



# MANIPAL

ACADEMY of HIGHER EDUCATION

(Deemed to be University under Section 3 of the UGC Act, 1956)

## MAHE Research Bulletin

Apr-Jun 2020



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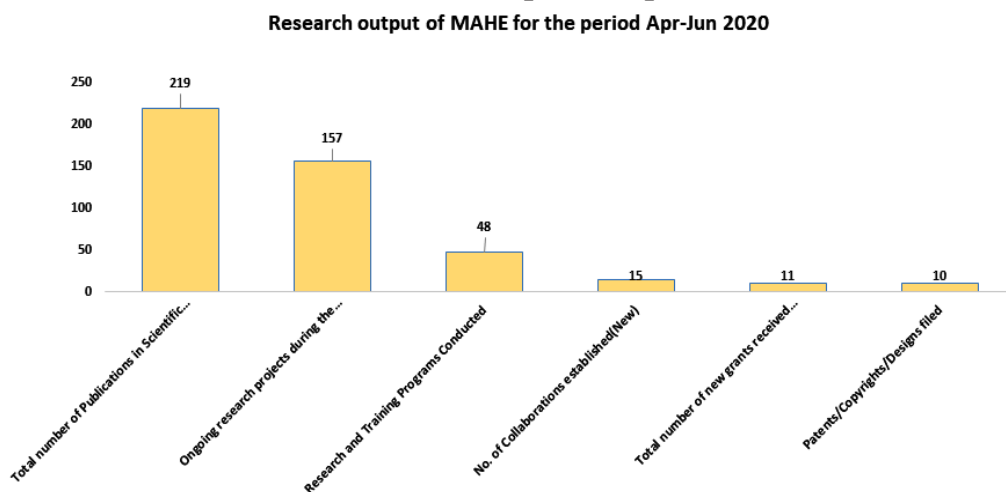
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# Part I

Manipal Academy of Higher Education (MAHE) is one of the premier deemed to be universities in India. MAHE considers both academics and research equally important for the betterment of an institution. The faculty members and the research scholars at MAHE have embraced the research culture. They publicize their research work in scientific publications, through presentations in various conferences and obtaining patents, research grants etc. In this report, we present to you *an overview of the research activities* at MAHE during the period **Apr-Jun 2020**.

## A. Details of research activities of MAHE for the period Apr-Jun 2020



## B. Faculty and institution achievements

1. Dr Priya Ballal K, Professor and Head, Department of Obstetrics and Gynaecology, Kasturba Medical College, Mangalore was the resource person in a webinar held on May 31 MOGSI Panel Discussion Topic: Coping with corona pandemic.
2. Dr Srirama Bhat M, Professor and Head; Dr Rahul Bhat R, Associate Professor and Dr Shabin Fahad, Assistant Professor of Surgery, Kasturba Medical College, Mangalore have been selected to be the National Senior Vice President, National Joint Secretary and National Treasurer respectively for ACCC India for two years till June 2022. The ACCC India is a national society formed with the interest of promoting awareness and skill development in the field of Critical Care amongst clinicians in India. The Department of Surgery, KMC, Mangalore has already conducted Acute Critical Care Courses for multiple specialities over the past two years.





3. Professor Neeta Inamdar, Head of Manipal Center for European Studies, has been designated as a member of the Thematic Group-Education for formulating India's new Science, Technology, and Innovation Policy (STIP 2020).
4. Manipal Center for European Studies is a partner to the University of Deusto in Global Observatory on International University Networking.
5. Dr Sabu K M, Professor, Health Information Management, Manipal College of Health Professions, MAHE, has been selected as an expert member to the American Health Information Management Association (AHIMA) International Advisory Council based in Chicago, USA. The AHIMA is one of the globally reputed and largest HIM organization in the globe and it is the first time a member from India is offered a seat in the AHIMA International Advisory Council.
6. Dr Suhan, Associate Professor, Manipal Institute of Management, MAHE, Manipal, published an article titled "*The Effect Of AI On The Sales Graph In Indian Market*" in Entrepreneurship and Sustainability Issues'. The journal is indexed in Scopus, Web of Science and is a Q1 journal.
7. Dr Pallavi U and Dr K R Pillai, Professors, Manipal Institute of Management, MAHE, Manipal, published an article titled "*Intention and barriers to use MOOCs: An investigation among the postgraduate students in India*" in *Education and Information Technologies*. It is a Scopus and Web of Science indexed, Q1 journal.
8. Two women dentepreneurs, Dr Shruti Singh and Dr Shruthi Acharya, have incorporated their Start-up *Eikona X Innovative Solutions Private Limited* in April 2020. Dr Singh is a Lecturer in Department of Conservative Dentistry and Endodontics and Dr Acharya is working as Associate Professor in Department of Oral Medicine and Radiology at Manipal College of Dental Sciences, Manipal, MAHE. It is a product-based company working in the domain of dental innovations. They are incubated at Manipal-GoK Bioincubator, Manipal.



9. Dr Aditi, Reader, Department of Periodontology, MCOADS, Manipal, along with Dr Joerg Eberhard of Charles Perkins Center of the University of Sydney, Dr Shobha U Kamath, Associate Professor, Department of Biochemistry, KMC, Manipal, Dr Shyama Prasada, Associate Professor, School of Life sciences have established a collaboration. The title of the research project is “Research on Identification of advanced glycation end products in the gingiva, gingival crevicular fluid and serum of diabetic patients and non-diabetic patients with or without periodontitis: a pilot study”.
10. Dr Sangeeta Nath, Assistant Professor, Manipal Institute of Regenerative Medicine, MAHE, Bangalore, was conferred with the following travel grants - to accomplish the invitation for oral presentation, to give a talk on “Amyloid-beta induced membrane damage instigates tunnelling nanotubes and direct cell-to-cell transfer”.
  - i) SERB-Travel Grant for AAT-AD/PD 2020 (April 2nd -5th), Vienna, Austria conference
  - ii) DBT/CTEP Travel Grant for AAT-AD/PD 2020 (April 2nd -5th), Vienna, Austria conference
11. Dr Ajeetkumar Patil, DAMP, MAHE, Manipal was awarded the prestigious “Dr D C Pavate Memorial Visiting Fellowship-2020 (13th Award) to visit University of Cambridge, London, UK” by the Dr D C Pavate Foundation Expert Committee as a Science Visiting Fellow - 2020 for a period of four months (May to August, 2020) to carry out research work with the residence at Sidney Sussex College, University of Cambridge, London, UK.
12. The Department of Philosophy organized an international seminar hosting erudite scholars from Uzbekistan and Brazil. Over 400 participants attended the session during June 2020.

### C. Achievements by Research Scholars and students

1. Ms Pooja Gopal Poojari, Research Scholar, Department of Pharmacy Practice, bagged the first place for the oral presentation titled, “Consumers and practitioners’ perspectives on challenges to patient prescribed second generation antipsychotics metabolic monitoring in severe and complex mental health: Findings from multicentric qualitative study from South India”. Pooja presented her paper in Online International Conference on Recent Advances in Child Psychiatry held by Department of Psychiatry, Chettinad Hospital and Research Institute, Kelambakkam, Tamil Nadu during 23-24 June 2020. She is pursuing PhD under the guidance of Dr Girish Thunga, faculty, Department of Pharmacy Practice, MCOPS.
 
2. Ms Aditi Kandlur, PhD Scholar, Department of Cell and Molecular Biology, Manipal School of Life Sciences, Manipal has been awarded with ICMR Junior Research Fellowship for the research work titled “Molecular and Neural Circuit Study of Age Associated Cognitive Decline in Mice”. She is working under the supervision of Dr Gireesh G, Ramalingaswamy Fellow.
 

3. Mr Satyajit Dey Pereira, PhD Scholar, Department of Cell and Molecular Biology, Manipal School of Life Sciences, Manipal has been awarded with ICMR Junior Research Fellowship for the research work titled “Impact of Cytokines on Epigenetic Regulation in Cancer”. He is working under the supervision of Dr K Satyamoorthy, Director, MSLS.





## Part II



### A. Featured Researcher of MAHE

Dr M Selvakumar is serving as a faculty member at the Department of Chemistry, MIT, MAHE. He received his PhD from NITK in 2009. His areas of research interest are Super capacitors, Electro catalysis for hydrogen and oxygen evolution reaction, Dye sensitized solar cells (DSSC), Perovskite solar cells, Polymer electrolytes, Thermolectric materials, Cathode materials for Lithium ion battery, and Metal organic framework for carbon capture. In his initial years of research, Dr Selvakumar worked in the area of rheology of polymer solutions, polymer blend and biodegradable polymer electrolytes. Later, he worked in the field of electrode materials for supercapacitor and solar cells.



Dr Selvakumar and his team has been working to develop a new concept of electromagnetic supercapacitor and has filed for an Indian patent under MAHE. He has over 57 publications and two books to his credit - *Electrochemical Capacitor* (Real guide for young researcher), *Biopolymer Electrolytes: Fundamentals and Applications in Energy Storage* (Elsevier). In 2020, Dr Selvakumar published 12 papers in reputed journals. Currently, his team is working on the “Synthesis and characterization of new perovskite solar materials for solar cell applications.” He has guided two PhD students, 25 MSc projects and completed a DRDO funded project successfully. Currently, five students are working under him in diverse research fields, as mentioned above. Dr Selvakumar’s message to budding researchers: “*Present-day researchers are product based. If you have a potential product in your PhD, you are the CEO of your own company*”. He says that the following aspects during the PhD tenure of a student matter the most:

- enthusiasm
- isolation
- increasing interest in work
- transfer of dependence from the supervisor to the work
- punctuality and honesty

He plans to initiate a PG program in Materials for Energy in MAHE.

## B. Top publications for the period Apr-Jun 2020

Title of the Publication	Name of the author	Institution	Name of the Journal	Cite score	Month and Year of Publication	Current Quartile value
Mapping Local Patterns of Childhood Overweight and Wasting in Low-And Middle-Income Countries Between 2000 and 2017.	Dr Vinod C Nayak, Dr Prateek Rastogi, Dr Archith Bolor, Dr Jagadish Rao P, Dr Shankar M Bakkannavar, Dr Reshmi Bhageerathy, Dr Arunkumar G, Dr Ramesh Holla, Dr Praveen Hoogar, Mr Vivekanda Jha, Dr Nitin Joseph, Dr Priya Rathi	KMC, Manipal, KMC Mangalore	Nature Medicine	<b>19.14</b>	April 2020	Q1 (Top 1)
Heterogeneous surface architected metal-organic frameworks for cancer therapy, imaging, and biosensing: A state-of-the-art review.	Dr Srinivas Mutalik, Dr Abhijeet Pandey, Padya Bharat Singh, Ajinkya Nitin Nikam	Manipal College of Pharma Science	Coordination Chemistry Reviews	<b>13.83</b>	May 2020	Q1(Top 1)
Copper sulphide based heterogeneous nanoplatfoms for multimodal therapy and imaging of cancer: Recent advances and toxicological perspectives.	Dr Srinivas Mutalik, Ajinkya Nitin Nikam, Dr Abhijeet Pandey, Fernandes Gasper Joseph Julie, Sanjay Kulkarni, Sadhana Mutalik, Padya Bharat Singh, Dr Sajan Daniel George	Manipal College of Pharma Science, DAMP	Coordination Chemistry Reviews	<b>13.83</b>	May 2020	Q1 (Top 1)
Mapping geographical inequalities in childhood diarrhoeal morbidity and mortality in low-income and middle-income countries, 2000–17: Analysis for the Global Burden of Disease Study 2017.	Dr Praveen Hoogar, Jagadish Rao Padubidri	MAHE University Office, KMC Mangalore	The Lancet	<b>10.28</b>	May 2020	Q1(Top 1)
Combined effect of oxygenated liquid and metal oxide nanoparticle fuel additives on the combustion characteristics of a biodiesel engine operated with higher blend percentages.	Shiva Kumar, Dr Dinesha P, Ajay C M, Poojitha Kabbur	MIT Manipal	Energy	<b>6.2</b>	April 2020	Q1 (Top 1)

### **C. Grants Office, Directorate of Research, MAHE, Manipal**

- MAHE is committed to facilitate faculty and research scholars in assisting resource identification, enhancing 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 Directorate of Research, 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, 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 a new grant to generate UTN number for proposal submission. Updating the project status (funded /rejected) in RMS portal is the responsibility of the Principal Investigator as per the sanction/rejection letter from the concerned funding agency.





### **Editorial Team**

1. Dr N Udupa, Director Research (Health Sciences) 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 Rekha R Shenoy, Associate Professor, Department of Pharmacology, Manipal College of Pharmaceutical Sciences, MAHE, Manipal
5. Dr Manthan D Janodia, Professor and Head, Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, MAHE, Manipal