



**MANIPAL COLLEGE
OF PHARMACEUTICAL SCIENCES**
MANIPAL
(A constituent unit of MAHE, Manipal)

Vol: 7

Issue: 1

January to June 2021

The most sought-after for pharmaceutical education and research

Ad Meliora

a biannual newsletter



Programs: DPharm | BPharm | MPharm | PharmD | PharmD (PB) | Doctoral



Pharmacy and Pharmacology
#

150-200



MCOPS RECOGNITIONS/ AWARDS/ACHIEVEMENTS

4 May 2021: MCOPS bags the Second rank in private pharmacy colleges ranking according to the list published by *Careers360 - India's Best University 2021* magazine.

23 March 2021: Centre for Biotherapeutics Research, Manipal commenced the activities of MAHE-Esco Aster (Singapore-based CDMO) collaborative translational research unit. Dr Raviraja N S, Director, Corporate Relations and Professor Pharmaceutical Biotechnology, MCOPS serves as the head of this initiative.

1 June 2021: A Centre for Pharmaceutical Care (CPC) has been established under MAHE on 1 June 2021. Dr Rajesh V, Assistant Professor-Selection Grade, Department of Pharmacy Practice, MCOPS is the Coordinator of the centre. The main aim of the centre is to assist the physicians in the rational use of medicines and apprehend the patient's choice. The broader objectives of the centre include fostering clinical pharmacy research, education, and practice.

10 March 2021: A centre for cGMP has been established by MAHE. Dr Girish Pai Kulyadi, Faculty, Department of Pharmaceuticals is the coordinator of the Centre. Dr Kulyadi, in a media release, said, "There is a huge industry-academia gap with respect to cGMP concepts in academic curriculum and actual industry practice, and therefore academia has a major role to inculcate a strong cGMP foundation in young brains."

The screenshot shows a news article on BusinessLine. The headline is "MAHE sets up Centre for cGMP". The sub-headline reads "Our Bureau | Mangaluru | Updated on March 10, 2021". The article text states: "Manipal Academy of Higher Education (MAHE) has established a Centre for current Good Manufacturing Practices (cGMP) at Manipal College of Pharmaceutical Sciences in Manipal." It quotes Dr. Girish Pai Kulyadi, coordinator of the centre, saying, "There is a huge industry-academia gap with respect to GMP concepts in academic curriculum and actual industry practice, and therefore academia has a major role to inculcate a strong cGMP foundation in young brains."

1 May 2021: Dr H Raghu Chandrashekar, Professor and Head, Department of Pharmaceutical Biotechnology, MCOPS was conferred with Best Teacher Award by the Antiviral Research Society.



FACULTY AWARDS/ACHIEVEMENTS

26 February 2021: Dr Usha Y Nayak, Associate Professor, Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences (MCOPS), received the third position in "BioPress" for presenting the poster entitled "Glycosylated mesoporous silica nanoparticles loaded with a fluoroquinolone antibiotic for overcoming antimicrobial resistance in UTP" in International Symposium BIOCREST 2021 held during 24 to 26 February 2021 organized by School of Biotechnology at Amrita Vishwa Vidyapeetham, India; CHARM at University of California San Diego, USA; Bugworks Inc., India and C-CAMP, India. The paper was co-authored by Songhita Mukhopadhyay, Reema Narayan, Shivaprasad Gadag, and Padmaja A Shenoy.



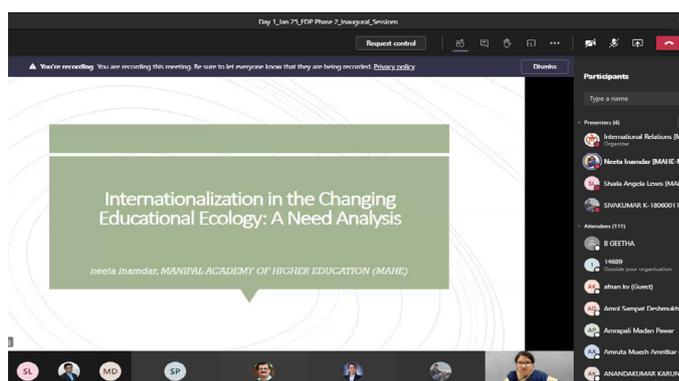
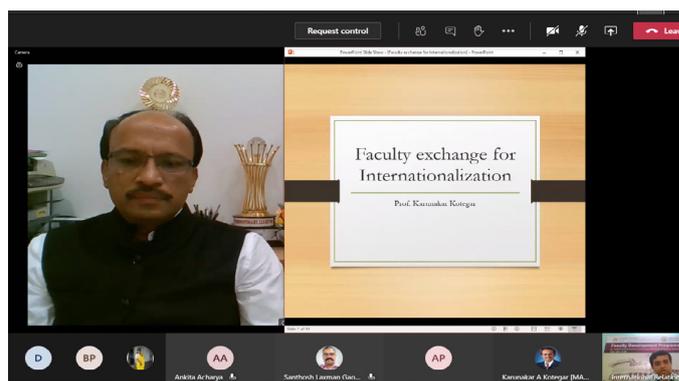
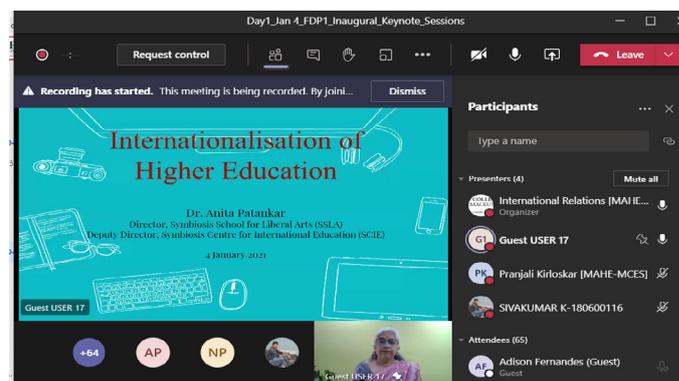
23 to 24 May 2021: Dr Vasudev Pai, Assistant Professor-Senior Scale, Department of Pharmacognosy, MCOPS, MAHE, Manipal clinched the "Best Professional e-Poster Presentation Award" for the project titled "Insilico and In-vitro acetylcholinesterase inhibitor: An approach towards Alzheimer's disease" in RAKCOPS International e-Conference on Drug Development 2021 during 23 to 24 May 2021. The theme of the conference was "Quality Medicine from Bench to Bed Side" organized by RAK Medical and Health Sciences University, Ras Al Khaimah, UAE. The work was co-authored by Dr M Manjunath Setty and Dr Chandrashekar K S, Department of Pharmacognosy.



FACULTY DEVELOPMENT PROGRAMME (FDP)

4 to 16 January and 25 January to 6 February 2021: Department of Pharmaceutics, MCOPS organized AICTE sponsored two weeks Faculty Development Program (FDP) with the theme “Internationalization and Research Collaboration for Pharmacy Teachers – The way forward”. In a bid to step up and enhance faculty development via training, MCOPS, Manipal, organized this FDP on a virtual platform in two phases, which was unveiled on 4 January 2021. The program was inaugurated by Colonel B Venkat, Director, Faculty Development Cell, AICTE, New Delhi. Phase 1 of the program was organized from 4 to 16 January 2021 and phase 2 was organized from 25 January to 6 February 2021.

The objective of the event was to explore the opportunities in the field of Internationalization in Pharmaceutical Sciences, to improve and enhance collaborative research, and to define strategies to overcome the hurdles in the internationalization of pharmacy education and collaborative research across countries. Around 650 faculty members from 120+ AICTE approved pharmacy colleges from 19 states in India had registered and participated in the two phases of the FDP. 60+ speakers from various reputed universities and industries have delivered sessions related to the theme. The keynote address of FDP phase 1 on “Internationalization of Higher Education in India” was delivered by Dr H Vinod Bhat, Executive Vice President, MAHE on and the keynote address for phase 2 was delivered by Dr Neeta Inamdar, Head, Manipal Centre for European Studies, MAHE on “Internationalization and the Changing Education Ecology: A need analysis”.



SHORT TERM TRAINING PROGRAMME (STTP)

18 January to 13 March 2021: Department of Pharmaceutics, MCOPS, Manipal organized AICTE sponsored Short Term Training Program (STTP) online from 18 January 2021 in three phases. The theme for the program was “Innovative pedagogy to develop and implement skill-based pharmacy curriculum - A

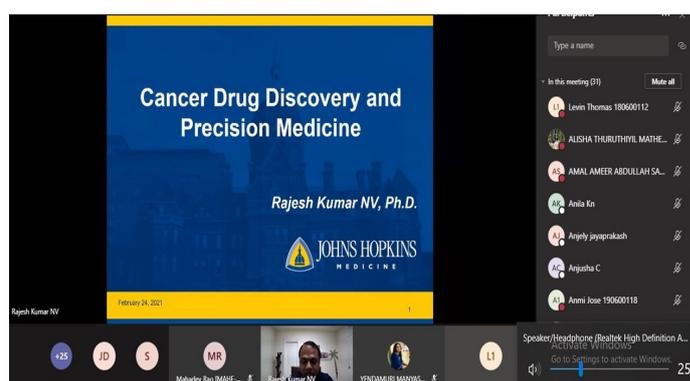
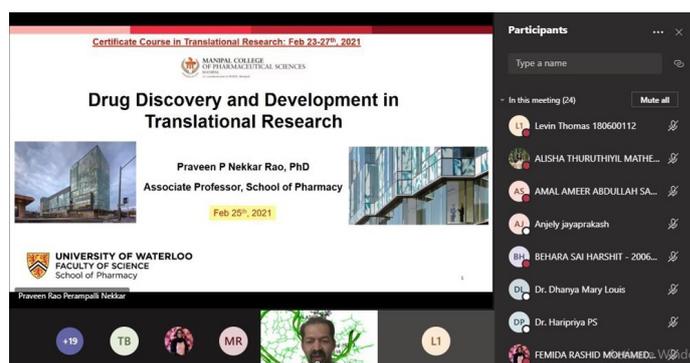
faculty perspective". The objective of the event was to understand the fundamental elements of effective teaching and learning in varied learning contexts, exposure to the latest pedagogical methods, and to focus on industry-specific skills in the curriculum for better connection of students with industry.

The three phases of the STTP, organized on 18 to 23 January 2021, 8 to 13 February 2021, and 8 to 13 March 2021 was attended by 700+ pharmacy teachers across 110+ pharmacy colleges across 18 states of India. 75+ resource persons from reputed institutions of India, abroad, and from pharmaceutical industries spoke on various pedagogic topics related to the theme and the skills required from the students.



CERTIFICATE COURSES

23 to 27 February 2021: Translational Research Certificate Course 2021 - Department of Pharmacy Practice, MCOPS, Manipal organized a five-day certificate course program on translational research for the benefit of students pursuing postgraduate degree courses such as MSc/MPharm/PharmD/MD/MS/DM/MCh, PhD scholars, and research scholars in any discipline of biological sciences. The course was coordinated by Dr Mahadev Rao, Professor and Head, Department of Pharmacy Practice, MCOPS. There were 16 resource persons from various institutions like MCOPS, KMC-Manipal, KMC-Mangalore, PSPH, Yenepoya University-Mangalore, MedGenome-Bengaluru, Novartis-Hyderabad, AIMST University-Malaysia, University of Waterloo-Canada, Johns Hopkins School of Medicine-United States. The various lectures on topics such as translational research, proteomics, genomics, Human Genome Project (HGP), genomic technologies, new cancer drug discovery and precision medicine etc, were delivered.

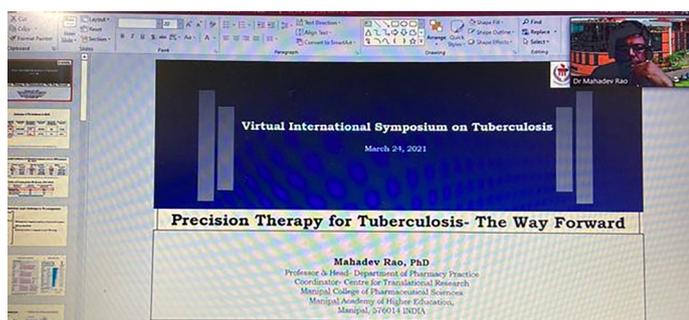


April 2021 to May 2021: Certificate Course in Biology and Therapy of Cancer Indo-American Cancer Consortium organized a certificate course in "Biology and Therapy of Cancer Course" from April to May 2021. Classes were conducted on Monday and Wednesday during 5:00-8:30 PM IST. The classes were offered in two tracks: Basic Cancer Biology and Translational Oncology and Epidemiology. The course included key areas of cancer development such as genetic and epigenetic factors,

cell cycle controls, the role of apoptosis/autophagy, chromosomal instability, signal transduction defects, the role of viruses in causing cancer, etc. The latter part of the curriculum addressed various clinical aspects for the treatment of cancer.

GUEST LECTURES

24 March 2021: Dr Mahadev Rao, Professor and Head, Department of Pharmacy Practice delivered a lecture on “Precision therapy in Tuberculosis” at the International TB Symposium on 24 March 2021. The symposium was jointly organized by Manipal Centre for Infectious Diseases.



19 February 2021: Department of Pharmacognosy organized its second guest lecture webinar by Dr Deepak Mundkinajeddu, Head–R&D and Human Health Division, Natural Remedies Private Limited, Bangalore, India through MST, on the topic “Industry perspectives on quality of botanicals in the global regulatory context”. Dr Richard Lobo, Head, Department of Pharmacognosy, delivered the welcome address and introduced the speaker to the participants Dr Deepak; a renowned scientist and phytochemist, deliberated on how the quality of the botanicals/raw materials affect the quality of the drugs from an industry perspective. He also stressed how the substituents and adulterants will affect the quality of the drugs and how to overcome the problems for the same, in his lecture with various examples, he explained how to set standards for the botanicals of various species of the same genus plant. Dr Deepak also narrated how the geographical variation will affect the production of

secondary metabolites of therapeutic importance in the plant, which is to be considered while selecting the raw materials for the production of the herbal dosage form. In the last part of his lecture, he explained the regulatory norms to be followed by the manufacturer while producing the dosage forms as per the guidelines, to maintain the quality and efficacy of the herbal drugs. The lecture was very informative and well appreciated by the participants, after the lecture Dr Deepak interacted with the participants and answered all the queries raised by them. The lecture was attended by more than 50 participants. Dr Vasudev R Pai Assistant Professor Senior Scale coordinated the guest lecture, Dr Richard Lobo proposed the vote of thanks.



17 April 2021: Department of Pharmaceutical Chemistry, MCOPS organized a guest lecture via MST (Microsoft Teams). Dr Mukesh M Mudgal, Florida International University, was the resource person. He delivered a lecture titled “Insights into the Inhibition of Ribonucleotide Reductase by 2’-Chloro-2’Deoxynucleotides: Biomimetic Studies”. Dr Mudgal shared his experience in the synthesis of small organic molecules using various methods, which would help the department, PG students, and research scholars. His lecture comprised an introduction to ribonucleotide reductases (RNRs) and their importance. He explained the vital role played by RNR in DNA biosynthesis and its control on cell growth making it one of the main targets for anticancer therapy. Dr Mudgal concluded by projecting a virtual tour of his lab at Florida University. PG students, research scholars, and faculty participated in large numbers and were benefitted from his lecture.

Dr Jeyaprakash was the master of ceremony. Dr Ruchi Verma introduced the speaker to the audience. Dr Aravind Pai proposed a vote of thanks. The event was organized and coordinated by the Head of the department, Dr Suvarna G Kini.



brand value. The insightful session helped participants enhance their understanding of the use of digital strategy in pharmaceutical marketing.



WEBINAR ORGANIZED BY PROFESSIONAL BODIES

6 June 2021: Dr Virendra S Ligade, Associate Professor, Department of Pharmacy Management, MCOPS, MAHE delivered a guest lecture in AICTE sponsored one week online Short Term Training Program (STTP) on scientific research paper, patents and research proposal writing for grants and ethics on topic research incentives and collaborations, organized by R C Patel Institute of Pharmaceutical Education and Research, Shirpur (Maharashtra).



08 February 2021: Innovative Communication Club (I2C)-Manipal College of Pharmaceutical Sciences (MCOPS), Manipal Academy of Higher Education (MAHE) conducted a “National Webinar on Science Journalism – A void to be filled by upcoming scientists” on 08 February 2021. The event was inaugurated by Professor Varadesh Hiregange, Director, Gandhian Centre for Philosophical Arts and Sciences, MAHE on Microsoft Teams. Dr Felix Bast, Science Communicator, Associate Professor, Central University of Punjab, Mr Dinesh C Sharma, Jawaharlal Nehru Fellow, Award-winning Science Journalist, and Ms Subhra Priyadarshini, Chief Editor of Nature India, Award-winning Science Journalist delivered their talk on history and importance of science communication, science journalism in India - past and present challenges and informed about career opportunities for students in this field. They shared their experiences and gave information about the need for capacity building in this growing field. Dr C Mallikarjuna Rao, Principal, Dr Gautham G Shenoy, Vice Principal, and I2C coordinator Dr Usha Y Nayak participated in this event. More than 80 students and staff from various universities across India had attended the webinar. I2C members, Ms Alisha Saida, Mr Vijay Kumar, Mr Muralidhar Pise, and Ms Swastika Maity, coordinated the program.

10 June 2021: Dr Virendra S Ligade, Associate Professor, Department of Pharmacy Management, MCOPS, MAHE delivered a guest lecture for Certificate Course on “Employability Skills” on the topic “Presentation Skills” organized by Dadasaheb Balpande College of Pharmacy (DBCOP), Nagpur.

25 June 2021: Students and alumni of the Department of Pharmacy Management, MCOPS had an interactive webinar with Mr Salil Kallianpur, Founder ARKS Knowledge Consulting Private Limited and former member of Board of Directors for GlaxoSmithKline Asia Private Limited Mumbai. Over 35 participants attended this session. During his interaction, Mr Kallianpur highlighted the importance of digital communication in marketing. He explained the nuances of marketing, the evolution of the practices and digitalization undertaken by companies, especially tech giants. He used the corollary of the tech industry to explain the importance of digitalization in the pharmaceutical sector, the challenges associated and how to overcome them Mr Kallianpur emphasized changing the mindset of consumers, improving user experience, and using digital strategy to enhance the

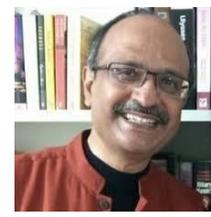
SPEAKERS



Dr Felix Bast
Associate Professor
Science Communicator



Subhra Priyadarshini
Chief Editor
Nature India
Science Journalist



Dinesh C Sharma
Jawaharlal Nehru
Fellow
Science Journalist

CONFERENCE/WORKSHOPS/TRAINING

7 to 9 January: CPCON 2021 - The sixth international conference on clinical pharmacy was conducted from 7 to 9 January 2021 virtually on Microsoft Teams. The event was based on the theme “Redefining Clinical Pharmacy Practice and Education: Rising to the Pandemic Challenge”. A pre-conference workshop was conducted, followed by two days of the conference. The inaugural address was given by Lt Gen (Dr) M D Venkatesh, Vice Chancellor, MAHE. A total of 174 national and international registered delegates participated in the event. A total of 118 scientific abstracts were received from various categories of pharmacy disciplines.

The speakers for day 1 were Dr Coney Kang (University of Southern California School of Pharmacy, USA), Dr Rohan Elliott (Senior Pharmacist at Austin Health Adjunct Associate Professor at Monash University, Melbourne, Australia), Dr Dennis Thomas (Early Career Research Fellow Priority Research Centre for Healthy Lungs, Hunter Medical Research Institute (HMRI)).

Dr Rajesh Nayak (Associate Professor Pharmacy Administration and Public Health, College of Pharmacy and Health Sciences, St John's University, New York, USA), Dr Ng Yen Ping (Deputy Dean (Academics and International Affairs) and Head of Clinical Pharmacy, Faculty of Pharmacy, AIMST University, Malaysia), Dr Raghavendra Pai (Director, Regional Pharmacovigilance Lead, AbbVie, Singapore), and Dr Thiyagu Rajakannan (Research Associate IMPAQ International's Health Division, Maryland, USA) were part of the day 2 conference.

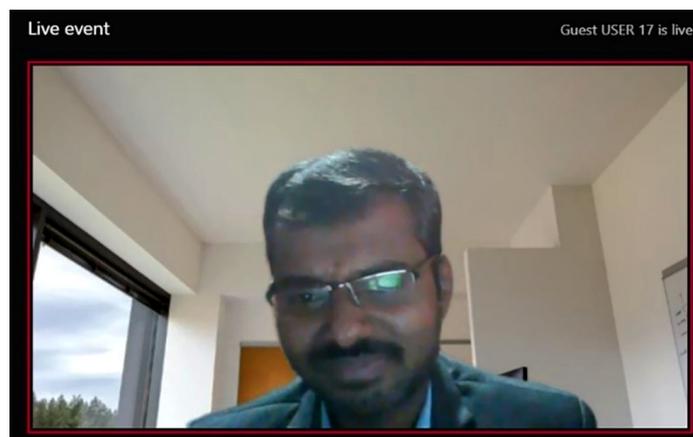
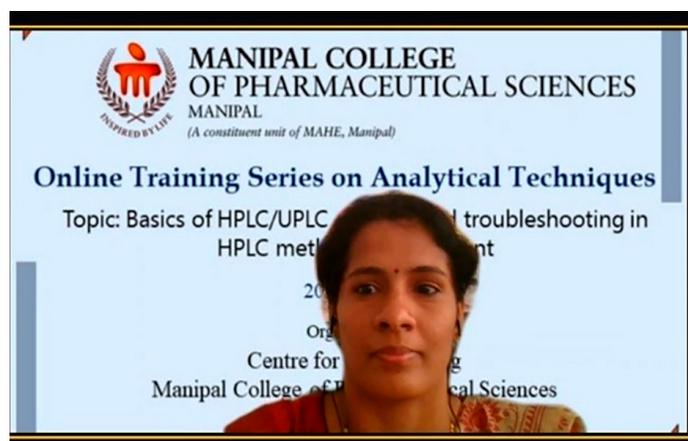
The speakers shared their real-life experiences in the field of pharmacy before and during the pandemic. They also gave insights on various opportunities for students in the area of pharmacy and the skills required to study abroad.



19 to 21 January 2021: Cloud-based Hands-on Workshop: Rational Computational Drug Design Approaches - Manipal Centre for Molecular Simulations, MAHE, Manipal in coordination with Schrodinger has jointly organized an online “Cloud-based Hands-on Workshop: Rational Computational Drug Design Approaches” from 19 to 21 January 2021. This workshop was inaugurated by the Retd Lt Gen (Dr) M D Venkatesh, Vice Chancellor, MAHE, Manipal. The workshop demonstrated how industry-leading computational molecular modelling tools are used to aid in drug design and formulation development and to incorporate these tools into the academic curriculum and research projects. This program has also provided an exceptional value addition to professional development in the form of new skill enhancement. The program was conducted as a three-



day hands-on cloud-based workshop on the structure and ligand-based drug discovery using the Schrödinger suite hosted on Amazon Web Servers. About 53 participants from constituent colleges of MAHE were registered for this cloud-based hands-on Workshop. Participants have received practical experience in using the software and in-person guidance on the topics like Maestro GUI, organic molecule enumerations, protein selection, preparation, modelling, ligand hypothesis generation, etc. They also learned rational strategies to screen organic molecules against therapeutic targets of interest. The workshop has provided basic theoretical background presentations for molecular mechanics, molecular docking, pharmacophore modelling, homology modelling, molecular dynamics, and case studies on modern drug discovery projects.



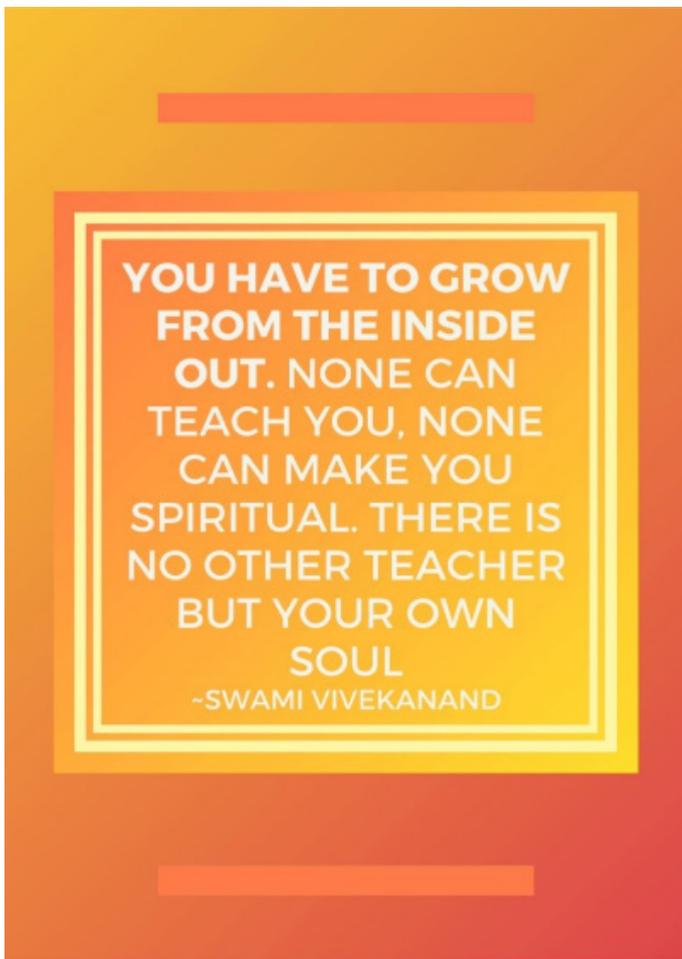
20 March 2021: “Online Training Series on Analytical Techniques” - The Centre for Drug Testing, MCOPS, MAHE, Manipal organized the first session of the “Online Training Series on Analytical Techniques”, on 20 March 2021. The session was on the topic “Basics of HPLC/UPLC analysis and troubleshooting in HPLC method development” delivered by Dr Karthik Arumugum, Group Leader, TKPL, Bengaluru, India. Dr Karthik explained the basics of HPLC and UPLC techniques, including column selection, solvent selection,

method validation, and troubleshooting in the analysis. He also discussed on the day today’s problems in the analysis and possible solutions. About 500 participants from various pharmacy colleges across India attended this program. The session was coordinated by Dr Usha Y Nayak, Associate Professor, Department of Pharmaceutics; Coordinator, Centre for Drug Testing, MCOPS, MAHE, Manipal.

SPECIAL DAYS

12 January 2021: MAPS celebrated National Youth Day on 12 January 2021 to commemorate the birth anniversary of the philosopher, social reformer and thinker, Swami Vivekananda, one of India’s greatest spiritual and social leaders. Swami Vivekananda personified the eternal energy of the youth so that they could bring about social change. National Youth Day is important to inspire young minds and remember the invaluable contribution of Swami Vivekananda. The motive of this event was to propagate the philosophy and ideals of Swami Vivekananda for which he lived and worked. Swami Vivekananda stands as a role model for generations in various respects. An essay writing competition was held for the students on the topic “Channelizing Youth Power for Nation Building”. Students actively participated in the competition despite exam schedules.

The student council celebrated this auspicious day by spreading the ideas and inspirational words of the great leader. All the members of the MAPS student council put up stories on their social media accounts to ignite and create awareness to make a better future for the country. We were successful in delivering knowledge and literature to the students to build good characters and true citizens of the Nation.



12 March 2021: MCOPS, Manipal celebrated “India’s 75 years of Independence - Azadi Ka Amrut Mahotsav” by organizing a webinar entitled “India’s Freedom Struggle”. The event was held on 12 March 2021. Professor Varadesh Hiregange, Director, Gandhian Centre for Philosophical Arts and Sciences, MAHE was the resource person. Professor Hiregange reiterated the role played by various freedom fighters during the early stages of freedom fighting. He also spoke about the approaches adopted by Mahatma Gandhi for achieving freedom. Professor Hiregange dealt in detail with the nonviolent approach, Dandi March, Quit India Movement, and Gandhiji’s vision of the post-independence era.

The event was attended by faculty members, research scholars, and students of MCOPS. Dr G Gautham Shenoy, Vice Principal delivered the welcome address. Syeda Alisha Md Isha Ali, Research Scholar, Department of Pharmaceutical Quality Assurance, President, Innovative Communication Club (I2C)-Manipal College of Pharmaceutical Sciences introduced the chief guest. Dr Gautham Shenoy, Vice Principal and Professor, Pharmaceutical Chemistry, MCOPS proposed the vote of thanks.

4 to 6 February 2021: On account of World Cancer Day, the Community Development Committee, MAPS organized a guest talk and a two-day blood donation drive. The guest talk was held on 4 February 2021. The theme for the talk was “Cancer Awareness and the Importance of Blood Transfusion”. The speakers were Dr Karthik S Udupa, Dr Naveen Salins, Dr Shamee Shastry, and Dr Mahadev Rao. Around 80 participants attended the program. On 5 and 6 February 2021, the blood donation was conducted at the KMC Blood Bank following strict COVID-19 safety measures. Out of the 69 volunteers who registered for the blood donation drive, 52 were able to donate. The donors received a certificate and badge from the Blood Bank.



4 FEBRUARY **WORLD CANCER AWARENESS DAY**

I AM AND I WILL

CDC INVITES YOU TO A HEALTH TALK ON
"CANCER AWARENESS AND THE IMPORTANCE OF BLOOD DONATION"

From 4-5pm Platform: **Zoom**

OUR SPECIAL SPEAKERS:

- DR. NAVEEN SALINS**
 Professor & Head,
 Department of Palliative
 Medicine and Supportive
 Care, Kasturba Medical
 College, Manipal.
- DR. KARTHIK UDUPA**
 Associate Professor & Head,
 Department of Medical
 Oncology, Kasturba College,
 Manipal.
- DR. SHAMEE SHASTRY**
 Professor and Head,
 Department of
 Immunohematology and
 Blood Transfusion,
 Kasturba Medical College,
 Manipal.

Contact: Lipin (+91 9582800236), Alisha (+91 7022651631)

ALUMNI MEET

24 April 2021: MCOPS alumni meet was coordinated by Dr Sreedhar D by the virtual means for the first time. Mohan Devineni delivered the welcome address. This was followed by thanking and observing silence for a minute. Sam Maddali introduced Dr C Mallikarjuna Rao, Principal -MCOPS and invited him for the speech. Closing remarks were rendered by Chandra Chaurasia.

UPCOMING EVENTS

20 to 25 September 2021: Online Quality Improvement Program on the theme “Quality management in the design, discovery, and development of drugs from the natural and synthetic origin” will be conducted in two slots.

1. Slot I (Organized by the Department of Pharmaceutical Chemistry) will be held from 20 to 22 September 2021
2. Slot II (Organized by Department of Pharmaceutical Quality Assurance) will be between 23 to 25 September 2021.

The program is sponsored by the All India Council for Technical Education, New Delhi with maximum participation of 200 registrants who will be awarded 3 credits.