2022

No	Title Of the Publication	Author Name	Institution	Name of the Journal (Publisher)	Month & Year of Publication	Scopus Percentile
1	Integration of liquid biopsy and pharmacogenomics for precision therapy of EGFR mutant and resistant lung cancers	-Mahadev Rao* -Jill Kolesar -Spencer Peh -Levin Thomas -Gayathri Baburaj -Nayonika Mukherjee -Raveena Kantamneni -Shirley Lewis -Ananth Pai -Karthik S Udupa -Naveena Kumar -Vivek M Rangnekar	Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences	Molecular Cancer (Springer Nature)	February 2022	99

No	Title Of the Publication	Author Name	Institution	Name of the Journal (Publisher)	Month & Year of Publication	Scopus Percentile
2	Investigation of structural and physicochemical properties of rice starch with varied amylose content: A combined microscopy, spectroscopy, and thermal study	-Indira Govindaraju -Nirmal Mazumder* -Guan-Yu Zhuo -Ishita Chakraborty -Sindhoora Kaniyala Melanthota -Sib Sankar Mal -Bhaswati Sarmah -Vishwa Jyoti Baruah -Krishna Kishore Mahato	Department of Biophysics, Manipal School of Life Sciences	Food Hydrocolloids (Elsevier)	January 2022	98
3	Dynamic dehumidifier characterization under varied climatic conditions and pad thickness	-Shiva Kumar -S.V. Kota Reddy -Sampath Suranjan Salins*	Department of Mechanical, MAHE Dubai	Building and Environment (Elsevier)	January 2022	98
4	Numerical analysisbased performance prediction in a direct evaporative cooler used for building cooling	-Ritu Kiran Kartik -Shiva Kumar* -Sampath Suranjan Salin -S V Kota Reddy	Department of Mechanical and Manufacturing Engineering, Manipal Institute of Technology, Manipal	Journal of Building Performance Simulation (Taylor & Francis)	February 2022	98
5	Modelling of a multistage reciprocating humidifier and performance analysis for various packing configurations	-Shiva Kumar* -Sampath Suranjan Salins -S. V Kota Reddy	Department of Mechanical and Manufacturing Engineering, Manipal Institute of Technology, Manipal	Energy (Elsevier)	February 2022	98

E. Patents filed during the period of January – March 2022:

- Shreya Hegde from Manipal College of Dental Sciences, Mangalore, has filed a patent titled "APPARATUS FOR PLACING GRAFT MATERIAL IN ROOT CANAL".
- Shwetha V, Keerthana Prasad and Chiranjay Mukhopadhyay from the School of Information Science, Manipal, and Kasturba Medical College, Manipal, have filed a patent titled "SYSTEM AND METHOD FOR BACTERIA DETECTION FROM THE DIRECT GRAM STAIN SMEAR IMAGES".
- K Sivanandan from Manipal Institute of Technology, Manipal, has filed a patent titled "SYSTEM AND METHOD FOR OPERATING A PROSTHETIC LIMB".
- Deepak D and Subraya Krishna Bhat from Manipal Institute of Technology, Manipal, have filed a patent titled "APPARATUS AND METHOD FOR DESHELLING OF HARD-SHELLED OBJECTS".
- Rajitha K V; Keerthana Prasad; Prakash P Y, Raghavendra Rao, Sreejith Govindan from Manipal Institute of Technology, Manipal; Manipal School of Information Science and Kasturba Medical College, Manipal have filed a patent titled "SYSTEM AND METHOD FOR DETECTING DERMATOPHYTOSIS OF SUBJECT".

- Venkata, Santhosh Krishnan G; Prabu Raja from Manipal Institute of Technology, Manipal and Manipal College of Health Professions, Manipal have filed a patent titled “APPARATUS AND METHOD FOR MUSCLE STRAIN MEASUREMENT”.
- Aravind M and Sajjan Daniel George from the Department of Atomic and Molecular Physics, Manipal, have filed a patent titled “SELF-MOISTURIZING CONTACT LENS AND A METHOD OF MANUFACTURING THEREOF”.
- Bhushan Shivanand, Oommen Sibi; Kaushal Simran from Manipal College of Health Professions, Manipal have filed a patent titled “METHOD FOR REMOVING SURFACE RADIOACTIVE CONTAMINANTS”.
- Manohar Pai MM, Shreesha S, Radhika M Pai, Ujjwal Verma from Manipal Institute of Technology, Manipal have filed a patent titled “A METHOD AND SYSTEM FOR ANOMALY DETECTION IN AERIALSURVEILLANCE VIDEOS”.
- Chidangil Santhosh, V R Nidheesh; Mohapatra Ashwinikumar, Kartha V B from the Department of Atomic and Molecular Physics, Manipal; Kasturba Medical College, Manipal have filed a patent titled “SYSTEM AND METHOD FOR COMPOUND IDENTIFICATION IN A SAMPLE ”.

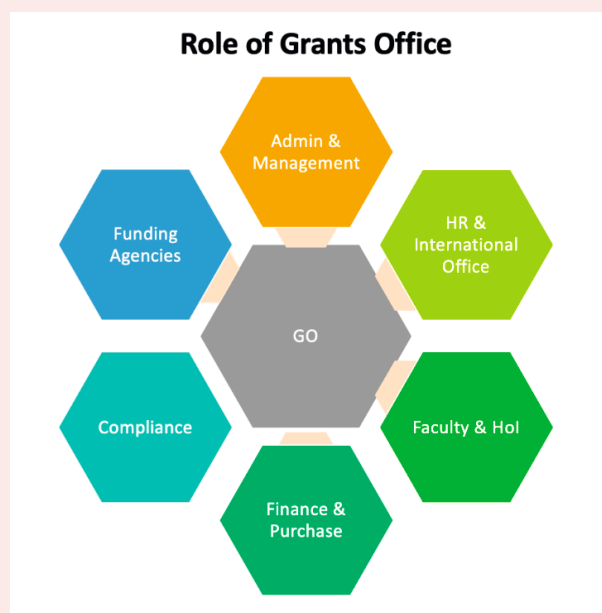
F. Grants Office, Directorate of Research, MAHE, Manipal

At DoR, MAHE, the whole grant management lifecycle, beginning with preaward planning and concluding with the reporting stage, presents itself as a tenacious but rewarding process lined up to provide the best results. Particularly, when a researcher is starting to initiate the grant process for the first time, it can be quite challenging. However, with timely and proactive management, the appropriate tools at hand, and a benevolent workflow procedure in place, one can successfully handle any challenging programme. As a result, the grant administration process continuously improves and actualizes many lifecycle duties through its distinctive award phases.

We in the ethical research community are aware of the occasionally inconvenient nature of the grant lifecycle (with its short application window) as well as the problem of constantly evolving grant regulations and specifications. We are aware of the time constraints placed on meeting deadlines, as well as the exact information required for delivery and the crucial financial transparency required to complete a collaborative mission.

Therefore, to make the process of preaward planning to the final reporting (i.e., identifying, applying, and managing the external research grants without undue administrative delays), the administration of the MAHE has set up the Grants Office (GO) centrally at the DoR. The Grants Office managed by a Grants Coordinator (GC). At the GO, we work to enhance

the quality and quantity of research funding while assisting academics and research scholars in improving the research outcomes at MAHE.



In tandem with the objective, we are committed to creating an enabling environment to facilitate our researchers with the following support:

- We are dedicated to aiding researchers and faculty in identifying resources and increasing the quantum and quality of research funding.

- Information regarding grants and funding calls can be accessed through the Funding Institutional, Grants Management portal and Research Management System (RMS) to help faculty and researchers identify new open calls, meet deadlines and make the application process easy by providing all required documents at one click and any project-related help as well as guidance from the Mentor Board.
- Additionally, the Grants Coordinator (GC) will serve as the applicant's single point of contact for all essential discussions, policy documents, and meetings with the Mentor Board, Finance, Legal, and HR. The GC will serve as the liaison officer between the organization and the funders.

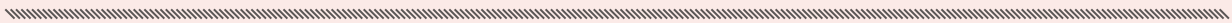
At MAHE for academic and faculty research entering Project details in RMS is mandatory while applying for a new grant to generate a UTN number for proposal submission. The UTN will serve as an identification for your project and finance management. Updating the project status (funded/rejected) in the RMS portal is the responsibility of the Principal Investigator as per the sanction/rejection letter from the concerned funding agency.

Contact Details:

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PART 2

A. Featured Researcher of MAHE



Dr Sulatha V Bhandary

Professor and Head of Unit,
Department of Ophthalmology, KMC Manipal, MAHE, Manipal
Co Director: Vyabjya Ocular Innovations Pvt Ltd
Medical director Kasturba Hospital Eye bank
Ex HOD Dept of Ophthalmology (May 2017 to May 2022)
Ex Deputy director student affairs, MAHE Manipal.
Ex Joint secretary Karnataka Ophthalmic society
Ex President OEU Alumni Association

Area of expertise:

- Clinical: Cataract and vitreoretina & retinopathy of prematurity (ROP)
- Research: Retinal imaging/nanoparticle drug delivery/tear protein/amino acid analysis

How has this journey been to you, in terms of teaching and research?

I began my journey as an Assistant Professor in 2002 in the Department of Ophthalmology teaching and training both undergraduate and postgraduate students. During my tenure as HOD (from 2017 to 2022), I introduced innovation in training focused on training in ophthalmoscopy for MBBS students, a PG update program and special training in wet lab phacoemulsification techniques.

Being a doctor, I was happy being involved with patient care and teaching. A decade ago, I was introduced to research by chance. The first step I took in research was to develop interinstitutional collaboration. I started with automated detection of ocular diseases using retinal imaging along with Dr Rajendra Acharya and Dr Raghavendra U. The retinal imaging collaboration extended to Dr Srikanth Prabhu, Dr Preetham Kumar, Dr Geetha Maiya, and gradually I started guiding PhD scholars in the same area.

Later collaborations extended into molecular physics and protein/amino acid detection with Dr. Santhosh Chadangil and then into drug delivery systems. Since then, I have worked in neonatal studies along with Dr Leslie Lewis and siRNA-based gene-silencing strategies for the treatment of glaucoma with Dr Srinivas Mutalik and Dr Shaila A Lewis.

I have worked as the primary investigator in two research projects funded by FORUS Health Pvt Ltd. on the validation of the Trinetra nonmydriatic fundus camera and Trinetra refractometer. Additionally, I have served as a collaborator for three funded projects in retinal imaging.

I have served as Co-PI for a project on microbiological assessment of neonatal tear samples with Dr. Manali Hazarika (funded through Seed money MAHE), an Ocular Nano Particle drug delivery post cataract surgery

(funded by BIG BIRAC grant), Diabetic kidney disease and diabetic retinopathy (funded by Zeiss) and a Myopia study with Dr. Ramesh Sv and Ms. Salai Damayanti.

In addition to my research, I, along with Dr. Bharat Raj Guru, Prof. in Biotechnology, have initiated a start-up named “Vyabjya Ocular Innovatons Pvt Ltd”, which is currently working on a patent for our drug delivery system.

In my time, I have guided more than 25 postgraduates in their thesis and am currently guiding five PhD scholars. This has been extremely fulfilling. All these efforts have resulted in approximately 60 publications with an h-index of 21.



What is your message to budding researchers?

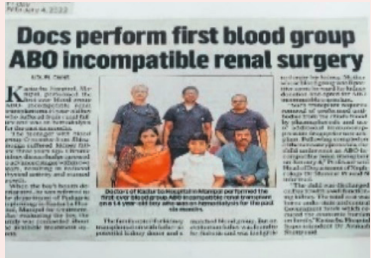

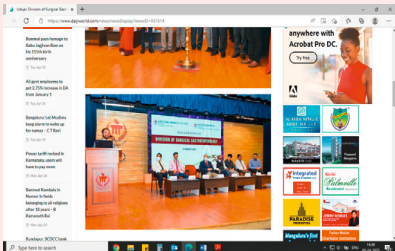
The budding researchers must think of a problem statement, which is novel but also useful to humanity. Interdisciplinary research expands your horizon and broadens the scope of research. A cordial relationship with no ego is the need of the hour in the research community.


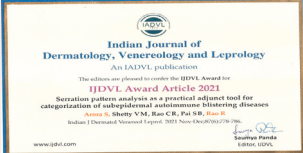

What is your future plan with respect to teaching and research activities in your field?

My plan in teaching is going back to basics. Most of the recent information is easily available, and currently, postgraduates lack basic subject knowledge and skills. Hence, rebuilding a strong foundation is my next step in teaching. In research, we are starting a “centre for ocular nano medicine” with interinstitutional collaboration. We are hoping to patent nanoparticle drug delivery products, train PhD scholars and conduct certificate courses through this centre. Because of such bulletins, interdisciplinary research will become easy as faculty get to know other researchers and their area of interest.

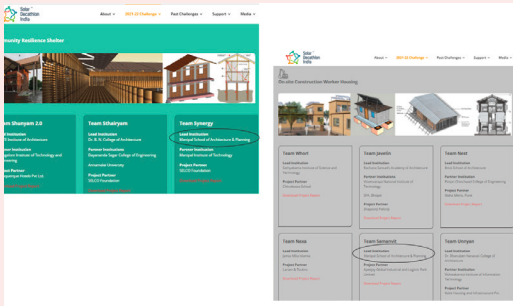

B. Faculty and Institution Achievements

Institution	Award/achievement	Faculty
T A Pai Management Institute, Manipal	Dr Madhu Veeraraghavan , Director and T A Pai Chair, Professor of Finance & Executive Director, Management Studies – MAHE has been ranked 97 and TAPMI ranked 272 in Brigham Young University (BYU) 2021 rankings	
Manipal School of Life Sciences, Manipal	Dr Nirmal Mazumder , Assistant Professor, Department of Biophysics, Manipal School of Life Sciences, Manipal has secured First prize for his Poster titled “Second Harmonic generation microscopy for investigating for Starch structure” in the GSBTM, DST, Gol sponsored International Conference on Emerging Trends in Biological Sciences (ICETBS 2022) organized by the Department of Biological Sciences, P D Patel Institute of Applied Sciences, CHARUSAT on 9 Jan 2022 to 11Jan 2022.	
Manipal College of Pharmaceutical Sciences, Manipal	MCOPS finds place between 101 to 150 in QS World University Rankings by the subject pharmacy and pharmacology 2022.	

Institution	Award/achievement	Faculty
	<p>Ms Athira R Nair, Assistant Professor, Department of Pharmaceutical Quality Assurance, MCOPS under the guidance of Dr Krishnamurthy Bhat , Professor, bagged the “Best Oral Presentation” award for the PhD research work entitled “Implication of Solution Phase behavior on the Coadministered drugs: The Case of Rifampicin, Saquinavir, Darunavir” during the 6th Nirma Institute of Pharmacy International Conference (NIPiCON-IPS 2022) jointly organized by Indian Pharmacological Society held during February 17-19, 2022 with the theme “Emerging Opportunities and Challenges in Pharmacology and Pharmaceutical Sciences for Drug Discovery and Healthcare Innovations”.</p>	
<p>Manipal College of Dental Sciences, Manipal</p>	<p>Dr Madhurya N Kedlaya, Assistant Professor and Dr Lakshmi P, Reader, Department of Periodontology, Manipal College of Dental Sciences, MAHE, Manipal were granted design patent for their design on Tooth Mobility Assessment Device.</p>	
<p>Kasturba Medical College, Manipal</p>	<p>Dr Shankar Prasad N, Professor, Dr Ravindra Prabhu, Professor & Dr Darshan, Additional Professor - Faculty from Department of Nephrology, KMC, Manipal conducted the first-ever blood group ABO incompatible renal transplantation on a 14-year-old boy who suffered from renal failure and was on hemodialysis for the past 6 months.</p>	
	<p>International Collaborative Coordinating Centre has recognized KMC, Manipal as the International Reference Centre for the Palliative & End of Life Care. KMC, Manipal is the first and only institute to have this recognition; 24 Jan2022.</p>	
	<p>Division of Surgical Gastroenterology was inaugurated at Kasturba Medical College and Hospital, Manipal on 16 Mar 2022</p>	




Institution	Award/achievement	Faculty
	<p>The ICMR Dr Subhas Mukherjee award for the year 2020 is being presented to Dr Satish Kumar Adiga, Professor, Department of Reproductive Science, Kasturba Medical College, Manipal for his contribution to the field of Assisted Reproductive Technology.</p>	
	<p>Dr Rekha, Associate Professor, Department of OBG, KMC, Manipal received the Fellowship from the Indian College of Obstetricians & Gynaecologists (ICOG) during the ICOG fellowship award held on 23 Jan 2022.</p>	
	<p>Dr Raghavendra Rao, Professor, Department of Dermatology, KMC, Manipal – received best IJDVL Award Article 2021) published in IJDVL in 2021 during IADVL National conference held between 4 to 6 Feb 2022.</p>	
	<p>Dr Anil K Bhat, Associate Dean, Professor & Head, Department of Hand Surgery, KMC, Manipal – has been appointed as partner nation representative for the AO North America Trauma Hand Education Committee for a term of 1 year from 1 Jul 2021 to 30 June, 2022</p>	
<p>Manipal College of Dental Sciences, Manipal</p>		
<p>Manipal Institute of Technology, Manipal</p>	<p>Dr Poornalatha G, Associate Professor senior scale, Information & Communication Technology, MIT,MAHE, Manipal conferred with Outstanding Women in Engineering Volunteer at Mangalore, IEEE Mangalore sub section during January 2022.</p>	
	<p>Dr Selvakumar M, Asst. Prof., (Selection Grade), Department of Chemistry, Manipal Institute of Technology, has received best UG Supervisor Award for the year of 2021-22 from Institute of smart structures and systems, Indian Institute of Science</p>	


Institution	Award/achievement	Faculty
	<p>Dr Murthy Dharmapura, Associate Professor – Research, Department of Chemistry, Manipal Institute of Technology, MAHE, Manipal, conferred with a Research Grant from the Department of Science and Technology (DST) under the Integrated Clean Energy Material Acceleration Platform scheme from the Government of India worth Rs 1.15 crores as the Principle Investigator for three years. He is an integral part of the national-level consortium on Green Hydrogen: Evolution to Revolution. He will work on innovating new materials and technology toward sustainable and scalable green hydrogen generation.</p>	
<p>Department of Commerce, Manipal</p>	<p>Dr Mukesh H V, Asst Prof – Sr scale, appointed as ECSB Visiting scholar (European Council for Small Business & Entrepreneurship) at Munster Technological University, Ireland. Visiting scholar programme starting from Jan 2022 to January, 2023. He will be working at Hincks Centre for Entrepreneurship Excellence, MTU, Ireland. He also delivered a talk on “Pro-society Extracurricular Activities and Social Entrepreneurial Intention” at Coffee Conversations on Inclusive Entrepreneurship, at Hincks Centre for Entrepreneurship Excellence, MTU, Ireland</p>	
<p>Manipal College of Health Professions, Manipal</p>	<p>Dr Shovan Saha, Associate Professor, Department of Occupational Therapy, Manipal College of Health Professions, MAHE Manipal, has been appointed as Guest Editor for the specialty issue title “Occupational Therapy and Assistive Technology” of World Federation of Occupational Therapists Bulletin</p>	
	<p>Dr Rakesh C V, Asst Professor, Dept of Speech and Hearing, MCHP received the prestigious National Institute on Deafness and Other Communication Disorders-NIDCD (part of NIH) Bursary, Maryland USA, for the year 2022 \$1385.</p>	
	<p>Dr Shwetha T S, Assistant Professor from Department of Clinical Psychology received the Best Paper Award for the paper titled: Inhibitory Control and irrational procrastination among students with social media addiction at 57th National and 26th International conference of Indian Academy of Applied Psychology (IAAP), 27th -29th January 2022, organized by Department of Clinical Psychology, Mizoram University.</p>	

Institution	Award/achievement	Faculty
Manipal School of Architecture and Planning	<p>Team Synergy (Team lead: Nandini & Vidya, Faculty lead: Ratna Sravya.Y, Project Partner: SELCO Foundation) and Team SAMANVIT (Team Lead: Sneha Suman & Mushkan Mukadam, Faculty lead: Naga Venkata Sai Kumar M, Project Partner: Apeejay Global Industrial and Logistic Park Limited) were one of the Top 6 Finalists in Solar Decathlon India challenge 2021 to2022</p>	
Welcomgroup Graduate School of Hotel Administration	<p>Chef Thirugnanasambantham, Principal WGSMA was honoured with an appreciation certificate from National Skill Development Centre (NSDC) for participating as expert in IndiaSkills National Competition held in New Delhi between 6 to 10 January 2022.</p>	
Melaka Manipal Medical College, Manipal	<p>Ms Akshatha Ganesh Nayak, Senior Grade Lecturer in Biochemistry, MMMC has been awarded Organizing Committee Award at the 47th National Conference of Association of Clinical Biochemists of India held on 12th to 15th December, 2021</p>	
	<p>Research led by Ms. Chitra Venugopal from Manipal Institute of Regenerative Medicine and coauthored by Dr. Kiranmai S Rai in Brain Research Bulletin was featured in STEMCELL Science News</p>	
Srishti Manipal Institute of Art, Design & Technology	<p>Dr Pooja Jain, Faculty, Srishti Manipal Institute, MAHE, Manipal was honoured with Award, “Best Paper Award”, at the 33rd International Conference on Literature, Humanities, Education and Social Sciences (LHES2-22) held virtually from Barcelona, Spain</p>	
Manipal Institute of Technology, Bengaluru	<p>Dr Ravi Kumar Gupta, Associate Professor, Department of Mechanical engineering, Manipal Institute of Technology Bengaluru, Chaired Session at 3rd International Conference on Mechanical, Materials and Renewable Energy (ICMMRE 2022), organized at Sikkim Manipal Institute of Technology, India from 11.02.22 to 12.02.22</p>	
	<p>Dr Utpal Deka, Additional Professor, Department of Physics, Manipal Institute of Technology Bengaluru, MAHE, Chaired Session at 1st International Conference on Physics of Materials and Technology (ICPMT 2022), organized at Sikkim Manipal Institute of Technology, India from 16 Feb 2022 to 18 Feb 2022</p>	

Institution	Award/achievement	Faculty
	Dr Ramya M , Assistant Professor, Department of Biotechnology, Manipal Institute of Technology Bengaluru, MAHE, served as Resource Person for the Workshop on “Advancement in Biomedical Nanotechnology”, organized by Dr NGP Institute of Technology, Coimbatore, Tamil Nadu, held on 24 Feb 2022. She and Mr Firoz Alam Faroque, Assistant Professor (senior scale), Department of Civil Engineering, Manipal Institute of Technology Bengaluru, MAHE Organized Legal Awareness Activity on “Empowerment of Women through Legal Awareness: A Proactive Approach”	

C. Achievements by Research Scholars and Students

Institution	Award/achievement	Scholar/Student
Manipal School of Life Sciences, Manipal	Mr Akshay Ware Pramod , PhD Scholar, Department of Bioinformatics, Manipal School of Life Sciences, Manipal is awarded with Mahatma Jyotiba Phule Fellowship (MJPRF-2021) by Government of Maharashtra, w.e.f. 18th October 2021. Guide: Dr Bobby Paul; PhD Title: Structural Diversity and Functional Regulation of microRNA (miRNA) Clusters during Carcinogenesis	
	Ms Soundaryaa Bargunam , PhD Scholar, Department of Plant Sciences, Manipal School of Life Sciences has bagged First Prize for the best paper entitled “ <i>Dynamic instability of endogenous melatonin in Portulaca species and its functional significance</i> ” in an oral presentation conducted in the online mode under the segment of ‘Phytochemistry’ at the National Seminar on Fundamental and Applied Dimension in Plant Sciences organized by Jawaharlal Nehru Tropical Botanic Garden and Research Institute, KSCSTE-JNTBGRI, Palode, Thiruvananthapuram, Kerala held on the 25 Mar 2022.	
	Ms. Joanna Ann Daniel , 2nd year MSc student of Genome Engineering, has been selected for a six month internship under the Erasmus University, Netherland student exchange program as part of the Erasmus Plus program 2020-2022. She will be working with Dr Dik van Gent, Department of Molecular Genetics, Erasmus University Medical Center, Erasmus University, The Netherlands	
	Ms Ishita Chakraborty and Ms Indira Govindaraju (PhD Scholars, Manipal School of Life Sciences, Manipal), Sib Sankar Mal, Bhaswati Sarmah, Vishwa Jyoti Baruah, Dr Krishna Kishore Mahato (Professor & HoD, Biophysics Department, Manipal School of Life Sciences, Manipal), Dr Nirmal Mazumder (Assistant Professor, Biophysics Department, Manipal School of Life Sciences, Manipal) have secured the second prize for their Poster titled “ <i>New insights into the physicochemical characteristics of modified rice starch</i> ”, in the GSBTM, DST, Gol sponsored International Conference on Emerging Trends in Biological Sciences (ICETBS 2022) organized by the Department of Biological Sciences, P. D. Patel Institute of Applied Sciences, CHARUSAT on 9 to 11 January 2022.	

Institution	Award/achievement	Scholar/Student
Manipal College of Pharmaceutical Sciences, Manipal	<p>Mr Subham Das, PhD scholar of Department of Pharmaceutical Chemistry, MCOPS under the guidance of Dr Alex Joseph, Associate Professor, bagged the “Best Oral Presentation” award for the research work entitled “Design, synthesis, ADMET, Molecular dynamics, and biological evaluation of some PPAR-α Partial Agonist as Insulin Sensitizers” during the 6th Nirma Institute of Pharmacy International Conference (NIPiCON-IPS 2022) jointly organized by Indian Pharmacological Society held during 17 to 19 Feb 2022 with the theme “Emerging Opportunities and Challenges in Pharmacology and Pharmaceutical Sciences for Drug Discovery and Healthcare Innovations”.</p>	
	<p>Mr Naga Thirumalesh Chevala, Research Scholar, working under Dr Lalit Kumar, Assistant Professor-Selection grade, Department of Pharmaceutics, MCOPS, MAHE, Manipal received the best oral presentation award for the paper entitled “Multifunctional Surgical Sealant: A Surface Modified Fibre Reinforced Nanoporous Multifunctional Scaffold for Biomedical Applications” at the International conference jointly organized by the Nirma Institute of Pharmacy, Ahmedabad, India with the Indian Society of Pharmacology, held from 17 to 19 Feb 2022.</p>	
	<p>Mr Akhil Nair, Research Scholar in Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences under the guidance of Dr Usha Y Nayak, Associate Professor – Senior Scale, Department of Pharmaceutics secured Second Prize in “Oral Presentations” session for the research work titled “Development of Mesoporous nanoparticles of Cefotaxime for the treatment of Urinary Tract Infection and to increase their affordability and accessibility” during International Webinar on Biomaterials The Road Ahead: Enabling Affordable and Accessible Medicine” jointly organized by Amrita Vishwa Vidyapeetham School of Pharmacy and Endorsed by Society for Biomaterials and Artificial Organs India (SBAOI) held during 16 to 17 Mar 2022.</p>	
	<p>Mr Chetan Has Mukh Mehta, Research Scholar, Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal working under the guidance of Dr. Usha Yogendra Nayak, Associate Professor – Senior Scale, bagged the third prize in Oral Presentation for his research work titled “Novel Localized Drug Delivery Systems of Quercetin for Periodontitis: A Strategy Towards an Affordable and Accessible Medicine” coauthored by Gururaj C. Aithal, Dr Usha Y Nayak during the International Webinar on Biomaterials the Road Ahead: Enabling Affordable and Accessible Medicine” jointly organized by Amrita Vishwa Vidyapeetham School of Pharmacy and Endorsed by Society for Biomaterials and Artificial Organs India (SBAOI) held during 16-17 Mar 2022.</p>	
Manipal College of Dental Sciences, Mangalore	<p>Dr Antarleena Sengupta, Dr Suhina Mitra, Dr Sweta Pradhan, Dr Anirudh Garg, Final year postgraduates from the Department of Periodontology and the Department of Conservative Dentistry, MCOADS, Mangalore won 1st prize for E-Paper presentations at the 2nd National Virtual ISPRP Conference conducted by Indian Society of Prosthodontics-Restorative-Periodontics from 4to 6 Feb 2022</p>	

Institution	Award/achievement	Scholar/Student
	<p>Dr Sristi Grover, Dr Kadambari Sriram, Dr K B Roshni First year postgraduate from the Department of Conservative Dentistry and Dept of Periodontology, MCOADS, Mangalore awarded the Consolation prize for Poster presentation at the 2nd National Virtual ISPRP Conference conducted by Indian Society of Prosthodontics-Restorative-Periodontics from 4 to 6 Feb 2022.</p>	
	<p>Dr Madhu Bangera, PhD research scholar, Dept of Dental Materials, MCOADS, Mangalore has been awarded in Top 100 Best stories (PhD category) for popular science communication competition AWSAR (Augmenting Writing Skills for Articulating Research) organized by National Council for Science & Technology Communication Division, coordinated by Vigyan Prasar, Department of Science and Technology, Government of India.</p>	
	<p>Dr Shradha Bhutoria and Dr Ishita Singh, 2nd Year Post Graduate students, Department of Prosthodontics, MCOADS, Mangalore have won the Best Paper in Session at the 24th IPS PG Convention, held in SDM College of Dental Sciences, Dharwad from 4th to 6th March 2022</p>	
	<p>Ms Disha Prabhu, Final BDS Part- Student, and Ms Ritu Gupta, Intern MCOADS, Mangalore Secured prizes at the Indian Prosthodontic Society- Karnataka in collaboration with SDM College of Dental Sciences and JSS Dental College as a part of Prosthodontists' Day 2022 Celebration on the Theme: "Prosthodontics - A Galore of Opportunities".</p>	
	<p>Dr Surmayee Singh, 2 Post graduate Student, Dept of Conservative Dentistry and Endodontics, MCOADS, Mangalore won 3rd in paper presentation in 22nd IACDE National PG Convention held at GSL Dental College and Hospital, Rajahmundry, Andhra Pradesh from 27 to 29 Mar 2022.</p>	
<p>Manipal College of Dental Sciences, Manipal</p>	<p>Dr Srilaxmi and Dr Akanksha, Post Graduate Students, received the best scientific paper presentation in the national conference 'IMPLA-INTEGRATE 2022' organized by Kalinga Institute of Dental Sciences, KIIT, Bhubaneswar in association with IDA Temple City Branch and University of Genoa held between 24 to 26 Feb 2022.</p>	
<p>Kasturba Medical College, Manipal</p>	<p>Dr Alankrita Chari, PG, Department of Anaesthesiology, KMC, Manipal – received second prize for paper presentation at RACE 2022 organized by The Department of Anaesthesiology and Pain Medicine, Sri Ramachandra Medical College & Research Institute, SRIHER, Porur, Chennai on 29 Jan 2022</p>	
	<p>Dr Krithiga M, PG, Department of Dermatology, KMC, Manipal – second place in the Torrent Young Scholar Award -TYSA selected for the zonal round (among 500 contestants), TYSA quiz conducted by Torrent Pharma on 23 Jan, 2022</p>	
	<p>Dr Sukriti Arora, PG, Department of Dermatology, KMC, Manipal – received Bishnupriya Devi Award (Best original article) published in IJDVL in 2021 during IADVL National conference held between 4 to 6 Feb 2022</p>	

Institution	Award/achievement	Scholar/Student
	<p>Dr Salvy S Raj, PG, Department of Medicine, KMC, Manipal – received Medal of Appreciation in online International Art Contest -IAC -Innovize, arts and culture-a global talent search season 6 held on 10 Feb 2022</p>	
	<p>Dr Arya Wagle and Dr Alisha Kulkarni, PG, Department of Ophthalmology, KMC, Manipal –runners up 1 Geeta Dutt Rolling Trophy at Yen-Oph Annual Intercollegiate Postgraduate online Quiz in Ophthalmology, 19 Feb 2022</p>	
	<p>Ms Prinu Jose, PhD scholar, Department of Palliative Medicine and Supportive Care, KMC, Manipal – received 3 prize in oral paper presentation during 29th International Conference of Indian Association of Palliative Care, 12 Feb 2022</p>	
	<p>Dhakshanya P, PhD scholar, Department of Reproductive Science, KMC, Manipal – 1st place in oral presentation in Embryology (Junior Category) at International Conference on Reproductive Medicine (International)</p>	
<p>Manipal Institute of Regenerative Medicine, Bengaluru</p>	<p>Ms Srividya H, Dr Nasera Rizwana and Ms Supriya Bhatt PhD students Manipal Institute of Regenerative Medicine, Bengaluru had Oral Presentations at the 5 International Conference on Recent Trends in Bioengineering (ICRTB 2022), February 12-13, 2022</p>	
	<p>Mr Mohana Sundarm S PhD student, Manipal Institute of Regenerative Medicine, Bengaluru was conferred with 'Amity Best Poster Presentation Award' at the Annual Conference of Indian Association for Cancer Research (IACR) organized by Amity Institute of Molecular Medicine and Stem Cell Research, Amity University, Noida, 2 to 5 Mar 2022.</p>	
<p>Manipal Institute of Technology, Manipal</p>	<p>Mr Achintya Dutta, B Tech Fourth Year, Department of Electronics and Communications Engineering, Manipal Institute of Technology, MAHE, Manipal, received the First prize (WINNER) for the UG Research Award from the Institute of Smart Structures and Systems (ISSS), IISc Bangalore which was held on 26 March 2022 (Online).</p>	
	<p>Mr Ajay Kumar Sahu, M Tech (2019 to 2021 batch) Department of Electronics and Communications Engineering, Manipal Institute of Technology, MAHE, Manipal, received the 2nd Runner Up for the PG Research Award from the Institute of Smart Structures and Systems (ISSS), IISc Bangalore which was held on 26 Mar 2022 (Online)</p>	
	<p>Mr Raghavendra P (Dr TMA Pai PhD Scholar), Department of Biotechnology, MIT awarded with Young Scientist Best Oral Presentation Award in the 3 International Conference on Environmental, Agricultural, Chemical and Biological Sciences (ICEACBS-2022) held during 22, 23 and 26 Jan 2022</p>	

Institution	Award/achievement	Scholar/Student
	Mr Sujesh S (Dr TMA Pai PhD Scholar), Department of Biotechnology, MIT awarded with Prestigious Senior Research Fellowship from ICMR, GOI.	
	Ms Natasha Joyline Aquinas (Dr TMA Pai PhD Scholar), Department of Biotechnology, MIT secured 3rd place in essay writing competition conducted by Technical association of Biotechnology during Technical Fest Technozion 2022 of NIT Warangal	
	Mr Vipin Cyriac , Research Scholar, Department of Physics, Manipal Institute of Technology, Manipal has received best oral presentation award at the International Conference on Recent Advances in Functional Materials (RAFM 2022) organized by Department of Physics, IQAC and Star College Scheme (Gol), ARSD College University of Delhi held during 14 to 16 Mar 2022.	
	Ms Chahat , final year student, has been awarded the coveted 'Women Transforming India 2021' award as the co-founder for "NerdNerdy at the event organized by NITI AAYOGA (Govt. of india)	
	Mr Arko Chattopadhyay and Mr Enrique Ferrao , final year students of the department have won prizes in various events. 1st at Meraki 2022, FIIB - New Delhi (₹1,50,000 cash prize). 1st at Elevate 2022, E-Summit of IIT Madras (₹1,00,000 cash prize). 1st at Pitch Showdown, E-Summit of IIT Hyderabad (₹10,000 cash prize). Established startup named "AMIGO" along with Pranav Reddy and Priyanshu Gupta (BTech in Electronics and Communication Engineering - Batch of 2022, MIT Manipal).	
Department of Commerce, Manipal	Venisha Jenifer Dmello , Research scholar, Department of Commerce, MAHE, Manipal, received the second runner award which was held IIM Bangalore International software product management association (ISPMA) in oral presentation	
Manipal College of Health Professions, Manipal	Mr Sulfikar Ali A and Ms Apoorva Shankaranarayana , PhD scholars, Department of Physiotherapy, have both individually secured the Society of Indian Physiotherapists 2021 Research Grant Award under Young Researcher category	
Manipal School of Architecture and Planning		

D. Research activities: Workshops, Programs, Webinars, and Conferences

Institution	Activity
T A Pai Management Institute, Manipal	Kartikeya Bolar (2022).” Online Faculty Development Program on Structural Equation Modelling”. March 26 and 27, 2022
Manipal College of Pharmaceutical Sciences, Manipal	International Conference on Clinical Pharmacy – CPCON 2022. The Department of Pharmacy Practice, in association with the Centre for Pharmaceutical Care, MCOPS organized CPCON 2022, the 7th International Conference on Clinical Pharmacy virtually on Microsoft Teams. The event was based on the theme “Pharmacist towards an Inclusive Healthcare system”.
	
	<p>Shastri Conference and Lecture Series Grant Workshop on Data Science in Pharmacoepidemiology: 25-29 March 2022.</p> 
	<p>On the occasion of National Science Day, Innovative communication club (I2C) in association with Centre for Drug Testing, Manipal College of Pharmaceutical Sciences, MAHE, Manipal – 576 104, Karnataka, hosted “Virtual training on Pharmaceutical Techniques involved in Drug, Design and Analysis” during 28 Feb 2022 to 05 Mar 2022. During this program, I2C hosted the release of newsletter “Frontline- Innovative info on the go” by Dr B S Sathish Rao which is something that will upscale the skills of participants and editors, enhance and modernize about current trends and inventions in pharmaceutical and scientific field and take up prime issues for positive discussions and explore untouched terrains of health and pharmaceutical sector in nifty manner.</p>
	



A. MAHE Students' Research Forum (MAHE-SRF) – Activities for the period of January to March 2022

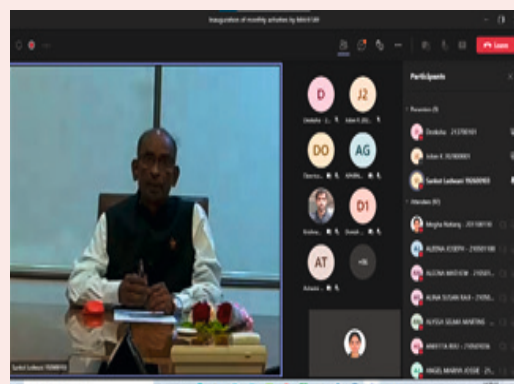
The MAHE Students' Research Forum (MAHE-SRF) is a robust and upbeat student-centric body that facilitates the active involvement of undergraduates, postgraduates, and research scholars of the constituent institutions of MAHE. MAHE-SRF is dedicated to developing research interest among students and is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

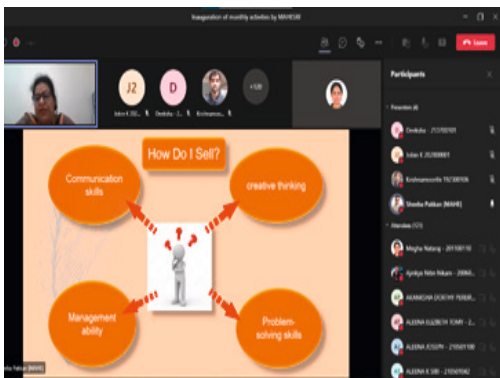
Objectives of MAHE-SRF

- 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 students to 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 DoR, MAHE, Manipal. MAHE-SRF 2022 was established in January and includes undergraduate, postgraduate, and doctoral research scholars from the constituent institutions of MAHE. This body has a core team of 22 students from Manipal, Mangalore, and Bangalore campuses. The current President for 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, Kasturba Medical College (KMC), Mangalore. This year, MAHE-SRF has three major events, namely, the MAHE PhD Conclave, a Summer Training Program, and an Interdisciplinary Conference on Healthcare and Technical Research (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.

MAHE Students' Research Forum under the aegis of Directorate of Research - MAHE, successfully launched its 2022 academic activities on 25 Feb 2022 at 2:30 pm. Dr PLNG Rao, Pro-Vice-Chancellor, Faculty of Health Sciences, MAHE, virtually inaugurated the academic activities of MAHE-SRF in the presence of Dr. Satish Rao, Director Research, Dr Bharthi Chogtu Magazine Deputy Director, and MAHE-SRF student council members. During his inaugural speech, Dr Rao said, "on October 2020 MAHE was awarded the status of Institute of Eminence" he further emphasized that "MAHE is the only multifaculty institution of eminence; approved by the Government of

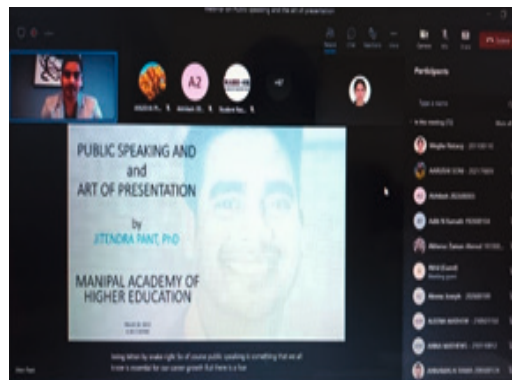




India till date.” MAHE aims to reach the top 500 universities globally by our contributions to academic excellence, consultancy, services, and above all, vibrant university research activities; that is where the student research forum plays an essential role towards research in the days to come. Mr Jobin K, President, MAHE-SRF, welcomed the guest and the participants. Chief Guest Dr PLNG Rao, Pro-vice-chancellor of MAHE, presided over the inaugural event and graced the function. The vote of thanks was delivered by Ms Saniya Mariyam Rasheeka, Vice President, MAHE-SRF. The inauguration function was followed by a webinar

on “Research in Global scenario, Job avenues in research”. Ms Sheeba Pakkan Bibliometrician MAHE Manipal was the resource person for the session. Mr Krishnamoorthi Executive member MAHE-SRF coordinated the webinar.

MAHE-SRF 2022 successfully hosted a webinar on “Public speaking and the art of presentation” by Dr Jitendra Pant, Director of Research and Innovation at CARON Products, US, on 30 Mar 2022. Ms Megha Nataraj, General Secretary MAHE-SRF, delivered the welcome address. The event was coordinated by M S Anusha Pillai, Executive member MAHE-SRF, as a part of the monthly activities.



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, Manipal College of Pharmaceutical Sciences, MAHE, Manipal.
5. Dr Abraham Samuel Babu, Associate Professor, Department of Physiotherapy, Manipal College of Health Professions, Manipal

