



# 9<sup>th</sup> World Conference on Pharmaceutical Science and Drug Manufacturing

01<sup>st</sup> - 02<sup>nd</sup> December 2021 | Dubai

**Theme:** Technological Innovations in Drug Discovery

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APR  
Pharmaceutical Research



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## 1. Event Summary

**Conference Name:** 9<sup>th</sup> World Conference on Pharmaceutical Science and Drug Manufacturing

**Date:** 1<sup>st</sup> and 2<sup>nd</sup> December 2021 | Dubai, UAE

**Conference Theme:** Technological Innovations in Drug Discovery

**Mode/Place:** Holiday Inn Bur Dubai, Khaled bin Al Waleed Building - 20th St - Bur Dubai - Al Hamriya - Dubai - United Arab Emirates

**No of Delegates** : 202 Delegates registered for the conference

### 1.1 OVERVIEW

Association of Pharmaceutical Research (APR) organizes the “9th World Conference on Pharmaceutical Science and Drug Manufacturing” on 1st & 2nd December 2021, in Dubai. This conference is a multidisciplinary program with broad participation with members from around the globe focused on learning about pharmaceutical science, research methodologies, formulations, manufacturing, and its advances. The Pharmaceutical industry has an important role in designing and developing drugs and vaccines. They play a significant role to treat diseases and more importantly to improve the quality of life. APR provides an excellent platform for the interaction between experts in the areas of pharmaceuticals, drug delivery, nanomedicine, biotechnology, and nanotechnology around the world and aims in sharing some unique research and translational studies on various advances in the related fields.

This conference open doors for many researchers in academia, clinicians, and industry representatives working in these exciting areas. It is expected to bring together both reputed scientists in advanced stages of their career and young researchers from many related disciplines. This conference expects many ideas to emerge at the interfaces between disciplines aiming to solve the most important problems relating to the health and wellbeing of humanity.

This will provide an opportunity to reach the largest assemblage of participants from the Pharmaceutical community to gather and share their insights and convey recent developments in drug research and current challenges and possibilities in modelling a new drug and breakthroughs in drug development, drug safety, novel trends and advanced strategies involving formulation research. Industries related to Pharmaceutical and Drug manufacturers are all invited to showcase their advanced products so that their products can get exposure and forefront of developing the products, services, technologies, and expertise that will drive the industry forward.

### 1.2 Conference Theme

Technology has been a significant driver of advances in drug discovery. Automation, nanofluidic, imaging, software and assay technologies have played a pivotal role in acquiring better data, faster.

The number of new drug approvals has remained reasonably steady for the past 50 years at around 20 to 30 per year, while at the same time the total spending on health-related research and development has tripled since 1990. There are many suspected causes for this trend, including increases in regulatory barriers, the rising costs of scientific inquiry, a decrease in research and development efficiency, the downstream effects of patient expirations on investment, and the lack of production models that have successfully incorporated new technology. Regardless, this trajectory is not economically sustainable for the businesses involved, and, in response, many companies are turning toward collaborative models of drug development, whether with other industrial firms, academia, or government. Introducing greater efficiency and knowledge into these new models and aligning incentives among participants may help to reverse the trends highlighted above, while producing more effective drugs in the process.

**To summarise new technologies have the potential to open up avenues of development and to identify new drug targets to pursue.**

## 2. ABOUT THE CONFERENCE

Association of Pharmaceutical Research (APR) organizes the “9th World Conference on Pharmaceutical Science and Drug Manufacturing” on 1st & 2nd December 2021, in Dubai. This conference is a multidisciplinary program with broad participation with members from around the globe focused on learning about pharmaceutical science, research methodologies, formulations, manufacturing, and its advances. We invite all the Speakers and Delegates from all over the world to attend this conference. It creates a perfect podium for global networking as it brings together renowned speakers and scientists across the globe to the most exciting and memorable scientific event filled with informative and interactive sessions, international workshops, world-class international exhibitions, and poster presentations.

Experts and scholars from Drug Manufacturing and Pharmaceutics background can showcase their scientific work, research, and emerging technologies on the topics such as Pharmacology, Pharmaceutical Biotechnology, Pharmacogenomics, Drug Delivery Systems, Bio-drugs, Pharmacovigilance, and Drug Safety, Pharmaceutical Microbiology, Pharmaceutical Research, and Development, Pharmaceutical Analysis, and Quality Assurance, Bio-therapeutics, Radiopharmaceuticals, Vaccine Design, Formulation Technologies, Clinical Pharmacy, Industrial Pharmacy, Pharmaceutical Chemistry, and Pharmaceutics

## 3. CONFERENCE SCOPE

9<sup>th</sup> Pharma conference topics include the following

- AI and Machine learning for Drug Discovery
- Digitization of Medicine
- AR – VR Technologies

- IoT Integration
- Blockchain
- 3D- Printing Drugs
- Organs on Chips
- Molecular Modelling in Drug Designing
- Computer-Aided Drug Design-CADD
- Growth Strategies for Pharmaceutical Industries
- Biochemical pharmacology
- Clinical pharmacology
- Clinical Pharmacokinetics
- Drug Delivery Systems
- Pharmacogenomics
- Pharmacovigilance and Risk Management
- Clinical Pharmacy
- Pharmaceutical Toxicology
- Clinical Research and Clinical Trials
- Hospital Pharmacy
- Modern Pharmacognosy
- Novel Drug Delivery Systems, Bioavailability & Bioequivalence Studies
- Cosmetology
- Radiopharmacy
- Pharmaceutical Microbiology
- Biopharmaceutics and Pharmacokinetics
- Herb -Drug Interaction
- Edible Vaccines and Marine Pharmacognosy
- Biopharmaceutical Drug Design and Development
- Biomarkers in Drug Design
- Medicinal Chemistry & Drug Discovery
- Pharmaceutical chemistry and Research Advancements
- Nanotechnology
- Pharmaceutical Formulation Technologies
- Industrial Pharmacy
- Pharmacoinformatics
- Drugs and Medical Devices: Regulatory Affairs
- Pharmacy Business and Market

As a result, many Keynotes, Tutorial and Technical Sessions have been prepared in accordance with conference scope to discuss the Challenges, Opportunities and Problems of Application in various fields.

#### **4. INAUGURAL PROGRAMME**

The day 1 of the conference started with welcoming all the participants, dignitaries and special guest for the conference followed by the proceedings book release on Physical and virtual platforms and introduction of session chair for the technical sessions. And then opening speech, welcoming speech were conducted.

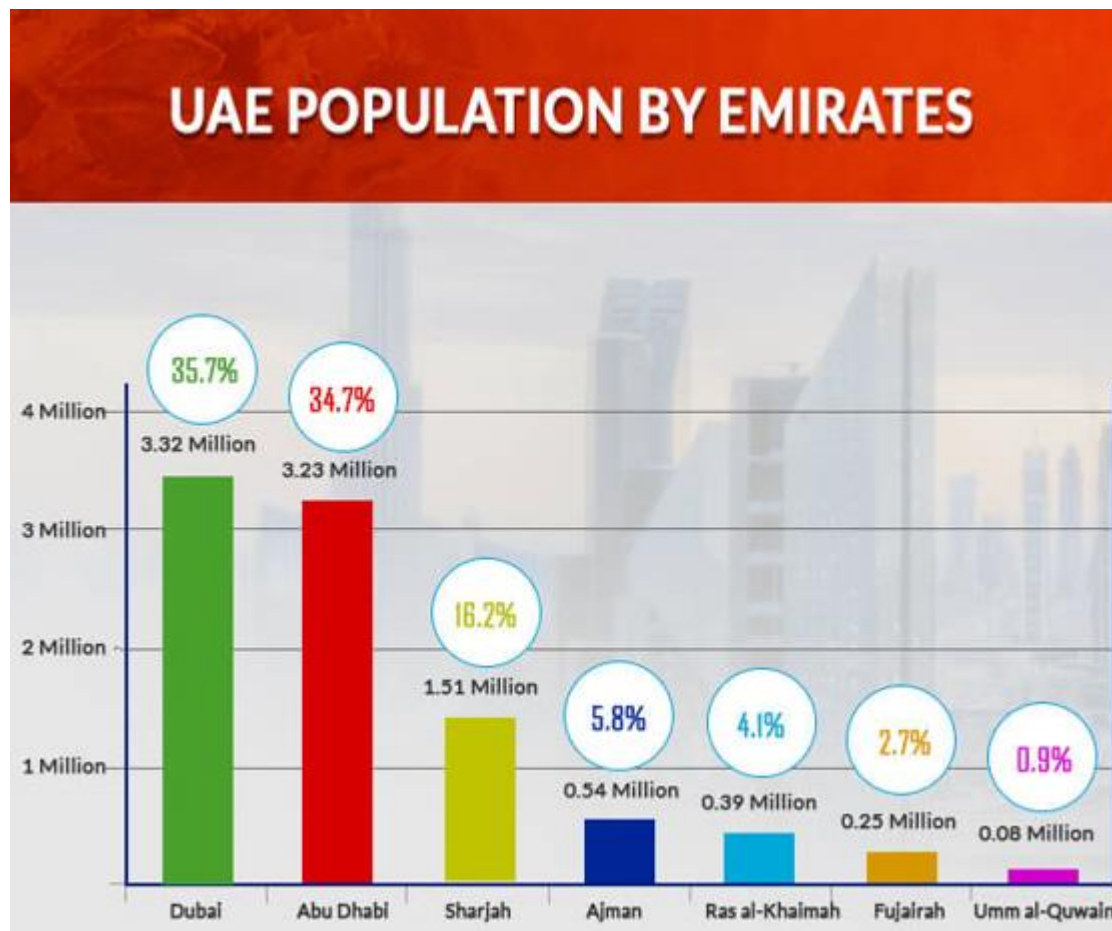
Post to that, our valuable eminent keynote speakers from various parts of the country given their speeches followed by the technical session. On Day 1, technical sessions has begun with participants from different places were presented on Day 1 and completed the day 1 conference successfully.

The day 2 of the conference started by welcoming all participants, speakers and dignitaries followed by the technical participants. On Session 1, 2 and 3, multiple technical participants had presented their views based upon the theme of conference. Post completion, our honourable dignitary delivered the Valedictory speech followed by Vote of thanks. All together the 9<sup>th</sup> WCPSDM 2021 conference conducted on 1<sup>st</sup> and 2<sup>nd</sup> December was completed successfully.

To make the conference delight and successful, our team has taken a huge effort and undergo several analyses on how best the conference can be arranged. A Market and geographical analysis were prepared prior to the conference.

### Total Population of Dubai:

3.32 Million Population of the Philippines (2020 and historical)



## Geographical Analysis:

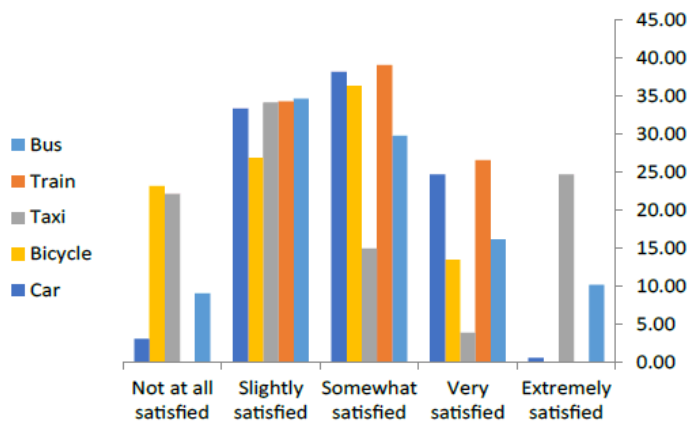


Figure 12: Satisfaction with mode of transportation in Dubai city.

## Targeted Countries (based on geographical analysis)

### Targeted Countries based on Tourist (Check in):

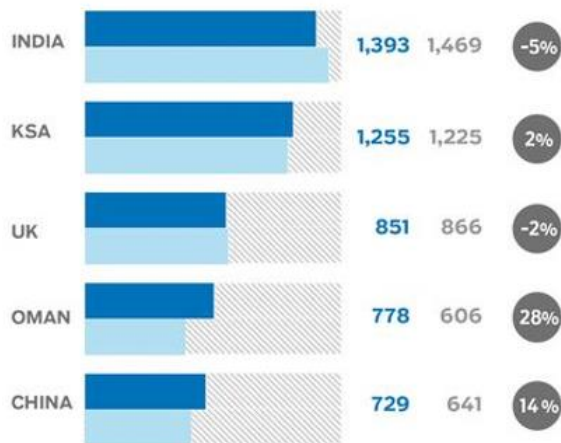
2019



## DUBAI'S VISITOR NUMBERS SURGE

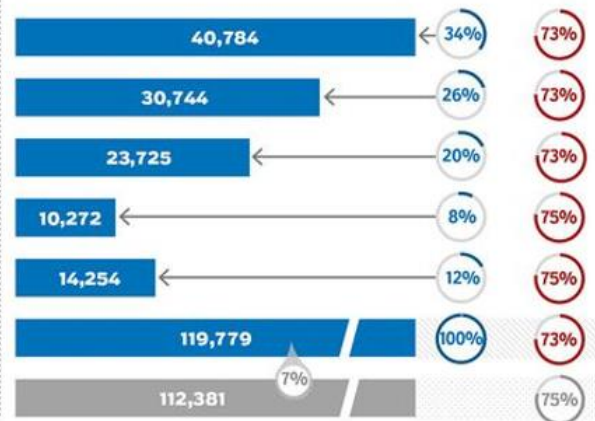
TOP 20 SOURCE MARKETS FOR VISITORS TO DUBAI  
(\*000 visitors YOY Jan - Sep 2019|2018)

Performance of Top 10 Source Markets ■ 2019 ■ 2018



HOTEL INVENTORY BY CATEGORY  
AND PERFORMANCE KPIS

Total Available Rooms [Supply] → % of Inventory Average Occupancy



### 4.1 Welcoming and Opening Ceremony

The respective opening speech and the Welcoming Speech was given by these dignitaries:



**Asif Mahmood**

Chief Safety Officer, VP Global Clinical Safety & Pharmacovigilance at Medicago, Durham, North Carolina, United States



**Dr. Anil Philip**

Associate Dean, School of Pharmacy, University of Nizwa, Sultanate of Oman





**Dr. M.Sunitha Reddy**

Head of Department

Associate Professor

Centre for Pharmaceutical Sciences, IST,  
JNTUH



**Dr. Aysu Yurdasiper**

Assistant. Professor

Department of Pharmaceutical Technology

Faculty of Pharmacy, Ege University, Izmir,  
Turkey

## 4.2 Keynote Speakers

Welcoming Keynote Speakers of the 9<sup>th</sup> World Conference on Pharmaceutical Science and Drug Manufacturing

Our first honourable Keynote speaker was



**Mohamed Haitham Ayad**

R & D Manager and Fellow,  
Johnson & Johnson,  
Dubai, UAE.



**Dr Razia Khanam**

Professor and Lead-  
Pharmacology,  
Gulf Medical University  
Ajman  
United Arab Emirates



**Dr. Ibrahim Elsayed**

Director of Quality Assurance and Institutional Effectiveness  
Gulf Medical University, United Arab Emirates  
Faculty of Pharmacy - Cairo University, Egypt



**Prof . Marcel Mozafari**

President and Founder  
Australasian Nanoscience & Nanotechnology Initiative (ANNI),  
Australia



**Dr. Ranendra N. Saha**

Director and Shri B K Birla & Smt Sarala Birla  
Chair Professor,  
BITS Pilani Dubai,  
United Arab Emirates.



**Dr. S Ghasemi**

Assistant Professor of Cellular and Molecular  
Research Center,  
Shahrekord University of Medical Sciences,  
Iran.



**Ignacio Quiles Lara**  
Board of Directors,  
WBY Ventures,  
USA.



**Prof. Dr. Awad Mansour**  
Professor  
Pharma Tech International, Inc.  
Greater Chicago, USA



**Dr. Dan Lim**  
Vice President  
Advent Health University  
United States



**Dr. Gunawan Indrayanto**  
Professor  
Universitas Surabaya (UBAYA)  
Indonesia



**Santanu Sinhamahapatra**  
Principal Scientist  
Biocon Research Center  
India



**Gaelle JARON**  
Co-founder & CEO  
RephineSourcing.com  
Paris



**Shri. Ashish Kumar**  
Vice President  
Zydus Group,  
Ahmedabad Area, India

### Guest of honour



**Asif Mahmood**  
Chief Safety Officer, VP Global Clinical  
Safety &  
Pharmacovigilance at Medicago, Durham,  
North Carolina, United States

### Session Chair

Followed by welcoming our session chair of the 9<sup>th</sup> World Conference on Pharmaceutical Science and Drug Manufacturing consist of the 4 sessions. Which spitted into 2 per day



**Neda Bavarsad**

Assistant Professor of Pharmaceutics,  
School of Pharmacy,  
Ahvaz Jundishapur University of Medical,  
Iran.



**Dr. Bontha Venkata Subrahmanya Lokesh**

Senior Lecturer,  
University of Malaya,  
Malaysia.



**Dr. Firoj A. Tamboli**

Head  
Department of Pharmacognosy  
Bharati Vidyapeeth College of Pharmacy,  
Maharashtra, India



**Prof. Dr. Nahlah ElkuDssiah Ismail**

Professor,  
Department of Clinical Pharmaceutics,  
Faculty of Pharmacy, MAHSA University,  
Malaysia Council Member, Malaysian  
Academy of Pharmacy,  
Malaysia



**Dr. Azimova Bahtigul**  
Faculty & Researcher,  
Tashkent Pharmaceutical Institute,  
Uzbekistan.



**Prof. (Dr.) Jayvadan K. Patel,**  
Professor of Pharmaceutics and Principal, Nootan  
Pharmacy College,  
Dean, Faculty of Pharmacy, Sankalchand Patel  
University,  
India.

### 4.3 Opening Session \_Conference Proceedings.

Keynote speakers will be releasing the proceedings book on the conference day

**BioLeagues Worldwide Conferences**  
<https://www.bioleagues.com/> | [info@bioleagues.com](mailto:info@bioleagues.com)

**UPCOMING CONFERENCES**

**International Conference on Current Advances in Pharmaceutical Industry and Developments**  
March 10<sup>th</sup> & 11<sup>th</sup>, 2022 | Hyderabad, India

**PharmaCon-Asia: Drug Discovery & Communal trial**  
June 17<sup>th</sup> & 18<sup>th</sup>, 2022 | Kuala Lumpur, Malaysia

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APF PHARMACEUTICAL INNOVATION

ISBN : 978-93-92106-00-2

### 4.4 Speakers of Interactive Idea Panels



**Mohamed Haitham Ayad**  
R & D Manager and Fellow,  
Johnson & Johnson,  
Dubai, UAE.

#### Biography:

Mohammad Hiatham Ayad is passionate about Innovation in Drug Delivery strategies which provide concrete benefits to patients. He is having +20 years working experience in Pharmaceutical Research & Development including:

- Strong expertise in formulation development of oral dosage forms, CMC, and drug delivery technologies: bioavailability enhancement, controlled release, process scale-up, technology transfer, and troubleshooting

- Team leadership and Project management experience acquired in diversified industrial environments: Big Pharma, Biotech and Contract Manufacturing companies
- Recognized expert in selection, audit, and management of CDMOs

**Specialties:**

- \* Formulation development of oral solid dosage forms (Tablet, Capsule, and Sachet) and oral liquid dosage forms (Solution and Suspension).
- \* Drug delivery technologies to handle specific drug substance problems such as poor solubility and short half-life.
- \* Process development, scale-up to industrial facilities, Technology transfer and Troubleshooting.

**Keynote Speech about:** Open Innovation in Life Sciences: from Theory to Industrial Implementation



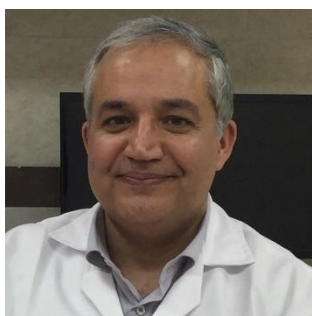
**Dr Razia Khanam**  
Professor and Lead-Pharmacology,  
Gulf Medical University Ajman  
United Arab Emirates

**Biography:**

A committed Professor with over 20 years of experience at leading institutions in UAE and India, teaching students from various social and cultural backgrounds. Possessing excellent administrative, communication and written skills along with constructive and effective teaching methods that promote a stimulating learning environment. Responsible for carrying out teaching using advanced teaching techniques, administrative and research duties. Also involved in coordinating courses for Pharm.D, MBBS and BBMS students.

**Keynote Speech about:** Hypertension: Novel Drug Targets and Potential Utility





**Prof . Marcel Mozafari**

President and Founder  
Australasian Nanoscience & Nanotechnology  
Initiative (ANNI),  
Australia

Prof. Marcel Mozafari, graduated from the school of pharmacy and chemistry, Liverpool John Moores University in 2005. He has authored more than 100 publication, including 3 patents and 3 books, which are among the first books in the field of Pharmaceutical Nanotechnology and Nanobiotechnology, his book Nanoliposomes from fundamentals to recent developments is the very first book on nanoliposomes ever written. Prof Mozafari possess 20 years research and teaching experience both in the academics as well as the industry in different countries including England, Turkey, New Zealand and Australia.

**Keynote Speech about:** Tocosomal Drug Delivery Systems: Safe and Efficient Tocopherol-Based Carrier Technology



**Dr. Ranendra N. Saha**

Director and Shri B K Birla & Smt Sarala Birla  
Chair Professor,  
BITS Pilani Dubai,  
United Arab Emirates.

Dr. Ranendra N. Saha, is shri B K Birla & Smt Sarala Birla Chair professor (Senior professor of Pharmacy) and director of BITS Pilani Dubai Campus. In 2011 he has been awarded Shri B. K. Birla & Smt Sarala Birla Chair professorship at BITS Pilani for contributing in teaching and research. He has vast experience in the field of Pharmacy especially in Pharmaceutics, Novel Drug Delivery Systems and Pharmacokinetics. He received “Pharmacy Professional of the year 2013” award given by Indian Association of Pharmaceutical Scientist and Technologist. He is also a recipient “The Best Pharmacy Teacher Award” for the year 2005. He has more than 33 years of teaching, research, and administrative experience. He has published more than 90 papers in International, National Journals and presenter more than 100 papers in conference/ Seminars/ Symposiums. He has also delivered several invited lectures at seminars and Conferences, universities in India and abroad.

**Keynote Speech about:** Drug Delivery: Challenges and Ways to Selective Delivery and Better Therapeutic Efficacy.



**Dr. Gunawan Indrayanto**  
Professor  
Universitas Surabaya (UBAYA)  
Indonesia

**Keynote Speech about:** Recent Developments on Chemical Validation Methods for Drug Analysis



**Gaelle JARON**  
Co-founder & CEO  
RephineSourcing.com  
Paris


**Keynote Speech about:** Why should supplier compliance management dive into a new ear?



**Shri. Ashish Kumar**  
Vice President  
Zydus Group,  
Ahmedabad Area, India







**Keynote Speech about:** Improving Access to Cancer Treatment: The Role of Biosimilars.







## 5. CONFERENCE ORGANIZING COMMITTEE



Conference Chair	
	<p style="text-align: center;"><b>Dr. Anil Philip</b> Associate Dean, School of Pharmacy, University of Nizwa, Sultanate of Oman</p>
Conference Co-chair	
	<p style="text-align: center;"><b>Dr. M.Sunitha Reddy</b> Head of the Department, Centre for Pharmaceutical Sciences, IST, JNTUH, Hyderabad, India</p>
Publication Chair	
	<p style="text-align: center;"><b>Dr. Aysu Yurdasiper</b> Assistant. Professor Department of Pharmaceutical Technology Faculty of Pharmacy Ege University, Izmir, Turkey</p>
Organizing Committee Memebers	
	<p style="text-align: center;"><b>Dr. Sridevi Chigurupati</b> Assistant Professor, Department of Medicinal chemistry and Pharmacognosy College of Pharmacy, Qassim University, Buraidah, Kingdom of Saudi Arabia</p>
	<p style="text-align: center;"><b>Dr. Ammar Ahmed Mohammed</b> Head College of Pharmacy University of Duhok Iraq</p>
	<p style="text-align: center;"><b>Dr. C. Ananda Vayaravel</b> Principal Sri Venkateshwaraa College of Paramedical Sciences India</p>
	<p style="text-align: center;"><b>Dr. Sambath Kumar</b> Principal J.K.K. Nattraja College of Pharmacy, India</p>
	<p style="text-align: center;"><b>Dr. Usama Hamid Ramadhan</b> Professor college of pharmacy University of Basrah Iraq</p>

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	<p><b>Professor Ahmed Sebihi</b> Professor American University UAE</p>
	<p><b>Sunil K. Prajapati</b> Senior Lecturer AIMST University Malaysia</p>
	<p><b>Dr Mohammad Jamali</b> Program Leader/Assistant Professor Department of Health &amp; Medical Sciences Khawarizmi International College Abu Dhabi, United Arab Emirates</p>
	<p><b>Dr. Amgad Rabie</b> Head of Clinical Research Department Dikernis General Hospital Egypt</p>
	<p><b>Dr. Anantha Naik Nagappa</b> Director Amity Institute of Pharmacy, Gwalior India</p>
	<p><b>Dr. Brahim Benyahia</b> Associate Professor Department of Chemical Engineering, Loughborough University, United Kingdom</p>
	<p><b>Dr. Majid Saeedi</b> Professor Department of Pharmaceutics, Faculty of Pharmacy, Mazandaran University Sari Iran</p>

	<p><b>Dr. Manickam Balamurugan</b> Asst. Dean UG Studies College of Pharmacy &amp; Nursing, School of Pharmacy, University of Nizwa, Nizwa, Sultanate of Oman</p>
	<p><b>Dr. Pharkphoom Panichayupakaranant</b> Professor Department of Pharmacognosy and Pharmaceutical Botany, Faculty of Pharmaceutical Sciences, Prince of Songkla University, Thailand</p>
	<p><b>Dr. Pravinkumar Vishwanath Ingle</b> Senior Lecturer International Medical University Malaysia</p>
	<p><b>Dr. Sasikala Chinnappan</b> Head of Department UCSI University Malaysia</p>
	<p><b>Dr. Suzan Omer Rasool</b> Head of Department University of Duhok Iraq</p>
	<p><b>Prof (Dr.) Manish Kumar</b> Professor M M College of Pharmacy, Maharishi Markandeshwar (Deemed to be University), Haryana India</p>
	<p><b>Prof. Dr. Ashik Mosaddik</b> Chairman Pharmacy Department, University of Rajshahi Bangladesh</p>

	<p><b>Dr. Purushottam Dewang</b>          Founder MD and Chief Scientific Officer,          CropG1 Agro Research &amp; Development          Pvt. Ltd          Bangalore          India</p>
	<p><b>Dr. Sandip Sharad Kshirsagar</b>          Principal, Research Scientist &amp; Project          Head of Department          Department of Pharmaceutical Analysis          Kasturi Shikshan Sanstha College of          Pharmacy,          Maharashtra          India</p>
	<p><b>Dr.S.N. Sriharsha</b>          Principal, Professor, and Research Director,          Hill Side College of Pharmacy and          Research Centre          Karnataka,          India</p>
	<p><b>Dr.Sabu MC</b>          Principal          Mookambika College of Pharmaceutical          Sciences and Research,          Kerala          India</p>
	<p><b>Mr. Santhosh Savarkar</b>          Associate Vice President          Umedica Laboratories Pvt. Limited          India</p>
	<p><b>Dr Pareshkumar Chandravadan Dave</b>          Founder          IP Moment          Delhi          India</p>
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		<p><b>Dr. Satya Prakash Singh</b>  Professor and Director  Babu Sunder Singh College of Pharmacy,  Uttar Pradesh  India</p>
		<p><b>Prof (Dr.) Subas Chandra Dinda</b>  Professor &amp; Head,  Department of Pharmaceutics  Teerthanker Mahaveer University,  Uttar Pradesh  India</p>
		<p><b>Dr. Ashwin Kuchekar</b>  Associate Professor  School of Pharmacy, Dr. Vishwanath Karad  MIT World Peace University,  Pune  India</p>
		<p><b>Dr. Bandoo Chagan Chatale</b>  Associate Professor  Department of Pharmaceutical Chemistry  Mumbai Educational Trust Institute of  Pharmacy  Maharashtra  India</p>
		<p><b>Dr. M. Senthilraja</b>  Professor &amp; Head  Department of Pharmaceutical Chemistry,  J.K.K.Nattraja College of Pharmacy  Tamil Nadu  India</p>
		<p><b>Dr. Rupesh K. Gautam</b>  Professor &amp; Head  Department of Pharmacology,  MM School of Pharmacy, MM University  (NAAC Accredited),  Haryana  India</p>
		<p><b>Ms. Anjali Sharma</b>  Assistant Professor  Guru Gobind Singh College of Pharmacy  Haryana  India</p>

	<p><b>Dr. Palanisamy Sivanandy</b> Assistant Professor Department of Pharmacy Practice School of Pharmacy, International Medical University, Kuala Lumpur Malaysia</p>
	<p><b>Dr. Saurabh Sharma</b> Assistant Professor Department of Pharmaceutics School of Health Science, University of Petroleum and Energy Studies, Uttarakhand India</p>

### International Advisory Committee





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## Advisory Committee Chair

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	<p><b>Dr. Palanirajan Vijayaraj Kumar</b> Head UCSI University Malaysia</p>
	<p><b>HANIF SHIRINZADEH</b> Assistant Professor Ankara University Turkey</p>

## Review Committee Members

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	<p><b>Elif Gizem Karaca</b> Research Assistant Ege University Turkey</p>
	<p><b>Dr. N T Pramathesh Mishra</b> Assistant Professor MGIP, Dr. APJ Abdul Kalam Technical University, India</p>

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	<p><b>DR. MAQSOOD UR REHMAN</b> Lecturer University of Malakand Pakistan</p>
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	<p><b>Prof.Swarupananda Mukherjee</b> Assistant Professor NSHM Knowledge Campus India</p>
	<p><b>Dr. Azimova Bahtigul</b> Faculty &amp; Researcher Tashkent Pharmaceutical Institute, Uzbekistan</p>
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	<p><b>Dr. Simanchal Panda</b> Associate Professor Dattakala College of Pharmacy India</p>

## Technical Committee Members



**Dr. M. Vijayabaskaran**  
Professor & Head  
Department of Pharmaceutical Chemistry,  
J. K. K. Nattraja College of Pharmacy,  
Tamil Nadu  
India

## 6.SCIENTIFIC PROGRAM

Day	Session
Day 1	Technical Session I
Day 2	Technical Session II
	Technical Session III
	Technical Session IV

### Technical Session I

**Formulation of Moxifloxacin Loaded Solid Lipid Nanoparticles for Ophthalmic Delivery**

*Presentation by Jayvadan Patel*

**Synergistic effect of Farnesoid X receptor and fasting-mimicking diet against metastasis castration -resistant Prostate cancers**

*Presentation by Dr. Inam Sameh Arif*

**Pharmacist's Role in Antimicrobial Stewardship Program Application in Pediatric Hospital**

*Presentation by Sajid Majeed Hameed*

**Application of subcritical water as a green solvent for extraction of biologically important molecules**

*Presentation by Nataša Nastić*

**pH-Sensitive Compound Liposomes of Mesalazine and Curcumin Prompt Instantaneous Relief to Guinea Pig Models of Ulcerative Colitis: Investigating Drug Synergy Along Colon-targeting Approach**

*Presentation by Soumayya Aib*

**Green technology for medical herbs processing: supercritical carbon dioxide extraction through basics and case studies**

*Presentation by Senka Vidovic*

**Cutting-edge nanoparticles: a step towards the clinical and industrial applications**

*Presentation by Colombo Miriam*

**A Review on the Antibacterial efficacy of Siddha Formulations against Helicobacter pylori**

*Presentation by V. POORNA PUSHKALA*

**Formulation development, optimization and in-vitro, ex-vivo and in-vivo characterization of self-nano emulsifying drug delivery systems of Ibrutinib**

*Presentation by K Anie Vijetha*

**DEVELOPMENT AND OPTIMIZATION OF NEBIVOLOL HYDROCHLORIDE LOADED NANO- TRANSFEROSOME PATCHES FOR TRANSDERMAL DRUG DELIVERY**

*Presentation by Aparanjitha.R*

**Docking-based strategy to design novel Isatin derivatives as potent MAO-A inhibitors with prediction of their drug-likeness and ADMET properties**

*Presentation by divya sreepada*

**The levels of interleukin-1 family cytokines and oxidative stress in rheumatoid arthritis patients in terms of disease activity**

*Presentation by Sezen Yilmaz Sarialtun*

**The effect of topical quercetin loaded liposome on pressure ulcer healing in rats**

*Presentation By Golnaz Hemmati*

**Documentation in Clinical Research**

*Presentation by Dr.Akshaya Sridhar*

**TOXICITY AND CARDIAC EFFECT DURING ACUTE EXPOSURE OF NON-ESSENTIAL AMINO ACIDS IN COMBINATION WITH PROKINETIC AGENT IN EARLY DEVELOPING ZEBRAFISH (Danio rerio)**

*Presentation by Samrat Bose*

**A PROSPECTIVE RANDOMISED STUDY OF PROPOFOL AND ETOMIDATE ON RECOVERY PROFILE AND ADVERSE EFFECTS IN ELECTROCONVULSIVE THERAPY**

*Presentation by Dr. Skandashree B S*

**DEVELOPMENT OF AN OPTIMIZED FRACTION OF STROBILANTHES CRISPUS USING RESPONSE SURFACE METHODOLOGY FOR ANTICANCER ACTIVITY.**

*Presentation by Sutha Devaraj*

**COMPARATIVE STUDY BETWEEN THE SAFETY AND EFFICACY OF PHENYLEPHRINE AND MEPHENTERMINE IN THE MANAGEMENT OF HYPOTENSION INDUCED BY SPINAL ANAESTHESIA**

*Presentation by Dr Manjula MJ*

**Study on Drug Therapy Problems (DTPs) in hypertensive Patients with Cardiovascular Diseases (CVD) at Multispecialty Teaching Care Hospital, South India – A Prospective Study**

*Presentation by Dr.R.A.M.Jainaf Nachiya*

**“Knowledge, Attitude and Practice of needle stick injuries among dental and nursing students”**

*Presentation by SUNIL K. PRAJAPATI*

**A SYSTEMATIC REVIEW ON NOVEL ANTIFUNGAL 1,3 BETA-D-GLUCAN INHIBITOR ROLE IN RESISTANT VULVOVAGINITIS**

*Presentation by DR SHOEBUL HAQUE*

**EVALUATION OF TOXICOLOGICAL STUDIES OF *Cardiospermum halicacabum* Linn**

*Presentation by Kumudhavalli Sureshkumar*

**Therapeutic moral through Traditional medicine on transplacental genotoxicity caused by modern medicines in pregnant women**

*Presentation by Camellia Roy*

**Effect of Enoxaparin on D-Dimer level in Hospitalized COVID-19 Patients: An Observational Study**

*Presentation by Dr Ayasha Nayak*

**CARBON NANOTUBES : TREATMENT AND APPLICATIONS IN  
EUTODEGENERATIVE AND ALZHEIMER' S DISEASE.**

*Presentation by Niharika Modi*

**Social Media's Impact on Pharmacovigilance**

*Presentation by Anuj Kumar Singh*

**Opening the treasure chest of the non-coding RNA**

*Presentation by Sayantan Pal*

**Comparative study of Anti-inflammatory and Anthelmintic activities of T.Orientalis by  
In-vitro method**

*Presentation by Kaustav Mahapatra*

**In-Silico studies, Molecular Docking, Synthesis and Characterization of 4-methyl 9, 10-  
dihydro-2H, 8H-chromeno [8, 7-e][1, 3]oxazin-2-one as Antimicrobial and Anticoagulant  
Agents**

*Presentation by PARKAVI M*

**“CONTRACEPTIVE PILLS”:- A dental nightmare !**

*Presentation by Dr Kumar Sougata, Sivalanka Sree Chandana Shreya and Nitya Jha*

**PAST, PRESENT AND FUTURE OF CLINICAL RESEARCH IN INDIA**

*Presentation by Arpan Bera*

**Effect of Body weight and organs on Dactylorhiza hatagirea (D. Don) Soo. root extract  
using Cyclophosphamide induced method in male albino rats**

*Presentation by Raju G*

**A REVIEW ON UROLITHIASIS, ITS DIAGNOSIS AND THEIR TREATMENT**

*Presentation by Laxmikant M. Purane*

**Pre-existing and latest paradigms explored in the domain of precision medicine**

*Presentation by Monalisha Jena*

**Patient Adherence to Anti-Tubercular Medication at a Tertiary Care Teaching Hospital  
in Mahabubnagar**

*Presentation by P. Ushasree*

**In-vitro Evaluation of a synthetic compound 1-(4-nitrophenyl)-N- phenylmethanimine against Breast Cancer**

*Presentation by Reetuparna Acharya*

**Brk/PTK6- siRNA: A Novel Therapeutic Agent for Treatment of Breast Cancer**

*Presentation by Roja Sahu*

**Hypobaric hypoxia induced renal injury in Rats: prophylactic amelioration by Quercetin supplementation**

*Presentation by Vaishnavi Rathi*

**Acceptance of COVID-19 vaccines among Iraqi pharmacy students**

*Presentation by Alaa Abdulhasan Abbas*

**Linear Discriminant Analysis and Artificial Neural Network Modeling of Molecular Descriptors of COX-2 – Targeted Non-Steroidal Anti-inflammatory Drugs (NSAIDs)**

*Presentation by Liza T. Billones*

**Preparation and Physicochemical Characterization of Succinyl Chitosan Coated Liposomes for Oral Delivery of Grape Extract and Evaluation of Its Effect on Pulmonary Fibrosis Induced by Bleomycin in Rats**

*Presentation by Fateme Jafarian*

**Brain eating amoeba' a review**

*Presentation by Ketakee Prakash Gosavi and Bhagyashree Chandrasekhar Wagh*

**Design and evaluation of Ornidazole loaded microsphere drug delivery system**

*Presentation by Plaban Saha*

**Role, guidelines, and consequences related to Iron supplements**

*Presentation by Noor subhi fawwaz*

**MICROBIAL DRUG DELIVERY SYSTEM: A NEWER APPROACH**

*Presentation by Pratyusa sar*

**QSAR and molecular docking studies for prediction of novel potential anti-tubercular leads**

*Presentation by VENKATESAN S*

**MITIGATIVE EFFECT OF ZANTHOXYLUM RHESTA LINN ETHANOLIC EXTRACT IN LETROZOLE INDUCED POLYCYSTIC OVARIAN SYNDROME (PCOS) IN A MURINE MODEL**

*Presentation by Vijay Babu*

**Nimesulide Loaded Silver Nano formulation used in Psoriasis and Psoriatic arthritis**

*Presentation by Komal Raj*

**DEVELOPMENT AND IN VITRO EVALUATION OF CEFTRIAXONE SODIUM COATED SUTURE FOR ANTIBACTERIAL ACTIVITY**

*Presentation by S Pranav Ragavendra*

**COMPARATIVE ASSESSMENT OF THE EFFECTS OF CANAGLIFLOZIN AND SITAGLIPTIN IN SCOPOLAMINE INDUCED COGNITIVE IMPAIRMENT IN RAT**

*Presentation by Arpan Adak*

**Evaluation of the protective effect of hydroalcoholic extract of Brassica nigra seeds on Manganese induced neurotoxicity in mice**

*Presentation by Sushila Rawat*

**Phenytoin Loaded Copper Nanoparticles used in Wound healing.**

*Presentation by Bhawana Chand*

**AMPHOTERICIN – GOLD STANDARD OF ANTIFUNGAL THERAPY FOR CORONA VIRUSE DISEASE ASSOCIATED MUCORMYCOSIS ( CAM )**

*Presentation by Harshada Ramesh kajave and Namrata sanjtkumar sant*

**Technical Session II**

**Invitro Antiglycation Activity of Isorhamnetin on Bovine Serum Albumin with different sugars using Sodium Dodecyl Sulphate Polyacrylamide Gel Electrophoresis**

*Presentation By Vimalavathini.R*

**A Validated, Green and Rapid ATR-FTIR Spectroscopic Method for Evaluation of Gliclazide in Gastroretentive Mucoadhesive Microspheres and its Marketed Formulations**

*Presentation By Annapoorani Arjunan*

**Design, molecular docking, and antimicrobial assessment of newly synthesized phytochemical thymol Mannich base derivatives**

*Presentation By MONALISA MAHAPATRA*



**Method Development and Validation of an Oral Anti-hyperglycemic Drug: Sitagliptin and its Application in Bioequivalence Studies**

***Presentation By DIBYA DAS***

**Clinically relevant concepts on Polymer-Paclitaxel conjugates**

***Presentation By Preeta Bose***

**Application of Natural Gums in the Formulation of Microspheres – A Review**

***Presentation By Devlina Pal***

**Total Synthesis and Molecular Docking of Biologically Active Natural Products Using Palladium Catalyzed Biaryl Coupling Reactions**

***Presentation By Ishtiaq Jeelani***

**DEVELOPMENT AND EVALUATION OF SOLID DISPERSION BILAYER TABLETS FORMULATED WITH SOME BCS CLASS II DRUGS**

***Presentation By Kola Hephzibah***

**Protein-polysaccharide Scaffold of fish collagen and Nano-Hydroxyapatite crystals for bone regeneration**

***Presentation By Prakruti P Acharya***

**Application of Quality by design for the optimization of Push pull osmotic pump of S-Metoprolol Succinate**

***Presentation By Dr.Bhuepndra Gopalbhai Prajapati***

**EFFICACY AND SAFETY OF TRIAMCINOLONE ACETATE INJECTION IN PLANTAR FASCIITIS : A PROSPECTIVE INTERVENTIONAL STUDY**

***Presentation By Dr Raghu N***

**DEVELOPMENT AND EVALUATION OF CYCLODEXTRIN BASED ACTARIT NANOSPONGES**

***Presentation By Madhavi M***

**Synthesis of new hydrazone derivatives bearing imidazolidine moiety as monoamine oxidase inhibitors**

***Presentation by Fatih Tok***

**A STUDY OF DEVELOPMENT, VALIDATION AND FORCED DEGRADATION FOR QUANTIFICATION OF TECOVIRMAT IN BULK AND DOSAGE FORMS BY UPLC**

*Presentation by Anusha kota*

**PREPARATION OF QUERCETIN MICROSPHERE FORMULATIONS BY SOLVENT EVAPORATION METHOD AND EVALUATION OF THE FORMULATION FACTORS**

*Presentation by Esra Demirtürk*

**Insilico Docking of Cyanidin on Molecular Proteins of Mitogen Activated Protein Kinase (MAPK) Pathway**

*Presentation by Vimalavathini.R*

**Design, Synthesis, Characterization, and in-vitro anti inflammatory activities of 2-phenyl-1-(piperidin-1-yl methyl)-1H-indole**

*Presentation by BANUREKHA. J*

**Simvastatin Loaded Nano-Structured Lipid Carriers For Repurposing In Breast Cancer**

*Presentation by Asha Spandana K M*

**Formulation and Evaluation of PAMAM Dendrimer based Topical Nanogel of Nimesulide.**

*Presentation by Alka Srivastava*

**Application of co-crystal Technology in Formulation of Pharmaceuticals**

*Presentation by Sanika Kole*

**DEVELOPMENT AND CHARACTERISATION OF ROSUVASTATIN SELF MICROEMULSIFYING DRUG DELIVERY SYSTEM IN A QUALITY BY DESIGN FRAMEWORK**

*Presentation by Kavitha AN*

**Simultaneous Quantification of Lupeol, Stigmasterol and  $\beta$ - Sitosterol in methanolic extract of Tricovas capsule- a polyherbal Marketed Formulation by a Validated RP-HPLC Method**

*Presentation by Sireesha Rayadurgam*

**Structural-Profiling of Fucoidan derived from Brown Seaweed *Stoechospermum marginatum* (C. Agardh) Kutzing and In-silico Screening for its Potential Antiviral Activity against Dengue Virus (DENV).**

*Presentation by Saravanan Muniappan*

**Formulation, Optimization And Evaluation Of Antifungal Nanosponge Loaded Hydrogel For Topical Delivery**

*Presentation by Anju N. K*

**Dissolution enhancement of Lercanidipine using liquid- Solid compact Technique**

*Presentation by Manisha Kotadiya*

**DEVELOPMENT AND EVALUATION OF NAPHTHOQUINONE COMPOUND LOADED NLCs AGAINST BREAST CANCER CELL LINE FOR THE TREATMENT OF TRIPLE NEGATIVE BREAST CANCER**

*Presentation by Preethi S*

**ISOLATION AND IDENTIFICATION OF MICROORGANISMS AND ASSESSING OF ANTIMICROBIAL RESISTANCE IN THE PHARMACEUTICAL EFFLUENTS**

*Presentation by Kamatham Sravani*

**Formulation and Evaluation of Polyherbal Protectant Cream**

*Presentation by Abhishek S*

**In silico design of an epitope-based vaccine ensemble for SARS-CoV-2**

*Presentation by Sivaa Arumugam R*

**Designing next-generation multi-epitope vaccine against a pathogenic strain of *Pseudomonas aeruginosa***

*Presentation by Sindhu.K*

**In silico recognition of novel antimicrobial peptide targeting biofilms and characterization**

*Presentation by Saravana Kumar*

**In Silico Prediction and Characterization of Biosynthetic Gene Clusters in the *Staphylococcus Aureus* Subsp. *Aureus* Nctc-8325**

*Presentation by Thanga Raj P*

## **GUGGUL LIPOSOME AS DRUG DELIVERY SYSTEM: A REVIEW**

*Presentation by Dr. Aiswarya Mohan*

**Development of Nanoemulgel for arthritic inflammation and pain based on ethnomedicinal plants of Western India**

*Presentation by Munira Momin*

### **Technical Session III**

**Phytochemical and Proximate Analysis of selected Medicinal Plants**

*Presentation By A Srivani*

**STANDARIZATION AND VALIDATION OF TRADITIONAL CLAIM OF MAESA INDICA (ROXB.) FOUND IN UTTARAKHAND**

*Presentation By Saraswati Bahuguna*

**Valorisation of Pacu skin collagen for enhancing the burn wound healing process**

*Presentation By Manjushree.H.K*

**Prevention Oxidation of LDL and foam cell formation by tannin methanol extract from Citrus limon and honey mixture**

*Presentation By Hari Priya G*

**Standardization and Toxicological profiling of Polyherbal Anti-diabetic siddha formulations**

*Presentation Dr.S.Ruby*

**Formulation, Optimization and Evaluation of Polyherbal UNANI formulation Marham Karish Jadeed for the Treatment of Psoriasis**

*Presentation By Kumar Mohan*

**IMMUNO MODULATION WITH AYURVEDA DURING THE PANDEMIC**

*Presentation By Dr. Parvathy C*

**Antimutagenic activity of ethanolic extract of the fruits of Manilkara zapota. Linn in Swiss albino mice**

*Presentation By Vivek H S*

**Phytochemical, FTIR and NMR of isolated compounds of methanolic extract of Linnobium laevigaetum Hump and Bonpl**

*Presentation By Keserla Bhavani*

**INTEGRATING AYURVEDIC KNOWLEDGE INTO MODERN COMPUTATIONAL TOOLS WITH SPECIAL FOCUS ON TRIPHALA**

***Presentation By DEVASENA KM***

**Bio-availability of tender coconut water in Ayurvedic formulations**

***Presentation By Lekshmi devi S***

**AYURVEDIC TAMRA BHASMA (INCINERATED COPPER NANOPARTICLES) AS AGENTS FOR DESIRED DRUG DELIVERY**

***Presentation By SREENISHA.S.S***

**Assessment of the Effect of Agomelatine on High Fat Diet and Fructose Induced**

***Presentation By Subhashini Badoni***

**Evaluation of Cardioprotective Effect of Raphanus sativus Linn. (Red variety) Roots Extract on Doxorubicin Induced Cardiotoxicity in Rats**

***Presentation By Deepshikha Rawat***

**Evaluation of the Antidiabetic Effect of Leave Extracts of Pterocarpus marsupium Roxb. on Streptozotocin Induced Diabetic Rats**

***Presentation By Muhammad Murtaza***

**Formulation and evaluation of spray dried extract from Cynara scolymus L.**

***Presentation By Ciobanu Cristina***

**Evaluation of In-Vitro Antioxidant Potential of Terminalia Tomentosa Wright & Arn. Fruits Extracts**

***Presentation By Syed Arif Pasha***

**Qualitative Phytochemical Screening Through HPTLC and GCMS Analysis of Nilavembu Kudineer: A Siddha Preparation**

***Presentation By ASALI AHAMED ABDUL SUKKUR***

**PHARMACOGNOSTICAL AND ANTI-DIARRHEAL ACTIVITY OF GREWIA OPTIVA J.R. DRUMMOND EX BURRET STEM BARK**

***Presentation By Monika Jagtap***

**Plant based medicines for prevention and treatment of Age-related Macular Degeneration**

***Presentation By Suraj N. Pattekari***

**PHARMACOGNOSTICAL AND ANTI-CONVULSANT POTENTIAL OF RHUS PARVIFLORA ROXB.**

*Presentation By Anubhi badhani*

**DETERMINATION AND QUANTIFICATION OF CYPERMETHRIN PESTICIDE RESIDUE IN CUCUMBER USING RP-HPLC**

*Presentation By Vasudha R*

**Phytochemical Screening, Physicochemical studies of seed extract of *Asclepias exaltata* (Poke Milkweed) L.from Southern India**

*Presentation By LINGARAJ NAYAK*

**Antibacterial activity of Ethanolic Extracts of the leaves of *Terminalia Coriacea* and *Artocarpus hirsutus***

*Presentation By Dr. Jitendra Patel*

**Solubility Enhancement of Lornoxicam With Poloxamer 188 By Solvent Evaporation Method**

*Presentation By LUBNA NOUSHEEN*

**DEVELOPMENT OF SOLID SELF EMULSIFYING DRUG DELIVERY SYSTEM FOR ENHANCEMENT OF ORAL BIOAVAILABILITY OF QUERCETIN**

*Presentation By Roma Mathew*

**5-O-Acetylpinostrobin as Potential Agent of Breast Cancer with Estrogen Receptor Alpha: Cytotoxic Activity and Molecular Docking Study**

*Presentation By Tri Widiandani*

**Formulation and Evaluation of Tablets Containing Metaxalone Solid Dispersion**

*Presentation By Anjali Patwal*

**FORMULATION AND EVALUATION OF BETACYCLODEXTRIN COMPLEXED CURCUMIN TRANSDERMAL PATCHES**

*Presentation By Vaishnavi Baban Shiravale*

**Formulation and Characterization of Glipizide Microspheres**

*Presentation By Subhajit Sarkar*

**Formulation and Development of Microsponges Containing Antifungal drug Luiconazole for Dermal Route**

*Presentation By Pragati Karn*

**Multifunctional Ceramic Nanocarriers in Targeted Drug Delivery**

*Presentation By Rajkumar Ghosh*

**Plastic eating bacteria – solve problem of Medical plastic waste**

*Presentation By Ketakee Prakash Gosavi*

**Influence of Kollicoat ® IR Concentration on the Dissolution of Dried Hesperetin Nanosuspension**

*Presentation By Maria Lucia A.D Lestari*

**FORMULATION DEVELOPMENT AND EVALUATION OF FAST DISSOLVING TABLET OF ACYCLOVIR USING NATURAL SUPER DISINTEGRANTS**

*Presentation By Gomathi A.R*

**Effect of Formulation Variables of Gastro retentive Floating Tablets of An Anti-Hypertensive Agent Using Different Grades of Hydrophilic Polymers**

*Presentation By Vamshi krishna Lekkala*

**Permeation Enhancement of Alprenolol across Skin by Ethosomal Carriers**

*Presentation By Adil Ahmed MD*

**DESIGN AND DEVELOPMENT OF LORNOXICAM MODIFIED PULSINCAP FOR RHEUMATOID ARTHRITIS**

*Presentation By T. SUDHAMANI*

**Design and Evaluation of Liquid Crystalline Nanoparticles for the effective targeting to Triple Negative Breast Cancer**

*Presentation By Hitesh Kumar*

**Formulation and Evaluation of Mucoadhesive Oral Patch Containing Metronidazole and Benzocaine for The Treatment of Mouth Ulcer**

*Presentation By Alvin Johnson*

**Resveratrol loaded Nanostructured Lipid Carriers for brain targeted delivery in the management of Parkinson's disease**

*Presentation By Nagashree AG*

**FORMULATION AND EVALUATION OF TRANDOLAPRIL NANOSTRUCTURED LIPID CARRIER LOADED TRANSDERMAL DRUG DELIVERY SYSTEM**

*Presentation By Ramankit Jaiswal*

**ONE POT SYNTHESIS, EVALUTION AND MOLECULAR DOCKING OF SOME NOVEL IMIDAZOLE DERIVATIVES**

*Presentation By Santhia.P*

**A STABILITY INDICATING ASSAY METHOD FOR ISOLATION, IDENTIFICATION AND CHACTERIZATION OF DEGRADATION PRODUCT DURING THE ESTIMATION OF CANGRELOR TETRASODIUM AND ITS VALIDATION**

*Presentation By BELAGALA NAGESH*

**Survey and Quantification of Resvervatrol in Various Wine Sample by RP HPLC Method**

*Presentation By G.P.GOWTHAM*

**FORMULATION OF ORODISPERSIBLE FILMS OF LORNOXICAM AND ITS EVALUATION**

*Presentation By Supriya Chandramouli*

**Formulation of polymeric film solution spray and its evaluation for antifungal studies**

*Presentation By Abhishek Kumar*

**DESIGNING OF NOVEL TOPICAL IN SITU POLYMERIC FILM-FORMING SOLUTION SPRAY FORMULATION OF ANTIFUNGAL AGENT: IN VITRO ACTIVITY AND IN VIVO CHARACTERIZATION**

*Presentation By Nabil Abdullah Mohammed Ali*

**Antifungal drug loaded Microemulsion Based Transdermal Gel for Enhanced Skin permeation**

*Presentation By Ms. Nidhi P. Shah*

**Pharmaceutical analysis of Sowbhagya Shunti Legium – A review**

*Presentation By Dr.S.MARY PRINCESS SULEKHA*



## 6.2 Highlights Day1 session

Day 1 of 9<sup>th</sup> WCPSDM 2021 Conference consist of 7 keynote presentations and 1 sessions in which each session consists of 8 presentations

### Highlight of Session I (Physical)

Session I of 9<sup>th</sup> WCPSDM Conference presentations in which the award-winning presentation are attracted all is listed below



**Author Name: Soumayya Aib**

**Title: pH-Sensitive Compound Liposomes of Mesalazine and Curcumin Prompt Instantaneous Relief to Guinea Pig Models of Ulcerative Colitis: Investigating Drug Synergy Along Colon-targeting Approach**

#### **Abstract:**

The prevalence of mild to moderate UC has been increasing in an alarming rate, resulting in a high global burden of colorectal cancer cases. Due to the incompetence of the current management of UC, it is important to employ novel pharmaceutical techniques and alternative therapeutic strategies to facilitate safe and efficacious treatment of the disease. In this quest, mesalazine, a 5-aminosalicylate with anti-inflammatory and potent antioxidant activities, along with curcumin, a natural anti-inflammatory and antioxidant polyphenol, have been found to produce a synergistic efficacy to efficiently alleviate mild-moderate UC. In the current research, we have formulated pH-sensitive liposomes of a low-dosed combination of mesalazine and curcumin as a potential therapy for UC. It was hypothesized that the synergistic action of the two drugs, pH-dependent colon-specific delivery, and use of nano-technological drug carrier system would undermine the risk of drug-associated side effects, reduce the total administration dose, and provide instant and high efficacy to ameliorate UC. The hypothesis was validated using guinea pig model of mild-moderate UC, where eudragit S100 coated MZ-CM co-loaded liposomes were found to be more efficacious than single-drug liposomes or drug's solution form. Furthermore, both drugs exhibited high antioxidant activity and mitigated the oxidative stress present along UC; hence, prompted an instantaneous, efficient, and safe treatment of UC. We, therefore, validate that eudragit S100 coated MZ-CM LS is a promising therapy that needs to be developed as a marketed product for the management of IBD.

## 6.3 Highlights of Day 2 Sessions

### Highlight of Session I (Virtual):

**Author Name: Sezen Yılmaz Sarıaltın**

**Title: The Levels of Interleukin-1 Family Cytokines and Oxidative Stress in Rheumatoid Arthritis Patients in terms of Disease Activity**

**Abstract:**

Rheumatoid Arthritis (RA) is a systemic autoimmune disease that causes chronic inflammation characterized by pain, swelling, and irreversible damage to various joints, mainly synovial joints. The formation and development mechanism of RA has not been clearly elucidated yet. Many factors, including genetic and environmental factors, may contribute to the onset and progression of the disease. Interleukin-1 (IL-1) family cytokines are key signaling molecules in inflammatory diseases. These diseases are often the outcome of excessive oxidative stress which occurs by increasing inflammation, regulating apoptotic cell death, and disrupting immunity. Therefore, this study aimed to assess the levels of interleukin-1 family cytokines and oxidative stress status in RA patients with different disease activities. The mean plasma IL-1 $\beta$  levels of the patient group were approximately 5.6-fold higher than the control group ( $p < 0.001$ ). Plasma IL-18 levels were 4-fold greater in the RA group compared to the control group ( $p < 0.001$ ). Patients with active disease had 1.9 and 1.5-fold higher IL-1 $\beta$  and IL-18 levels than patients in the remission period, respectively. Similar to the results of the ILs, plasma reactive oxygen species increased considerably in RA patients compared to the control ( $p < 0.001$ ). Among all groups, the highest levels of IL-1 $\beta$ , IL-18, and reactive oxygen species were detected in the group of patients with active RA. Data from the present study exhibited that increase in the levels of oxidative stress and IL-1 family cytokines can contribute to higher disease activity.



**Author Name: Golnaz Hemmati**

**Title: The Effect of Topical Quercetin Loaded Liposome on Pressure Ulcer Healing in Rats**

**Abstract:**

Quercetin antioxidant properties could play an important role in various fields of health. However, its use has been limited because of several disadvantages such as very low solubility in water and high instability in the presence of air, light and heat. Encapsulation of quercetin in nanostructure systems such as liposome may lead to decrease the adverse effects and protect this molecule against degradation. The aim of this study was preparation and in-vitro and in-vivo evaluation of liposomes for topical delivery of quercetin to improve the pressure ulcers. Liposomal formulations were prepared by fusion method and characterized. The amount of drug retained in and penetrated through mouse skin after 8 hours were determined. Also microscopic and macroscopic examination of laboratory animals was performed. Encapsulation efficacy of liposomes was in range 64.66-77.83%. Formulation F4 showed maximum drug release in 8 hours and the remaining drug in the skin layers was more than 46%. Histological investigation suggested that F4 and phenytoin 1% cream have the healing effect on the pressure ulcer during 28 day-treatment. Quercetin liposomes due to its natural structure and minimal systemic absorption and side effects can be a suitable candidate for the treatment of pressure ulcers.

**Key words:** Fusion; Liposome; Pressure ulcer; Quercetin; Topical delivery



**Author Name: Samrat Bose**

**Title: Toxicity and Cardiac Effect during Acute Exposure of Non-essential Amino Acids in Combination with Prokinetic agent in Early Developing Zebrafish (*Danio rerio*)**

**Abstract:**

Both the prospective and case control studies have shown that an elevated plasma total homocysteine is an independent risk factor for cardiovascular disease. Cysteine is a sulfhydryl-

containing amino acid having similar chemical and structural properties of homocysteine. L-arginine as non essential amino acids, no adverse effect reported but the lack of clinical safety information on amino acids used in general population as dietary supplement is ongoing reality. Domperidone as prokinetic agent has hazardous Cardiovascular (CV) adverse effects due to its delaying cardiac repolarization which prolongs the QT interval, considered to involve blockage of IKr. However, it is unclear their effect on cardiac system fully. Thus this study will examine the actual toxicity and cardiac effect of non essential amino acids, prokinetic agent at different concentration on zebrafish embryos starting at the blastula period (4 hpf) up to 120 hpf.

At 24-hour, 48-hour, 72-hour, 96-hour, 120-hour LC50 values were determined upto 120 hpf embryos as: 3.148 mg/L, 2.754 mg/L, 2.606 mg/L, 2.109 mg/L, 1.651 mg/L for Domperidone, 0.58 mg/ml, 0.38 mg/ml, 0.273 mg/ml, 0.141 mg/ml, 0.126 mg/ml for L- Arginine, 109.396 gm/ml, 102.802 gm/ml, 89.73 gm/ml, 72.78 gm/ml, 61.518 gm/ml for Cysteine. In addition, treatment with different concentrations of non essential amino acids (0.025 mg/ml and 0.030 mg /ml for L- Arginine), prokinetic agent (0.6 mg/L and 1 mg/L for Domperidone) caused a dose-dependent decrease in heartbeat. But treatment with Cysteine (0.060 gm/L ) caused a dose-dependent increase in heartbeat. Certain developmental toxicity found like for Domperidone at 3mg/L and 3.4 mg/L embryos of this species have been destroyed. 4 mg/L the tail end bending of the larvae, 5 mg/L the notochord bending of the zebrafish larvae has been found. Arginine causes tail bending at 0.060 mg/ml Concentration, at 0.100 mg/L embryos ruptured totally, at 0.540 mg/L larvae found in bending shape. Cysteine at 0.060 gm/L the head portion of the larvae has been fully ruptured, 0.100 gm/L total bending of the body shape has been found.

After the above study it can be concluded that consumption of food supplement containing nonessential amino acids along with prokinetic agent may create severe cardiac adverse effect as they are showing significant cardiac effect on *Danio rerio* which is 84% genetic similarity with human.

**Keywords:** Cardiac toxicity, Non-essential amino acid, *Danio rerio*, LC50, Developmental toxicity.



**Author Name:** Kaustav Mahapatra

**Title:** Comparative study of Anti-inflammatory and Anthelmintic activities of *T.Orientalis* by In-vitro Method

**Abstract:**

**Background:** Helminth infection and inflammation are two of the most widely spread diseases in the world. Approximately 3 million people worldwide suffer from these diseases. *Trema Orientalis* is an evergreen shrub which is found in different parts of India mainly in the lowland humid tropical region. Various parts of the plant has medicinal properties. However there has been no conclusive comparative study on *T.Orientalis* to check inflammatory and anthelmintic

activity. Various earlier studies reported extracting leaves of *T.guineense* and *T.micrantha* producing arthritic and analgesic activity. This could also potentially lead us to other species like *T.orientalis* for other activity.

**Methodology:** The powdered material was subjected to extraction by maceration. The extract obtained was analysed for its major chemical phytoconstituents. Different concentrations of the extract were subjected to anti-inflammatory studies by inhibition of albumin denaturation method, heat induced and hypotonicity induced haemolysis method. To assess the anthelmintic activity, Dip method was studied.

**Results:** Aspirin was used as a standard drug to measure the anti-inflammatory activity and it showed the maximum inhibition and haemolysis of 56% at the concentration of 100µg/ml, whereas the test drug showed maximum action of 56% at concentration of 400µg/ml.

Albendazole was used a std drug to measure the anthelmintic activity and showed paralysis at 2.5±1min and death after 62±2min at 20mg/ml concentration, whereas the test drug showed paralysis at 3±0.5 min and death after 10±0.2 min at 100mg/ml concentration.

**Conclusion:** the comparative study to check the anthelmintic and anti-inflammatory activity was performed and that data showed that the extract possesses greater extent of the anthelmintic activity to that of anti-inflammatory activity when compared with the standard drug.



**Author Name: Dr.Kumar Sougata, Dr.Sree ChandanaShreya Sivalanka and Dr.Nitya Jha**

**Title: Department of Public Health Dentistry (Systematic Review)**

#### **Abstract:**

**Background:** - An estimated 7 million women in India alone use oral contraception. With more than 20.56 billion at stake and a forecasted growth of 5.8% by the year 2026 alone it's a long run before we actually stop to turn a leaf and think about the impact this pharmaceutical idea has had on our body especially our oral structure, but that of course isn't mentioned on the caution list! From tooth extractions to life-long periodontal problems the intimacy of the "pill" on our body weighs beyond the facts that have been discussed or assured of so far. Well! While the previous generations surely did boast of oral contraception we are now in the era of injectable ones. Although innovations and necessities of evolving has changed the very course of our fragmented imagination however the fundamental question regarding our body is always a matter of our future selves, so shouldn't we be well informed?

**Aim of the Study:** To assess the curious relationship of birth control "pill"/contraception and dental health.

**Research Question:** Is there a need to redefine our thought processes before using birth control contraception?

**Materials & Methods:** With the MEDLINE database taken as a source for authenticated scientific research data, articles were selected having undergone Randomized Control Trial. Out of these, articles (studies) were chosen which met the criterion for Systematic Review.

**Results & Conclusion:** Since the study is still in progress, the results will be discussed at the venue on the day of the conference



**Author Name: Fateme Jafarian**

**Title: Preparation and Physicochemical Characterization of Succinyl Chitosan Coated Liposomes for Oral Delivery of Grape Extract and Evaluation of Its Effect on Pulmonary Fibrosis Induced by Bleomycin in Rats**

**Abstract:**

**Background:** Pulmonary Fibrosis (PF) is a fibroproliferative lung disorder with unknown etiology. This study aimed to develop an oral succinyl chitosan-coated liposomal formulation containing grape seed extract and evaluate the therapeutic effects of the preparation on pulmonary fibrosis induced by bleomycin in rats.

**Methods:** N-acetyl succinyl chitosan was synthesized, the formulations were prepared using probe sonication method and characterized for the size, encapsulation efficiency, and FESEM liposome morphology. Drug release from liposomal formulations was checked in vitro using dialysis bag diffusion technique. Rats were divided into 5 groups of 6 and pulmonary fibrosis was induced by intratracheal injection of bleomycin, then measurements of hydroxyproline, lung weight, animal body weight, and histopathological studies were performed.

**Results:** The results show that coated liposomes with succinyl chitosan have suitable resistance to acidic conditions. Succinyl chitosan increases the physical stability of the formulation. The Grape Seed Extract (GSE) was successfully loaded into liposomes and the loading percentage was more than 90%. The results of zeta potential of the selected formulation (CF2) confirmed the homogeneity of the formulation. Drug release studies show that 66.27% of the loaded drug was released from CF2 in acidic medium in 2 hours but in pH=7 medium, 92.31% of the drug

was released in 8 hours. In vivo study showed that rats exposed to bleomycin alone significantly reduced weight, and body weight of those treated with CF2 (400 mg/kg) was partly corrected, but there is still a significant difference compared to that of normal saline group. The results showed that receiving bleomycin increased the mean lung weight of rats; the mean lung weight of rats in the bleomycin group was  $5.4 \pm 0.96$  g, but the mean lung weight of rats in the group treated with 400 mg/kg CF2 was  $3.22 \pm 0.46$  g. According to the Tukey HSD test, the lung index of the normal saline group was significantly different from the bleomycin and CF2 groups of 400, 200, 100 mg/kg. The highest amount of hydroxyproline was observed in bleomycin group. Treating with 400 mg/kg CF2 caused a significant reduction ( $p < 0.05$ ) in hydroxyproline amount compared to the bleomycin group. But there is no significant difference in comparison with that of the normal saline group. The results of histopathological examination showed that alveoli and the wall between them were normal in normal saline group and no pathological changes were observed. Tissue damage was significantly observed and in bleomycin group treating with 400 mg/kg CF2 resulted in a significant improvement in pathological damage compared to the bleomycin group.

**Conclusion:** The results of this study showed that oral administration of N-succinyl chitosan-coated liposomal formulation containing grape seed extract in a dose of 400 mg/kg would lead to an improvement in pulmonary fibrosis caused by bleomycin in rats.

**Keywords:** pulmonary fibrosis; succinyl chitosan; grape seed extract; liposomes



**Author Name:** S.Pranav ragavendra

**Title:** Development and In Vitro Evaluation of Ceftriaxone Sodium Coated Suture for Antibacterial Activity

**Abstract:**

**Aim:** This research aim is to develop and evaluate the ceftriaxone sodium coated suture for antibacterial activity by in-vitro methods.

**Methods:** Ceftriaxone sodium was coated on to the marketed suture and prepared suture. Monofilament sutures prepared by water extrusion method with 40% PLGA were found to be milk-white in color and fragile in nature. Anti-microbial efficacy of ceftriaxone sodium coated prepared sutures was assessed by using an Agar diffusion assay for antibacterial activity against most two common organisms that cause Surgical Site Infection (SSI) such as *Staphylococcus aureus* and *E.coli* then it was compared with pre-processed ceftriaxone sodium coated marketed suture.

**Result:** Ceftriaxone sodium coated suture was prepared by dip-coating technique and the surface morphology was analyzed by Scanning Electron Microscope (SEM). It reveals that the PLGA suture surface was found to be smooth with thickness 220 microns and the marketed suture was 350 micron. Drug adsorbed on the suture per sq.cm was found to be 0.47 mg. The *in Vitro* drug release of Ceftriaxone sodium from the prepared PLGA suture at pH 7.4 after 45 mins was found to be 38.7 %. Ceftriaxone coated marketed suture has more antimicrobial property when compared with PLGA suture, against *S.aureus and E.coli*. This confirms ceftriaxone sodium coated suture will be effective against surgical site infections causing microorganisms.

**Keywords:** Ceftriaxone sodium, antibacterial suture, wound closure, PLGA suture, water bath extruder.



**Author Name: Plaban Saha**

**Title: Design and Evaluation of Ornidazole Loaded Microsphere Drug Delivery System**

**Abstract:**

This study involves preparation and evaluation of microspheres drug delivery system of Ornidazole as a novel approach. The emulsion gelation technique was used to create formulations containing peppermint oil encased in enhanced sodium alginate and pectin polymers. The inclusion of volatile oil (Peppermint Oil) was intended to provide flavour as well as cool sensation after intake to the patient. Evaluation was done to determine drug polymer compatibility. The medication is compatible with the polymers utilized, according to the FT-IR spectra of the physical mixture. Particle size, percentage yield, entrapment efficiency, density, and in-vitro drug release experiments, among other things, were all examined on the manufactured beads. For 6 hours, in-vitro drug release tests were conducted. The findings showed that the percentage of oil had a noteworthy influence. As the quantity of oil phase in the beads grows, so does the particle size of the beads. The percentage yield and percent drug entrapment efficiency decline as the oil phase lengthens. The prepared microspheres could be used to distribute or in a regulated manner.



**Keywords:** Ornidazole, Emulsion gelation technique, FT-IR spectra, Oil phase.

## Highlight of Session II:



**Author Name:** Vimalavathini R

**Title:** *Invitro* Antiglycation Activity of Isorhamnetin on Bovine Serum Albumin with different sugars using Sodium Dodecyl Sulphate Polyacrylamide Gel Electrophoresis

### **Abstract:**

Advanced Glycation End Products (AGEs) resulting from glycation of proteins, lipids and nucleic acids has several pathophysiological manifestations by altering the structure and functions of molecular proteins. Isorhamnetin is a flavonoid with anti-inflammatory, anti-oxidant, anti-obesity, anticancer, antidiabetic and anti-atherosclerosis activity. Based on the structure activity relationship and our insilico antiglycation study of isorhamnetin, we hypothesised that isorhamnetin may have antiglycation activity by inhibiting protein glycation on sugar molecules due to its antioxidant and free radical scavenging activity. Hence our aim of the study was to determine the glycation level of Bovine Serum Albumin (BSA) with varying sugar concentration of glucose, fructose and ribose on 14th and 21st day of incubation. Our second objective of the study was to determine the antiglycation activity of isorhamnetin on BSA using all the sugars at 14th and 21st day of incubation using SDS - PAGE. Our study showed that increase in concentration of glucose, fructose and ribose (0 – 50 mM) showed a dose dependent decrease in migration of protein implying increased glycation of BSA. Isorhamnetin (100  $\mu$ M) exhibited antiglycation activity for fructose (30 mM) at 14th day onwards and for glucose (30 mM) was at 21st day onwards. But isorhamnetin did not exert antiglycation activity for ribose (30 mM) on both 14th and 21st day of incubation. Our study establishes the antiglycation activity of isorhamnetin however further In-vivo studies are necessary to warrant this activity.



**Author Name: Abhishek. S**

**Title: Formulation and Evaluation of Polyherbal Protectant Cream**

**Abstract:**

**Background:** Human skin is considered as the first line of defence and barrier against the majority of infections caused through the skin that are affecting human populations. The emergence of natural herbal remedy for managing skin disorders become a pivotal and essential contributor for treating skin infections due to increased demand of herbals and their lower price and continued adverse effect of modern medicines. Thus, the goal of present work is to formulate protectant creams obtained from *Tagetes* species and *Chrysanthemum* species.

**Methodology:** The powdered material was subjected to extraction by kinetic triple maceration. The extract obtained was analysed for its physical characters and spreadability. The extract blend was made in the ratio 30:10 of *Tagetes erecta* and *Chrysanthemum indicum*. The extract blend obtained from *Tagetes erecta* and *Chrysanthemum indicum* was subjected for both antibacterial and antifungal studies by well diffusion method. Formulation was made using slab method, and evaluations of physical parameters and spreadability was carried out.

**Results:** The in-vitro study performed revealed, the extract blend obtained from *Tagetes erecta* and *Chrysanthemum indicum* have anti-fungal activity against various species of *Candida*, *Trichophyton* and anti-bacterial activity against *Staphylococcus* species. The zone of inhibition values ranged from 1.7 to 2.4cm.

**Conclusion:** Out of all species studied, formulation showed relatively high action against *Candida albicans*, *Trichophyton rubrum*. Evaluation tests were performed to check and report the quality of prepared cream.



**Author Name: Sivaa Arumugam R**

**Title: *In silico* Design of an Epitope-Based Vaccine Ensemble for SARS-CoV-2**

**Abstract:**

SARS-CoV-2 is one of the pandemic diseases the world has experienced. This prompted global health workers to look for a cure. Even then, few are considered anymore about immunological trigger epitopes of the novel coronavirus (SARS-CoV-2), which are included to elicit adaptive immune responses. The

protein sequence of the SARS-CoV-2 spike epitope was preserved and its elementary and physicochemical properties were precisely assessed. HLA-I / MHC-I, HLA-II / MHC-II and LBC were examined for their antigenicity, allergic properties, toxicity and homology. Appropriate auxiliary proteins were selected and their sequence was actually recorded, followed by physicochemical parameters were examined and these were connected with appropriate linkers. Then the 3D models of the vaccine were developed, refined and further examined for their amino acid benefits. The performance test is then carried out and the X-ray crystallography and the NMR curve were collected to analyze the results. Docking analyzes were then carried out with the selective receptors (TLR-3, 4 & 7) and the association properties were assessed. The energy required for affinity was taken into account when interpreting docking studies. According to the results of the above evaluation studies, when combined with TLR, the vaccine improves immunity and cleanses from the body easily.

**Keywords:** Epitope, Vaccine, Toll-like Receptors, SARS-CoV-2, Antibody.



**Author Name:** Maria Lucia A.D Lestari

**Title:** Influence of Kollicoat® IR Concentration on the Dissolution of Dried Hesperetin Nanosuspension

**Abstract:**

Hesperetin (HPT) is a flavonoid belongs to BCS class II with low solubility and high permeability. Consequently, it has low dissolution rate hence oral bioavailability also low. Nanosuspension is a simple formulation strategy to increase drug dissolution due to particle size reduction. However, nanosuspension needs to be dried to obtain solid form which can be transferred into capsules. The use of stabilizing agent is important to stabilize nanosuspension particle size, preserve the particle size during drying, and increase dissolution of dried nanosuspension. Nanosuspension was prepared by dissolving Kollicoat® IR 20% w/w and 50% w/w in 90 mL aquadest, separately. 13 g HPT was then dispersed and milled with 0.5 mm yttrium-stabilized zirconium beads to produce nanosuspension. HPT nanosuspension obtained was dried at 45°C then evaluated for its release at pH 6.8 and characterized for its crystallinity using thermal analysis.

Results showed that HPT nanosuspension stabilized Kollicoat® IR 20% w/w and 50% w/w had particle size 151 nm and 168 nm, respectively. Dissolution of dried HPT nanosuspension stabilized Kollicoat® IR 50% w/w significantly increased the HPT dissolution but not for Kollicoat® IR 20% w/w. Thermal analysis of dried HPT nanosuspension stabilized Kollicoat® IR 50% w/w tend to have amorphous form.



**Author Name: Abhishek Kumar**

**Title: Formulation of Polymeric Film Solution Spray and Its Evaluation for Antifungal studies**

**Abstract:**

The high incidence of fungal infections has become a major health issue across the globe. Despite different dosage form available to treat fungal infection, their efficiency is questionable, and patient's acceptability cannot be neglected. Topical treatment of such infections has found to be useful due to direct application at target site with improved patient compliance. So, the aim of this study is to develop technology based antifungal polymeric solution for spray and its *in-vitro* and *in-vivo* characterization. Clotrimazole was used as an anti-fungal agent and was formulated as spray formulation for topical application using Eudragit RS-100, PEG-400 and ethanol. The prepared film forming polymeric spray was evaluated for pH, viscosity, drying time after spray and *in-vitro* parameters like drug diffusion studies and anti-fungal studies. To assess the patient acceptability, the formulated polymeric spray solution was evaluated for skin irritation studies, acute & repeated-dose dermal toxicity studies and *in-vivo* anti-fungal studies in male albino wistar rats. From all the prepared formulation, F1 formulation was optimized using design of experiment software V-12. The drying time, viscosity, pH, volume of solution upon spraying and spray angle were 53 sec, 14.99 cp, 7.02 pH, 0.25 ml, and 80.90° respectively. The *in-vitro* drug diffusion studies using cellophane membrane and anti-fungal studies against *Candida albicans* showed 98.03% drug diffusion and 10 mm of zone of inhibition respectively. Skin irritation studies confirmed the compatibility of spray formulation on rat's skin. Histopathology results revealed the safe and effective delivery of drug in spray formulation. Stability studies indicated that formulation was stable after 28 days when stored at normal room temperature. As conclusion, the use of Clotrimazole incorporated in polymeric spray solution could be a potential alternative for the treatment of various topical fungal infection.



**Author Name: Tri Widiandani**

**Title: 5-O-Acetylpinostrobin as Potential Agent of Breast Cancer with Estrogen Receptor Alpha: Cytotoxic Activity and Molecular Docking Study**

**Abstract:**

Breast cancer is currently one of the most common causes of death in women all over the world. Estrogen Receptor Alpha (ER- $\alpha$ ) plays a major role in breast cancer pathogenesis because about 75% of breast cancers are associated with estrogen receptor expression. The purpose of this study was to determine the cytotoxic activity of a pinostrobin derivative, 5-O-acetylpinostrobin, against breast cancer and normal cells, as well as to determine its interaction with ER- $\alpha$  by molecular docking. Cytotoxicity was tested using the MTT method against T47D and Vero cells. Molecular docking was determined using the MVD Ver.5.5 program. The results showed that the IC<sub>50</sub> and CC<sub>50</sub> values of the 5-O-acetylpinostrobin were 0.34 mM and 1.16 mM, respectively. The selectivity index value of 5-O-acetylpinostrobin is greater than pinostrobin, with an SI value of 3. Molecular docking results showed an interaction between the ligand and ER- $\alpha$  (PDB ID: 5W9C) through the formation of hydrogen bonds with Arg394; Thr347; Ala350 and clarified by the binding affinity with a slightly different rerank score of 5-O-acetylpinostrobin (-85.3151 kcal/mol) and co-crystal ligand OHT\_601 (-95.1011 kcal/mol). It can be concluded that 5-O-acetylpinostrobin has the potential as an anti-breast cancer candidate with estrogen-alpha expression that works selectively.

**Keywords:** 5-O-acetylpinostrobin, Breast cancer, Estrogen, Cytotoxic, Molecular docking

**Highlight of Session III:**



**Name: A. Srivani**

**Title: Phytochemical and Proximate Analysis of selected Medicinal Plants**

**Abstract:**

The phytochemical investigation is effective in discovering bioactive markers of plants with therapeutic value. Hence several phytochemical surveys have been carried out for detecting

diverse groups of naturally occurring phytochemicals. Present study describes some parameters like extractive values, preliminary phytochemical studies, ash value, foreign organic matter, foaming index, swelling index, loss on drying and crude fibre of selected plants namely *Pterospermum suberifolium*, *Givotia moluccana*, *Ixora parviflora*. All methods were carried out using standard methods. For extractive values and preliminary studies various solvents like hexane, chloroform, ethyl acetate, acetone, methanol, ethanol and water were used. *G.molucanna* and *I.parviflora* showed high extractive value and significant phytoconstituents like alkaloids, flavonoids, glycosides, saponins, phenols, tannins in ethanolic extract whereas *P.suberifolium* showed high extractive yield and phytoconstituents in methanolic extract. There was no foreign organic matter in all three plants. The foaming index was less than 100 for both *P.suberifolium*, *G.molucanna* and greater than 100 for *I.parviflora*. The total ash value was obtained as 12.36%, 14.58%, 11.78%, the swelling index was 7.4cm, 6.2cm, 3.6cm, loss on drying was 11%, 13%, 9% and crude fibre content was 26.58%, 34.18%, 41.24% for *P.suberifolium*, *G.molucanna* and *I.parviflora* respectively.

**Name: Hari Priyaa G**

**Title: Prevention Oxidation of LDL and Foam Cell Formation by Tannin Methanol Extract from Citrus Limon and Honey Mixture**

**Abstract:**

Atherosclerosis is caused from high plasma concentrations of Low Density Lipoprotein (LDL), resulting in development of lipid laden plaques on the arterial walls leading to blockage and heart attack. Macrophages takes up Oxidised low density lipoproteins which results in the formation of foam cells, which are critical in the initiation of atherosclerosis. Till today contemporary drugs used for the treatment and prevention are statins, nevertheless, some of these have serious side effects. Medicinal plants have wide range of phytochemicals used for treatment, and are rich in as yet unexplored novel natural products. Ayurveda and Siddha recommends a list of medicines which also serve as food in our daily lives thus called Nutraceuticals. *C. limon* was collected and phytochemical (tannin) was extracted using two solvents i.e. water and methanol. Antioxidant assays such as Superoxide, DPPH, and Nitric Oxide scavenging activity was performed. LDL isolation and oxidation inhibition assay were performed and were evaluated. Highest active sample was then subjected to Anti-proliferative, Anti-apoptotic and foam cell inhibition studies on cell lines (Raw 264.7 and THP-1 cells). Significant inhibition and anti-oxidant activity were observed in tannins from methanolic extract. Further, tannin extract was evaluated on RAW264.7, THP-1 cell lines in which foam cell inhibition assay revealed the potential to prevent foam cell formation. Thus active phytochemical acts as antilipidemic and anti-atherogenic property. Hence, contemplating the side effects of presently available treatment. The present paper provides a comparison of action of phytochemical and statin on cell lines (RAW 264.7, THP-1) as the major therapy for atherosclerosis.

**Keywords:** *C. limon* honey; Tannin; foam cell inhibition; Phytochemical.



**Name: Kumar Mohan**

**Title: Formulation, Optimization and Evaluation of Polyherbal UNANI formulation Marham Karish Jadeed for the Treatment of Psoriasis**

**Abstract:**

Development of effective standardization technique with proven efficacy is mandatory necessary to establish standards through advanced scientific and techniques. This will lead to the increase reputation and acceptance of traditional medicines. Marham Karish Jadeed (MKJ), a unani polyherbal formulation is used by Unani physicians for treatment of psoriasis. The current work involves standardization of MKJ in order to assess the quality of In-house and marketed formulations. In-house and marketed formulations were subjected to pharmacognostic studies, physico-chemical properties, phytochemical analysis and HPTLC fingerprint profile to set the standards, which can be used as reference standard to evaluate the quality control in herbal industries and to avoid batch to batch variations in traditional preparation. In the present study, the anatomical markers of the constituents were observed. Microbial load was determined using different strains of pathogenic bacteria. The extractive values were found to be more for alcohol than water. The preliminary phytochemical analysis, heavy metal analysis indicated the presence of tannins, camphor, and sulfur and acacia catechu. HPTLC and ATR FTIR fingerprint profile of in house and marketed formulations were found to prove the active medicaments incorporated in the unani formulation.

**Keywords:** Marham Karish Jadeed; Unani, Psoriasis; Standardisation; Formulation;



**Name: Ciobanu Cristina**

**Title: Formulation and Evaluation of Spray Dried extract from *Cynara scolymus L.***

**Abstract:**

*Cynara scolymus L.* is a well known medicinal plant native to the Mediterranean basin, with wide spectrum of therapeutic properties, including: antioxidant, hepatoprotective, cholesterol-lowering, antimicrobial and other effects, generally linked to their secondary metabolites phenol-derived structures. The paper aims to obtain a spray dried extract from leaves of *C. scolymus L.* and technological processes validation. The fluidized bed granulation technique is currently very often used in pharmaceutical industry because it allows the production of uniform granules. For this purpose the aeromatic fluidized air bed granulator Stearea I, with the following technical parameters: atom pressure 1.5 atm; flow 20-25  $\lambda$ pm; fan 4; time 45 min and temperature 80°C, was used. The *C. scolymus L.* liquid extracts obtained by ultrasound-assisted extraction [1] were sprayed in 5 steps, after each step a respective amount of samples were taken for analysis. The series of granules were subjected to pharmaco-technical evaluation and to quantitative analysis by HPLC and spectrophotometric method for determination in subseries of polyphenol and flavonoid contents. This study showed that the granulate of *C. scolymus L.* present omogeneous physical characteristics and chemical content and induces the possibility of various processing of the granulated product for therapeutic purposes.



**Name: Subhashini Badoni**

**Title: Assessment of the Effect of Agomelatine on High Fat Diet and Fructose Induced Metabolic Syndrome in Rats**

**Abstract:**

The present study was designed to evaluate the effect of melatonin agonist agomelatine in High Fat Diet (HFD) and fructose induced metabolic syndrome. The high fat diet and fructose was fed to the rats in



diet and drinking water respectively, for a period of 45 days. Animals having body weight of 300 g and fasting blood sugar level of 200 mg/dl were considered as hyperlipidemic diabetic rats and were selected for the study. The hyperlipidemic diabetic rats were divided into four groups, each group containing six animals. The hyperlipidemic diabetic rats received agomelatine (20 mg/kg, p.o.) and standard drugs melatonin (20 mg/kg, p.o.) for a period of 30 days. Body weight and BMI of animals was checked regularly on weekly basis. Various biochemical, hormonal and tissue parameters were evaluated at the end of treatment period. Agomelatine and melatonin significantly decreased ( $p < 0.001$ ) body weight, BMI, fasting blood sugar and insulin level in hyperlipidemic diabetic rats. Treatment also improved insulin resistance in hyperlipidaemic diabetic rats as compared to high fat diet and fructose fed positive control group. Agomelatine significantly improved the level of lipid profile, C-reactive protein, LDH and CK-MB in the serum of hyperlipidaemic diabetic rats but does not have significant effect on NO level. However, agomelatine caused significant decrease ( $p < 0.001$ ) in malondialdehyde level and significantly restored the depleted level of superoxide dismutase and reduced glutathione in the pancreas of hyperlipidaemic diabetic rats. It also improved the histology of pancreatic beta cells. Results of the study concludes that agomelatine caused significant improvement in the abnormalities of metabolic syndrome and can be explored as potential treatment strategy for the management of conditions related to metabolic syndrome.

**Keywords:** Agomelatine, Fructose, High Fat Diet, Hyperlipidemia, Metabolic Syndrome



**Name:** Vasudha R

**Title:** Determination and Quantification of Cypermethrin Pesticide Residue in Cucumber using RP-HPLC

**Abstract:**

The objective of the research was to detect and quantify cypermethrin pesticide residue in cucumber using ultra-fast liquid chromatography (RP-HPLC). Pesticides play a vital role in increasing crop production in large quantities, it may lead to health hazards in human beings. Cypermethrin is pyrethroid pesticide that acts on insects as a fast-acting neurotoxin. The maximum residue limit for Cypermethrin in cucumbers is 0.5mg/kg. The column used in the study was the Phenomenex Luna C<sub>18</sub> column (250mm 4.60 mm 5 $\mu$ ). The mobile phase used in

the study was acetonitrile and methanol in the ratio of 60:40. The injection volume of the sample was 10  $\mu$ L. The wavelength of 235nm was selected and the Retention time was found to be 3.4 minutes. The run time was 6 minutes. Linearity samples in a range of 10-30 $\mu$ g/mL was prepared. The regression coefficient was found to be 0.995. The LOD and LOQ were 0.4 and 0.3 $\mu$ g/ml. The method was validated according to ICH guidelines which include system suitability, precision, accuracy, linearity, robustness, LOD and LOQ. The developed analytical method was easy, accurate and can be successfully applied to estimate the Cypermethrin present in the vegetables like cucumber and can determine the safety of vegetables consumed.

**Keywords:** Pesticide, Cypermethrin, Cucumber, HPLC, ICH guidelines.

## 6.4 Most Enjoyed Presentation



**Name:** Cheryl F. Daleon

**Title:** Soil Characterization Based on Physical and Mechanical Properties of Pliocene-Pleistocene Geology in Bukidnon Philippines

**Abstract:**

**Introduction:** Siddha medicine, traditional system of healing that originated in South [India](#) and is considered to be one of India's oldest systems of [medicine](#). Sowbhagya Shunti is an effective Siddha medicine used in postnatal Siddha care. The postpartum or postnatal period begins immediately after [childbirth](#) as the mother's body, including [hormone](#) levels and [uterus](#) size, returns to a non-pregnant state. It is prepared in legium form, that is herbal jam / granular form. Shunti refers to ginger, it is the main ingredient of this medicine. It also contains many other herbal ingredients. **Objectives:** The main objective of the present review is to describe the phytochemicals, pharmacological activity and health benefits of Sowbhagya Shunti. **Methodology:** All relevant preclinical and clinical trials of Sowbhagya Shunti were analyzed in electronic databases like Google scholar, Pubmed, Scopus and Siddha medical literatures. **Inference:** Sowbhagya shunti pacifies vata and kapha doshas. It also detoxifies the body and is given after delivery to eliminate clots and toxins from

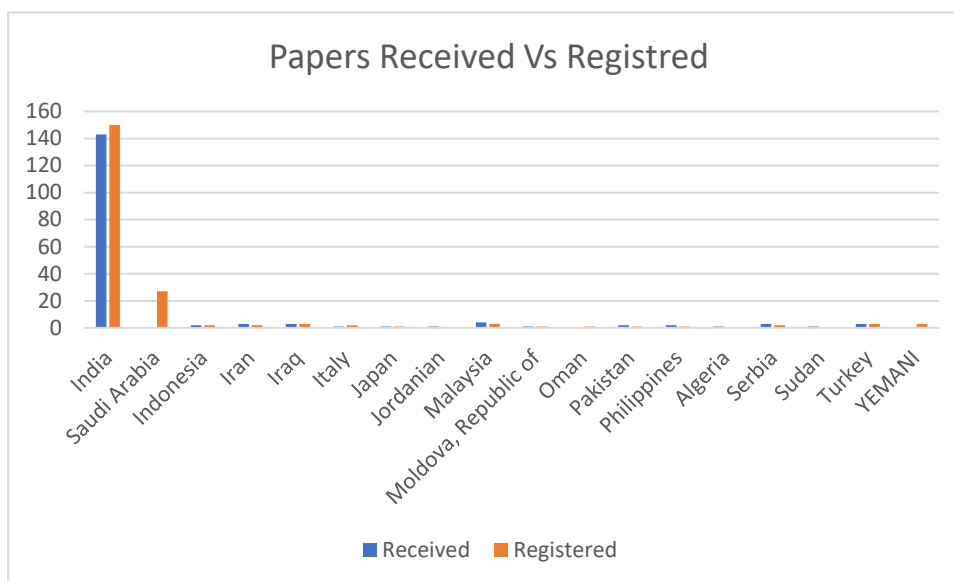
the uterus and cleanses the reproductive system of the women. It has the property of galactagogue so it promotes breast milk. It is beneficial for new mothers who have a problem with their breast milk production. After Abortion women can use this as a tonic to regain health. The main ingredient of this preparation *Zingiber officinale* is used in many traditional medicinal systems to cure a variety of diseases like nausea, vomiting, asthma, cough, palpitation, inflammation, dyspepsia, loss of appetite, constipation, indigestion and pain. The plant is reported for antimicrobial activity, anticancer activity, antioxidant activity, antidiabetic activity, hepatoprotective activity, analgesic activity, anti-inflammatory activity and immunomodulatory activities. The phytochemicals present in the various ingredients of Sowbhagya shunti is responsible for its pharmacological potential and health benefits.

**Conclusion:** This review may highly validate the further evaluation of this novel herb as a first line drug of choice in the management of antenatal period. A systemic research and development work like Standardization, preclinical and clinical studies should be undertaken for the development of the Siddha medicinal preparation Sowbhagya shunti for their better economic and therapeutic utilization.

**Key words:** Sowbhagya Shunti, Siddha Antenatal care, Phytochemicals, Pharmacological activity, galactagogue, *Zingiber officinale*.

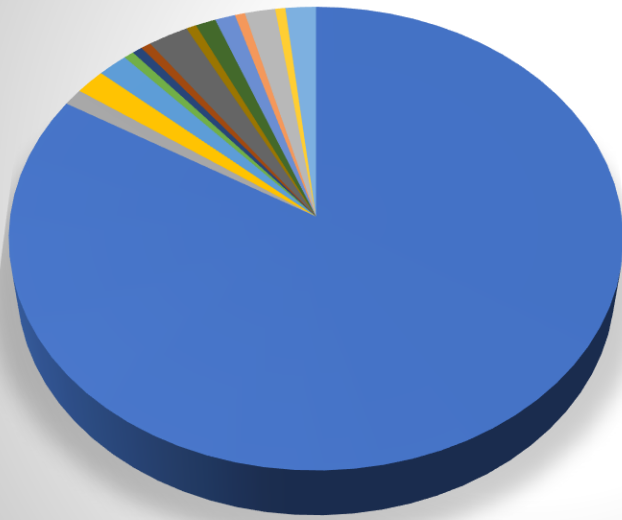
## 7.SURVEY ANALYSIS

### Papers received based on the Country.



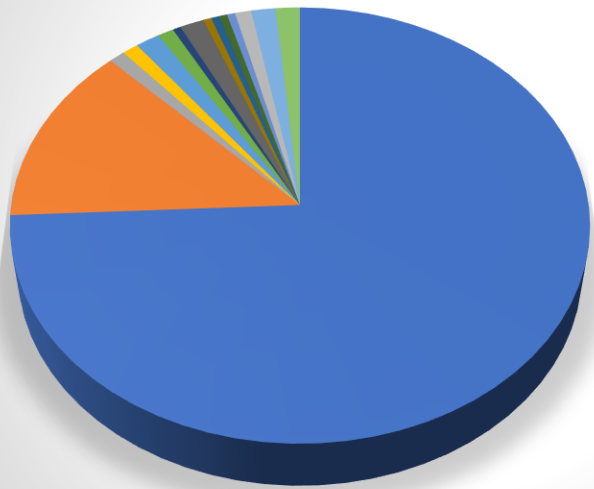
Country	Received	Registered
India	143	151
Saudi Arabia	-	27
Indonesia	2	2
Iran	3	2
Iraq	3	3
Italy	1	2
Japan	1	1
Jordanian	1	
Malaysia	4	3
Moldova, Republic of	1	1
Oman	-	1
Pakistan	2	1
Philippines	2	1
Algeria	1	-
Serbia	3	2
Sudan	1	
Turkey	3	3
YEMANI	-	3
Total	171	203

## Received



- India
- Saudi Arabia
- Indonesia
- Iran
- Iraq
- Italy
- Japan
- Jordanian
- Malaysia
- Moldova, Republic of
- Oman
- Pakistan

## Registered



- India
- Saudi Arabia
- Indonesia
- Iran
- Iraq
- Italy
- Japan
- Jordanian
- Malaysia
- Moldova, Republic of
- Oman

## 8.VALIDICTORY

**In the Valedictory best paper and best Oral/poster/Video Presentation of 9<sup>th</sup> World Conference on Pharmaceutical science and Drug Manufacturing was announced**

### Best paper award

Paper ID	Paper Title	Author Name
PHARMA-DUABI_965436	Pharmaceutical analysis of Sowbhagya Shunti Legium – A review	Dr.S.MARY PRINCESS SULEKHA

### Best paper Presentation awards

Paper ID	Paper Title	Author Name
PHARMA-DUABI_835617	pH-Sensitive Compound Liposomes of Mesalazine and Curcumin Prompt Instantaneous Relief to Guinea Pig Models of Ulcerative Colitis: Investigating Drug Synergy Along Colon-targeting Approach	Soumayya Aib
PHARMA-DUABI_365904	The levels of interleukin-1 family cytokines and oxidative stress in rheumatoid arthritis patients in terms of disease activity	Sezen Yılmaz Sarıaltın
PHARMA-DUABI_132965	The effect of topical quercetin loaded liposome on pressure ulcer healing in rats	Golnaz Hemmati
PHARMA-DUABI_340281	TOXICITY AND CARDIAC EFFECT DURING ACUTE EXPOSURE OF NON-ESSENTIAL AMINO ACIDS IN COMBINATION WITH PROKINETIC AGENT IN EARLY DEVELOPING ZEBRAFISH (Danio rerio)	Samrat Bose
PHARMA-DUABI_153266	Comparative study of Anti-inflammatory and Anthelmintic activities of T.Orientalis by In-vitro method	Kaustav Mahapatra
PHARMA-DUABI_053726	“CONTRACEPTIVE PILLS”:- A dental nightmare !	Dr Kumar Sougata, Sivalanka Sree Chandana Shreya and Nitya Jha
PHARMA-DUABI_193720	Preparation and Physicochemical Characterization of Succinyl Chitosan Coated Liposomes for Oral Delivery of Grape Extract and Evaluation of Its Effect on Pulmonary Fibrosis Induced by Bleomycin in Rats	Fateme Jafarian

PHARMA-DUABI_057338	DEVELOPMENT AND IN VITRO EVALUATION OF CEFTRIAZONE SODIUM COATED SUTURE FOR ANTIBACTERIAL ACTIVITY	S Pranav Ragavendra
PHARMA-DUABI_857093	Design and evaluation of Ornidazole loaded microsphere drug delivery system	Plaban Saha
PHARMA-DUABI_1854796	Invitro Antiglycation Activity of Isorhamnetin on Bovine Serum Albumin with different sugars using Sodium Dodecyl Sulphate Polyacrylamide Gel Electrophoresis	Vimalavathini.R
PHARMA-DUABI_870915	Formulation and Evaluation of Polyherbal Protectant Cream	Abhishek S
PHARMA-DUABI_015327	In silico design of an epitope-based vaccine ensemble for SARS-CoV-2	Sivaa Arumugam R
PHARMA-DUABI_934821	Influence of Kollicoat ® IR Concentration on the Dissolution of Dried Hesperetin Nanosuspension	Maria Lucia A.D Lestari
PHARMA-DUABI_354891	Formulation of polymeric film solution spray and its evaluation for antifungal studies	Abhishek Kumar
PHARMA-DUABI_590672	5-O-Acetylpinostrobin as Potential Agent of Breast Cancer with Estrogen Receptor Alpha: Cytotoxic Activity and Molecular Docking Study	Tri Widiandani
PHARMA-DUABI_674153	Phytochemical and Proximate Analysis of selected Medicinal Plants	A Srivani
PHARMA-DUABI_942831	Prevention Oxidation of LDL and foam cell formation by tannin methanol extract from Citrus limon and honey mixture	Hari Priya G
PHARMA-DUABI_387491	Formulation, Optimization and Evaluation of Polyherbal UNANI formulation Marham Karish Jadeed for the Treatment of Psoriasis	Kumar Mohan
PHARMA-DUABI_480295	Formulation and evaluation of spray dried extract from Cynara scolymus L.	Ciobanu Cristina
PHARMA-DUABI_698745	Assessment of the Effect of Agomelatine on High Fat Diet and Fructose Induced	Subhashini Badoni
PHARMA-DUABI_192536	DETERMINATION AND QUANTIFICATION OF CYPERMETHRIN PESTICIDE RESIDUE IN CUCUMBER USING RP-HPLC	Vasudha R

## 9.VOTE OF THANKS:

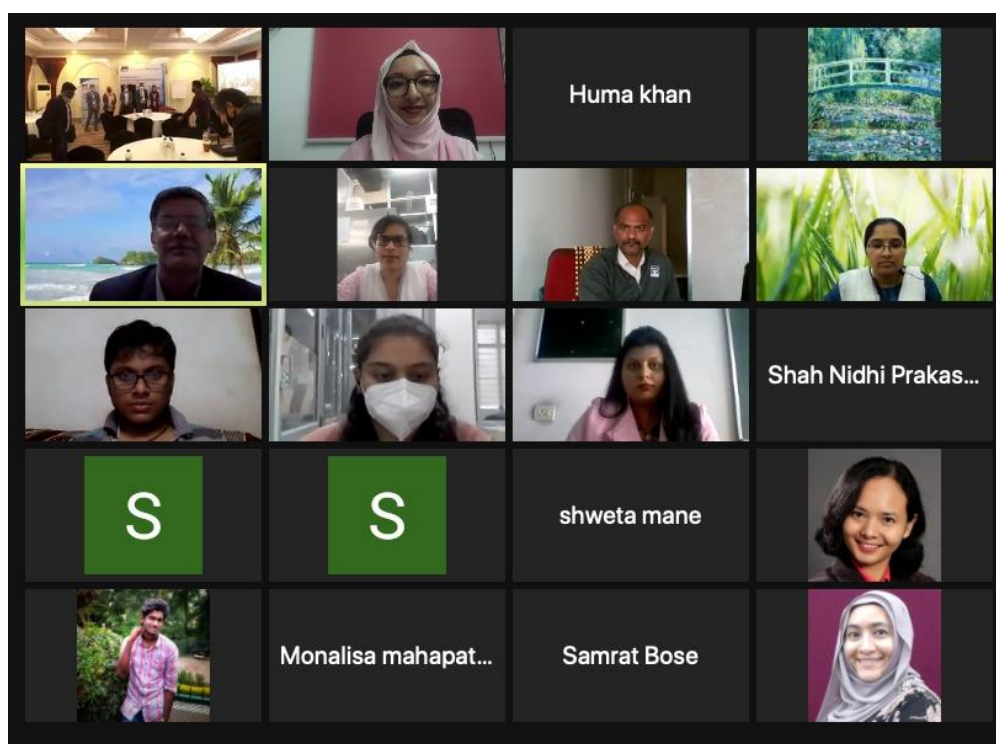
9th World Conference on Pharmaceutical Science and Drug Manufacturing successfully hosted its premiere at Holiday Inn Bur Dubai on 01<sup>st</sup> and 02<sup>nd</sup> December 2021. The conference was organized with a focus on “Technological Innovations in Drug Discovery” and it was a great success where eminent keynote speakers from various universities addressed the gathering.

The generous response and active participation of the Organizing Committee Members and Editorial Board members of Pharmaceutical science field we take the opportunity to thank all the speakers, delegates and participants for providing their valuable support and time for 9<sup>th</sup> WCPSDM 2021.

Organizing Committee would like to thank the Moderator of the conference, and who contributed a lot for the smooth functioning of this event.

congratulates the Best Paper, Best Paper Presentation awardees for their outstanding performance in the field of Pharmaceutical Science and Drug Manufacturing and appreciates all the participants who put their efforts in poster presentations & Young Researchers form and sincerely wishes them success in future endeavours.

## 10.CONFERENCE GLIMPSES





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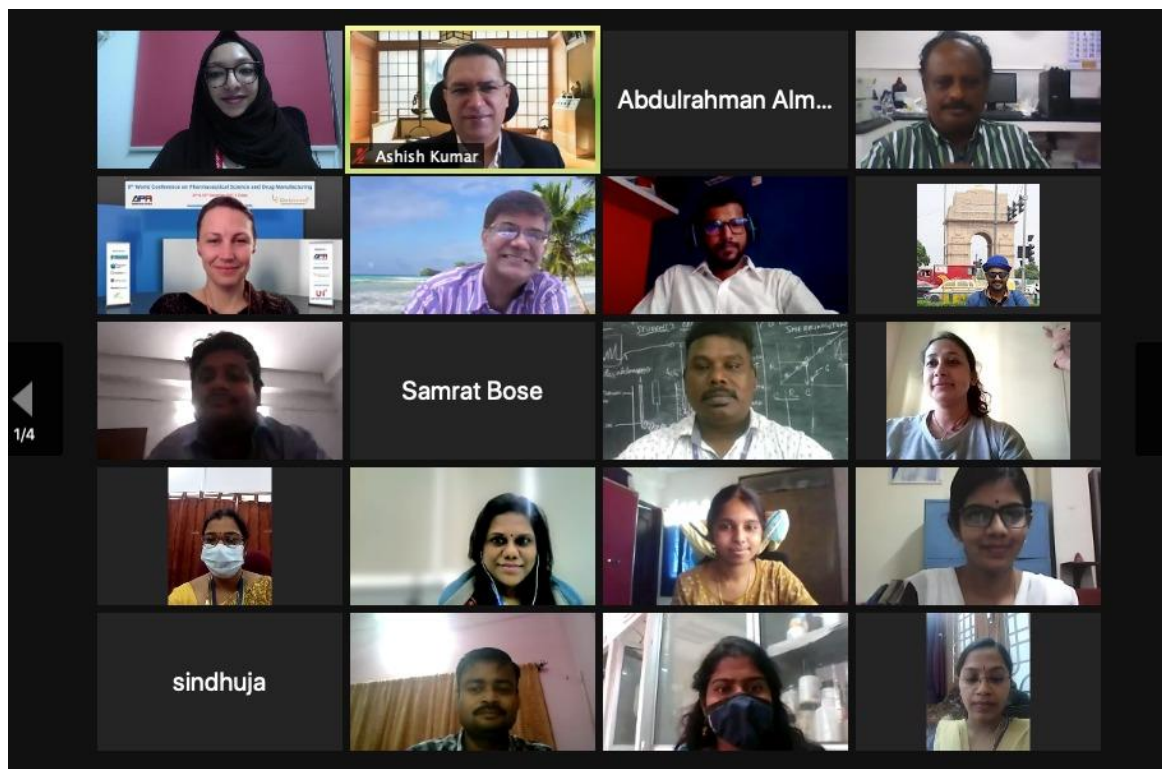
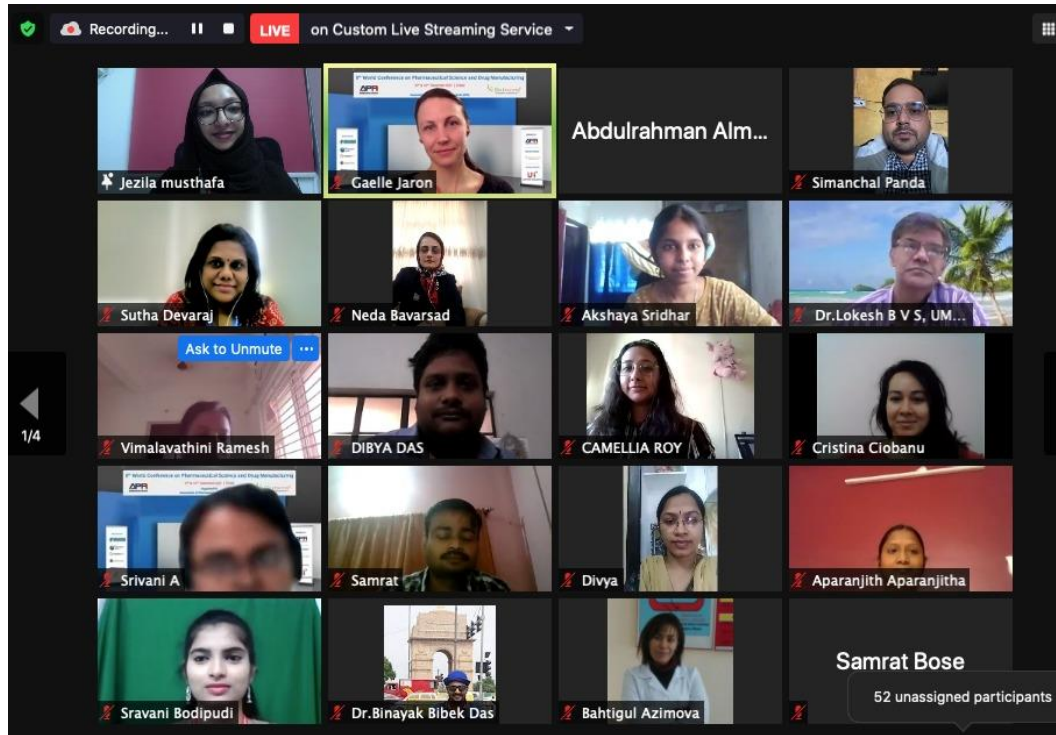
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Anupriya	Savi Biswakarma	Monalisa	Sezen Yilmaz
		Mithul	sravani
Pallab Roy			
Pooja	jitendra		

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RAMANKIT JAIS...			V. POORNA PUSH...

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**Thank You**  
For Your Attention

Presenter: **Dr. Soumayya Aib** | Email: **Soumayya.aib@gmail.com** | Institute: **The University of Lahore**



Ranjan Subhra


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Go to Settings to activate Windows.

Unmute | Start Video | Participants: 34 | Share Screen | Chat: 1 | Reactions | Settings | More | Leave


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**Background**


IBD is an autoimmune recurrent chronic inflammation of the gastrointestinal tract.



Ulcerative Colitis (UC)  
Most Prevalent



Crohn's Disease (CD)



Ranjan Subhra

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## Collaboration between Universities and Industry Advantages for both Sides

- Advantage for University
  - Working against concrete problems of the society
  - Project management skills
- Advantage for Industry
  - Access a whole range of disciplines and expertise that would not normally be present within the company
  - Optimize the cost of research by accessing public funding and financial benefits granted by governments for Public-Private collaborations

11





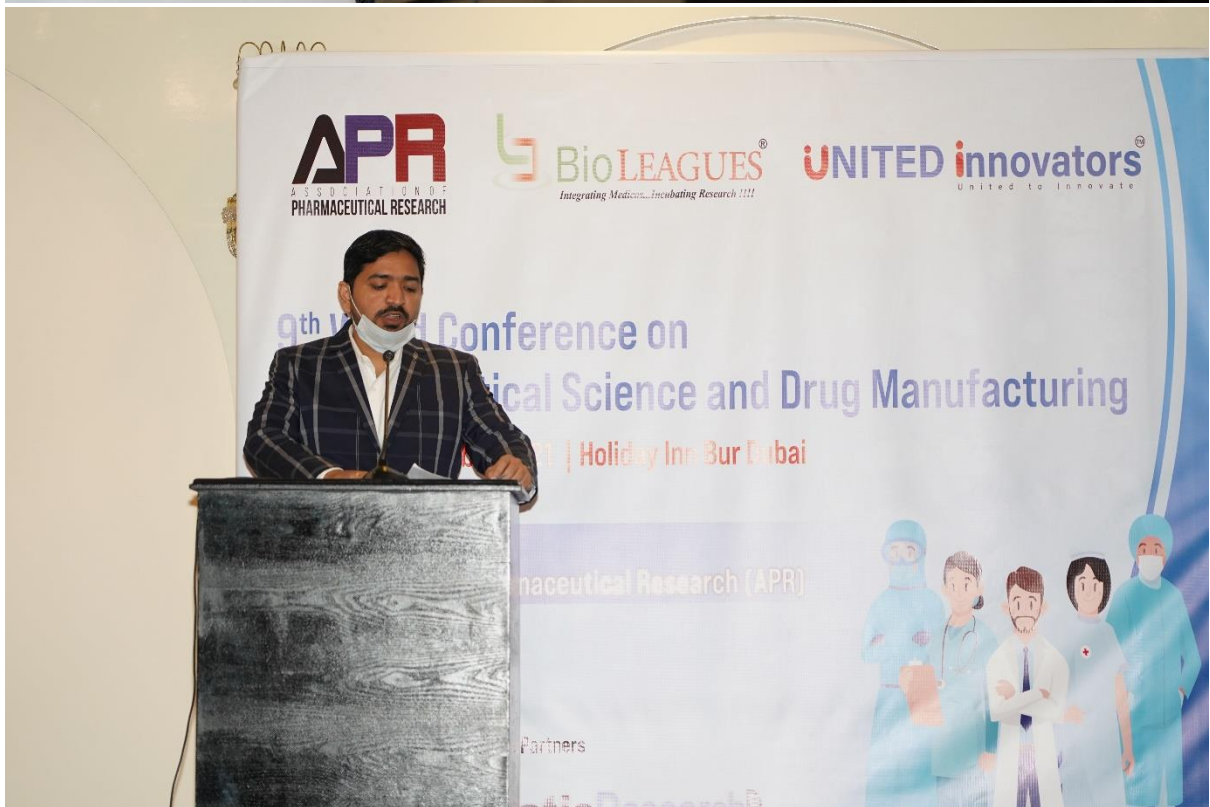
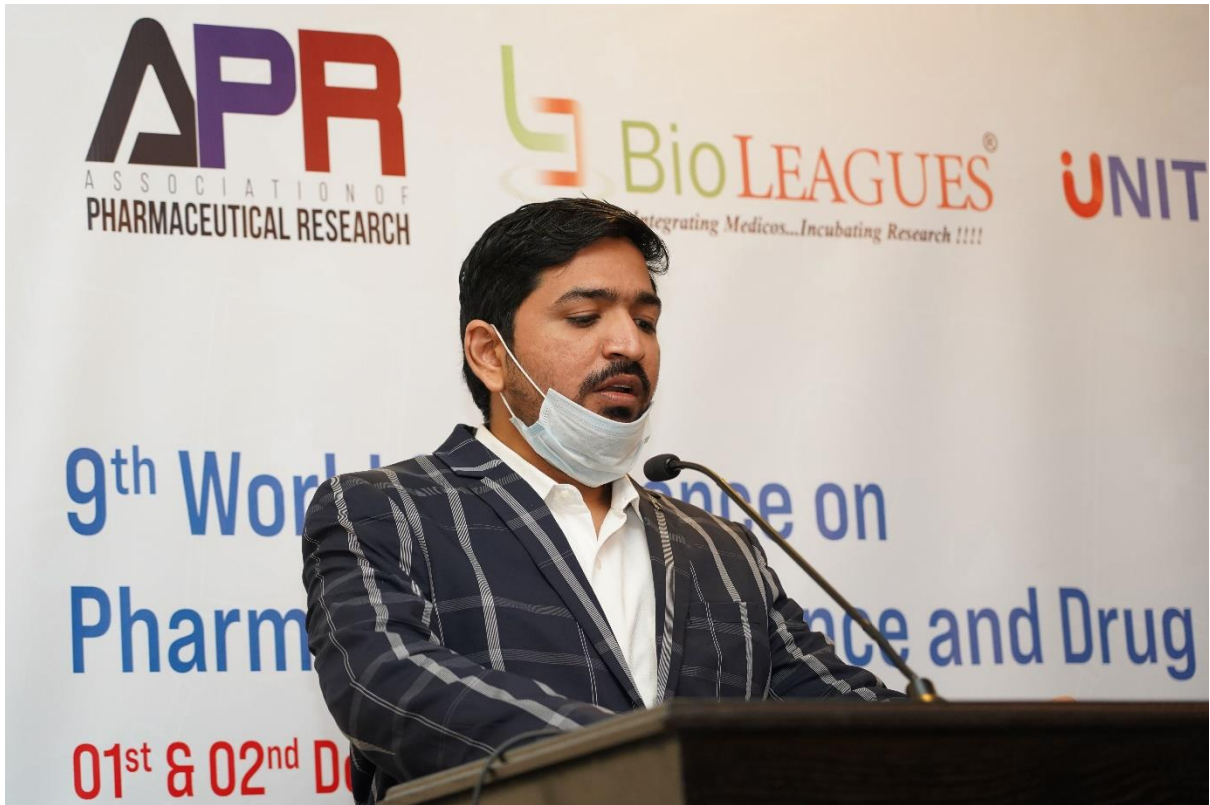












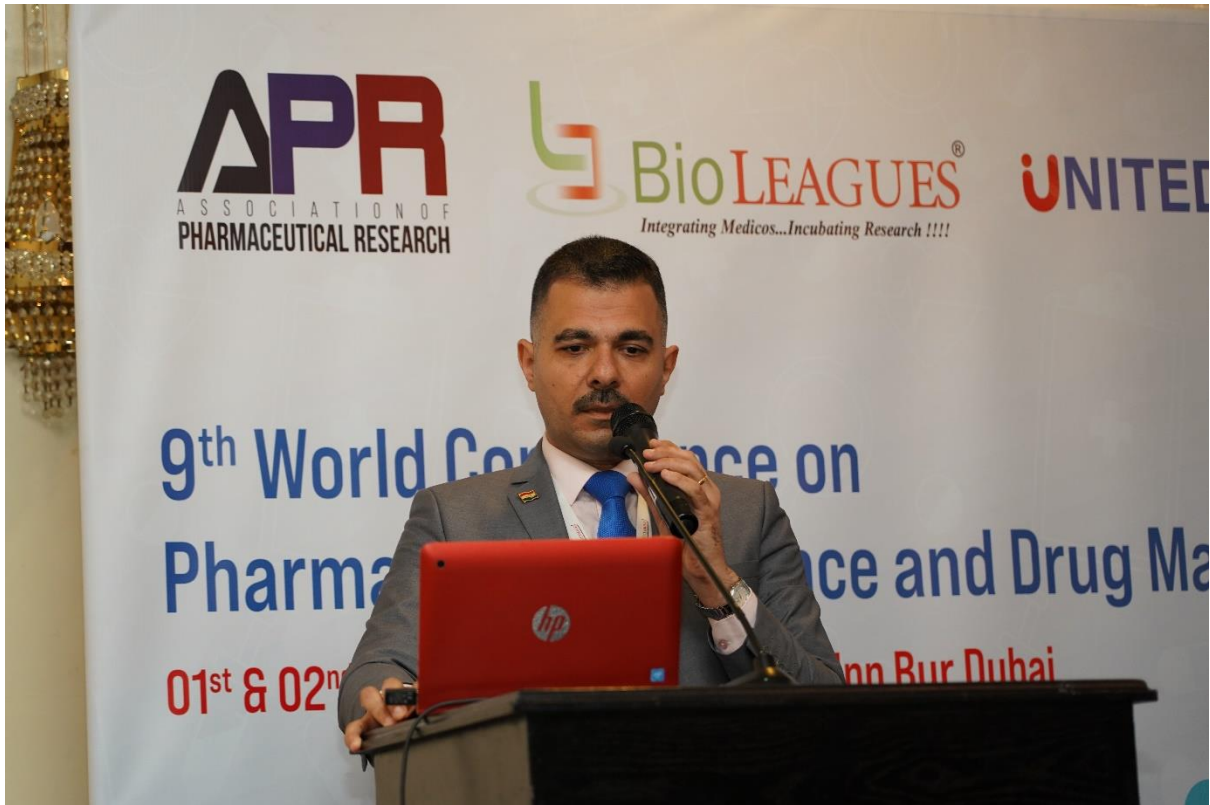
























## 11.CONCLUSION SUMMARY

"9th World Conference on Pharmaceutical Science and Drug Manufacturing" was a success event organized by APR amid the COVID19 with a collective effort from host organization, Organization committee members and all participants.

The **"9th World Conference on Pharmaceutical Science and Drug Manufacturing"** was a notable event which brings Academia, Researchers, Engineers, Industry experts and Students together.

The purpose of this conference was to discuss applications and development in area of **"Technological Innovations in Drug Discovery"**

The Pharmaceutical industry has an important role in designing and developing drugs and vaccines. They play a significant role to treat diseases and more importantly to improve the quality of life. APR provides an excellent platform for the interaction between experts in the areas of pharmaceuticals, drug delivery, nanomedicine, biotechnology, and nanotechnology around the world and aims in sharing some unique research and translational studies on various advances in the related fields.

This conference open doors for many researchers in academia, clinicians, and industry representatives working in these exciting areas. It is expected to bring together both reputed scientists in advanced stages of their career and young researchers from many related disciplines. This conference expects many ideas to emerge at the interfaces between disciplines aiming to solve the most important problems relating to the health and wellbeing of humanity.

At a practical level, the theme and aim of this conference provides valuable resource to assist aspiring people more proficient in leading and managing as well as the available resources as academic bureaucrat. Finally, the findings of this study could potentially serve as knowledge-avenue for college deans and directors, reasearch scholars, industry experts and students in choosing and to develop academic leaders' competencies and skills in decision making.

## Our Associates



## Proceeding Book

Click the link to download the Proceedings Books

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## Conference Poster

Click the link to download the poster

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## Conference Brochure

Click the link to download the brochure.

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## Conference Background

