



# MANIPAL

ACADEMY of HIGHER EDUCATION

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

## Manipal Academy of Higher Education

Oct-Dec 2017



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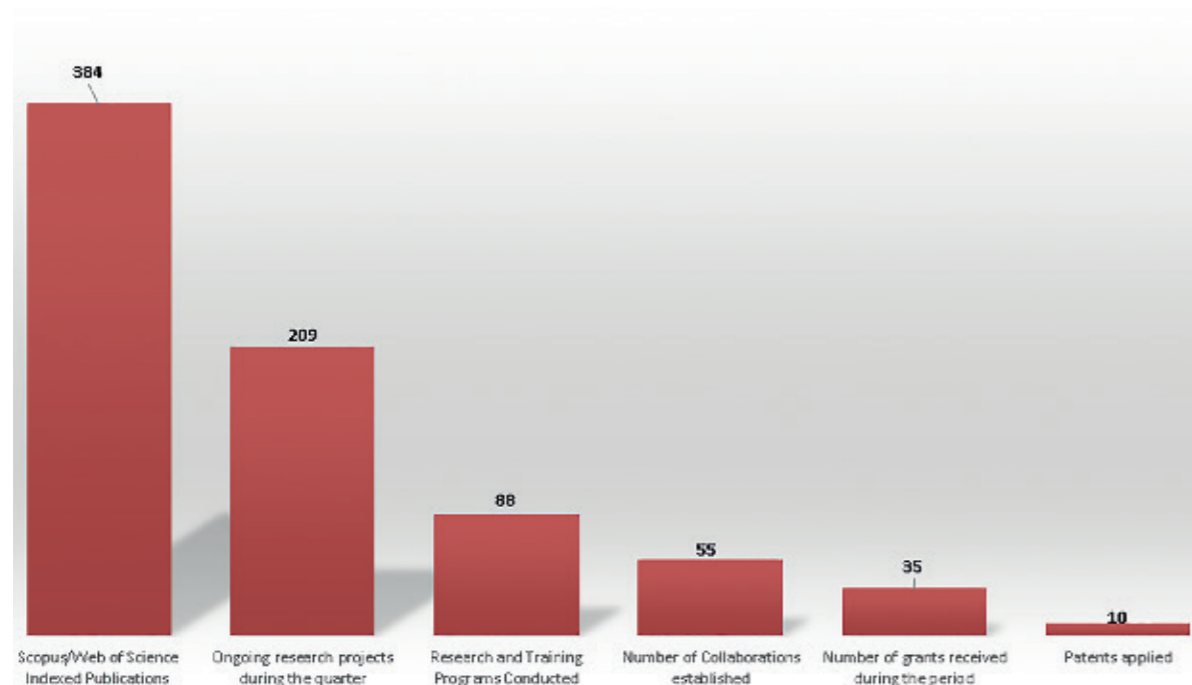
# Part I



Manipal Academy of Higher Education (MAHE) is one of the premier higher education institutions in India. MAHE considers both academics and research, equally important for the betterment of the 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, by obtaining patents and research grants, etc. In this report, we present to you **an overview of the research activities** by MAHE, during the period **Oct-Dec 2017**.

## A. Details of research activities of Manipal Academy of Higher Education for the period Oct- Dec 2017

Research Output during Oct-Dec 2017



## B. Faculty and institution achievements

- Dr B S Satish Rao, Associate Director- Research, School of Life Sciences, Department of Radiation Biology and Toxicology, MAHE, Manipal has been awarded the prestigious Indian National Science Academy (INSA) Teachers Award for the year 2017, for his excellent contribution to Science education and also for nurturing young talents by providing guidance, inspiration, and mentoring them to take up careers in Science and Technology. All disciplines of Science and Technology including Medical and Engineering Sciences



come under the purview of this award. The award presented to him comprised a scroll, cash award of Rs 50,000 and a book grant of Rs 20,000 at the Anniversary Meeting of INSA held at the Indian Institute of Science Education and Research (IISER), Pune on Dec 29, 2017.

- Dr Jerin Paul, Assistant Professor, Dept of Statistics, PSPH, MAHE won Prof A M Mathai Best PhD Thesis Award for the year 2017 (Thesis entitled "Record Values, Generalized Record Values and Applications") at University of Kerala, Trivandrum on Dec 14, 2017.



- Dr S Balaji, Faculty, Department of Biotechnology, Manipal Institute of Technology, Manipal was sanctioned Rs 30 lakhs to start a center on 'Interactive Biomolecular 3D literacy' funded by Centers of Innovative Science, Engineering and Education (CISEE), VGST, Govt of Karnataka.



- Dr Raviprakash Y, Asst. Professor-Selection grade, Dept of Physics, Manipal Institute of Technology, MAHE, Manipal received Seed Money to Young Scientist for Research (SMYSR) from VGST, KSTEPS, Govt of Karnataka for his project titled "Development of low cost thin film solar cells with earth-abundant kesterite absorber".



- Dr Shubhashree Uppangala, Assistant Professor, Department of Clinical Embryology, KMC, Manipal was awarded with prestigious International Cancer Research Technology Transfer (ICRETT) Fellowship funded by Union for International Cancer control (UICC) based in Geneva, Switzerland. With this fellowship, Dr Uppangala has undergone training in the field of oncofertility under the guidance of Prof Woodruff who is a pioneer in the field of oncofertility and director of oncofertility consortium at Feinberg School of Medicine, Northwestern University, Chicago, USA. During the fellowship tenure Dr Uppangala had the opportunity to understand the various aspects of fertility preservation in cancer affected prepubertal girls. She was also a part of research study titled "Multimodal cultural competence development tools for oncofertility" which was in association with oncofertility consortium and its global partners.



## C. Achievement by research scholars and students

- Mr Vinay Koshy Varghese, currently working as a PhD scholar under the guidance of Prof K Satyamoorthy, Director and Dr Shama Prasada, Associate Professor at School of Life Sciences, MAHE, Manipal participated in Bengaluru Tech Summit. He presented a poster entitled 'miRNA regulation by DNA promoter methylation in cervical cancer' and won the first prize for best poster presentation.



- Students of School of Life Sciences, MAHE, Manipal bagged the second prize at BioQuiz-Bengaluru Tech Summit 2017. Karnataka Biotechnology and Information Technology Services, Department of IT, BT and S&T of Government of Karnataka and Bangalore India Bio, the premier Biotechnology platform of India conduct India's largest state level



competition "BioQuiz" annually. Six winning teams from regional levels participated in the final round held during the last day of the event. Ms Shahina Mazumdar and Ms Malavika Meloth Jayaram, students from School of Life Sciences (SoLS), MAHE, Manipal participated.

- Ms Anusha Prabhu B, Research Scholar, Department of Biotechnology, Manipal Institute of Technology, Manipal was sanctioned Rs 5 lakhs for the Detection of Candida albicans pathogenic dual switching using Paper-based Analytical Devices (PADS for Candida) under SMYSR, VGST, Govt of Karnataka.



- Dr Venkata Joga Prasanth, Post Graduate student in Department of ENT, KMC, Manipal was awarded first prize in Baahubali-3 Postgraduate Quiz competition "ENTERACT 2017," the fourth Annual Conference of Indian Academy of Otorhinolaryngology Head and Neck Surgery held on Nov 10-12, 2017 at AFMC, Pune.

- Dr Deeksha P Rao Post Graduate student in Department of ENT, KMC, Manipal was awarded first prize in Baahubali-3 Postgraduate Quiz competition "ENTERACT 2017," the fourth Annual Conference of Indian Academy of Otorhinolaryngology Head and Neck Surgery held on Nov 10-12, 2017 at AFMC, Pune.

- Dr Malavika, Senior Research Fellow, Department of Medical Genetics, KMC, Manipal has been awarded Best Poster Award for the fourth National Conference of Society for Indian Academy of Medical Genetics (SIAMG), which was held on Dec 8-10, 2017 at Trivandrum, Kerala.

#### D. Achievement by Research Scholars and Students

- Dr Pratik Kumar C, Associate Professor, Department of Physiology, KMC, Mangalore has been awarded the "Best Paper Award" at the 23rd International Conference on Healthcare and Life Science Research (ICHLSR) held at Deira, Dubai, UAE.

- Dr Rashmi K S, Assistant Professor, Department of Physiology, KMC, Mangalore received Travel Award from Humboldt Foundation and was selected as speaker in the interdisciplinary workshop for early career researchers at 'Humboldt Colloquium' organized by Alexander von Humboldt Germany at Leela Palace, Bangalore during Nov 23-25, 2017.

- Dr Vineetha R, Professor and Head, Dept of Oral Medicine and Radiology, MCOADS, Manipal won the second prize for paper titled "Concepts and Challenges in Osteoradionecrosis revisited: A Case Series" at 29th National Conference of Indian Academy of Oral Medicine and Radiology, ITS Centre for Dental Studies and Research, Delhi Meerut Road, Muradnagar.



- Dr Vathsala, Assistant Professor, Dept of Oral Medicine and Radiology, MCOADS, Manipal won first prize for paper titled "Ability of two radiographic methods to identifying the closeness between IAN canal and third molar root" at 29th National Conference of Indian Academy of Oral Medicine and Radiology, ITS Centre for Dental Studies and Research, Delhi Meerut Road, Muradnagar.



- Dr Nishu Singla, Reader, Department of Public Health Dentistry, MCOADS, Manipal was awarded second prize in staff category for presenting a poster titled "Exploring trends and factors related to hookah use among college students: A cross-sectional survey" at 45th Karnataka State and fourth Interstate Dental Conference held at Davangere during Dec 15-17, 2017.

- The International Society for Pharmacoepidemiology (ISPE) granted scholarship to six faculty members and six students of PharmD from Department of Pharmacy Practice, MCOPS to attend and present their papers at the renowned ISPE's ACPE (Asian Conference on Pharmacoepidemiology). The conference was held during Oct 29-31, 2017 at the Pharmacy Australia Centre of Excellence (PACE), School of Pharmacy, The University of Queensland, Brisbane, Australia.



- Dr R Rajesh received international travel grant from Science and Engineering Research Board, Department of Science and Technology, Government of India for attending and presenting research paper in ISPE's 10th Asian Conference on Pharmacoepidemiology in School of Pharmacy, The University of Queensland, Brisbane, Australia from Oct 29-31, 2017.

- Dr Lalit Kumar, Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences, Manipal was selected as one of the top peer reviewers in the section Pharmacology, Toxicology and Pharmaceutics, and Publons certified him with "Publons Peer Review Awards 2017."

- Dr S G Vasantharaju, Department of Pharmaceutical Quality Assurance, Manipal College of Pharmaceutical Sciences, Manipal received best presentation award at ICMPS 2017 at Sydney, Australia.

- Dr Kiranmai Rai, Professor and Head, Department of Physiology was awarded the Prof Baldev Singh Oration Award for 2017 by Association of Physiologists and Pharmacologists of India at APPICON 2017 for her outstanding contribution to research and development in the field of Neuroscience held in Pondicherry during Oct 12-14, 2017.



- Dr Varalakshmi Chandrasekaran, lecturer in Community Medicine, MMMC was awarded second prize in the poster presentation competition for the poster entitled "Parents are from a different generation and tend to frown upon a lot more" – A photo-voice exploration of adolescent perceptions of parenting practices" at the International symposium inclusion jointly organized by MAHE, India and James Cook University, Australia, held at Manipal on Dec 7, 2017.



- Dr Deepthinath R, Professor of Anatomy, MMMC was awarded Best Presentation Award for the poster titled "Abnormal branching pattern of lumbar plexus in an adult male cadaver: A case report" at 'ICHAP 2017: 19th International Conference on Human Anatomy and Physiology,' organized by International Scientific Research and Experimental Development, Hong Kong, China held on Dec 4-5, 2017.





13. Dr Maya Roche, Professor of Biochemistry, MMMC received award for her poster presentation for the poster titled "From potpourri to percipience: Developing problem solving skills in medical students through a computer assisted active learning strategy" at ninth Asian Medical Education Association Symposium cum Frontiers in Medical and Health Sciences Education 2017, organized by Bau Institute of Medical and Health Sciences Education, Hong Kong held on Dec 14-16, 2017.



14. Dr Rajesh Kumar Sinha, Faculty, School of Allied Health Sciences, Manipal was invited as a speaker to talk on "Knowledge, attitude and practice of big data and cloud computing" at American Health Information Management Middle East Health Information Summit, Abu Dhabi on Oct 20-21, 2017.



15. Ms Rekha V, Assistant Professor, School of Allied Health Sciences, Manipal won second prize in poster presentation in Manipal Cardiology Update 2017, held on Nov 1, 2017 at Manipal. She presented the comparison of syntax score in STEMI patients treated by primary PCI.

16. Dr Shivani Tiwari, Associate Professor won Dr TMA Pai Gold Medal Award for the year 2017 for her article titled "Specific language impairment in a morphologically complex agglutinative Indian language –Kannada."

17. Dr Reshmi B, Faculty, School of Allied Health Sciences, Manipal was invited to attend the Ministry of Health and Family Welfare India organized national consultation (with support from World Health Organization) marking Universal Health Coverage (UHC) day 2017 on Dec 11-12, 2017 in New Delhi.

18. Dr Sebestina Dsouza with Roshan Galvaan and Elewani Ramugonda (Associate Professors at University of Cape Town, South Africa) published book titled 'Concepts in Occupational Therapy: Understanding Southern Perspectives' published by Manipal Universal Press. The book was released on Oct 27, 2017.



19. Mr Chethan K N and Mr Jayakrishnan got the best paper presentation award in the International Conference on Mechanical Materials and Renewable Energy organized by Sikkim Manipal Institute of Technology, Mechanical Department, Majitar, Sikkim, held on Dec 8-10, 2017.

20. Dr Ajeetkumar Patil, Asst Professor Sr Scale, Department of Atomic and Molecular Physics, MIT, Manipal has received best poster award for his poster titled "Development of Autofluorescence Device for Bio-medical in vivo Application" under 'Make in India' theme during 'Young Scientist' Conclave SYPOG at "India International Science Festival-2017" held at Chennai on Oct 13-16, 2017. The program was jointly organized by Ministry of Science and Technology, Govt of India, New Delhi; Ministry of Earth Sciences, Govt of India, New Delhi; CSIR, New Delhi; Vijnana Bharathi (VIBHA), New Delhi; Govt of Tamil Nadu; IIT Madras, and National Institute of Ocean Technology (NIOT), Anna University, Chennai.



21. Mr Rahul Putty, Assistant Professor, Department of European Studies, MAHE, undertook an international teaching assignment at the University of Warmia and Mazury (UWM) in Olsztyn, Poland (Dec 8-16). This assignment was in the framework of the Erasmus+ teaching mobility program between MAHE and UWM. The visit also explored possibilities of further collaboration.

22. Dr Mohan Amberkar, Faculty member, Department of Pharmacology, KMC, Manipal received the best paper award for the paper entitled: "Evaluating the hepato-protective activities of combination of aqueous extract of roots of *Tinospora cordifolia* and rhizomes of *Curcuma longa* against paracetamol induced hepatic damage in rats" at the international conference on Clinical Pharmacology and Pharmaceutical Chemistry, organized by World Academy Of Science, Engineering and Technology (WASET) group from Dec 4-5, 2017 at Sydney, Australia.

23. Dr Chythra R Rao, Associate Professor in Dept of Community Medicine, KMC, Manipal was awarded the Indian Council of Medical Research-Professor B C Srivastava Foundation award for the research work on "Risk factors for cardiovascular diseases" at the ICMR annual awards presentation ceremony held at New Delhi on Oct 11, 2017. Dr Rao has worked on 'Prevalence of diabetes, hypertension and obesity' in the rural areas of coastal Karnataka. In the community based screening involving anthropometry, blood pressure, and fasting blood glucose measurement among 1200 adults, she has identified a high prevalence of these non-communicable diseases (NCDs), contrary to the belief that prevalence in rural areas is lower.



## Part II



### A. Featured scientist of Manipal University

#### Dr Dhananjaya Kekuda

Assistant Professor - Selection Grade, Department of Physics  
Manipal Institute of Technology (MIT), Manipal



Dr Dhananjaya Kekuda's area of expertise includes thin film growth, physical and chemical methods, electronic device growth and characterization which include solar cells, thin film transistors, phototransistors, gas sensors, etc. He was also involved in industrial collaboration for the growth of organic photovoltaic devices and demonstrated a lab scale working device which could be scaled up for production.

His journey of teaching has been one of excellence. Teaching young and motivated students provides him with out-of-the-box thinking on a given subject. "Post-graduation teaching definitely provides finer details about the course content and facilitates deep learning and preparation. The publications are the result of quality work carried out by the research scholars which helps in enhancing visibility of the institution," says Dr Kekuda.

"Researchers need to inculcate the habit of reading research articles frequently and delve deeper into their specialized field, updated with literature survey and function in an organized manner. Efforts in the direction of demonstrating prototype devices should also be considered which can bring industrial collaborations," is his opinion.

Dr Dhananjaya's future plan for teaching would be to undertake new courses and offer more open electives to students. As far as research is considered, expanding research area, focus on the applied research and possibilities of industrial collaboration are some of his primary future plans.

Dr Kekuda is planning to offer open electives to BTech and post-graduate students in the area of solid state devices in near future.

### B. Top publications for the period Oct-Dec 2017

Title of the publication	Author name (MAHE affiliated)	Institution/Department	Journal	Month and year of publication	1-yr impact factor
Skin delivery of epigallocatechin-3-gallate (EGCG) and hyaluronic acid loaded nano-transfersomes for antioxidant and anti-aging effects in UV radiation induced skin damage	Kiran S Avadhani <sup>1</sup> , Jyothsna Manikkath <sup>1</sup> , Mradul Tiwari <sup>2</sup> , Misra Chandrasekhar <sup>1</sup> , Ashok Godavarthi <sup>3</sup> , Shimoga M Vidya <sup>4</sup> , Raghu C Hariharapura <sup>2</sup> , Guruprasad Kalthur <sup>5</sup> , Nayanabhirama Udupa <sup>1</sup> , and Srinivas Mutalik <sup>1</sup>	1. Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences, MAHE, Manipal, India, 2. Department of Pharmaceutical Biotechnology, Manipal College of Pharmaceutical Sciences, MAHE, Manipal, India, 3. Radiant Research Services Pvt. Ltd, Peenya Industrial Area, Bangalore, India, 4. Department of Biotechnology, NMAM Institute of Technology, Nitte University, Nitte, India, 5. Department of Clinical Embryology, Kasturba Medical College, MAHE, Manipal, India	Drug Delivery	November 2017	6.402

Title of the publication	Author name (MAHE affiliated)	Institution/Department	Journal	Month and year of publication	1-yr impact factor
A mutation in IFT43 causes non-syndromic recessive retinal degeneration	Pooja Biswas <sup>1, 2</sup> , Jacque L Duncan <sup>3</sup> , Muhammad Ali <sup>4</sup> , Hiroko Matsui <sup>5</sup> , Muhammad Asif Naeem <sup>6</sup> , P B Raghavendra <sup>2</sup> , Kelly A Frazer <sup>5, 7</sup> , Heleen H Arts <sup>8</sup> , S Riazuddin <sup>6, 9, 10</sup> , Javed Akram <sup>9,10</sup> , J Fielding Hejtmancik <sup>11</sup> , S Amer Riazuddin <sup>4*</sup> , Radha Ayyagari <sup>1</sup>	1. Shiley Eye Institute, University of California San Diego, La Jolla, CA, USA; 2. REVA University, Bengaluru, Karnataka, India; 3. Ophthalmology, University of California San Francisco, San Francisco, CA, USA; 4. Department of Ophthalmology, The Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD, USA; 5. Institute for Genomic Medicine, University of California, San Diego, La Jolla, CA, USA; 6. National Centre of Excellence in Molecular Biology, University of the Punjab, Lahore Pakistan; 7. Department of Paediatrics, Rady Children's Hospital, Division of Genome Information Sciences, San Diego, CA, USA; 8. Department of Pathology and Molecular Medicine, McMaster University, Hamilton, Canada; 9. Allama Iqbal Medical College, University of Health Sciences Lahore, Lahore, Pakistan; 10. National Centre for Genetic Diseases, Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad, Pakistan, 11. Ophthalmic Genetics and Visual Function Branch, National Eye Institute, NIH, Bethesda, MD, USA	Human Molecular Genetics	December 2017	5.340
Influence of nanoparticles on the performance and emission characteristics of a biodiesel fuelled engine: An experimental analysis	Shiva Kumar, P Dinesha, Ijas Bran	Department of Mechanical and Manufacturing Engineering, Manipal Institute of Technology, MAHE, Manipal, 576104, India	Energy	December 2017	4.52

# Part I

Title of the publication	Author name (MAHE affiliated)	Institution/Department	Journal	Month and year of publication	1-yr impact factor
Novel KIAA0753 mutations extend the phenotype of skeletal ciliopathies	A Hammarsjö <sup>1,2</sup> , Z Wang <sup>3,4</sup> , R Vaz <sup>1</sup> , F Taylan <sup>1</sup> , M Sedghi <sup>5</sup> , K M Girisha <sup>6</sup> , D Chitayat <sup>7,8</sup> , K Neethukrishna <sup>6</sup> , P Shannon <sup>9</sup> , R Godoy <sup>7</sup> , KGowrishankar <sup>10</sup> , A Lindstrand <sup>1</sup> , J Nasiri <sup>11</sup> , M Baktashian <sup>12</sup> , P T Newton <sup>13</sup> , L Guo <sup>3</sup> , W Hofmeister <sup>1</sup> , M Pettersson <sup>1</sup> , A S Chagin <sup>13</sup> , G Nishimura <sup>14</sup> , L Yan <sup>15</sup> , N Matsumoto <sup>16</sup> , A Nordgren <sup>1</sup> , N Miyake <sup>16</sup> , G Grigelioniene <sup>1</sup> , S Ikegawa <sup>3</sup>	1. Department of Molecular Medicine and Surgery, Centre for Molecular Medicine, Karolinska Institutet, Stockholm, Sweden, 2. Clinical Genetics, Karolinska University Hospital, Stockholm, Sweden. 3. Laboratory for Bone and Joint Diseases, RIKEN Centre for Integrative Medical Sciences, Tokyo, Japan, 4. Department of Medical Genetics, Institute of Basic Medical Sciences, Peking Union Medical College, Chinese Academy of Medical Sciences, Beijing, China, 5. Medical Genetics Laboratory, Alzahra University Hospital, Isfahan University of Medical Sciences, Isfahan, Iran, 6. Department of Medical Genetics, Kasturba Medical College, MAHE, Manipal, India, 7. The Prenatal Diagnosis and Medical Genetics Program, Department of Obstetrics and Gynaecology, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada, 8. Division of Clinical and Metabolic Genetics, Department of Paediatrics, The Hospital for Sick Children, University of Toronto, Toronto, Ontario, Canada, 9. Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada, 10. Medical Genetics, Kanchi Kamakoti Childs Trust Hospital, Chennai, Tamilnadu, India, 11. Department of Paediatric Neurology, Faculty of Medicine, Child Growth and Development Research Centre, Isfahan University of Medical sciences, Isfahan, Iran, 12. Student Research Committee, Department of Modern Sciences and Technologies, Faculty of medicine, Mashhad University of Medical Sciences, Mashhad, Iran, 13. Department of Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden, 14. Intractable Disease Centre, Saitama University Hospital, Saitama, Japan, 15. Department of Neurology, China-Japan Friendship Hospital, Beijing, China, 16. Department of Human Genetics, Yokohama City University Graduate School of Medicine, Yokohama, Japan	Scientific Reports	November 2017	4.259

Title of the publication	Author name (MAHE affiliated)	Institution/Department	Journal	Month and year of publication	1-yr impact factor
Climatic periodicities recorded in lake sediment magnetic susceptibility data: Further evidence for solar forcing on Indian summer monsoon	Anish Kumar Warriar, Kizhur Sandeep, Rajasekharaiah Shankar	Department of Civil Engineering, Manipal Institute of Technology, MAHE, Manipal, 576104, Karnataka, India; Department of Marine Geology, Mangalore University, Mangalagangothri 574199, Karnataka, India; Department of Geology, School of Earth Science Systems, Central University of Kerala, Tejaswini Hills, Periyar (P.O.), Kasaragod, Kerala 671123, India	Geoscience Frontiers	November 2017	4.256

## Part III

### MAHE Students' Research Forum (MAHE-SRF)

"Interdisciplinary conference on healthcare and technical research 2017" (ICHTR-2017)

"Interdisciplinary conference on healthcare and technical research" (ICHTR-2017) was organized during Dec 4-6, 2017 by the Manipal Academy of Higher Education Students' Research Forum (MAHESRF), under the aegis of Directorate of Research (DoR), Manipal Academy of Higher Education (MAHE), Manipal, India. It gave an opportunity to the participants [students (UG and PG)/research scholars/faculty members] from various disciplines to project their research work and to be a part of the interactive sessions with the peers in their related fields. "ICHTR-2017" aimed to ignite the young minds to come up with the innovative ideas towards the improvement in the quality of healthcare and technology. The conference featured keynote addresses and guest-lectures by many renowned researchers. There were two keynote addresses by Dr Iddya Karunasagar (International Consultant to organizations like FAO, WHO, and Asian Development Bank), and Dr Arun Shanbhag, Chief Innovation Officer, MAHE, Manipal and Professor of Biomedical Engineering at the Manipal Institute of Technology, Manipal.

In addition, there were 15 eminent speakers, who delivered plenary lectures. The lectures were delivered by Dr Manthan D Janodia (Topic: Fundamentals of IPR); Dr B Unnikrishnan (Topic: Integrating research into undergraduate medical education curriculum - A 25 point approach); Dr Joseph Thomas M (Topic: Ethical challenges in health care research); Dr Ramesh S Ve (Topic: Idea to commercialization taking innovations to market-conceptual framework, interdisciplinary team building and funding resources); Dr Ravikiran Ongole (Topic: Oral cancer detection and diagnosis: Are we doing enough?); Dr Sajjan Daniel George (Topic: Bio-inspired nano-engineering of surfaces for controlling the droplet dynamics); Dr Shama Prasada K (Topic: DNA Methylation: Basics to clinical application); Dr Somashekara Bhat (Topic: Design, fabrication, and testing of Micro-heaters and Micro-channels); Dr Usha Devdas (Topic: Scope of interdisciplinary research in health sciences); Dr Y Shrihari Upadhyaya (Topic: Entrepreneurship opportunities for researchers); Dr Yogendra Nayak (Topic: Journals and publication ethics); Dr Raviraja N S (Topic: Recent advances in stem cell research and therapy); and Dr Raveendranath Nayak (Topic: The trials and tribulations of a productive researcher - Do's and don'ts).

The conference brought together experienced minds with young and enthusiastic student community of a multitude of interlinked domains-Medicine and Health sciences, Pharmaceutical Sciences, Basic and Applied sciences, Engineering/Technical sciences, Management Sciences and related areas. ICHTR-2017 provided a medium to the participants to be a part of the oral and poster presentation sessions.

The conference had a total of 94 participants registered from both MAHE (School of Life Sciences, Manipal; Kasturba Medical College, Manipal and Mangalore; Manipal College of Dental Sciences, Manipal; Manipal Institute of Technology, Manipal; Faculty of Architecture, Manipal; Department of Commerce, Manipal; School of Management, Manipal; Manipal College of Pharmaceutical Sciences, Manipal and Melaka Manipal Medical College, Manipal) as well as from other nearby institutes such as K S Hegde Medical Academy, NITTE University; Govt Arts and Science College, Karwar; and SDM college of Naturopathy and Yogic Sciences, Ujire.

A total of 29 papers from health sciences, 10 from basic sciences, 13 in technical sciences and 26 from management stream were presented..

During valedictory of the ICHTR-2017, the Pro-chancellor (Health Sciences), MAHE, Manipal, Dr Poornima Baliga and the Pro-chancellor (Technical Sciences), MAHE, Manipal, Dr G K Prabhu, awarded best oral and poster presentations (first and second prizes) to the awardees. The list of winners for both oral and poster presentation sessions of ICHTR-2017 is below:

#### Oral presentation sessions

##### Health and basic sciences

**1. First prize:** Anu Radha Sharma, School of Life Sciences, MAHE, Manipal

**Title:** MirSNPs of clopidogrel metabolic pathway genes as modulators of clinical outcome in individuals with cardiovascular disease

**Author(s):** Anu Radha Sharma, Manik Vohra, Shashikiran Umakanth, Abdul Razak UK, Ranjan Shetty, Kapaettu Satyamoorthy, Padmalatha S Rai

**2. Second prize:** T Sowjanya, Kasturba Medical College, MAHE, Mangalore

**Title:** Comparison of age of menarche between government and private school girls

**Author(s):** Sowjanya T, Dr Bhagyalakshmi K

##### Technical sciences

**1. First prize:** Paritosh C Kulkarni, Manipal Institute of Technology, MAHE, Manipal

**Title:** Soot oxidation using perovskites as catalysts and their preparation

**Author(s):** Paritosh C Kulkarni, Cintia and Luciano

**2. Second prize:** Amit Jindal, Manipal Institute of Technology, MAHE, Manipal

**Title:** Glaucoma diagnosis and feature visualization using deep learning

**Author(s):** Amit Jindal, Sidharth Ramesh, Yogesh Lather, Tanmay Gulati, Bikramjeet Singh, Srikanth Prabhu, Govardhan Hegde

##### Management sciences

**1. First prize:** Immaculate Christina B, School of Management, MAHE, Manipal

**Title:** Operational efficiency in hospitals: A DMAIC framework in a multi-specialty unit

**Author(s):** Immaculate Christina B, Dr Swathi K S

**2. Second prize:** Rizwan Abdul Hafiz Dar, School of Management, MAHE, Manipal

**Title:** Process improvement in hospital lab testing

**Author(s):** Rizwan Abdul Hafiz Dar, Yogesh Pai P, S Lakshminarayanan



## Poster presentation sessions

### Health sciences

**First prize:** Nawal Palakkal Sathar, Kasturba Medical College, MAHE, Mangalore

**Title:** Does the clinical features of voice disorders vary with phonatory gap: A clinical voice analysis

**Author(s):** Nawal Palakkal Sathar, Harish S Dammanagi, Malavika Annakathil Anil

**Second prize:** Ashiya Shaima, Kasturba Medical College, MAHE, Mangalore

**Title:** An insight into communication profile of monozygotic twins with Phenylketonuria (PKU)

**Author(s):** Ashiya Shaima, Sunaina Yahiya, Dr Sudhin Karuppali, Manita Thomas

### Basic sciences

**First prize:** Mangala Hegde, School of Life Sciences, MAHE, Manipal

**Title:** IL-6 modulates angiogenesis in breast tumor models by epigenetic reprogramming of endothelial cells

**Author(s):** Mangala Hegde, Lingadakai Ramachandra, Kapaettu Satyamoorthy, Manjunath B Joshi

**Second prize:** C R Raghushekar, School of Life Sciences, MAHE, Manipal

**Title:** Assessing mitochondrial dysfunction by tryptophan autofluorescence: A laser induced fluorescence (LIF) study

**Author(s):** C R Raghushekar, S Chandra, K Satyamoorthy, K K Mahato

### Technical and management sciences

**First prize:** Nehal Shukla, Faculty of Architecture, MAHE, Manipal

**Title:** Articulating memory into spaces

**Author (s):** Nehal Shukla, Tanya Verma, Purushottam Kesar

**Second prize:** Pratheeksha, Department of Commerce, MAHE, Manipal

**Title:** Content analysis in print media: A study with specific reference to *Udayavani* Daily

**Author(s):** Pratheeksha Shetty, Vikram Baliga

## Editorial Team

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Deputy Director Research (Health Sciences), Manipal Academy of Higher Education, Manipal
4. Dr Santhosh K V  
Deputy Director Research (Technical), Manipal Academy of Higher Education, Manipal
5. Dr Rekha R Shenoy  
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