PharmEssence



e-Newsletter of the Department of Pharmacy Guru Ghasidas Vishwavidyalaya, Bilaspur (CG)

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Patron Prof. Shailendra Kumar (Registrar, GGV, Bilaspur)

Head of Department Dr. Bharti Ahirwar

Publication Committee

Dr. Harish Rajak Dr. Shivani Rai Paliwal Dr. K. Kesavan

National Webinar on "Multivalent Vaccines Against Corona Virus: Technology and Development Strategies"

Department of Pharmacy, Guru Ghasidas Vishwavidyalaya, Bilaspur has organized a one day national webinar on topic "Multivalent Vaccines Against Corona Virus: Technology and Development Strategies" on March 02, 2022. The keynote speakers of this webinar were Dr. K.S. Jaganathan, Deputy Director-Production, Serum Institute of India Pvt. Ltd. Pune and Dr. (Mrs.) Papiya Bigoniya, Principal and Professor, DSKM College of Pharmacy, RKDF University, Bhopal, (MP). More than 120 participants including faculty, research scholar and PG students attended the webinar. Dr. Sunil K. Jain, organizing secretary of national webinar expressed his vote of thanks to speakers, all the participants, and faculty members.

Research Projects from ICMR

Indian Council of Medical Research (ICMR), New Delhi has sanctioned a research project with the grant of Rs. 25 lakhs entitled "Anticancer evaluation of novel hydroxamic acids as histone deacetylase inhibitors" to Dr. Harish Rajak, Assistant Professor, Department of Pharmacy, GGV. ICMR has released Rs.18,16,845 as first installment of Project to University. In this project, ICMR has sanctioned a position of Junior Research Fellow (JRF) under this project.

Dr. Ravishankar Pandey received technical approval for his research project entitled "Adjuvanated nanoparticulate microassembly based immunotherapy for type-I diabetes" from ICMR. The project is based on development of immunotherapeutic vaccines for type-I diabetes.

Dr. Bharti Appointed as Nodal Officer for DACE



Dr. Bharti Ahirwar, Head, Department of Pharmacy appointed as Nodal Officer of Dr. Bhimrao Ambedkar Center of Excellence (DACE) set up at Guru Ghasidas Vishwavidyalaya, Bilaspur (CG). The DACE is a Ministry of Social Justice & Empowerment, Govt. of India supported scheme being set up to provide high quality free coaching facilities to the Scheduled Caste students for the Civil Services examinations.

Department of Pharmacy Signed MoU's with CDRI, Lucknow

Guru Ghasidas Vishwavidyalaya has entered into MoU with the Central Drug Research Institute (CDRI), Lucknow (UP), to explore the possible collaborative research programs in specific fields of interest for research collaboration and for the purpose of student internship. The MoU was signed by Director CDRI and Registrar, GGV, Bilaspur (CG). Prof. V.D. Rangari and Dr. Akhlesh Jain, Department of Pharmacy played appreciable role in execution of this MoU.

Guest Lectures Organized

Department of Pharmacy, GGV organized online guest lecture on the topic "Generic drug development: Clinical Perspective" February 19, 2022. The lecture was delivered by Dr. Vikas Jain, Chief Scientific Officer, Biocon Biopharmaceuticals, Bangaluru. More than 75 UG, PG and PhD students and faculty members participated in this session.

Another online lecture was delivered by Dr. Anshu Singh, Director, External Manufacturing, Jubilant Generrics, Greater Noida on February 26, 2022 on the topic "External manufacturing - Current trends in Pharma Industry, Scope and Challenges". The lecture highlighted the upcoming role of India as a global leader in the field of Generics. The guest lecture was followed by mind storing question answer session. More than 150 students and all the faculty members attended the guest lecture.

Dr. DilipKumar Pal received APTI-Prof LVG Nargund Research Excellence Award



Dr. DilipKumar Pal received prestigious APTI-Prof LVG Nargund Research Excellence Award in Pharmaceutical Chemistry for the year 2021. This award is given by Association of Pharmaceutical Teachers of India, Bangalore to encourage the promotion of excellence and practice of pharmacy research and recognize outstanding contribution among its life members.

Three Days National Workshop Organized



Three days national workshop on topic "Development of nanocarrier systems for drug delivery" was conducted during March 28 to 30, 2022. A total 30 postgraduates and research scholar from life sciences were registered for the workshop on national level. On the first day, Honorable Vice chancellor, GGV, Prof. Alok K. Chakrawal inaugurated the program. After inauguration of the workshop, Dr. Gautam Singhvi, Department of Pharmacy, Birla Institute of Technology and Science (BITS), Pilani, Rajasthan, India delivered a lecture on the topic "Lipid nanocarriers for topical drug delivery: basics and practical aspects". Dr. Amit Alexander, National Institute of Pharmaceutical Education and Research (NIPER-GUWAHATI), delivered a lecture on the topic "Fate of Nanomedicines towards effective Brain Targeting" on second day of workshop. On third day, Dr. Sanjay Tiwari, NIPER-Raebareli, delivered a lecture on "Colloidal stability of graphene oxide nanosheets". Dr. K. Kesavan, co-coordinator of workshop provided hands-on training on development of different nanoformulation to participants in lab session. During valedictory function, Dr. Bharti Ahirwar, Head and convener of this workshop welcomed the guests. Finally Dr. Alpana Ram, Co-Convener of this workshop proposed Vote of thanks.

Patents Granted to Faculty

A German Patent entitled "A system for synthesizing novel analogues of Nitrofurantoin based Hydroxamic acids as anticancer agents" granted to **Dr. Harish Rajak** on March 03, 2022. The patent number is 202022100777.2.

An Indian patent entitled "Novel biphenyl oxathiazolididione synthesis and their uses off" granted to **Dr. Dilipkumar Pal** on January 31, 2022. The patent number is 388144.

Development of Medicinal Plants Garden



Department of Pharmacy, added newer medicinal plant including Aloe, Adusa, Braophyllum, Lajwanti, Hibiscuus, Kali haldi and Akwan to the Medicinal Garden. A total of 25 medicinal plants were planted by students of B. Pharm and M Pharm. under the supervision of Dr. Bharti Ahirwar, Head of the Department, Dr. Neeli Rose Beck and Dr. Arjun Patra. These medicinal plants are a rich resources of ingredients which can be used in drug development either pharmacopoeial, nonpharmacopoeial or synthetic drugs.

Ph.D Degree Awarded to Four Students

Mrs. Preeti Patel was awarded Ph.D. for her thesis entitled "Design, synthesis and anticancer evaluation of novel Hydroxamic acid based analogues" on March 16, 2022 under the supervision of Dr. Harish Rajak, Assistant Professor, Department of Pharmacy, GGV, Bilaspur.

Mrs. Laxmi was awarded Ph.D. for her thesis entitled "Design, synthesis and evaluation of novel biphenyl analogues as aromatase inhibitors for the treatment of breast cancer" on April 26, 2022, under the supervision of Dr. Akhlesh Jain, Assistant Professor, Department of Pharmacy, GGV, Bilaspur.

Mr. Balak Das Kurmi was awarded Ph.D. for his thesis entitled "Development and characterization of multi-functional liposomal system(s) for targeted delivery of chemotherapeutic agent(s) against breast carcinoma" on May 10, 2022, under the supervision of Dr. Shivani Rai Paliwal, Assistant Professor, Department of Pharmacy, GGV, Bilaspur.

National Science Day Celebration



Department of Pharmacy, GGV celebrated National Science Day on February 28, 2022. School Children from various schools of Bilaspur city were invited to visit the DST-FIST recognized Department of Pharmacy. School children and staff from several schools including Krishna Public School and Government School. Koni visited the laboratories of the department. They learned about procedures for preparation of different dosage form and drug synthesis. Student were also familiarized about various instruments including UV-Visible spectrophotometer, Particle size analyser, IR spectrophotometer, HPLC and HPTLC.

Publications by Faculty

Dr. Bharti Ahirwar published a book titled 'New concept in Industrial Pharmacognostical technology'. The book has been published by PV Publication, Delhi.

Dr. Harish Rajak published a book on the title 'Practical Biochemistry'. The book has been published by Career and Pharma Publication, Nashik (MS) India. The faculty of the Department of Pharmacy published seven research and review papers in various high impact national and international Journals including AAPS PharmSciTech. Current Drug Delivery, Current Nanomedicine, Biochemical and Molecular Toxicology and Current Eye Research.

The faculty published **08 book chapters** with esteemed publishers, including CRC Press, Elsevier Publishers, BP International Publishers, Kolkata.

Faculty Recognized in World Ranking of Scientists

Four faculty members, Dr. Dilip Kumar Pal, Dr. Shivani Rai Paliwal, Dr. Partho Pratim Roy and Dr. Nishant Jain have been included in AD Scientific Index Ranking for Scientist in the Year 2022. The "AD Scientific Index" is the first and only study that shows the total and the last five-year productivity coefficients of scientists based on h-index and i10 index scores and citations in Google Scholar.

Mr. Gaurav selected in East zone Inter-University Cricket Tournament



One of student of B Pharm Sem-IV, Mr. Gaurav selected in East zone Inter University Cricket (Men) Tournament organized by KIIT University, Bhuubaneswar held on April 27, 2022. All the faculty and staff of department congratulated Mr. Gaurav for this achievement and provided best wishes for future endeavors.

Invited Lectures Delivered by Faculty

Dr. Harish Rajak delivered an invited lecture on the topic "Challenges and opportunities for women as Entrepreneurs in Pharmacy" on March 08, 2022 in the Worlds woman's day celebration organized by Faculty of Pharmaceutical Sciences, Shri Shankaracharya Technical Campus, Bhilai (CG).

Dr. Arjun Patra delivered a lecture on the topic "Drug discovery from medicinal plants" during SOAWAL-2022 organized by ITER, SOA deemed to be University, Bhubaneswar, Odisha. Dr. Patra also delivered a talk in National Workshop on the theme "Development of nanocarrier systems for drug delivery" organized by Department of Pharmacy, GGV, Bilaspur during March 28-30, 2022.

Dr. Alpana Ram delivered an invited talk on "Emerging pharmacy for brighter tomorrow" on March 03, 2022 organized by LCIT School of Pharmacy, Bilaspur, (CG). Dr. Ram also delivered an invited talk on "Emerging pharmacy for brighter tomorrow" on March 15, 2022, organized by Faculty of Pharmaceutical Sciences, RAMA University, Kanpur (UP).

Dr. Nishant S Jain delivered an invited talk on "Pharmacological simulation modelling" on February 28, 2022, organized by Faculty of Pharmacy, Kalinga University, Raipur (CG).

Dr. Manoj Kumar chaired a scientific session in an International conference on the theme "Emerging trends in multidisciplinary research and innovation" organized by LCIT group of Institutions, Bilaspur (CG) during April 19-20, 2022.

Dr. Sunil K. Jain delivered a lecture during national workshop on the topic "Formulation and characterization of nanoparticles" on April 30, 2022, organized by Department of Pharmacy, GGV, Bilaspur (CG).