



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

MAHE Research Bulletin

July - September 2021



Manipal Academy of Higher Education (MAHE) has been conferred in recent years with the “Institution of Eminence” status by the Ministry of Human Resource Development (now the Ministry of Education), Government of India. With over 30,000 plus students fulfilling their dreams, MAHE, Manipal remains congruous with the idea of world-class infrastructure and excellence in higher education. In this capacity, MAHE presents a sprawling network of creative offerings across diverse streams such as medicine, dentistry, nursing, life and pharmaceutical sciences, engineering, hotel management, allied health, architecture and design, the creative humanities, digital media, and communication. Over the years, MAHE has maintained its academic integrity to “promote research activities of global standards”. MAHE endeavours to provide its faculty and students with pivotal access to first-class resources and state of the art facilities. To this effect, MAHE has steadfastly propagated the work ethic of “Global leadership in human development, and excellence in education and healthcare”.

MAHE Manipal offers PhD programs in various disciplines through its constituent institutions and departments. In this direction, the main objective of MAHE has been to extend the scope as well as boost the prospects of multidisciplinary as well as interdisciplinary PhD ventures, which not only contribute to cross-cultural partnerships but also enable researchers in developing the competency for attaining goals through models of collaboration.

Directorate of Research – MAHE, Manipal



Multidisciplinary and interdisciplinary research ventures and academic tie-ups are the bedrock of MAHE's eclectic vision of global development. Thereof, the Directorate of Research (DoR) promulgates the univocal ethic of MAHE to nurture and promote research activities at par with international standards through collaborative projects and seed-funding endeavours. In perspective, exploring fertile areas in ground-breaking research has always been of paramount significance to MAHE. In this direction, the university has witnessed a dynamic gush of high-impact publications, with doctoral degrees being awarded and grants being presented by notable funding agencies amidst other accomplishments. Presently, the DoR is operating under the leadership of the Vice Chancellor Lt Gen (Dr) M D Venkatesh and aims to expand its strategic framework by providing an invigorating eco-system for concerted effort across multidisciplinary streams. The robust panel of DoR and the team works in association with the Heads of the Institutes, HODs, and faculty members of different constituent units of MAHE across the campuses. In lieu, the faculty, research scholars, and students of MAHE have co-opted MAHE's research culture and are furthermore encouraged to publicize their research work in scientific publications, present papers in conferences, obtain patents, and apply for research grants. In this bulletin, we present an outline of the research activities at MAHE for the period of July to September 2021.

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."

Objectives:

- 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.

**"The beauty of a living thing is not the atoms that go into it,
but the way those atoms are put together."**

– Carl Sagan

INDEX

Part I

- A. MAHE Research Data Network Visualization: Top Collaborating Countries
- B. Info-graph of Research Activities during the period July - September 2021
 - a. Total number of publications in Scientific Journals (Scopus/Web of Science - JCR Listed) indexed
 - b. Ongoing Research Projects
 - c. Research and Training Programs conducted
 - d. New collaborations established
 - e. The total number of new grants received
 - f. Patents/Copyrights/Designs applied
- C. Quartile Distribution of Publication for the period of July - September 2021
- D. Top publications for the period of July - September 2021
- E. Patents filed during the period of July - September 2021
- F. Grants Office, Directorate of Research, MAHE, Manipal

Part II

- A. Featured Researcher of MAHE
- B. Faculty and Institution Achievements
- C. Achievements by Research Scholars and Students
- D. Research Activities: Workshops, Programs, Webinars, and Conferences

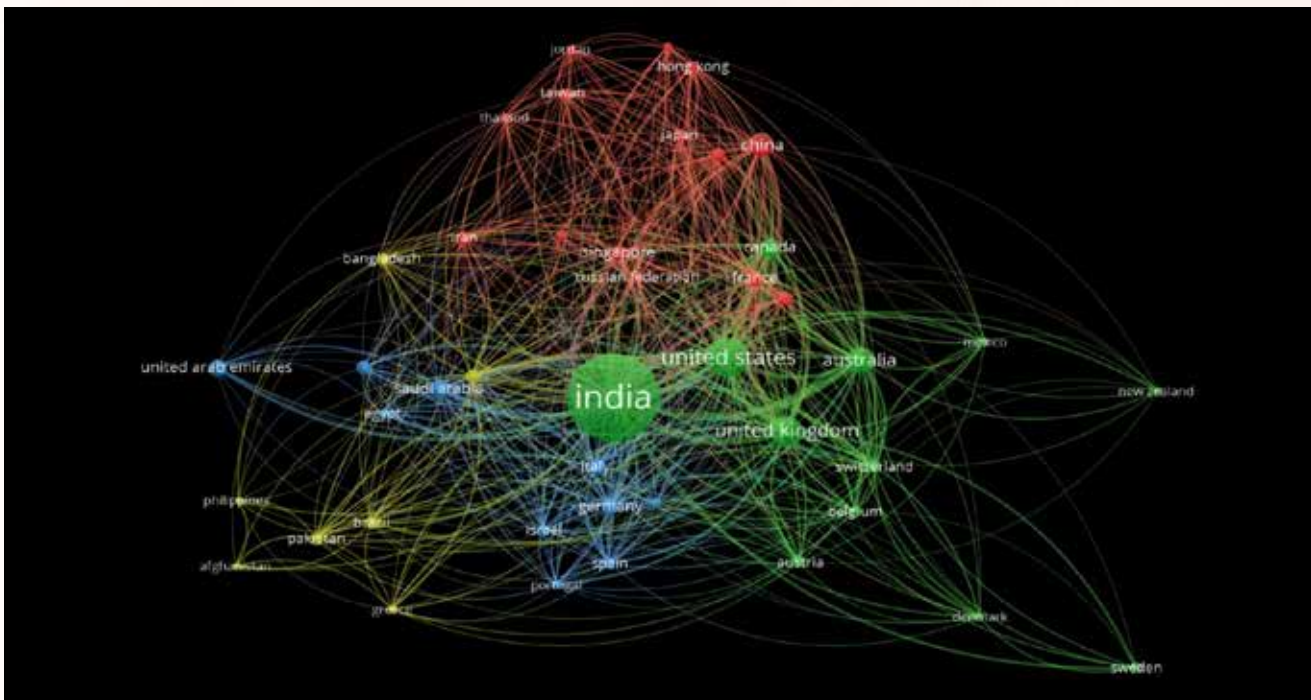
Part III

- MAHE Student's Research Forum (MAHE-SRF) – Activities for the period of July - September 2021

Part I

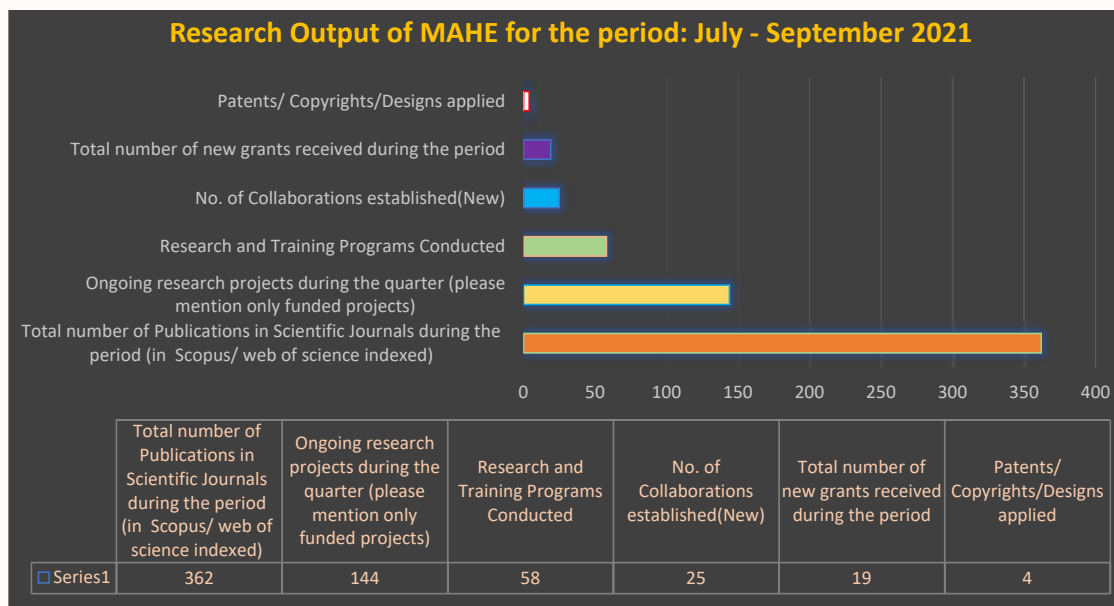
A. MAHE Research Data Network Visualization: Top Collaborating Countries

The VOS Viewer software enables one to visualize the top productive countries collaborating with MAHE. The data for the period July 2021 to September 2021 is visualized below. Current data shows the scientific collaboration network of the top 20 countries. The graph is a representation of the Institutions and the country in which the institutions belong.

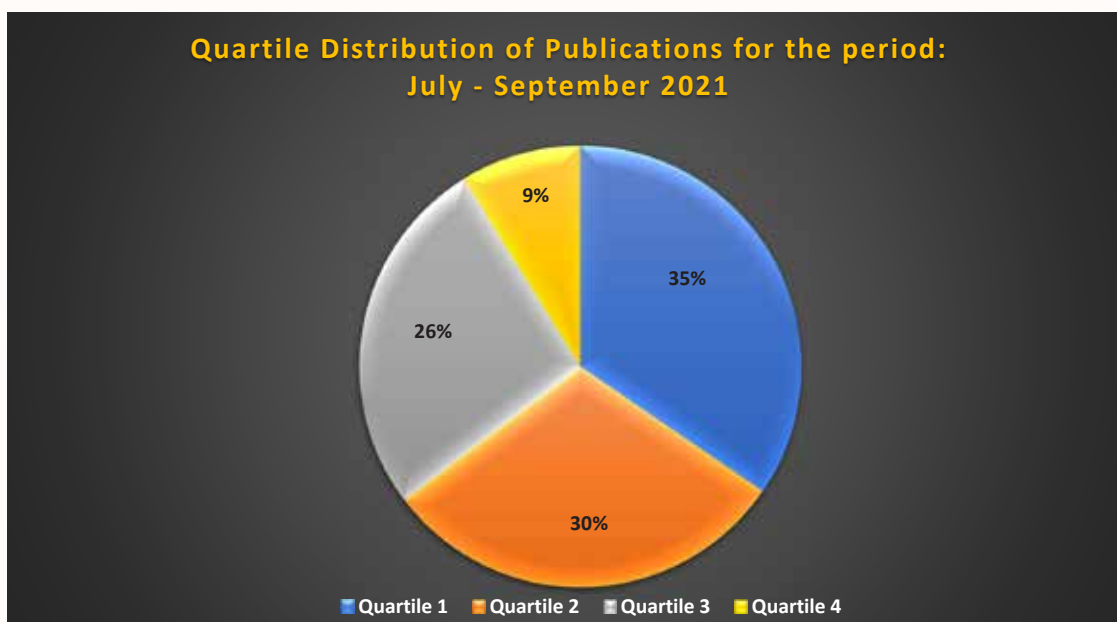


The figure is a network collaboration representing the publications from MAHE in terms of its collaboration with different universities in various countries. In the above analysis, the publication from July 2021 to September 2021 is considered. The coloured lines show the research collaboration between different countries (colours indicate the cluster to which a node has been assigned) and their size shows the strength of cooperation between two connected countries in terms of publications. Institutions from the United States cover an almost higher percentage of contribution in international collaboration. United Kingdom, Australia, China, and United Arab Emirates are among the highly collaborating countries with MAHE. This is a distance-based network visualization wherein the distance between two nodes approximately indicates the relatedness of the nodes. MAHE has 34 per cent international collaborations with world-class universities all over the world like the University of New South Wales, Johns Hopkins University, the George Institute for Global Health, Harvard University, Mayo Clinic Rochester, MN, University of Tennessee, Knoxville, University of Cape Town, and the University of Sharjah amongst others.

B. Info-graph of Research Activities during the period July - September 2021



C. Quartile Distribution of Publication for the period July - September 2021



D. Top publications for the period of July - September 2021

Serial No	Title of the Publication	Authors	Institution	Name of the Journal	Month and Year of Publication	Journal Quartile -Q1 (top 10 percentile)
1	Poly (ionic liquid) based charge and size selective loose nanofiltration membrane for molecular separation	- Nagaraj S Naik - Mahesh Padaki - Arun M Isloor - K K Nagaraja - K A Vishnumurthy	Department of Physics, Manipal Institute of Technology, Manipal	Chemical Engineering Journal - An International Journal of Research and Development, Elsevier	August 2021	99%
2	Evolutionary inferences from the sedimentary deposits of Lake LH73, Larsemann Hills, East Antarctica	- Badanal Siddaiah - Mahesh - Anish Kumar Warriar - Abhilash Nair - Revellino Fernandes - Rahul Mohan	Department of Civil Engineering, Manipal Institute of Technology, Manipal	Catena - An Interdisciplinary Journal of Soil Science - Hydrology - Geomorphology focusing on Geoecology and Landscape Evolution, Elsevier	August 2021	97%
3	Glacial-Holocene climate-driven shifts in lacustrine and terrestrial environments: Rock magnetic and geochemical evidence from East Antarctic Mochou Lake	- Cheryl A Noronha-D'Mello - A Nair - B S Mahesh - A K Warriar - Rahul Mohan - Siby Kurian	Department of Civil Engineering, Manipal Institute of Technology, Manipal	Palaeogeography, Palaeoclimatology, Palaeoecology - An International Journal for the Geo-Sciences, Elsevier	August 2021	96%
4	Agaric-like anodes of porous carbon decorated with MoO ₂ nanoparticles for stable ultralong cycling lifespan and high-rate lithium/sodium storage	- Chuanxin Hou - Wenyue Yang - Xiubo Xie - Xueqin Sun - Jun Wang - Nithesh Naik - Duo Pan - Xianmin Mai - Zhanhu Guo - Feng Dang - Wei Du	Department of Mechanical and Manufacturing Engineering, Manipal Institute of Technology, Manipal	Journal of Colloid and Interface Science, ScienceDirect	August 2021	95%
5	The need for exercise sciences and integrated response to COVID-19: A position statement from the international HLPVOT network	- Mark A Faghy - Ross Arena - Lee Stoner - Rebecca H Haraf - Richard Josephson - Andrew P Hills - Snehil Dixit - Dejana Popovic - Andy Smith - Jonathan Myers - Simon L Bacon - Josef Niebauer - Victor Z Dourado - Abraham S Babu - Thomas M Maden - Wilkinson - Robert J Copeland - Lewis A Gough - Sam Bond - Kaz Stuart - Thomas Bewick - Ruth E M Ashton - On Behalf of the HL-PVOT Network	Department of Physiotherapy, Manipal College of Health Professions, MAHE, Manipal	Progress in Cardiovascular Diseases, ScienceDirect	July 2021	94%

Serial No	Title of the Publication	Authors	Institution	Name of the Journal	Month and Year of Publication	Journal Quartile -Q1 (top 10 percentile)
6	Older adults with noncommunicable chronic conditions and their health care access amid COVID-19 pandemic in Bangladesh: Findings from a cross-sectional study	<ul style="list-style-type: none"> - Sabuj Kanti Mistry - A R M Mehrab Alil - Uday Narayan Yadav - Saruna Ghimire - Md Belal Hossain - Suvasish Das Shuvol - Manika Saha - Sneha Sarwar - Md Mohibur Hossain - Nirob Varalakshmi - Chandra Sekaran - Mark - F Harris 	Department of Community Medicine, Melaka Manipal Medical College, MAHE, Manipal	PLOS ONE	July 2021	
7	Genome sequencing in families with congenital limb malformations	<ul style="list-style-type: none"> - Jonas Elsner - Martin A Mensah - Manuel Holtgrewe - Jakob Hertzberg - Stefania Bigoni - Andreas Busche - Marie Coutelier - Deepthi C de Silva - Nursel Elçioglu - Isabel Filges - Erica Gerkes - Katta M Girisha - Luitgard - GraulNeumann - Aleksander Jamsheer - Peter Krawitz - Ingo Kurth - Susanne Markus - Andre Megarbane - André Reis - Miriam S Reuter - Daniel Svoboda - Christopher Teller - Beyhan Tuysuz - Seval Türkmen - Meredith Wilson - Rixa Woitschach - Inga Vater - Almuth Caliebe - Wiebke Hülsemann - Denise Horn - Stefan Mundlos - Malte Spielmann 	Kasturba Medical College, Manipal	Human Genetics, Springer	August 2021	90%

E. Patents filed during the period July - September 2021

1. Ms Madhu Sharma, Manipal College of Dental Sciences, Manipal, Mangalore, along with Ms Vasudha Gupta, Mr Atishay Jain, and Mr Umesh Y Pai, have jointly filed for a patent titled "Apparatus and Method for Controlling Impression Material In Oral Care Process".
2. Mr Lohan Moradia, Manipal College of Dental Sciences, Manipal, along with Ms Vidushi Gupta, Manipal College of Dental Sciences, Mangalore, and Mr Atishay Jain, Manipal Institute of Technology (MIT), Manipal, have jointly filed for a patent titled "A Mixing Tip for mixing together at least two Materials".
3. Mr Raghavendra K Holla, Assistant Professor, Department of Civil Engineering, Manipal Institute of Technology (MIT), Manipal, Mr Diwakar G Sudhakar, Mr Girish M G, and Mr Grahit Ravikiran have jointly filed for a patent titled "Spinal Vehicle Delineator".
4. Mr Rajath Shenoy, Mechanical and Manufacturing Engineering, Manipal Institute of Technology, Manipal, Ms Rashmi Samant, Mr Mohammad Zuber, Mr Suhas Y Nayak, Mr Shyamsunder Bhat, Mr Sathish Shenoy, and Mr Chandrakant R Kini have jointly filed for a patent titled "Terminal Device for Lower Limb Prosthesis."

F. Grants Office, Directorate of Research (DoR), MAHE, Manipal

At DoR, MAHE, the complete grant management lifecycle starting from pre-award planning to the final reporting stage, presents itself as a tenacious but rewarding process lined up to provide the best of results. Particularly, when one is starting to initiate the process for the first time it can be quite challenging. However, with timely and proactive management, the right tools at hand, and a genial workflow process in place, one can run any daunting program in solidarity. As such, the grant management process is constantly developing and actualizes various lifecycle tasks through its unique award phases.

As an ethical research community, we understand how annoying the lifecycle of a grant can be at times (with its limited-time duration for application), given the additional issue of ever-changing grant regulations and requirements. We understand the time limits set up in meeting deadlines, as also are conversant with the precise details expected in delivery alongside the financial transparency which is essentially maintained to accomplish a collaborative mission. Thereof, to make the process of pre-award 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. At the GO, we aim to improve the research outcome of MAHE and facilitate faculty and research scholars in enhancing the quantum and quality of research funding. In tandem with the objective, we are committed to creating an enabling environment to facilitate our researchers with the following support:

- We are committed to facilitating faculty and research scholars in assisting resource identification, enhancing the quantum and quality of research funding.
- MAHE has set up a dedicated Grants Office managed by a Grants Coordinator. The Grants Office is located in the DoR, MAHE.
- Information regarding Grants and funding calls can be accessed through Research Management System (RMS) to help faculty and researchers in identifying 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.
- Further, the Grants Coordinator will be the one-point contact to assist the grant applicant with necessary approvals, consultations, policy documents, and also to facilitate necessary meetings with Finance, Legal, HR, and Mentor Board.
- Entering Project details in RMS is mandatory while applying for a new grant to generate a UTN number for proposal submission. 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:

Ms Pooja Shanbhag, Coordinator, Grants Office, MAHE, Manipal.

Email - pooja.shanbhag@manipal.edu

Phone: 0820-29-37733

Part II

A. Featured Researcher of MAHE



Dr Usha Y Nayak

Dr Usha Y Nayak is Associate Professor at the Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences (MCOPS), and Coordinator, Centre for Drug Testing, MCOPS, MAHE, Manipal. Her core research area is pharmaceutics and pharmaceutical formulations, while her specialization lies in the sphere of nano-formulations for targeted delivery of drugs, in the case of diseases such as colon cancer, breast cancer, fibrosis, and infectious diseases.

Dr Usha started her research career with the development of “Befresh” mouthwash for the pharma industry BPRL (Bangalore Pharmaceutical and Research Laboratory Private Limited), Bangalore, during her PG at MCOPS. Later she received her PhD from MAHE-Manipal post which she joined as faculty at MCOPS in 2010. She is very passionate about teaching as well as research which is evident from the recognition she received in both domains. Dr Usha was instrumental in developing formulations for various industries, “Leuprolide depot injection” for Sven Genetech, Hyderabad, and “Injectable microsphere formulation of human growth hormone” for USV Limited, Mumbai. Presently, she is working on an implantable drug delivery system for Life Scient Inc, USA. She has received many research grants from government funding agencies such as the Career Award for Young Teachers by AICTE, Biotechnology Career Advancement & Re-orientation Programme (BioCARE) from the Department of Biotechnology (DBT), Science and Engineering Research Board - Department of Science & Technology (SERB-DST), Indian Council of Medical Research (ICMR), New Delhi, Vision Group on Science and Technology - Karnataka science and technology promotion society (VGST-KSTePS), Karnataka, and also from industries. She is currently exploring the role of glycosylated nanoparticles in cancer and antimicrobial therapy and as part of a team has developed a novel technology to deliver the drug for breast cancer.

Additionally, Dr Usha’s domain of specialization is the computational simulation in the area of formulation design which is of current interest in the field of Artificial Intelligence.

Dr Usha has 80 publications in Scopus and 1308 citations with an h-index of 20. She has one Indian patent based on controlled release technology and a few other patents are in the pipeline. She is actively involved in the MAHE-SRF and MCOPS Innovative Communication Club (I2C) activities, inspiring budding researchers to achieve their goals. Moreover, she has participated as an invited speaker in various training programs. Dr Usha has collaborated with the University of South Australia (UniSA) and the University of Pittsburgh, USA. Her PhD students had an opportunity to visit these universities for part of their PhD work.

Dr Usha's message to budding researchers is, "Researchers must be updated with the latest developments in their chosen areas of interest. Be goal-oriented, enthusiastic, and focused to achieve the solution to your research questions. To be a productive and efficient researcher, plan meticulously and be time-bound. If not, your novel idea/thought may become older!"

In her opinion, teaching is incomplete without research in professional institutions. So, she is planning to study the role of artificial intelligence in drug delivery applications, so it may help in upgrading her knowledge besides aiding in teaching too. Dr Usha has her plan to start a certificate course in the Design of Experiments. This course would help students gain knowledge in the niche domain, especially those who are keen on doing experiments, thereby opening the opportunity for students working with R&D departments in the industry on the lines of analytical job profiles.

Email: usha.nayak@manipal.edu

PURE link: <https://orcid.org/0000-0002-1995-3114>

B. Faculty and Institution Achievements

Dr Jagriti Gangopadhyay, Assistant Professor at Manipal Centre for Humanities (MCH), MAHE, Manipal, published a book titled: "Culture, Context, and Aging: Narratives of Older Indians and Beyond" with Springer on 8 July 2021. This book was funded by the Shastri-Indo Canadian Institute.



Dr Kapil Sadani, Assistant Professor, Department of Instrumentation and Control Engineering, was awarded with the "Naik and Rastogi Award for Excellence in PhD Research" for the tenure from 2019-2021 at IIT Bombay on 7 August 2021.



Dr Prachi Pundir, Research Officer, Public Health Evidence South Asia (PHESA), won the prize for the "Best Oral Presentation" (under the theme, Covid Miscellaneous Track) at IPHACON-2021 (the 65th annual conference of Indian Public Health Association (IPHA)), organized by IPHA Pondicherry state branch and Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), held online from 23 to 26 September 2021.



Dr Karthik Shetty, Professor and Head, Department of Conservative Dentistry, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal, won the "Best Paper Prize" for his research paper titled "Evaluation of the Root and Canal Morphology of the Maxillary First Premolars in an Indian Dravidian Subpopulation using Cone-beam Computed Tomography" presented on 31 July 2021 at the IFEA (International Federation of Endodontic Association Conference).



Dr Nandita K P, Associate Professor, Department of Oral Pathology and Microbiology, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal, won the "First Prize in The Best Scientific E-Poster Category" for her poster titled "Novel Method of Stature Estimation Utilizing Anthropometric Measurements in Indian Population" at the 8th International e-conference on Forensic Medicine and Toxicology conducted on 28 and 29 August 2021.



Dr Vinay Kumar Jadoun, Assistant Professor Senior Scale, Department of Electrical and Electronics Engineering, MIT, MAHE, Manipal, was awarded the “Best Paper of the Session”, at the First International Conference on Computations in Materials and Applied Engineering (CMAE-2021) held during 26 to 27 June 2021.



Dr Srikant N, Professor and Head Department of Oral Pathology and Microbiology, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal, won the “Second Prize” for the paper presentation titled “3D Geomorphometric shape analysis” presented at the “18th Annual National Conference of the Indian Association of Forensic Odontology – Innovations and Trends in Forensic Odontology” held on 25 and 26 September 2021, organized by the Department of Forensic Medicine, GS Medical College and KEM Hospital, Mumbai.



Dr Jagadish P C, Associate Professor, Department of Pharmaceutical Chemistry, Manipal College of Pharmaceutical Sciences, Manipal, received the “First Runner Up” in Krupa Pharma Con 2021, the third Global Online Conference and Workshop on Drug Development 4.0: Emerging Technologies. His paper titled “Assisted Design and Development of Micro Dissolution Experiment for Evaluation of pH-Dependent Interactions of Alecitinab” is co-authored by Ms K Durga Deepthi, Ms Prajakta Patil, and Mr Mrunal Desai. The event was held between 02 – 03 July, 2021.



Dr Shradha S Parsekar, Research Officer, Public Health Evidence South Asia, Prasanna School of Public Health, received a “Bursary Award” to attend and present her study findings at the World Congress on Epidemiology (WCE-2021) held from 3 to 6 September 2021. The WCE-2021 was organized by the International Epidemiology Association and the Australasian Epidemiology Association. Dr Shradha presented her study findings through an oral presentation titled, “To tell or not to tell... Practice of (non) disclosure and collusion of cancer in India”. The WCE-2021 proceedings are published by the International Journal of Epidemiology 2021; Volume 50, Issue Supplement_1, September 2021, dyab168.524.



Link: <https://doi.org/10.1093/ije/dyab168.524>

C. Achievements by Research Scholars and Students

A team from the Department of Orthodontics and Dentofacial Orthopaedics, Manipal College of Dental Sciences, Mangalore, MAHE-Manipal, comprising of Dr Sakshi Sachdeva (Postgraduate Student), Dr Supriya Nambiar (Professor and Head), and Dr Collin Robert (Alumni), won the “Silver Medal” in the innovation International Postgraduate category, and won the second place among the overall innovations at the International Medical Innovation Competition 2021 (IMIC 2021) organized by the Faculty of Medicine, Universiti Teknologi MARA (UiTM), Sungai Buloh Campus, Selangor, Malaysia, held between 15 and 27 August 2021.



Dr Supriya Nambiar



Dr Collin Robert



Dr Sakshi Sachdeva

Mr Prashanth Barla (Reg No. 180900119), Research Scholar, Department of Electronics and Communication Engineering, MIT Manipal, MAHE, received the “Best Paper Award” for the paper titled “Design and evaluation of hybrid SHE+STT-MTJ/CMOS full adder based on LIM architecture”, in GC-RDCT-2021, held between 28 and 29 July 2021, at AJ Institute of Engineering and Technology, Mangalore, Karnataka, India.

Dr Madhu Keshava Bangera, PhD Research Scholar, Department of Dental Materials, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal, won the “First Position” in the scientific paper presentation WEBCON season-2 Virtual National Dental Conference, organized by Kalinga Institute of Dental Sciences, (KIIT) Deemed to be University, Bhubaneswar, in association with IDA Temple City branch and NSS bureau KIIT, held between 29 and 31 July 2021.



Dr Anwasha Saha, second-year postgraduate student, Department of Oral Medicine and Radiology, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal, won the “First Prize” in the paper presentation category for her paper titled “Efficacy of Mastoid Morphometry in Sex Determination using CBCT” presented at the “18th Annual National Conference of Indian Association of Forensic Odontology – Innovations and Trends in Forensic Odontology” held on 25 and 26 September 2021, organized by the Department of Forensic Medicine, GS Medical College and KEM Hospital, Mumbai.



Dr Mohana Bhoraskar, final year postgraduate student, Department of Oral Medicine and Radiology, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal, won the “Second Prize” in the paper presentation category for the paper titled “Morphometric and Volumetric Evaluation of Maxillary Sinus as an aid in sex determination in Forensic Odontology” presented at the “18th Annual National Conference of Indian Association of Forensic Odontology – Innovations and Trends in Forensic Odontology” held on 25 and 26 September 2021, organized by Department of Forensic Medicine, GS Medical College and KEM Hospital, Mumbai.



Ms Aditi Sengupta, student of third-year BSc Biotechnology, Manipal School of Life Sciences, MAHE, Manipal, received the “Best Poster Award” on the topic “Physicochemical characterization of native starch from different starch varieties” in National Conference on Emerging Trends in Physics-2021 (NCETP-2021) held on 16 June 2021 organized by the Department of Physics, Tezpur University, Assam, India.



Mr Rajath Shenoy, Research Scholar, Department of Speech and Hearing, Manipal College of Health Professions (MCHP), MAHE, Manipal, received “Saffron Student Scholar Award” in view of the 15th Annual Eleanor M Saffron Conference on Cognitive Neuroscience and Rehabilitation of Communication Disorders which took place on 11 and 12 September 2021.

Mr M Wasim Ahmed, Research Scholar, Department of Speech and Hearing, MCHP, MAHE, Manipal, received the “Certificate of Merit for the E-Poster” titled “Development of a comprehensive test for agrammatism in Kannada” in the 4th Asia Oceanian Congress of Neuro Rehabilitation 2021, held between 6 to 8 August 2021.

Ms Pooja Nandagopal, Junior research Fellow – 2021, Optometry Department, Manipal College of Health Professions, MAHE, Manipal, received the “First Prize” for the “Best Scientific Review” in the oral presentation category, which was held on 9 September 2021 at the Dr Rajeswari Mahadevan Memorial Scientific Session.

Dr Rupanjan Roy availed the “First Prize” in the best Paper Presentation category in the National Post Graduate E-Paper Competition titled “Killing the Killer: Diabetes – A Kaleidoscope,” organized by “Diabetes and Oral Care JSS Academy of Higher Education and Research” on 23 and 24 August 2021. The paper title was – “Novel Treatment Adjuncts to Periodontal Debridement for the Management of Periodontitis in Diabetic Patients.”

Dr Parkhi Mathur, second-year PG student, secured the “Outstanding Paper Award” for the presentation titled “Carving an engaging smile” in the scientific program conducted during the 23rd Indian Prosthodontic Society Postgraduate Convention, held at Mahatma Gandhi Dental College, Jaipur, Rajasthan, from 2 to 4 July 2021.

F. Research Activities: Workshops, Programs, Webinars and Conferences

Department of Physics, MIT-Manipal, conducted the 9th National Conference on Condensed Matter Physics and Applications (CMPA 2021), on 16 and 17 September 2021. There were six invited talks on the recent developments in the area related to condensed matter physics. In addition, there were 93 paper presentations by researchers from various institutes. In total 151 registered participants witnessed the annual event of CMPA.

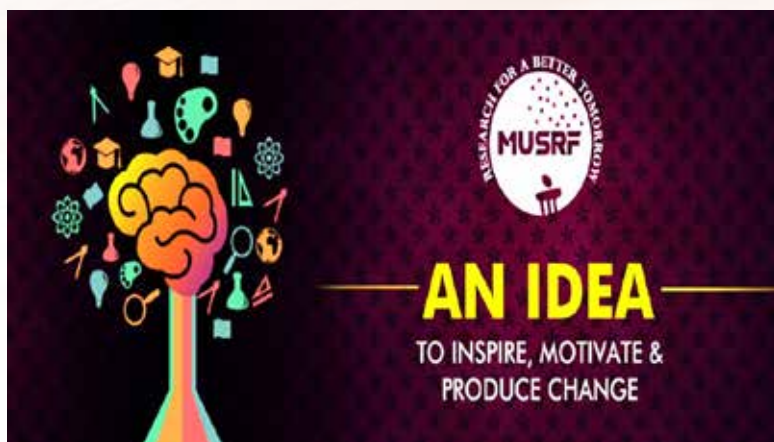
Department of Medical Laboratory Technology, MCHP, Manipal, facilitated an online workshop on “Interprofessional Collaborative Practice for Autism Spectrum Disorder,” held from 6 to 15 September 2021. The workshop was conducted by MAHE-FAIMER International Institute for leadership in Interprofessional education, in association with MCHP, MAHE, Manipal.

Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences, MAHE, Manipal, organized an AICTE sponsored Short Term Training Program (STTP) on “Computational tools for Pharmaceutical Development”. SLOT – I of this event was held from 28 June to 3 July 2021. Dr PLNG Rao, Pro Vice Chancellor of MAHE was the Chief Guest of the program. Dr C Mallikarjuna Rao, Principal, MCOPS, delivered the welcome address. The program coordinator, Dr Lalit Kumar, Assistant Professor (Selection Grade) in the Department of Pharmaceutics, MCOPS, provided an overview of the event. Meanwhile, SLOT – II of the event was held from 5 to 10 July 2021. Dr Narayana Sabhahit, Registrar of MAHE, was the Chief Guest of the program. He delivered the inaugural address and appreciated all the delegates for taking part in the STTP. Moreover, he spoke about the appropriate usage of computational tools in drug discovery and development, and discussed the necessity for users to be aware of the application of these tools to avoid obtaining wrong results in the light of negligence.

Department of Pharmaceutics, MCOPS, organized the AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program (FDP) on “Artificial Intelligence in Pharmaceutical Product Development”, which was held between 26 to 30 July 2021. The event was inaugurated in the virtual mode on 26 July 2021 by Lt Gen (Dr) M D Venkatesh, Vice Chancellor, MAHE, Manipal. The Chief Guest, in his inaugural address, said, “Artificial Intelligence is revolutionizing the world, where many companies are adopting Artificial Intelligence technologies, with the pharmaceutical industry being no exception.” Dr C Mallikarjuna Rao, Principal, MCOPS, in the interim gave an overview of the FDP. The inaugural was witnessed by Dr Srinivas Mutalik, Professor and Head, Department of Pharmaceutics; Dr Usha Y Nayak, Coordinator, ATAL-FDP, Associate Professor, Department of Pharmaceutics; and Dr Raghu R, Vice President, Schrodinger, Bengaluru, India. A wide array of delegates, faculty members, resource persons, research scholars, and students were present on the occasion. Mr Chetan Mehta, Research Scholar, Department of Pharmaceutics, coordinated the inaugural program. The event comprised 14 plenary sessions with hands-on online training for Schrodinger modules and tools. The valedictory program was conducted on 30 July 2021. Dr B S Satish Rao, Director-Research, MAHE, Manipal was the Chief Guest. He appreciated the enthusiasm of the participants and active involvement during the sessions. In total, 200 delegates registered for this program from various colleges across the country and 143 participants were awarded a certificate on satisfying the criteria of attendance and examination as per AICTE guidelines.

Part III

MAHE Student's Research Forum (MAHE-SRF)



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 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 DoR, MAHE, Manipal. MAHE-SRF 2021 was established in January which includes undergraduate, postgraduate, and doctoral research scholars from the constituent institutions of MAHE. This body has a core team of 28 students from Manipal, Mangalore, and Bangalore campuses. The current President for the forum is Mrs Athira Rajagopal V from Welcomgroup Graduate School of Hotel Administration (WGSHA), Manipal. The Vice Presidents are Mr Nidheesh V R from the Department of Molecular and Atomic Physics (DAMP), Manipal, and Dr Madhu Keshava Bangera, Manipal College of Dental Sciences (MCOADS), Mangalore, respectively. This year MAHE-SRF is set on three events, namely: the MAHE Research Colloquium (MRC), a Summer Training Program, and an Interdisciplinary Conference on Healthcare and Technical Research (ICHTR). These events primarily involve academic lectures, invited talks, poster and oral competitions, and workshops.



As planned, the MAHE Students' Research Forum under the aegis of Directorate of Research - MAHE, successfully launched its Online Training Program on 16 August 2021, at 4:00 pm. At the beginning of the inaugural session, Dr Madhu Bangera, Vice President, MAHE-SRF, welcomed the guest and the participants. Chief Guest Dr H Vinod Bhat, Executive Vice President of MAHE presided over the inaugural event and graced the function. He expressed his delight about the overwhelming responses received from delegates who registered from India and abroad from MAHE and non-MAHE institutes in large numbers. He emphasized that the outcome of the programs must be driven towards applying the acquired knowledge in real-time research applications and advised all the delegates to utilize this opportunity to boost the scientific impact. Dr Bhat also advised on endorsing the SRF community worldwide for maximum outreach and utilization. Finally, the vote of thanks was delivered by Mr Nidheesh V R, Vice President, MAHE-SRF. The event was anchored by Ms Vaishnavi Vetsa, Finance Coordinator, MAHE-SRF. In total, an overwhelming response was displayed by more than 2,500 participants registering from MAHE and non-MAHE organizations on the national as also on the international scale. This activity is deemed to continue till 30 September 2021, by which time it would be organized across various constituent institutions of MAHE. Meanwhile, the planning of the Interdisciplinary Conference on Healthcare and Technical Research (ICHTR) has begun, whereupon the event will be led and convened by Mr Nidheesh V R, Vice President, MAHE-SRF, in the times to come.

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. Ms Sheeba Pakkan, Bibliometrician, Directorate of Research Office, MAHE, Manipal.
6. Ms Anupa Lewis, Assistant Professor – Senior Scale, Department of Media Studies, Manipal Institute of Communication, MAHE, Manipal.
7. Ms Ramya S, Associate Professor, Electronics and Communication Engineering, MIT – MAHE, Manipal.

