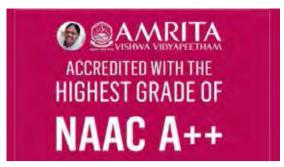




PHARMA COGNIZANCE



Amrita School of Pharmacy, Amrita Vishwa Vidyapeethtam, Amrita Health Science Campus, Kochi, Kerala









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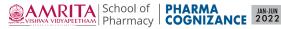
Extra-curricular events

IPA-SF Amrita -Student Chapter Activites

FIVE GOALS OF EDUCATION

- 1. To earn a living—the knowledge and skills needed to gain wealth, position and comfort.
- 2. To recognise that mental health—the maturity to control our thoughts and emotions— is just as important as physical health and to attain that maturity as well.
- 3. The training to do one's duty to repay one's debt to one's home and family as well as to Mother Nature, who has compassionately blessed us with food, shelter, sunshine, rain, the hills, forests, rivers, trees and fruits.
- 4. The inspiration to have gratitude, love and respect towards God and Mother Nature, and the motivation to engage in social work and selfless service born out of that gratitude.
- 5. To awaken the awareness of our Inner Self and to understand, "I am not a separate entity. Rather, I am a part of this universe. Just as the water in the waves reaching the shores and the water in the middle of the ocean is the same, I am one with the whole of creation."

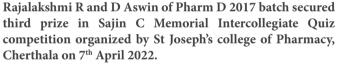
(From Amma's message on being conferred with an honorary degree-D.Litt. (Honoris causa)-from the Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar)





Student Achievements

















Placement

Our students were placed into various positions in Covance, IQVIA, Straive, Icon PLC and Indegene Pvt Ltd during the last six months period. Also four of our M Pharm Pharmaceutics second year students got the opportunity to do their internship in Dr Reddy's Pharmaceuticals.







Department of Pharmacy Practice



Dr. Abhijith K

- Dr. Abhijith K joined as a Lecturer at the Department of Pharmacy Practice, Amrita School of Pharmacy.
- He completed his Doctor of Pharmacy from Amrita School of Pharmacy in 2016.
- He worked as the chief Clinical Pharmacist in the Department of Gastrointestinal Surgery and Liver Transplant under Dr. Sudhindran S for 4.5 years at Amrita Institute of Medical Sciences.
- His areas of interest are immunosuppressive therapy, infectious diseases and critical care medicine.



Pharmaceutical Chemistry

Dr. Chandrakant Deoram Bagul

- Dr. Chandrakant D. Bagul joined as an Assistant Professor in the Department of Pharmaceutical Chemistry, Amrita School of Pharmacy, Kochi, India in February 2022.
- He completed his B. Pharm from Sharadchandra Pawar College of Pharmacy, Pune University, Pune, Maharashtra. He obtained MS (Pharm.) in Medicinal Chemistry from National Institute of Pharmaceutical Éducation & Research

(NIPER), Mohali in 2011 and Ph.D. in Medicinal Chemistry from National Institute of Pharmaceutical Education & Research (NIPER), Hyderabad in 2018.

- He worked as an Assistant professor in BVDU-Poona College of Pharmacy, Pune (2016-22).
- He has published total 22 papers in International Journals [h-index = 14; i10-index = 17; the number of citations: 535 in Google scholar
- His primary areas of interest are anticancer agents, EGFR inhibitors, Computer Aided Drug Design, Machine Learning, Artificial Intelligence organic synthesis.

Faculty Accomplishments



Dr. Lekshmi R Nath Received publication grant under KSC-STE (Kerala State Council for Science, Technology and Environment) - Student project Scheme - for the financial assistance to the Principal Investigators of projects with publication in the SCOPUS indexed journal.



Ms. Meenu Vijayan Received grant of 14,94074 INR as a co-investigator under ICMR-Extramural Ad-hoc scheme (Indian Council Of Medical Research)

Dr. Elezabeth M Koshy

the year 2022.

Lakeshore hospital and research Centre, Cochin.

international journals to her credit.

and microbial genetics.

· Dr. Elezabeth M Koshy joined as a Lecturer at the Department of Pharmacy

Practice, Amrita School of Pharmacy in

Dr. Elezabeth, an alumni of Amrita

School of Pharmacy completed Doctor

of Pharmacy in the year 2014. She worked as Clinical Pharmacist

in Me<mark>dcare Women</mark> and Children hospital, Dubai and

She has 4 research publications in national and

Pharmacovigilance, Patient Counselling, Clinical research

Koshy's research interests include medical oncology, infectious diseases, translational medicine,





Dr. Sreeja C Nair Invited speaker in webinar by Indian Pharmaceutical Association on National Science Day 2022 Presented his Ph.D work and secured second position in the "International webinar on Biomaterials the road ahead: Enabling affordable and accessible medicines" organized by Amrita School of Pharmacy, AIMS, Kochi, India on 16 and 17 March 2022.





Dr. Prashant S

Presented his Ph.D work and secured first position in the "International webinar on Biomaterials the road ahead: Enabling affordable and accessible medicines" organized by Amrita School of Pharmacy, AIMS, Kochi, India on 16 and 17 March 2022.

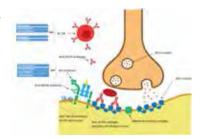
Publications



Recent advancements in the pharmacotherapy of Myasthenia Gravis

Advancement in molecular biology and diagnostic tools has enabled us to identify many targets for pharmacotherapy as well as for early diagnosis of myasthenia gravis. This article discusses the recent advancements made in diagnosis and therapy of the disease.









Prashant S & Athira K V, 2022, Current Topics in Medicinal Chemistry.

Bacopa monnieri for Disorders Affecting Brain

This review projects the beneficial role of *Bacopa monnieri* in disorders affecting the brain, including Alzheimer's disease, Parkinson's disease, stroke, epilepsy, and depression.

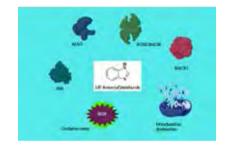




Formulating the Structural Aspects of Various Benzimidazole Cognates

 $B_{
m as}^{
m enzimidazole}$ derivatives are widely used in clinical practice as potential beneficial specialists. Most of the benzimidazole derivatives discussed in this review influence multiple targets, and hence a multi-targeted approach enlighten the hope of ray in the field of research in the area of neurological disorders.

Subin Mary Zachariah et al., 2022, Current Topics in Medicinal Chemistry





Novel Methotrexate-Loaded Nanoemulsion for the treatment of Rheumatoid Arthritis

A major challenge in treating rheumatoid arthritiswith methotrexate is the systemic side effects that limit dose escalation. A novel formulation of a methotrexate-loaded nanoemulsion for subcutaneous administration was developed that deliver methotrexate into the system via the lymph

VidyaViswanad et al., 2022, Nanomaterials



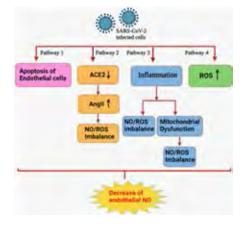




Roshni PR & Bijo Mathew, 2022, Environmental Science and Pollution Research

Critical role of nitric oxide in impeding COVID-19 transmission and prevention

This study examines the role of NO in COVID-19 in terms of its specific physiological and biochemical properties, as well as the possibility of using inhaled NO a standard therapy.

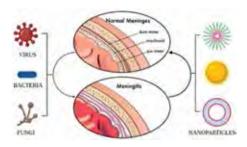




Sreeja C. Nair et al., 2022 Journal of Drug Delivery Science and Technology

Nanomedicine as a future therapeutic approach for treating meningitis

Tompeting kinetic processes give rise to a dynamic Competing knieue processes give his to a z-, supersaturation in situ during the dissolution of amorphous solid dispersions (ASDs) that depends on the formulation and physiological factors. The review evaluates the feasibility, predictability, and practicability of permeability/dissolution for the optimal development and risk assessment of ASD formulations.



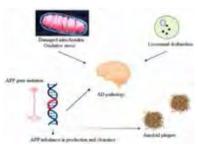




Ginson George & Bijo Mathew. 2022 International Journal of Molecular Sciences

Structural modifications on chal cone framework for developing new class of cholinesterase inhi bitors.

Different classes of chalcone-derived analogs are summarized for the easy understanding of the previously reported analogs as well as the importance of certain functionalities in exhibiting cholinesterase inhibition. In this way, this review will shed light on the design and development of novel promising chalcone candidates for the treatment of Alzheimer's disease.

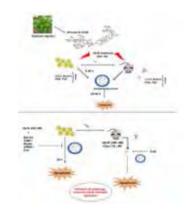




Lekshmi. R. Nath et al., 2022, Frontiers in Oncology

Uttroside B, a saponin exhibits a remarkable growth inhibition of Hepatocellular Carcinoma

nhibition of Uttroside B-induced autophagy improves its therapeutic efficacy against hepatocellular carcinoma. Also it is found to be an inducer of autophagy as evidenced by the up-regulation of autophagy markers in vitro and in vivo.



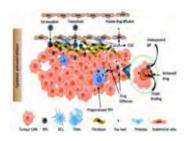




M. S. Sudheesh and Sabitha M, 2022 Nanoscale Advances.

Revisiting the outstanding questions in cancer nanomedicine

This review critically examines the impediments **I** posed by biological factors to the clinical success of nanomedicine. The current observations on critical outstanding questions in nanomedicine and the promising side of cancer nanomedicine is highlighted.



Academic Events





National Science Day 2022

As part of the National Science Day 2022, Amrita School of Pharmacy conducted a webinar series on 2nd March 2022.

Highlights

- First session was by Dr. Piyush. K. Jain, Assistant Professor and Shah Rising Star Professor,
 Department of Chemical Engineering, University of Florida. He shared his research
 experience and knowledge on CRISPR based COVID-19 diagnostics and multi-scale
 biomolecular engineering platform based on nucleic acid chemistry, protein engineering and
 nanoengineering.
- The next talk was delivered by Dr. Umesh Gupta, Assistant Professor, Department of Pharmacy, School of Chemical Science and Pharmacy, Central University of Rajasthan on the topic 'Research methodology and Publication ethics'. He explained the various aspects of research and publication related details such as h-score, impact factor, citescore, percentile, indexing services etc.

A short video competition was also conducted.



Start with WHY?

A motivational session entitled "Start with WHY?" was handled by Dr. Manu Melwin Joy, Assistant Professor, School of Management Studies, Cochin University of Science and Technology (CUSAT) for the faculty on 25th February 2022. The session inspired everyone to have better insights and approach towards life, teaching and learning by a shift towards newer and broader perspectives.



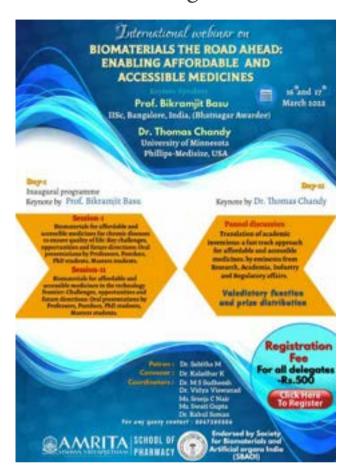


Patenting in pharma research

A highly informative, lively and interacting sessions on "Patenting in pharma research" for the faculty and Ph.D Scholars was conducted on 3rd June 2022. Dr. Yamuna, Senior Associate and Patent Agent and Mr. Srihari of K & S Partners handled the sessions.

Department of Pharmaceutics

Biomaterials the road ahead: Enabling affordable and accessible medicines



An International webinar was conducted by Amrita School of Pharmacy in association with Society for biomaterials and artificial organs India (SBAOI) on $16^{\rm th}$ and $17^{\rm th}$ March 2022 on the topic "Biomaterials the road ahead: Enabling affordable and accessible medicines".

Highlights

- The webinar was inaugurated by Prof. Shanti Kumar V Nair, Dean, Amrita Vishwa Vidyapeetham.
- The inauguration was followed by a session by Prof. Bikramjit Basu, Bhatnagar awardee and president of SBAOI. He gave a comprehensive outlook about the current status and future of biomaterials in the keynote entitled, "Biomaterialomics: Data Science-driven Path ways to develop fourth-Generation Biomaterials".
- This was followed by competition in oral presentation mode by students, conducted in four categories; (1) PhD scholar just completed, (2) PhD ongoing, (3) Master completed and, (4) Masters ongoing.
- The day two was started with Dr. Thomas Chandy, Ph.D,



Consultant in GLG Consulting, New York, who gave a comprehensive keynote presentation entitled "Overview of biomaterials and their use in biomedical devices". In that he spoke in detail about development of combination products, of drug in association with biomaterial to form advanced drug delivery devices.

That was followed by a panel discussion, on the topic; Translation of Academic invention, a fast track approach for affordable and accessible medicines". This was moderated by Dr. Kaladhar and the panel members were Dr. Sabitha M (Professor and Prinicipal, Amrita School of Pharmacy, Kochi); Dr. Deepthy Menon (Professor, ACNMM, AIMS Healthcare campus, Kochi); Dr. Siddharth J (Assistant Professor, IISc, Bangalore); Dr. Sam Rothenstein (CEO, Q Rono, University of Pittsburgh, USA); Dr. Rajesh Kainthan (Pfizer USA); Dr. Neetu Singh

(Associate Professor, IIT Delhi, India); Dr. Rao Bazewada (President and CEO, Bazewada Biomedical, USA). Dr. Kaladhar presented the idea of developing affordable and accessible medicines using biomaterials from academia, as a visionary topic for the panel members to discuss. The net conclusion was that there is a possibility to develop advanced medicines from academia which is affordable

- and accessible to citizens through appropriate cross-talk and networking.
- The valedictory section was presided over by Prof. Chandra P. Sharma was presided as the chief guest and gave a brief speech about history of biomaterials which was followed by Prize distribution ceremony for the competitions held.

Online Workshop conducted on Design of Experiments (DoE)



One-day online workshop was organized on the Design of Experiments (DoE) for research scholars and M. Pharm students on 19th May 2022. Dr. Muralidhara Anantmurthy from JMP academics was the trainer for the workshop.

Highlights

- Amrita Vishwa Vidyapeetham now has a licensed version of the JMP software. DoE is a robust optimization tool used for product and process development. DoE is expected to be a part of all the projects dealing with product development and optimization in the Dept. of Pharmaceutics.
- The key topics covered were: Introduction to DoE, Factorial design and response surface methodology (RSM), Mixture/Formulation design, Custom design and optimization.
- Students were given hands on training on the software with relevant example of drug product and development from the pharmaceutical industry. The workshop was followed by a Q&A session.

Department of Pharmaceutical Chemistry Drug analytical tools and Discovery of medicine





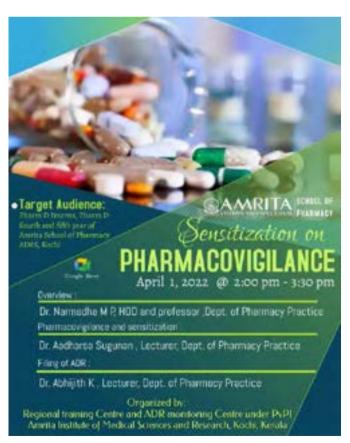


Department of Pharmaceutical Chemistry, Amrita School of Pharmacy organized 2 sessions for the faculty and students on "Drug Analytical Tools and Discovery of medicine" on 16th May 2022 from 11:00 am to 3:00 pm. Dr. Mandar Bodas, Solution consultant, Elsevier handled the sessions.

Highlights

- In the 1st session, Dr. Mandar Bodas created awareness regarding the importance of the use of REAXYS in drug discovery.
- Session 2 was an interactive session explaining the various stages
 of drug discovery and the various types of drug designing,
 synthetic strategies of new chemical entity was explained.

Department of Pharmacy Practice Sensitization on Pharmacovigilance

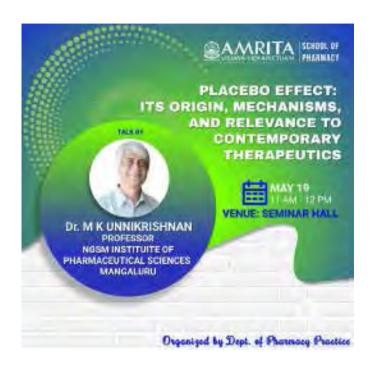


An online session on "Sensitization on Pharmacovigilance" was arranged by Department of Pharmacy Practice, as part of Regional Training Centre and ADR monitoring centre under PvPI, on 1st April 2022, at 2.00-3.30pm via Google Meet for Pharm,D interns, Pharm.D 5th year and 4th year students as well as faculty, in order to improve the ADR monitoring and reporting. The programme was divided into three sessions and the speakers were Dr. M P Narmadha, Dr. Abhijith K and Dr. Aadharsa Sugunan.

Highlights

- Dr. M P Narmadha began the session with an overview of Pharmacovigilance and how it is important to report the ADR.
- It was followed by Dr. Aadharsa Sugunan, who briefed about the importance of Pharmacovigilance system and how such a system will help improve the patient's safety. She also discussed signal generation, how to report an ADR, and the difference between ADR and ADE.
- Dr. Abhijith K elaborated on how to analyse, report and file an ADR, which is an important step of ADR reporting or Pharmacovigilance. He discussed the challenges faced by the healthcare team while reporting the ADR and the possible solutions to overcome the same.
- The session was concluded by an interactive Q&A session by the students.

Placebo Effect: Its origin, mechanisms and relevance to contemporary therapeutics







A seminar on "Placebo Effect: Its origin, mechanisms and relevance to contemporary therapeutics" by Dr. Unnikrishnan, Professor, NGSM Institute of Pharmaceutical Science Sciences and Research was organized by Department of Pharmacy Practice, Amrita School of Pharmacy on May 19th 2022 in Seminar hall, ASP from 11AM to 12PM. The talk targeted all M.Pharm students, Pharm.D 5th years and 4th years, PhD research scholars and faculty members.

Highlights

- The session was highly interactive and engaging, which conveyed that management of medical conditions is not purely based on medications but it is beyond drugs. The perspective or one's belief towards medication or medical condition has a significant role in progression or worsening of the condition. He cited various examples with clinical evidence which made it truly interesting.
- The session was concluded by a Q&A session where a few students and teachers shared their experience of the placebo effect.

Extra-curricular events







International Women's Day

International women's day celebrated on 31st march 2022 with a motivational talk by Dr M. Beena IAS, Chairperson, Cochin Port Trust.

International Yoga Day

Yoga session was conducted on 21st June 2022 with 65 participants from Amrita School of Pharmacy as part of International Yoga day celebration.

Sports Fest 2022

UDHGOSH 2022, the annual sports fest of Amrita School of Pharmacy was a momentous event conducted from 26th April to 11th May, 2022.

Mastery Over Mind

Mastery Over Mind (MA OM) Meditation program for all faculty and staff members was launched by our Amrita Darshanam - International Center for Spiritual Studies.

IPA-SF Amrita – Student Chapter Activites



Inaugural Function

(7th March 2022)

Inaugural function of Indian Pharmaceutical Association Student Forum Amrita Student Chapter was on 7th March 2022.



Career Guidance for Pharmacy Students

A career guidance program for Pharmacy students was conducted on 25th of June 2022 in 5th floor auditorium, Amrita School of Pharmacy, organized by IPA-SF Amrita student chapter. The Chief Guest of the event was Mr. Anil Kumar, Senior Director, Biostatistics, IQVIA along with Prakash V.P, Associate Director, Biostatistics, IQVIA.



World Health Day - Quiz Competition

(7th April 2022)

Amrita School of Pharmacy, Kochi witnessed Quiz competition conducted by IPA-SF Amrita Student Chapter on 07/04/2022. The theme was "Our Planet Our Health". Team Dhyana won the first position and where presented with books.

World Oral Health Unified Week - Interview

(30th March 2022)

As part of World Oral Health Unified Week observed from 25th March to 31st March 2022, the Editorial committee, Amrita Student Chapter, conducted an interview with Dr. R Venkidachalam, Associate Professor (Department of Public Health Dentistry), Amrita School of Dentistry, Kochi.











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