

Global Initiative of Academic Networks (GIAN) is a new program in Higher Education approved by Ministry of Human Resource Development, Govt. of India. It is aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence. In order to garner the best international experience into our systems of education, enable interaction of students and faculty with the best academic and industry experts from all over the world and also share their experiences and expertise to motivate people to work on Indian problems. Punjabi University, Patiala is one of the several distinguished institutes of higher education selected across India for conducting course under this program. The University is delighted to announce the first course entitled as

Environmental Contaminants: Nature, Analytical Strategies and Control

Course Overview:

Society faces tremendous challenges to maintain and improve the life for everyone in the world with respect to health, environment, energy, food, water and last but not least peace. Despite many aspects that play a role to meet these goals, the environmental preservation and especially the aquatic ecosystem presentation is becoming crucial to ensure human wellbeing. Analytical Chemistry will be a major force to provide solutions, and already now the environment could not be preserved without the contributions Analytical Chemistry is making in the area of methods' development crucial to establish identity of new emerging contaminants, their occurrence and their potential control. Despite great advances chemistry has brought to society, with the growing world's population and the global change, the environmental contamination by these chemical and the consequent loss of water quality is affecting biota, ecosystem integrity and lately human being. Analytical chemistry is playing a major role to ascertain chemical processes involved in environmental degradation by chemistry, however, there is still much work to be done regarding identification of sources, transport and fate including identification unexpected and unknown compounds. In combination with emerging technologies like liquid and gas chromatography followed by mass spectrometry, geographical information systems and environmental forensics, these information gaps could be filled. This course will give an overview on the current state of the art in analysis of emerging contaminants in the context of the aquatic ecosystems preservation with special focus on identifying sources and environmental clearance processes as well as model design.

The primary objectives of the course are:

1. Identification of emerging and traditional contaminants that affects aquatic ecosystems
2. Analytical techniques involved in the establishment of the occurrence of emerging contaminants
3. Analysis and control of the presences of environmental contaminants (basic risk assessment, geographical Information Systems (GIS) to map the occurrence of contaminants and decision support systems).

The Faculty:



Prof. Dr. Yolanda Picó
Desertification Research Center
University of Valencia
Moncada (Valencia) SPAIN

Prof. Yolanda Pico is Professor of Food Chemistry and Nutrition at the Department of Medicine Preventive of the University of Valencia. She has more than 20 years' experience as an environmental and food chemist developing field risk assessment and methods for determining the environmental impact of contaminants. Her line of priority research is the development and validation of methods of analysis for the determination of emerging organic contaminants in food and environment, the development of methods and models for the control of the routes and the contaminant exposure assessment environmental and development of tools and methods that improve the knowledge about their impact. Within health sciences field, she is working on the elucidation of molecular structure, determination of the fragmentation mechanisms of emerging contaminants, as well as, multi-pesticides screening in food, in multi-drugs, forensic sample and in general unknown screening, etc.

Prof. Gulshan Kumar Bansal is a Professor of Pharmaceutical Chemistry at the Department of Pharmaceutical Sciences and Drug Research in Punjabi University, Patiala (India). He has more than 23 years of research in industry and academia. His major research area include interpretation of spectroscopic and LC-MS data for characterization of unknown and known impurities or degradation products in drug substances; Development and validation of RP-HPLC Stability-indicating Assay Methods for drugs; Stability testing of herbal drugs and phytopharmaceuticals; and Quantification of drugs in environmental and food samples through LC-UV and LC-MS methods. He is a CEGR certified academic leader.



Prof. Gulshan Kumar Bansal
Department of Pharmaceutical
Sciences and Drug Research,
Punjabi University, Patiala INDIA

Who can participate?

This course is important and intended for Post-graduate students, M. Phil and PhD research scholars, Postdoctoral research fellows, as well as faculty and scientific staff working in the area of environmental chemistry and environmental preservation in academia, industry and professional laboratories in the public and private sectors. The maximum number of participants is limited to thirty only.

Course duration	March 03 - March 09, 2022 (07 days); 10:00 am to 5:00 pm daily
Venue:	Punjabi University, Patiala
Delivery mode	March 03 - March 07: Online mode (Lectures and Tutorials) March 08 - March 09: Offline mode (Tutorials and Training Sessions)
Registration fee	PG students/M. Phil and PhD scholars/Postdoctoral fellows: ₹ 300 Faculty: ₹ 500 Industry sponsored participants: ₹ 1000 The participants can pay the fee in cash or alternatively, the participants can pay the fee as Demand Draft (DD) favoring "The Registrar, Punjabi University, Patiala" payable at Patiala before the last date of registration. The participants are required to send scanned copy of the DD at gulshan@pbi.ac.in All participants must submit the registration form available as Google Form using the following link: https://docs.google.com/forms/d/e/1FAIpQLScAhv4zvdzy87raD8wVmoJZWa0ACMOiK2SWEBK KIU2efnIUg/viewform?usp=sf_link Alternatively, this link can be copied and pasted in your web browser to access the form. The last date for registration is March 01, 2022.
Boarding and Lodging	Participants can avail accommodation during offline mode on the University campus on actual payment basis.

For any queries, please contact at: gulshan@pbi.ac.in (9855166102)
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Patron

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