

MCOPS-Diamond Jubilee e-Newsletter Issue 12, December 2023

Newspill Monthly once

DJC Event TRDDCON 2023 Organized by MCOPS

2-4 November 2023 : National Conference on Translational Research in Drug Development (TRDDCON) 2023, organized by Manipal College of Pharmaceutical Sciences, MAHE, as a part of its Diamond Jubilee Celebrations, during 2-4 November 2023 was an amazing conference that brought together knowledge and innovation in the field of pharmaceutical research. This three-days conference was jointly organized by the Departments of Pharmaceutical Chemistry headed by **Dr Suvarna** G Kini, Pharmacology led by Dr K Nandakumar, Pharmaceutical Biotechnology headed by Dr Raghu Chandrashekar H and Pharmacognosy led by Dr Richard Lobo. Dr Narayana Sabhahit, Pro-Vice Chancellor [Technology & Science], MAHE; Principal of MCOPS, Dr C Mallikarjuna Rao, Vice Principal, Dr Krishnamurthy Bhat and other dignitaries were present during the inaugural function. Dignitaries lighted the lamp and offered a floral tribute to the founder, Dr TMA Pai. Chief Guest of the inaugural, Dr Sabhahit, highlighted the intersection of research and technology, and emphasized the societal benefits of translational research. He lauded MCOPS for its active role in research enhancement. Dr Nandakumar K, Professor and Head, department of Pharmacology and the coordinator of the conference proposed the vote of thanks, acknowledging the dignitaries, faculty members, organizing team, delegates, and event sponsors for their invaluable contributions. Over 150 delegates from various pharmacy colleges across the country attended the function.

Ms Raksha and Ms Anusha, research scholars, department of Pharmacology anchored the inaugural function of TRDDCON 2023. Ms Ishani Roy, PharmD student, rendered the invocation.

The opening speaker was **Dr Ajay Pràkash**, Associate Professor, Postgraduate Institute of Medical

Education and Research, Chandigarh who spoke on Drug Development Process and Current Indian Scenario. Dr Prakash discussed the drug discovery process, emphasizing its evolution since 1999 and its current status in 2023. Dr Prakash's talk provided a comprehensive overview of the drug discovery journey, from inception to market, with a focus on India's contributions and the complexities involved in ensuring safety and efficacy.

The next talk by **Dr Srinivas Seekallu**, Head-Preclinical Research, Test Facility Management, Anthem Biosciences Pvt. Ltd. Bengaluru provided a succinct overview of Good Laboratory Practices (GLP) in the pharmaceutical industry. He stressed upon the importance of meticulous documentation in the synthesis and testing of molecules, particularly in the context of non-clinical studies. Dr Seekallu spoke on the key elements of GLP, emphasizing the significance of practices that are attributable, legible, contemporaneous, original, and accurate (ALCOA+).





Dr Ashok Shenoy, Professor, Department of Pharmacology, KMC Mangalore, chaired both the sessions.

Scientific deliberation in oral and poster formats were carried out in the post lunch session of Day 1 of TRDDCON 2023. Students and educators, driven by their passion for learning, participated wholeheartedly, creating an enthusiastic atmosphere throughout the conference hall at Interact lecture halls, KMC, Manipal. The presentations covered a wide array of categories such as Pharmacology and Toxicology, Formulation, Translational and Clinical Drug Development, Drug Design and Synthesis, Concept and Review Papers, and Drug Discovery from Biological/Natural Sources; each reflecting the diverse facets of pharmaceutical research.

The second day began with a talk by **Dr Mohamed** Rafiq, Head, Discovery Sciences - R&D Himalaya Wellness Company, Bengaluru. Dr Rafiq presented a comprehensive talk on the opportunities and challenges in drug development from botanicals, emphasizing the significance of natural sources such as plants. His talk emphasized the significance of harnessing natural products for therapeutic advancements while acknowledging the complexities and hurdles in this field.

Following the first talk, **Dr Pritesh Bhat**, Principal Scientist, Schrodinger, Bengaluru, delivered an insightful talk on drug molecule discovery using the Schrödinger platform, covering the entire pipeline from target validation to lead optimization. The platform excels in cost, quality, and time efficiency compared to traditional drug design methods. Dr Bhat highlighted Schrödinger's track record in rapidly identifying potent, soluble, and permeable compounds crucial for therapeutic drug development. Overall, Schrödinger emerges as a fast and invaluable tool in the intricate landscape of therapeutic drug compound identification.

Dr Abdul Ajees Abdul Salam, Associate Professor, DAMP, MAHE chaired both these sessions.

Following tea break, **Dr Jeyaraj D A**, Vice-President and Head, Discovery Chemistry, Jubilant Biosys Limited, Bengaluru led an impactful talk on Antiviral Drug Discovery, emphasizing the urgency post-COVID to address viral infections. The talk elucidated the multidisciplinary nature of drug discovery, starting with target identification and progressing through hit molecule screening, utilizing high throughput screening, AI, and natural products and provided valuable insights into the challenges and progress in antiviral drug discovery.

Dr Abhijeet Rajendra Joshi, Assistant Professor at the Department of Pharmacy, BITS Hyderabad delivered an insightful talk on neuropathic pain, focusing on novel mechanisms and therapeutic targets, with a specific emphasis on chemotherapyinduced peripheral neuropathy (CIPN). Drawing from a scientific paper, he demonstrated how disruption of the node of Ranvier contributes to neurological diseases. His research not only shed light on the pathology but also explored potential therapeutic interventions, showcasing promising results in animal models.

Sessions were chaired by **Dr Somasish Ghosh** Dastidar, **Assistant** Professor, Molecular Neurosciences, KMC, MAHE, Manipal.

During the afternoon session, Dr Bikash Medhi, Professor at PGIMER, Chandigarh delivered an illuminating talk on India's progress towards achieving OECD Mutual Acceptance of Data (MAD) and striving for pharmaceutical excellence. The talk explored India's pharmaceutical ecosystem, encompassing infrastructure, manufacturing, and domestic demand. Dr Medhi delved into Good Laboratory Practice (GLP) in India, outlining its history since its inception in 1991. He detailed the formation of the National GLP Compliance Monitoring Authority (NGCMA), a collaboration between Indian and foreign test facilities, and discussed NGCMA's activities. Dr Medhi's talk not only underscored India's pharmaceutical prowess but also illuminated the vital role of GLP and MAD in ensuring global standards and credibility in the industry. **Dr Raviraja N S**, Professor and Coordinator, MCBR, MAHE chaired the session.

Dr Bikash Medhi conducted an insightful workshop on Standard Operating Procedures (SOPs) with a focus on the role of Quality Assurance (QA) in their development and review. The workshop provided valuable insights into the meticulous process of SOP creation, underscoring the critical role of QA in upholding quality and adherence to protocols within an organization.

The third and final day of TRDDCON 2023 commenced with a talk by Dr Anand P Kulkarni, Senior Principal Scientist & Head, Scientific Directorate at CSIR-Central Drug Research Institute, Lucknow on "New Drug Discovery and Development in Independent India," illustrating India's transformative journey from a non-existent pharmaceutical industry in British India to becoming the third-largest globally. He emphasized the pivotal role of CSIR, detailing its inception, COVID contributions, and expansive branches. The talk concluded with a call for continued fundamental research, innovative drug discovery, and strategic alignment to address evolving challenges.

Dr R Govindarajan, Head R&D at Zydus Wellness, Ahmedabad, Gujarat presented a comprehensive overview of challenges and opportunities in the herbal drug industry. He highlighted the rich history of herbal drugs in India, dating back 4000 years, with 70% of the population still relying on them. Dispelling the notion that herbal drugs are inherently economical, he explored the evolution of drug modification, discovery, and development.

The session was chaired by **Dr K P Guruprasad**, Associate Director-Research & HoD, Department of Ageing Research

Dr Praveen Kumar N, Clinical Research Manager at nference, Indiqube, Bengaluru elaborated on the nferX Platform's role in accelerating translational drug discovery. The foundation lies in literature-based evidence, patient-level evidence, and molecular evidence. Dr Kumar explained a hypothesis-free approach to identifying drug-to-target and target-to-drug relationships using deep learning models on public data. A live demo showcased the nferX database. Dr Kumar emphasized evidence reinforcement, biological and clinical rationale, and empirical validation as pillars of robust translational drug discovery with nferX.

The last talk of the conference was by **Dr Ashok Godavarthi** CEO of Radiant Research Services Pvt Ltd, Bengaluru. His presentation explored the "Impact of In Vitro Models in Cosmetic and Consumer Care Product Research" explored the multifaceted realm of cosmetic products. The discussion unfolded across six categories, encompassing facial, hair, eye, dental, oral cavity cosmetics, and miscellaneous cosmetics. Dr. Godavarthi's talk underscored the transformative impact of in vitro models on understanding, developing, and ensuring the safety of cosmetic and consumer care products in a dynamic and competitive landscape.

This session was chaired by **Dr Surulivel Rajan M**, Head, Department of Pharmacy Practice, MCOPS.

The Valedictory function of TRDDCON 2023 was hosted by Research Scholars, Ms Pragnya and Ms Akshatha, commencing at 2:30 p.m. During the welcome address, Dr Suvarna Kini, the Joint Secretary, emphasized that the conference had been a remarkable journey of knowledge, collaboration, and innovation, focusing on the invaluable theme of "Translation Research in Drug Development". Dr K Nandakumar, the Organizing Secretary, provided a comprehensive overview of TRDDCON 2023. He highlighted the uniqueness of the conference, which was entirely organized by Research Scholars with active faculty guidance, aiming to move beyond conventional textbooks. Dr Nandakumar proudly announced the participation of 160 delegates, showcasing around 16 oral presentations and over 100 poster presentations under various categories. The conference's success was attributed to the support of 25 different sponsoring agencies, which facilitated awards for the best oral and poster presentations.

The Chief Guest, Dr Chiplunkar, shared motivating stories. Dr Mallikarjuna Rao, the Principal of MCOPS, took the opportunity to felicitate the core team members of the organizing committee, acknowledging their dedicated efforts. A heartfelt moment arrived when Ms Sandra Ross, a delegate from M S Ramaiyah College, Bengaluru, shared her honest feedback and expressed gratitude to the organising committee and faculty members for making her TRDDCON experience truly memorable.

Dr Rao then presented a memento to the Chief Guest to appreciate his presence and contribution. The anticipation mounted as the winners of the oral and poster presentations were announced by Dr Alex Joseph, Head of the scientific Committee. Ms Sandra Ross from M S Ramaiah College received the 1st Prize, while Dr Jayesh Mudgal, Associate Professor at MCOPS, MAHE, was awarded the 2nd Prize. Best poster prizes were awarded for various winners under each category comprising of 11 best posters and 2 consolation prizes.

The event concluded with vote of thanks proposed by Dr Raghu Chandrashekar, followed by harmonious rendition of the National Anthem, uniting all in a final note of celebration.

















































CPSD Awarded Centre of Excellence

The Centre for Pharmaceutical Skill Development, Manipal Academy of Higher Education has been certified as Centre of Excellence by Life Sciences Sector Skill Development Council (LSSSDC), New Delhi recently. On behalf of LSSSDC, Dr Nivedita M, Sr Director-Assessment, Accreditation & Certification, LSSSDC handed over the Certificate of Excellence to Lt. Gen Dr M D Venkatesh, Vice Chancellor, MAHE at Manipal. A Memorandum of Understanding was signed on the occasion between MAHE and LSSSDC for future skilling activities of students, faculties in Life Sciences sector. Dr Sharath K Rao, Pro Vice Chancellor (Health Sciences), Dr Giridhar P Kini, Registrar, MAHE, Dr C Mallikarjuna Rao, Principal, MCOPS & Dr Anup Naha, Coordinator, CPSD along with Dr Srinivas Hebbar, Co-coordinator, CPSD were also present on the occasion.

To commemorate this collaboration, 3 days skill based training and certification program (under LS-Pro) was conducted by Centre for Pharmaceutical Skill Development (CPSD), MAHE with support from LSSSDC from Nov 3-6, 2023. Two certified Master Trainers with nearly 25-30 years of pharmaceutical industry experience representing LSSSDC conducted the training using validated training modules in the area of Marketing. Around 100 pharmacy students of Manipal College of Pharmaceutical Sciences were trained and certified by LSSSDC for the job role of pharmaceutical marketing and sales.

Life Sciences Sector Skill Development Council (LSSSDC), New Delhi is the awarding body of NCVET (National Council for Vocational Education and Training) under the Ministry of Skill Development & Entrepreneurship (MSDE) and is an authorized advisory and monitoring body under MSDE for engaging Industry for Apprenticeship under Apprenticeship Act.



Drug Controller General of India Visited MCOPS

19 November 2023: The Drug Controller General of India, Dr Rajeev Singh Raghuvanshi visited MCOPS on 19 November 2023. The visit commenced with a meeting in the Board Room with the policy makers of MCOPS followed by a facility visit. In the former part, Dr Mallikarjuna Rao, Principal, MCOPS, spoke about the establishment, legacy, progress, and current position of MCOPS. He also introduced all Heads of Departments and Centre Heads and briefed about the research competency of each department and centres. Dr Raghuvanshi was highly impressed by the work carried out by the college, especially on Pharmaceutical Skill Development and Pharmacovigilance. He enquired about details of the work and promised to involve MCOPS in the activities of his department.

The team led by the Principal displayed the teaching and research facilities of MCOPS to Dr Raghuvanshi. He was highly impressed by the state-of-the-art facilities of the institution and expressed his interest in scientific collaboration. The DCGI then proceeded to visit the facilities at Manipal Centre for Biotherapeutics Research, MAHE.



Alumni Guest Talk by Dr Sajjad Fazal, Public **Health Specialist, Canada**

22 November 2023: Dr Sajjad Fazal, Program Manager, Ontario Health, Toronto, Canada, delivered a guest talk on "Public Health Opportunities for Pharmacists in Canada" on the 22 November 2023 from 11:30 am to 12:30 pm at Seminar Room, Dept. of Pharmacy Practice, MCOPS. He is an alumnus of MCOPS and studied PharmD from 2009 to 2015. During the talk, Dr Fazal said, "Pharmacy graduates can play a tremendous role in public health, especially if they hold a degree in public health." He shared his professional experience as a public health specialist and motivated students by describing the vast opportunities for public health jobs in Canada. The event was organized by the Pharmacy Literacy Club (PLC), Centre for Public Health Pharmacy, Dept. of Pharmacy Practice, MCOPS, on the momentous occasion of the 62nd National Pharmacy Week 2023 celebration and 125th Birth Anniversary of our visionary founder Dr TMA Pai.







CPSD Teacher's skill Empowerment Series on "Student Assessment"

24 November 2023: As part of MCOPS Diamond Jubilee celebrations, the Centre for Pharmaceutical Skill Development (CPSD), MCOPS, MAHE, Manipal, in association with Life Science Skill Development Council (LSSDC), APTI-Karnataka, and APTI-Uttar Pradesh State Branch, organized the Teachers' Skill Empowerment Series on the topic "Student Assessment" in an online format. The event



assessment like interactive polls, whiteboard activities, discussions and feedback, roleplay assessments, various challenges in the assessment and future trends. Over 140 teachers from diverse educational

institutions attended the session. A dynamic Q&A session and explanation on the subject kept the audience interested.

MAHE Convocation held in November 2023

26 November 2023: The 31st Convocation of MAHE was conducted during 17, 18, 26 and 26 November 2023, in a grand manner. The function began at 3PM with ceremonial procession followed by formal function and distribution of degrees by the chief guest and other dignitaries. The Day 2 of convocation witnessed the presence of Dr Rajeev Singh Raghuvanshi, the Drug Controller General of India as the Chief Guest.

Ms Poorvika Agarwal of BPharm bagged the prestigious Dr TMA Pai Gold Medal for the best outgoing student of MCOPS. A total of 286 students graduated from MCOPS this year with a break up as 104 BPharm graduates, 128 MPharm postgraduates, 29 PharmD, 5 PharmD Post Baccalaureate and 20 PhDs.









Centre for cGMP, MAHE, Manipal, Bags the Prestigious India Pharma Awards 2023 for **Excellence in Quality Assurance**

27 November 2023: The prestigious INDIA PHARMA AWARDS 2023 was announced and declared at the "Awards Ceremony" on Day 1 of CPHI-PMEC India at India Expo Center, Greater Noida. Centre for cGMP, Manipal Academy of Higher Education (Institution of Eminence), Manipal, is the only Academic Institute to have received this award for the first time for the unique initiative and conceiving the idea of celebrating "National cGMP Day". Dr Girish Pai K, Coordinator, and Dr Muddukrishna B S, Co-coordinator, were nominated by MAHE, Manipal, to represent the Center for cGMP for a 3-minute presentation in front of the Jury which consisted of 12 members and elucidate the details of the initiative, Impact and Outcome and the Sustainability and Scalability.

The award was received by Dr Girish Pai K and Dr Muddukrishna from Christopher Eve, Senior Vice

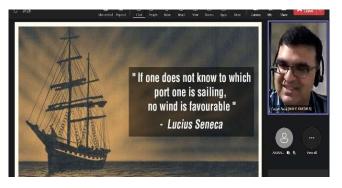
President. Informa Markets in the August presence of Industry leaders, Pharmaceutical Entrepreneurs, Executives from companies of high repute, and Exhibitors of the CPHI PMEC 2023 event.



CPSD on Framing Learning Objectives

26 October 2023: As part of MCOPS Diamond Jubilee celebrations, the Centre for Pharmaceutical Skill Development (CPSD), MCOPS, MAHE, Manipal, in association with Life Science Skill Development Council (LSSDC), APTI-Karnataka, and APTI-Uttar Pradesh State Branch, organized the Teachers' Skill Empowerment Series, 2023 on the topic "Framing **Learning Objectives** " on Thursday, 26 October 2023, in online mode. The event featured **Dr Gagan Bajaj**, Associate Professor, Department of Audiology and Speech Language Pathology, KMC Mangalore, as the resource person. The program commenced at 3 pm and the event was hosted by Ms Induja KO, Student Coordinator, CPSD.

The talk provided a comprehensive exploration of learning objectives, various domains of learning objectives, framework of writing a learning objective, its characteristics, SMART objectives, Bloom taxonomy and its various aspects. This strategy improves engagement, accommodates various preferences, and gives teachers the ability to use data to support students more effectively. The participation of over 180 teachers from diverse educational institutions attended the session. A dynamic Q&A session and explanation session on the subject kept the audience interested.



Testimonial from the first Post Doctoral **Student of MCOPS**

"My 1-year stay of research in MAHE was a turning point. Indeed, MAHE is an institution of scholastic difference! A glowing and growing institution of eminence across India and the world at large. MAHE leadership is working and leading in the right direction, and a place to be for local and international researchers. Your good memories remain indelible in my heart, and I shall speak of MAHE anywhere I go! What

an opportunity to be the first international postdoctoral researcher in MCOPS! The mentorship and supervision Sreedhara of Prof Κ Ranganath Pai was topnotch, international, competitive and impactful. I am ever grateful to him! "



Thank you and regards Yours faithfully,

Ademola C. Famurewa (PhD) Senior Lecturer, Department of Medical Biochemistry, AEFUNAI, Nigeria.

Dr Ademola C. Famurewa, a Nigerian, came to India for postdoctoral research and training at the Department of Pharmacology, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education (MAHE) under the guidance of **Prof** K Sreedhara Ranganath Pai of the Department of Pharmacology, Manipal College of Pharmaceutical Sciences (MCOPS), MAHE. The Supervision/Hosting acceptance of Prof Pai enabled him to apply for the postdoctoral fellowship jointly funded by the Department of Biotechnology, Government of India and The World Academy of Sciences, Trieste, Italy.

The application submitted in September, 2021 was successful and Dr Ademola was awarded a 1-year postdoctoral fellowship/research under the guidance of Prof Pai in May, 2022.

His research proposal was targeted at deciphering the anticancer efficacy of an herbal mixture frequently used by pregnant women and nursing mothers in Nigeria. Also, he was interested to know whether the herbal mixture could enhance the cisplatin chemotherapy widely used in the treatment of cancer patients. Interestingly, the equipment, instruments, and research facilities available at the Department of Pharmacology were of invaluable support for his research.

The Department of Biotechnology (DBT), Government of India funded his research expenses and monthly stipend for one year. During the 12 months of fellowship, he published 11 research papers in Q1/Q2 journals with MCOPS and MAHE affiliation are currently gathering citations to the benefits of MCOPS and MAHE. These papers had emanated from his research at Nigeria with international collaborations (Germany, China, Thailand, Saudi Arabia and Egypt).

Achievements...

Dr S G Vasantharaju, Received Best Poster Award at NAMSCON 2023

8 October 2023: Dr S G Vasantharaju, Additional professor, Department of Pharmaceutical Quality Assurance, Manipal College of Pharmaceutical Sciences, MAHE, Manipal received the best poster award for the research poster titled "Stability-Indicating **RP-HPLC** Method For The Simultaneous Estimation of Bergapten, Lupeol And Stigmasterol In Shwitrahara Churna Formulation" at 63rd Annual conference of National Academy of Medical Sciences (NAMSCON 2023), Ramaiah Medical College, Bengaluru, India, held during 6-8 October, 2023. The award comprises of a certificate and a memento.



Dr Vamshi Krishna T Baggs Awards at ICHTR 2023

7 November 2023: **Dr Vamshi Krishna T**, Associate Professor, Department of Pharmaceutics,



Book Co-Edited by Dr Namdev Dhas: Site-specific Cancer Nanotheranostics: A Microenvironment-responsive Approach Published by CRC Press

Dr Namdev Dhas, Assistant Professor, Department of Pharmaceutics, MCOPS along with Dr Yashwant Pathak, Dr Jayvadan Patel and Dr Vipulkumar Patel published an edited book by CRC press on Site-specific Cancer Nanotheranostics: A Microenvironmentresponsive Approach. This book presents an overview of tumor microenvironment, their challenges and opportunities in the development of stimuli-responsive and site-specific delivery nanoplatforms and their related strategies for cancer treatment. The book also addresses the development of smart nanoparticles or smart materials and their fabrication chemistries. Additionally, the compatibility of therapeutic moieties with smart materials along with any other synergistic material is also discussed in fabricating smart nano-particulate system. The book also includes characterization techniques which needs to be taken into consideration for evaluating efficiency of fabricated nanoparticles, their toxicology, regulatory aspects, and commercialization.

This book focuses on the following major aspects of emerging strategies for tumor microenvironment responsive nanoplatforms:

- i. Introduction to Nanoparticles and tumor microenvironment
- ii. Introduction to materials and their chemistries of tumor microenvironment responsive materials/ delivery platforms
- iii. Endogenous stimuli–responsive nanoplatforms
- iv. Exogenous stimuli-responsive nanoplatforms
- v. Targeting materials and strategies in cancer therapy
- vi. Characterization techniques for stimuliresponsive delivery nanoplatforms
- vii. Toxicity and regulatory aspects
- viii. Future opportunities and Challenges

This edited book presents 21 chapters written by leading authors who are contributing to this area of research in their respective institutions.

Ms Niharika Gaddam Research scholar, **Pharmaceutical** Department of Assurance, MCOPS received best poster award at TRDDCON 2023

04 November 2023: Ms Niharika Gaddam **Research Scholar**, Department of Pharmaceutical Quality Assurance, Manipal College of Pharmaceutical Sciences, MAHE, Manipal received best poster award for the poster titled "Development and Validation of Stability-indicating RP-HPLC Method for Simultaneous Estimation of Glycyrrhizic acid and Berberine in a Classical Ayurvedic Formulation" under the guidance of Dr S G Vasantharaju, Additional Professor, Department of Pharmaceutical Quality Assurance at National Conference on Translational Research in Drug Development held during 2-4 November 2023, at Manipal College of Pharmaceutical Sciences, Manipal. The award comprised of a certificate, memento, and cash prize of ₹ 2000.



Upcoming Events...

MCOPS DJC Pinnacle Fest: The Ten Hug Days-December 11 to 20, 2023

QALAM: Where Words Create Worlds

11&12 December 2023

To commemorate the significant milestones of Diamond Jubilee Celebrations of Manipal College of Pharmaceutical Sciences and the 125th Birth Anniversary of our visionary founder, Dr TMA Pai, the editorial board Committee of MCOPS, MAPS is organizing 'QALAM' - A Literary event on the 11 and 12 December 2023. This event will feature various competitions ranging from Parliamentary Debate, Spell Bee, Scavenger Hunt, Shakespeare-ify and

blindfold conversations."

MCOPS EXPO : Technology, Innovation and Knowledge in Pharmaceutical Sciences

11-15 December 2023

MCOPS is organizing "MCOPS EXPO: An Exhibition of Technology, Innovation, and Knowledge in Pharmaceutical Sciences" from 11 to 15 December 2023 as a part of its Diamond Jubilee celebrations. The expected participants are the science stream students of 12th class of Udupi Taluk and the public. Through this exhibition, participants will get knowledge about the discovery, manufacturing, testing, quality control and regulation of drugs and the roles of a pharmacist.

Highlights of EXPO

- ✓ Molecular modelling, set up of synthetic methods, purification procedures and characterization techniques to demonstrate discovery of medicines.
- ✓ Demonstration of the origin of medicines from nature, there will be display of medicinal plants, herbarium specimens, crude drugs, extraction process etc.
- For exhibiting biotechnologically medicines, display of microorganisms, modeling microorganisms and demonstration techniques such as cell culture, electrophoresis and PCR will be demonstrated.
- Demonstrations of in-vitro, in-vivo and in-silico experiments to exhibit testing the drug activity.
- of medicines ✓ Manufacturina demonstrated through exhibition of production of tablets, capsules, ointments etc.
- Display of high-end analytical equipment such as HPLC, mass spectrometers, spectrophotometers etc used for checking the quality of medicines.
- Demonstration of the regulatory control over medicines by video display on the regulatory approval process.
- Role of a pharmacist in patient counselling, patient education, antibiotic awareness, poison identification, and snake bite identification will be demonstrated through posters.

World Rx: A Global Pharmacy: Connecting Cultures, Igniting Minds

13 Dec 2023

Embark on a global journey of knowledge and diversity at "World Rx: A Global Pharmacy," a groundbreaking event scheduled for December 13th.

From 11 am to 1 pm and then from 2 pm to 4 pm, this unique experience is divided into two captivating parts.

Global Poster Showcase: Exploring Cultures and Educational Insights

(11 am - 1 pm / 2 pm - 3 pm) Immerse yourself in the rich tapestry of global education and cultures with our "Global Poster Showcase." Wander through a visually stunning exhibition featuring posters that delve into the educational systems and cultural nuances of countries worldwide.

Gain valuable insights and broaden your perspective as you explore the diverse presentations. This enlightening showcase promises to be a feast for curious minds, fostering a deeper understanding of the global community.

Global Expo: A World of Engagement (2 pm - 4 pm)

Step into the dynamic world of the "Global Expo: A World of Engagement" from 2 pm to 4 pm. This vibrant fair is a celebration of diversity, offering an array of activities and stalls that showcase the uniqueness of cultures around the globe. Engage in interactive games, explore informative displays, and indulge in the global marketplace. Participate in the festivities and stand a chance to win exciting prizes. This is more than an event; it's an opportunity to connect, learn, and celebrate the richness of our global community.

Sanskriti Where Culture Meets Joy

11 - 18 December 2023

The stage is set, the excitement is building, and the countdown to the most anticipated cultural extravaganza of the year, "Sanskriti," has begun! From 11th December 2023 to 18th December 2023, we invite you to join us for nine days of unbridled creativity, artistic excellence, and sheer joy as we present "Sanskriti," where culture meets joy!

About Sanskriti:

"Sanskriti" is not just an event; it's a celebration of culture, art, and the human spirit. It's a platform where diverse traditions, artistic expressions, and intellectual pursuits come together in a harmonious symphony. With the slogan "Where Culture Meets Joy," we aim

to create an atmosphere that not only appreciates culture but also brings delight to the hearts of all who participate and attend.

Alumni Summit 2023 : Alumni of Life: Rejoin, Recall, Relive

19 Dec 2023

2023 marks the Diamond Jubilee year of Manipal College of Pharmaceutical Sciences, Manipal. Since its inception in 1963, MCOPS has been on a glorious journey, catering to the needs of the society by imparting unparalleled quality education and on the forefront of cutting-edge research.

The alumni are the backbone of every institution. MCOPS is blessed with more than 8000 alumni and is grateful for their unwavering love and support. The institution takes pride in her alumni and celebrates their achievements. On the occasion of the Diamond Jubilee Commemoration of MCOPS, an Alumni Summit is planned on the 19th of December 2023, to connect with all the alumni and rekindle the moments of joy. The students and the staff of Manipal College of Pharmaceutical Sciences extend a warm welcome to all the alumni of MCOPS to the alumni summit.

PharmaQuora: Catalysing Research Paradigm 16 &17 December 2023

On the significant occasion of the Diamond Jubilee Celebrations of Manipal College of Pharmaceutical Sciences and 125th Birth Anniversary of our visionary founder Dr. T.M.A. Pai, Academic Committee, MAPS, MCOPS is organising Scientific events on 16-17 December 2023. To inculcate and motivate students on scientific acumen, two days event hoists various scientific events like Scientific poster presentations, Scientific oral presentations and pharma quiz.

Pharmacists' Day Out: Socializing pharmacy for tomorrow's better health

17&18 Dec, 2023

Pharmacy Literacy Club, in association with Community Development Committee, is organising a plethora of National level competitions on the occassion of Diamond Jubilee Celebrations of MCOPS. This includes Quiz, Debate, Case Report presentations and Graphical e-poster presentations. In addition

to this, a blood donation camp, and an interactive talk with industry personnel on skill development and cracking interviews, is being arranged. The scale of the competitions makes this one of the largest student run pharma events in the country. The competitions being online, and the use of modern techniques in its conduction, makes this series stand out amongst the rest.

Entrepreneurship and Innovation Conclave:

The Road to Success in Healthcare

19 December 2023

INNOVATION AND ENTREPRENEURSHIP COUNCIL, MAPS, MCOPS will organize Panel Discussion on Innovation and Entrepreneurship in Healthcare on 19 December 2023. Elite alumni of Manipal college of Pharmaceutical Sciences will chair the Panel discussion. This panel discussion will set a benchmark and may help the students to inculcate the importance of entrepreneurship and innovation culture in healthcare. The discussion will highlight how to promote innovation in the health sector, how to strike an appropriate regulatory balance. Session discussions may give inputs on how innovated products and services are safe and high-quality. The innovation opportunity offered by the rise of data analytics, machine learning and AI would be discussed. It will also emphasis on need for stronger linkages between funders and entrepreneurs.

Valedictory of Diamond Jubilee Celebrations

20 Dec 2023

The valedictory of MCOPS DJC will be held on 20 December 2023 at 6 PM in Dr TMA Pai auditorium. The remarkable Ten Hug Days will culminate with the fusion concert by Ms Anjali Shanbhogue, saxophone specialist.

Newspill-December 2023 Editorial Team

Chairman: Dr C Mallikarjuna Rao Co-chairman: Dr Krishnamurthy Bhat Editor-in-chief: Dr Angel Treasa Alex Associate Editor: Ms Athira R Nair Reporter: Mr John Patani



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