

MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES MANIPAL

(A constituent unit of MAHE, Manipal)

Vol: 8 | Issue: 2 July to December 2020

## The most sought-after for pharmaceutical education and research



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









MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES IS THE TOP PRIVATE PHARMACY COLLEGE IN INDIA AS PER @CAREERS360 RANKING.

T IS A MOMENTOUS OCCASION FOR ALL OF US AT MCOPS.



#### CHANGE AT THE TOP Jamia Hamdard has been displaced by Manipal College of Pharmaceutical Sciences but the same institutions are in top five.

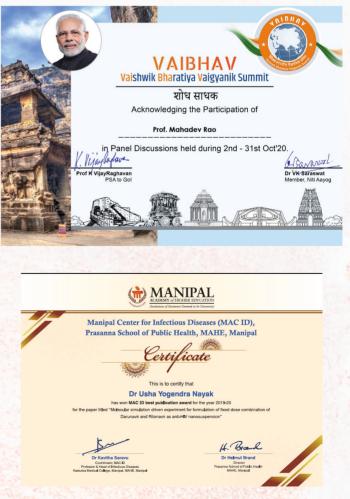
117.91	128.97	117.33	364.21
			207.21
109.78	150.00	90,89	350.67
105.55	123.02	115.74	344.31
108.85	136.90	95.02	340.78
100.74	122.70	114.53	337.97
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### FACULTY ACHIEVEMENT

Dr Yogendra Nayak, Associate Professor, Department of Pharmacology, received the Scopus online quiz prize conducted by Scopus, Elsevier. The quiz was conducted for South Asia Region in August 2020. Dr Mahadev Rao, Professor and Head, Department of Pharmacy Practice, participated in the Vaibhav Summit (a first-of-its-kind event) from 2 October 2020 to 31 October 2020.



Dr Usha Y Nayak, Associate Professor, Department of Pharmaceutics was awarded the 'MAC ID affiliated best publication award 2019-20' for her publication titled, "Molecular simulation driven experiment for formulation of fixed dose combination of Darunavir and Ritonavir as anti-HIV nanosuspension". The award was announced on the Virtual World AIDS Day symposium 2020 on 1 December 2020 organized by the Department of Infectious Diseases, KMC Manipal and Manipal Center for Infectious Diseases (MAC ID).



**9 July:** Centre for Digital Learning in coordination with the parent-teacher association of Madhava Kripa School, Manipal brought an awareness video on eye care during digital learning. Dr Anoop Kishore, Associate Professor in the Department of Pharmacology was the coordinator for the centre.

**2 September:** Dr Virendra S Ligade, Associate Professor, Department of Pharmacy Management published a textbook on Pharmacy Practice for VII semester BPharm. This textbook is written primarily for pharmacy students as per the PCI syllabus.

### Awards won by students

- 1. Chetan Hasmukh Mehta, Research Scholar in Pharmaceutics at MCOPS secured the third position (South Zone) in PharmTechChamp International Quiz organized by Chitkara College of Pharmacy, Chitkara University, Rajpura, Punjab in association with Indian Pharmaceutical Association, Association of Pharmaceutical Teachers of India (APTI) and Operant Pharmacy Federation (OPF) held on 25 July 2020. Over 500 students participated from national and international institutes. Questions from various topics such as drug discovery development, current therapeutics, industrial technology, quality assurance methods, pharmacy practice, community pharmacy, jurisprudence, pharma business, brands and corporate profiles were included. Currently, Chetan is pursuing his PhD under the guidance of Dr Usha Nayak, Department of Pharmaceutics at MCOPS.
- 2. Aditi Bajpai, PharmD Intern, bagged the Best Oral Presentation Award for the topic, "Potentially inappropriate medication use in geriatrics according to American geriatrics society-updated Beers criteria 2019 - prevalence and associated factors" in the first International Virtual Conference on Advances in Health Economics and Outcomes Research jointly organized by ISPOR Nitte (Deemed to be University) Student Chapter and Department of Pharmacy Practice, NGSM Institute of Pharmaceutical Sciences, Mangaluru, Karnataka during 27-28 November 2020.





3. Shilia Kurian won second prize in the Student's Pharmaceutical Conclave hosted by Pharmacist Society of Kerala, in association with Kerala Pvt Pharmacists Association on 21 August 2020. Collaborators - Dr Navya Vyas and Dr Manu Mohan. She is doing PhD under Dr Sekhar Sonal, Faculty in the Department of Pharmacy Practice.

#### 24 October: Book Release

The pharmaceutical industry in India is a wellestablished multi-crore industry and definitely, there is a substantially rising demand for pharmaceuticals given our weird lifestyles and food consumption patterns. Quality is of prime importance for pharmaceutical products. It is not possible to have a defect-free product in any sector/area. However, quality issues in medicines are a significant concern since an ailing patient consumes the product. This first-of-its-kind book, "Pharmaceutical Consumer Complaints: A guide to Academia and the Pharmaceutical Industry" is aptly timed when there is a critical need to continually upgrade the quality of products manufactured, given the increasing consumer expectations. "Extensive research by Dr Girish Pai and his team has gone into capturing live examples, analysing them, classifying them, and the manual includes probable root causes, suggests remedial measures, and clinical significance" was the message from Mrs Vasanthi Ramdas Pai, Trustee, Manipal Academy of Higher Education on the book's e-release held on 24 October 2020. The book has a foreword written by Professor B Suresh, President, PCI (Pharmacy Council of India) and Dr George Patani, Hon. General Secretary IDMA (Indian Drugs Manufacturers' Association). The prologue is written by Harish K Jain, Director Embiotic Laboratories and Secretary KDPMA (Karnataka Drugs and Pharmaceuticals Manufacturer's Association).

The book is published by Manipal Universal Press, an entity of Manipal Academy of Higher Education. Manipal. Experts from academia and industry have contributed as authors to this book. The book is edited by Dr Girish Pai Kulyadi, Dr Muddukrishna BS, (both faculty members at MCOPS, MAHE) and Dr Richa

Ajay Dayaramani (Member, PCI) and has 50 unique real-life cases with its remedial measures. The Chief Guest for the book e-release event was Mrs Vasanthi Ramdas Pai, Trustee, Manipal Academy of Higher Education and Lt Gen (Dr) M D Venkatesh, Vice-Chancellor MAHE, was the guest of honour for the book release event. The entire event was conducted online, keeping in mind the government's social distancing norms due to COVID-19. The book's first copies were handed over to Mr Manohar S Shetty, Managing Director, Sai Radha Pharma (I) Pvt. Ltd, and Mr Prabhakar M, Vice President, Hetero, Hyderabad. Professor Shailendra Saraf (Vice President, PCI, New Delhi), Mr G N Prashanth (Senior VP and Head, Corporate Quality, Granules India Ltd) also gave their expert opinion on the book. Dr Girish Pai Kulyadi and Dr Richa Dayaramani gave the book's insights and on how to bridge the academia-industry gap. Dr Neeta Inamdar, Chief Editor, Manipal Universal Press, welcomed everyone and Dr Muddukrishna, co-editor of the book, proposed the Vote of Thanks. Mr Ravindra Shenoy U, Faculty, Department of Commerce, MAHE, was the Master of Ceremonies.



Mrs Vasanthi Ramdas Pai and Lt. Gen (Dr) M D Venkatesh releasing the first copies to Mr Manohar S Shetty and Mr Prabhakar M

Release of the book 'Establishment of Universities of Eminence in India'

Dr N Udupa, Professor, Manipal College of Pharmaceutical Sciences and Former Director of Research, MAHE, Manipal published a book titled 'Establishment of Universities of Eminence in India'. The book was released by Dr H S Ballal, Pro Chancellor and Lt Gen (Dr) M D Venkatesh, Vice Chancellor of MAHE, Manipal on 9 November 2020. Dr Ballal lauded the research contributions of Dr Udupa and said this book is very informative and showcases the universities of eminence in India. Lt Gen (Dr) M D Venkatesh congratulated Dr N Udupa for bringing out this book at a time, when university rankings are of paramount importance. Dr P L N G Rao (Pro Vice Chancellor), Dr H Vinod Bhat (Executive Vice President), Dr Raviraja N S (Director, Corporate Relations) and Mr S P Kar (Director PR and Media) of MAHE and Mr Prashant Shetty of Navayuga Press, Udupi were present during the release event.

Dr N. Udupa interviewed about 25 Vice Chancellors of

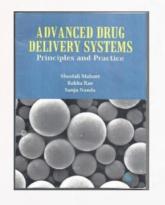
MAHE Manipal and compiled this book for the benefit of students, faculty members and university libraries. The book encompasses a list of world's top ranked universities and the quality standards and infrastructure required for setting world-class eminent universities.





### Alumni Corner

1. Department of Pharmacy Management Alumna, Ms Sheefali Mahant (2005-2007 batch), who is pursuing her doctoral studies as a UGC-BSR from Maharshi fellow Dayananda University, Rohtak, published a



book titled "Advanced Drug Delivery Systems -Principles and Practice". Department of Pharmacy Management congratulates Ms Sheefali Mahant and commends this achievement.

 Deepak Paliwal, an alumnus participated in a clinical trial for Oxford's COVID-19 vaccine. It was a proud moment for all of us at MCOPS for his magnanimous contribution to mankind during the worst- hit period.

### GUEST LECTURES/ WEBINARS

8 August : Webinar lecture series for the year 2020-21 hosted by the Department of Pharmacy Practice commenced on 8 August 2020. The topic - "Basics of RevMan (Meta-Analysis) Software" was delivered by resource person Mr Jeetu Gangil via MS Team platform. Mr Gangil is a site report specialist (Clinical Process Specialist) at IQVIA (formerly, Quintiles IMS), Lucknow. Over 120 participants attended the programme.

8 August : A webinar was hosted by the Department of Pharmaceutical Quality Assurance on the topic-"Endogenous Biomarkers to Understand Transporter Related Drug-Drug Interactions". The lecture was presented by Dr T Thanga Mariappan, Director and Head of Pharmaceutical Candidate Optimization, Bristol Myers Squibb, Bangalore. The session was moderated by Dr Sudheer Moorkoth and Dr Swapnil J Dengale.

Dr Mariappan detailed on the significance of measuring endogenous biomarkers to study transporter related drug-drug interactions. He defined the basic terminologies, explained how transporter related drug-drug interactions could enhance or inhibit the expected activity of drugs citing examples. In-depth application of the subject was demonstrated by presenting a paper on using coproporphyrin as a biomarker in the prediction of drug-drug interactions [DDI] involving hepatic organic anion transporting polypeptide B1 and B3, using clinical DDI data of rifampicin. The illustration explained the selection of a biomarker, in-vitro, in-vivo, clinical and analytical studies that are involved in the process.

The two-hour session also involved "Quiz time". The lecture and the following discussions were enlightening and well appreciated by the audience.



**17 August :** A webinar on the theme "Way forward to tackle challenges of COVID-19 in India" was jointly organized by the Indian Association of Pharmaceutical Scientists and Technologists (IAPST), International Pharmaceutical Federation (FIP) and Manipal Academy of Higher Education (MAHE).

COVID-19 has emerged as a fatal viral pandemic in 2020, only next to polio with respect to the infection rate and morbidity. This demands a prioritized concern across the globe due to the unavailability of effective therapeutic and preventive modalities. In spite of deliberate and continuous research and efforts to tackle this disease, success is still remote. In this context, the webinar was an attempt to create awareness for preventive and protective measures, treatment options and the updates on current research. Dr N Udupa, Convener of the webinar emphasized on the relevance of the webinar in the current disquieting scenario. Dr D Sreedhar served as the moderator who introduced the speakers and facilitated in fetching responses for the participants' queries. Four eminent speakers namely, Dr Biswajit Mukherjee, Secretary IAPST, Kolkata, India, Dr Lisa Kathleen Ryan, Assistant Professor, Division of Infectious Diseases, University of Florida, USA, Dr Gill Diamond, Professor, Department Oral Immunology and Infectious Diseases, University of Louisville School of Dentistry, USA and Dr Vandana Patravale Professor UDCT, Mumbai, India addressed the theme. Dr Sreedhar R Pai managed the discussion forum. Valuable inputs from the speakers and active participation by 100 registrants rendered the webinar a success.

**24 August 2020:** Department of Pharmaceutics hosted a guest lecture (via MS Teams) on "Recent Advances in Transdermal Delivery of Drugs". Dr S Narasimha Murthy, Professor of Pharmaceutics and Drug Delivery, University of Mississippi, MS 38677, USA was the speaker. Faculty members, students and research scholars attended the lecture. Dr Murthy emphasized on the application of novel transdermal technologies in the delivery of drugs through the skin by citing several recent drug delivery technologies and products.

12 September : Department of Pharmaceutical Chemistry organized a guest lecture on "Trends in regulated bioanalysis approach towards large molecules/ peptides". Dr Raghavendra Shetty, Assistant Vice President at Navitas Life sciences, Manipal was the resource person. By using current state-of-the-art LC-MS (/MS) instrumentation, this approach is predominantly used for peptides, small proteins and oligonucleotides with a molecular weight typically below 4–8 kDa- opined Dr Shetty. Digested analyte approach is more complex and mainly used for proteins or larger peptides. He also stressed that in addition to the intact analyte approach, this approach involves a (enzymatic) digestion step, where the protein/peptide is digested into smaller peptides. PG Students, Research scholars and faculty participated in large numbers and were benefited from his lecture. Dr Jeyaprakash was the master of the ceremony of this event. Dr Ruchi Verma introduced Dr Shetty to the audience and a vote of thanks was proposed by Dr Aravinda Pai. The event was organized and coordinated by Head, Dr Suvarna G Kini.



# 21 September – 23 October: Schrodinger PCI webinar series on "Introduction to Computational Drug Design"

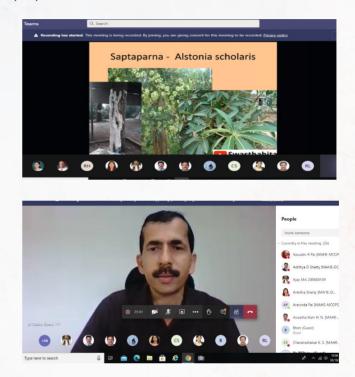
Pharmacy Council of India in coordination with Schrodinger and Manipal Centre for Molecular Simulations, MAHE, Manipal has jointly organized an online webinar series on "Introduction to Computational Drug Design". Various academic and industry partners such as Manipal Academy of Higher Education, JSS Academy of Higher Education and Research, Indian Society of Chemist and Biologist, Syngene and Glenmark were at the forefront in organizing this venture. The webinar series was conducted as a YouTube live event on all weekdays for two hours every day for a period of one month from 21 September 2020 to 23 October 2020.

Computational molecular modelling tools are changing the world of drug design and formulation development. The online webinar series has provided basic theoretical and practical applications of computational modelling using active learning strategies. About a thousand participants registered for this webinar series and the programme was conducted in three phases such as lectures concentrated on the theory and basics, demonstration of Schrödinger modelling tools and hands-on experience with the Schrödinger software on CADD to all the participants.

This webinar series has demonstrated how industryleading 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 programme has also provided an exceptional value addition to professional development in the form of new skill enhancement.

10 October : Department of Pharmacognosy organized a webinar on the topic - 'Efficacious Antiviral herbal drugs/formulation'. The resource person was Dr T S Bairy, a renowned Ayurvedic physician and former Professor of Ayurveda, SDM Ayurveda College and Hospital, Udupi. Dr Richard Lobo, Head, Department of Pharmacognosy, welcomed the participants and introduced the speaker. Dr Bairy explained the traditional knowledge documented in ancient Ayurvedic scripture by Charaka and Sushrutha, for the treatment and prevention of viral diseases. He also explained the various medicinal plants, which can be used as food in the prevention of various viral diseases by building up the immunity. He emphasized the usage of these medicinal plants in juvenile and geriatric populations and explained the science underlying the

tradition and culture followed by people in different seasons in combating the infectious diseases. Dr Bairy in his lecture deliberated on various locally available medicinal plants and their simple formulation in preventing viral infections. The lecture was very informative and well appreciated by the participants. The speaker gave useful tips for a healthy life. Over 40 participants attended the lecture. Mr Vasudev R Pai proposed the vote of thanks.



26 October : The sixth annual TB Portals Program Steering Committee Consortium meeting was held virtually on 26 October 2020 via Zoom video conferencing from 5.30 pm to 10.00 pm (Indian standard time). The program was hosted by the National Institute of Health/National Institute of Allergy and Infectious Diseases (NIH/NIAID), Bethesda, MD, USA. There were 53 participants from 21 countries. The TB Portal steering committee had invited two talks for the meeting from Dr Mahadev Rao, Principal Investigator, TB Portal, Manipal site, India and Mr Levin Thomas, Research Scholar, Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences. Dr Mahadev Rao had delivered a talk on the topic titled "Impact of Comorbidities on the Baseline Chest X-rays Reports of Pulmonary TB Patients: Early Reports from Manipal TB Portal" and Mr Levin Thomas delivered a talk on "Deriving Baseline Haematological Profiling in Pulmonary TB Patients". The TB portal research is funded by NIH/NIAID, Bethesda, MD, USA.

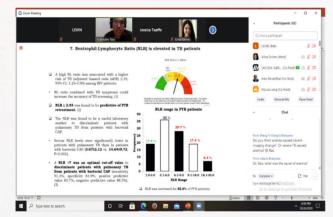


Welcome address by Mike Tartakovsky, NIAID, NIH, Bethesda, MD, USA.



Presentation by Dr Mahadev Rao,

Department of Pharmacy Practice, MCOPS, Manipal.



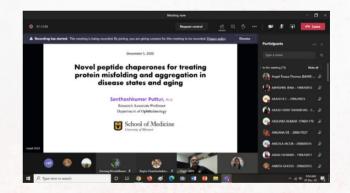
Presentation by Levin Thomas, Dr T M A Pai research scholar, Department of Pharmacy Practice, MCOPS, Manipal.

**18 November :** Department of Pharmacy Practice organized a webinar on the topic "Interdisciplinary Interventions targeting Chronic Health Conditions in Australian Healthcare Setting". Dr Johnson George, Senior Lecturer and Graduate Research Coordinator, Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Australia delivered the talk. During the talk, Dr George highlighted various COPD (Chronic Obstructive Pulmonary Disease) diagnostic trials that they successfully conducted in Australia. He stressed on the importance of streamlining COPD diagnosis and timely initiation of interdisciplinary intervention in effective management of the disease condition. Over 80 participants attended the program.



### 5 December : Novel Peptide Chaperones organized by Department of Pharmaceutical Biotechnology

Dr Santhoshkumar Puttur, Research Associate Professor at Mason Eye Institute, University of Missouri, Columbia was the invited speaker. Dr Puttur elaborated on the topic "Novel Peptide Chaperones for Treating Protein Misfolding and Aggregation in Disease States and Aging" which was attended by a large group of participants from various streams. During the lecture, Dr Puttur shared the discoveries of his research about the therapeutic potentials of novel mini-chaperones in treating protein misfolding associated diseases and aging in a very extensive and interesting manner. The participants interacted with the speaker actively. Dr Raghu Chandrashekhar, Professor, Department of Pharmaceutical Biotechnology was instrumental in organizing this event and was ably supported by Dr Angel Alex, Associate Professor who also served as the master of ceremony.



**30 October** : Annual student council inaugural "Genesis – Nuovo Inizio", was held on Friday, 30 October 2020. The event was graced by the Chief Guest, Dr G Arun Maiya, Professor and Dean, Manipal College of Health Professions. Other dignitaries of the event included Principal, Dr C Mallikarjuna Rao, Vice-Principal, Dr Gautham Shenoy G, MAPS Student Affairs Secretary, Dr Krishnamurthy Bhat and other Heads of Departments and faculty. This year MAPS hosted Genesis 2020 on an online mode. Over 350 participants attended the event of student council inauguration. The event began with the invocation song by Ms Roopa Acharya followed by the lighting of a lamp. The Chief Guest for the event, Dr Arun Maiya addressed the students regarding the importance of teamwork and dedication in the councils to make sure that extravagant and informative events were organized for the students. The names of the selected heads of all the councils were announced and congratulated. The principal addressed the students on the importance of each member's role in the council to fulfil the necessary duties and responsibilities.

The General Secretary of MAPS, Mr Adithya MS further spoke about the various councils of MAPS and the commitment of each member to complete the tasks on time. This was followed by the speech by Mr Shrawal Kotian, President, MAPS Council to give an overview of the MAPS Council and vision and aims for the year. To celebrate this joyous occasion, we had a classical dance performance by Ms Manasa. The event came to an end with the vote of thanks by the Vice-President of MAPS, Ms Gursimran Kaur who thanked all the dignitaries, faculty and students for joining the session and making it memorable.

The President, Vice-President, General Secretary and the Secretaries and Joint Secretaries of all the councils introduced their team members, highlighted the duties of each member and enthralled the new students to join the student council through a video. The event saw the participation of a huge crowd of students who actively took part in glorious satisfaction and enthusiasm. Though the event was conducted online, it was a day to remember for all the students. Genesis was undeniably a success and the crowd was delighted by the performances and introductory videos.



**5 September 2020**: Teachers' day was celebrated by organizing a talk on the topic "Understanding NEP 2020 from higher education perspective-key take away for students" via MST. The resource person was Dr Sandeep S Shenoy, Head, Department of Commerce/ Director Compliance, MAHE, Manipal. The event was moderated by Dr Anoop Kishore, Associate Professor, Department of Pharmacology. Dr Pradeep Muragundi, Associate Professor, Department of Pharmacy Management extended the necessary support.

Dr Sandeep Shenoy elaborated on the five pillars of NEP in detail with their purpose of education and aim. He also talked about the flexibility and conceptual understanding as emphasised by the NEP, the need to get rid of rote learning and hard separation sans technical jargons. Dr Shenoy also talked on "light but light" to regulations and the importance of life skills. The talk ended with a vote of thanks from Mr Shrawal Kotian, President MAPS. Over 270 individuals attended this event comprising V and VI semester BPharm students and faculty members.



25 September : On account of World Pharmacists Day is observed on September 25 every year, the Community Development Committee, MAPS organized a webinar on the theme, "WORK HARD, PUBLISH HARDER: How to write a research paper?". The speaker of the event was Mr Avinash Kumar, who is currently a Senior Research Fellow in the Department of Pharmaceutical Chemistry at MCOPS. He had completed his BPharm in 2012 from Manipal College of Pharmaceutical Sciences. Ms Keerthana K from third year PharmD served as the moderator for this webinar with over 150 attendees. Mr Avinash spoke about the basic skills required and the hurdles to overcome for publishing a research paper. He educated the participants about how to identify the right journal and explained the basic rules of manuscript writing. Participants' queries were addressed during the Q&A session after the webingr.

**10 October :** On the occasion of World Mental Health Day, the Community Development Committee, MAPS, in association with Student Support Centre, MAHE, hosted a talk on "Positive Psychology: Fostering Resilience and Well-being during the COVID-19 Pandemic". The speaker was Mr Shafeer K V who is a Clinical Psychologist in Student Support Centre, MAHE.

The discourse hosted on Microsoft teams was open to all students of MAHE, and was attended by 100 registered participants. Mr Archit Koul from third year BPharm served as the moderator.

Mr Shafeer spoke about Positive psychology and Quality of life therapy (QOLT). He elaborated on the various principles of QOLT and explained how it could be used to foster resilience and well-being.



**31 October :** On the 145th birth anniversary of Sardar Vallabhbhai Patel, the Iron Man of India, MAPS, Student Council of Manipal College of Pharmaceutical Sciences, Manipal organized an event to mark the celebration of Rashtriya Ekta Diwas. The event witnessed the participation of over 125 students and faculty. Lt Cdr Bijay Nair, a decorated retired Indian Naval Officer, an ultra-marathoner, a comrade 2019 finisher, an anchor, an author, a motivational speaker, a story-teller and a thyro-athlete was the speaker. He addressed the students of MCOPS about his journey in the Indian Navy. Being a part of Operation Talwaar and awarded with Operation Parakaram and Operation Vijay medal, it was indeed a proud moment to listen to such a prestigious officer.

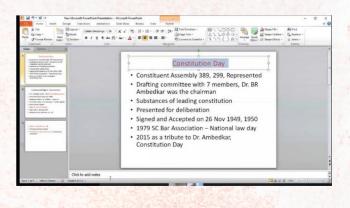
The valuable Ekta Diwas message was delivered through the narration of incidents during a rescue operation where the Hindu pilgrims were trapped in the cable way in the Himachal who was saved by a Muslim commando who risked his life climbing down the ropes as the army rescue chopper was flown by a Parsi officer, which was indeed a proud moment to know that our country is diversifying castes to work towards unity. He added that there is no discrimination between caste, creed, colour and gender in services. Lt Cdr Vijay hoped that in the coming years, India will be more secular, more adaptive and a place where we believe in unity.

The talk was followed by a performance by The Dramebaaz Company, the drama team of MCOPS who portrayed the sense of Ekta through poems, songs, dance and drama.



**26 November** : On Constitution Day, a webinar was organized via MST which witnessed over 100 participants. The speaker for the event was Professor (Dr) Prakash Kanive, Former Principal, Vaikunta Baliga College of Law, Udupi.

Professor Kanive discussed the various fundamental rights and articles of the Indian Constitution like Article 21: Right to Life and Article 14: Right to equality. He concluded with the fundamental rights related to the environment. The event was successful and the students were enlightened by this talk on the auspicious occasion of Constitution Day.



### PLACEMENTS/INTERNSHIPS

Name of the candidate	MPharm specialization	Company	Internship/ Placement	Location
Gankidi Shravani	Pharmaceutical Quality Assurance	Novartis	Internship	Hyderabad
Vijay Mohan Motwani	Pharmaceutical Quality Assurance	DRG Analytics & Insights Pvt. Ltd	Internship	Bengaluru
Reenal Shwetha Alva, Chetna Thakur, Aaditya Singh, Shreyas Daware, Sourav Maity and Sindhoori Bingi	Regulatory Affairs	Global Regulatory Platforms and Delivery, GSK	Internship	Bengaluru
Pooja Preet Bose	Pharmaceutical Quality Assurance	Global Regulatory Platforms and Delivery, GSK	Internship	Bengaluru
Aishwarya Bhandare	Pharmaceutics	Novo Nordisk service centre Pvt Ltd	Placement	Bengaluru
Poornima Adpekar	Industrial Pharmacy	Novo Nordisk service centre Pvt Ltd	Placement	Bengaluru
Sagar Sakhare	Industrial Pharmacy	airis PHARMA	Placement	Hyderabad
Leonna D'Souza	Pharmaceutics	Indegene	Placement	Bengaluru
Brynish Riyana D'Souza, Pragya Smriti	Pharmaceutical Analysis	Pfizer	Placement	Chennai
Adrija Jha and Pragathi	Pharmaceutics	Dr Reddy's	Internship	Hyderabad
Bhautik Ladani and Vignesh Saravanan	Industrial Pharmacy	Dr Reddy's	Internship	Hyderabad
Anusha Naik	Pharmaceutical Quality Assurance	Dr Reddy's	Internship	Hyderabad
Vinay Kumar and Mahitha M	Pharmaceutical Regulatory Affairs	Dr Reddy's	Internship	Hyderabad
Meghna Muralidharan	Pharmaceutical Quality Assurance	GlaxoSmithKline	Internship	Bengaluru
Deepika Muddana	Pharmaceutical Regulatory Affairs	Syngene International	Internship	Bengaluru
Pavan Kumar Puram	Pharmaceutical Quality Assurance	Vimta Labs Ltd	Internship	Hyderabad
Kurre Bhavana	Pharmaceutical Analysis	Syngene International	Internship	Bengaluru
Chebrolu Sai Tejasvini	Pharmaceutical Analysis	Hetero Labs Limited	Internship	Hyderabad
Nandita P, Shaik Sajeeda, Rahul Gopinath and A Dinesh	Pharmaceutical Analysis	Vimta Labs Ltd	Internship	Hyderabad

Vendanti Avinash	Pharmaceutical Quality Assurance	Shreya Life Sciences, Pvt Ltd	Internship	Aurangabad
Sameera and Aiswarya PK	Pharmaceutical Administration	Precision Business Insights	Internship	Hyderabad
Vaidruti Joshi	Pharmaceutical Analysis	Celon Laboratories	Internship	Hyderabad
Sandesh Jadhav and Nitin Khengte	Pharmaceutical Analysis	airis PHARMA	Internship	Hyderabad
Ashish Ghate and Praneshwar Mane	Pharmaceutical Analysis	Zydus Wellness	Internship	Ahmedabad
Madhuparna Bannerjee	Pharmacology.	Strides Arcolab Pvt Ltd	Internship	Bengaluru
Bikash Pal	Pharmaceutical Analysis	Springer Nature Technology and Publishing Solutions Private Limited	Placement	Pune
Pratiksha Deodhar	Pharmaceutics	Pfizer	Placement	Chennai

### UPCOMING EVENTS

#### 8 January 2021: CPCON 2021

19-21 January: Rational Computational Drug Design Approaches- Hands-on workshop

8 February 2021: National webinar on Science Journalism - A void to be filled by upcoming scientists

19 February 2021: Webinar on industry perspectives on quality of botanicals in the global regulatory context

**8 March 2021**: AICTE sponsored Short Term Training Programme on "Innovative pedagogy to develop and implement skill-based pharmacy curriculum - A faculty perspective"

### Editorial team

C Mallikarjuna Rao, Principal and Professor, Department of Pharmacology Rekha R Shenoy, Associate Professor, Department of Pharmacology Usha Y Nayak, Associate Professor, Department of Pharmaceutics Angel Alex, Associate Professor, Department of Pharmaceutical Biotechnology Vijaya Bhaskar, Associate Professor, Department of Pharmaceutical Chemistry Bhavana Bhat, Assistant Professor, Department of Pharmacy Management Chandrashekar KS, Associate Professor, Department of Pharmacology Sonal Sekhar, Assistant Professor- Selection grade, Department of Pharmacy Practice Athira R Nair, Assistant Professor, Department of Pharmaceutical Quality Assurance



### MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES

MANIPAL (A constituent unit of MAHE, Manipal)