











# **Deshbandhu College** Department of Chemistry, University of Delhi

# in Association

with

Augusta University (USA) Indian Society of Chemists & Biologists (ISCB) Indian Association of Solid-State Chemists and Allied Scientists

(ISCAS)

# PRESENTS International Conference

# Integrative Chemical Science for Health & Environment — 2023

**International Conference on Integrative Chemical Science for Health & Environment -2023 (ICHE-2023)** an opportunity to bring together academicians and researchers for discussions and long-term sharing of knowledge on recent advances in Chemical Sciences for tackling global challenges of health and environment that would help in creating a safer, healthier and more sustainable world.









# Hybrid Mode (In-Person and Online)

From October 6<sup>th</sup> – 8<sup>th</sup> , 2023



Venue: Deshbandhu College, University of Delhi, Kalkaji, New Delhi, India















#### **About the Conference**

The objective of the conference is to bring together researchers, scientists, academicians and industry professionals from various disciplines to explore the latest advancements and innovations in chemical science and its applications in promoting health and protecting the environment. The conference intends to provide a platform for exchanging knowledge, ideas and experiences, fostering collaborations and discussing practical challenges and opportunities in the field. Besides invited talks of stalwarts and plenary keynote speakers, there shall be both oral and poster presentations of contributed research papers on various sub themes. The key objectives of integrating Chemical Science for Health and Environment are:

•Developing safer chemicals and materials

- Developing saler chemicals and materials
- •Improving drug development and delivery
- Reducing environmental impact of chemicals
- •Enhancing monitoring and detection of pollutants in the environment
- Promoting public health
- •Advancing scientific research

https://sites.google.com/db.du.ac.in/iche2023/home

## About Deshbandhu College

**Deshbandhu College**, established in 1952 is the oldest and the largest co-educational institution in South Delhi and promotes Arts, Commerce, and Science courses. The college offers seven postgraduate and eighteen undergraduate courses in disciplines ranging from languages/literature, History, Political Science, Economics, Commerce, and all major branches of Sciences and Mathematics. It caters to more than 4500 students every year. Presently, it has secured **A++ grade** with **3.65 score** from the National Assessment and Accreditation Council (NAAC) and has been ranked **17th in NIRF ranking** in India. The sprawling campus of Deshbandhu College, with its lawns, gardens, and playground provides a healthy environment for all-round development of the generations to come.



# **About Department of Chemistry**

The **Department of Chemistry** of Deshbandhu College was established in the year 1952. The faculty takes pride in teaching cross sections of students enrolled in various courses and providing practical training to the students as per their academic curriculum. The courses offer immense opportunities for further studies in Biochemistry, Nanotechnology, Green Chemistry, Polymer Sciences, Agrochemical Sciences, Environmental Science, and other related fields. The department also has a special facility for advanced lab-based research work for doctoral projects. Every year distinguished speakers are invited to update the students about the latest trends in chemistry. In order to give market exposure to students, summer training projects are also conducted for undergraduate students. The department is proud to have a committed faculty that has excelled in research publication, book writing, and teaching.

# **Our Eminent Speakers**



**Prof. Anthony P. Davis** University of Bristol, UK



**Prof. Christophe Len** Institute of Chemistry for Life and Health Sci. PSL University, Paris, France



**Dr Ajeet Kaushik** Department of Environmental





Prof. Maria L Pereira **Prof. Paritosh Mohanty** Co-Founder of Ziylo & Carbometrics Engineering, Florida Polytech University CiCECO, University of Alveiro, Portugal IIT Roorkee, Roorkee, India



Prof. A K Tyagi FRSC, FNASc, FASc, FNAE DAE Director, Chemistry Group BARC, India



Prof. Douglas B. Grotjahn Dept of Chemistry & Biochemistry, San Diego State University, USA



**Prof. Alexander Greer** Dept. of Chemistry, Grad. Center CUNY Brooklyn College, NY, USA



Prof. Satish Kumar Awasthi Dean, Faculty of Science & Head, Department of Chemistry, University of Delhi, India



Prof. Nagendra K. Kaushik Department of Electrical and Bio Physics, Kwangwoon University, Seoul, South Korea



Prof. Virinder S. Parmar **CUNY Graduate Centre** The City University of New York, USA



**Dr Kuntal Manna** Department of Chemistry, IIT Delhi, India



Dr Supriya D. Mahajan Dept of Medicine, Jacobs School of Medicine & Biomed. Sci, University at Buffalo, New York, USA



Prof. Ram Sagar Misra School of Physical Sciences, JNU, New Delhi, India



**Dr Siddharth Sharma Department of Chemistry** Mohanlal Sukhadia University Udaipur, India



**Prof. Govind Gupta** Senior Principal Scientist (CSIR-NPL) Academy of Scientific & Innovative Research (AcSIR) Delhi, India

# **Our Eminent Speakers**



Dr Neha Kaushik Department of Biotechnology, University of Suwon, Hwaseong, Republic of Korea



**Prof Ravi P. Singh** Department of Chemistry, IIT Delhi, India



Prof. Ajay Kumar Mishra Department of Chemistry, Durban University of Technology, South Africa



**Dr Anthony Addlagatta** Center for Chemical Biology IICT Tarnaka, Hyderabad, India



Prof. Farhan J. Ahmad Department of Pharmaceutics, Jamia Hamdard, New Delhi, India



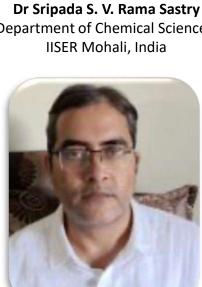
**Prof. Tanmay Basak** Dept. of Chemical Engineering IIT Madras, India



Dr Himanshu Aggarwal Dept of Chemistry, BITS, Pilani (Hyderabad Campus), India



Prof. Sujit Kumar Ghosh Department of Chemistry, IISER, Pune, India



**Dr Anupam Bhattacharya Department of Chemistry** BITS-Pilani (Hyderabad Campus) Telangana, India



**Prof. Sunil Kumar Sharma** Dept. of Chemistry University of Delhi, New Delhi India



Dr Rizwan Wahab Department of Chemical Sciences, Department of Zoology, King Saud University, Riyadh, Saudi Arabia.



Dr Puja Panwar Hazari Scientist F, Joint Director, Head-DCRS, RNAIS, Institute of Nuclear Medicine and Allied Sciences, Delhi, India



Prof. Venkata Khrishnan Dept. of Chemistry , School of Basic Sciences, IIT Mandi, HP India



Prof. Adarsh Pal Vig Chairman, PPCB. Guru Nanak Dev University, Amritsar, India.



Prof. Amitabh Jha Dept. of Chemistry Acadia University, Nova Scotia, Canada.



# **Our Eminent Speakers**



**Prof. Sabu Thomas** Vice Chancellor, Mahatma Gandhi Univ., Kottayam, Kerala, India



**Prof. Rajeev Sakhuja** Department of Chemistry BITS Pilani, Rajasthan, India



**Dr Ravindra Vikram Singh** Director and Head- R&D, Technology and Innovation, India



**Prof. Tokeer Ahmad** Department of Chemistry, Jamia Milia Islamia, Delhi, India



Prof. Krishna Nand Singh Department of Chemistry, Institute of Science, BHU Varanasi, India



Dr Yannick Guari Head, Dept. of Chem. & Molecular Mater., Director, CNRS, University of Montpellier, France



**Prof. Digambara Patra** Department of Chemistry American University of Beirut Beirut, Lebanon



Dr Chandramouli Subramaniam Department of Chemistry IIT Bombay, Mumbai, India



**Prof. A. Sakthivel** Department of Chemistry, Central University of Kerala, India



Dr Shailesh Narayan Sharma Principal Scientist, CSIR-NPL, Delhi, India



Dr U V Babu Head-Research and Development Himalaya Wellness Company Makali, Bengaluru, India



**Prof. Rakesh Kumar Sharma** Department of Chemistry, University of Delhi, India

## **Call for Papers**

Guidelines for the abstract submission:	Guidelines for Presentation:	
• Maximum words limit 300, typed in MS word,		
	<u>POSTER</u>	
• Times New Roman font,	•Poster size should be 4 X 3 feet (121 X 92 cm) in portrait mode.	
<ul> <li>Abstract title: Bold and 12 font size.</li> </ul>	•Leave margins of 3 inches from each side.	
• Authors' name, affiliation and abstract body: 12 font size with 1.5		
	•The printed poster should indicate the Title followed by the	
spacing.	Authors and their affiliations.	
<ul> <li>The name of the presenting author should be underlined.</li> </ul>	•The poster should clearly define Objectives, Methodology,	
• The template for abstract, and detailed guidelines are available on the		
	Outcomes, and Conclusions.	
conference website.	ORAL	
Note:	• Oral presentation should be prepared in MS PowerPoint	
• Submit your abstract through registration link in MS word format with		
, 0 0	compatibility mode only.	
the above specifications.	•Time slots will be 10 minutes for oral presentation.	
<ul> <li>Abstracts submitted in different formats will not be considered.</li> </ul>	Note: A copy of the presentation (Oral/Poster) should be	
• All submitted abstract should be plagiarism free, and authors would		
	submitted 20 days before October 6, 2023, by email to	
be solely responsible for the originality of the content.	iche@db.du.ac.in	

#### Call for paper: details: https://sites.google.com/db.du.ac.in/iche2023/abstract-submission?authuser=2

### Theme and Sections:

The chemical science, health, and environment have shared a fecund and harmonized partnership. The chemical science has been the central science to develop benign, effective medicines for various diseases, diagnostics; and providing the tools for monitoring, protection, and cleaning of the environment. This conference will bring together the researchers and academician on a single platform for fruitful discussion and collaborations to enhance the research in the following areas (but not limited to):

- Recent advances in medicinal chemistry
- Green synthesis for health and environment
- Biomass derived chemicals for pharmaceuticals
- Functional modification of bio-polymers for health and environment
- Nanotechnology for drug delivery and for health care monitoring
- Nanomaterials as chemical sensors for a safer environment
- Electrochemical water treatment and resource recovery
- Photochemical processes for health and environment
- Bio-materials for environmental remediation
- Sustainable chemistry
- Impact of chemical sciences on society
- Green alternative to fossil fuels
- Functional molecules/nanomaterials for catalysis
- Natural product synthesis
- Other related topics

Contact us at

Link: https://sites.google.com/db.du.ac.in/iche2023/call-for-paper?authuser=2

Selected papers will be published as full length articles in the special issues of SCOPUS Indexed Journals after Peer Review

## **IMPORTANT DATES**

Extended Last date of Registration: August 25, 2023 Extended Last date of Abstract submission: August 25, 2023

# **Registration fees**

Category	Early Bird	Late Fees	On-Desk
	(INR)	(INR)	(INR)
	Offline / Online	Offline / Online	Offline / Online
Students	2000 / 1000	2500 / 1500	3000 / 2000
UG/PG			
<b>Researchers</b> /	3000 / 2100	3500 / 2600	4000 / 3000
Ph.D.			
Faculty	4000 / 2500	4500 / 3000	5000 / 4000
Delegates	7000 / 4000	8000 / 5000	10000 / 6000
from Industry			
Foreign	100* / 50	150* / 80	200* / 100
Students	USD	USD	USD
UG/PG			
Foreign	200* / 100	300* / 150	400* / 200
Delegates	USD	USD	USD

PAYMENT DETAILS: A/C Name: ICHE 2023 DBC A/C No.: 09031000104063 IFSC Code: PSIB0000903 MICR Code: 110023098 Bank and Branch Name:Punjab & Sind Bank,DeshbandhuCollege,Kalkaji, New DelhiSWIFT Code: PSIBINBB007

#### Accommodation facility:

•\*For Foreign delegates, accommodation will be provided on twin-share basis for maximum five days.

• For Indian delegates, accommodation would be provided on payment basis (First Come First Serve)

#### CHECK FOR MORE DETAILS:

https://drive.google.com/file/d/1e5eyXQvgXvbebeM5BSMqAi8 MrfsMEQLo/view

#### • In-person attendees benefit:

The registration fee includes registration kit, certificate, tea and lunch on the conference days including gala dinner.

• Interaction with faculty members, researchers and peers.

• Opportunity for career development and visibility of your research profile across the world.

# **Registration link:**

https://docs.google.com/forms/d/e/1FAIpQLSc60Ieo0XFNRBwn8a8 s1ok5bWAxR-htEFKyhmzFl5cyLhegrg/viewform?usp=sf\_link

#### For more information:

Mail: <u>iche@db.du.ac.in</u> Tele Phone: + 91 9899367030, + 91 9311365896, + 91 8882796963

https://sites.google.com/db.du.ac.in/iche2023/home

## **CONFERENCE ADVISORY COMMITTEE**

#### Chairman: Prof. Diwan S. Rawat, Vice-Chancellor, Kumaon University, Nainital, Uttarakhand, India

**Prof. C.N.R. Rao** JNCASR, Bangalore, India

**Prof. Anamik Shah** President, ISCB and Professor at Saurashtra University, Gujarat, India

Dr Prem Man Singh Chauhan General Secretary, ISCB & EX-Chief Scientist (AcSIR), CDRI, India

**Prof. N.B. Singh** President, ISCAS, and Professor at Sharda University, Noida, India

**Prof. I.B. Sharma** Former President, ISCAS, India

**Prof. Rajender Varma** CESER, United States Environmental Protection Agency, USA

**Dr Sanjeev K. Varshney** The Head & Advisor, IBCD, DST, Ministry of Science and Technology, Govt. of India

**Prof. S.K. Awasthi** Dean, Faculty of Science & Head, Department of Chemistry, University of Delhi, India

**Dr O. P. Chauhan** Head – DFRL, DRDO, India.

**Prof. Bernhard Middendorf** University of Kassel, Germany

**Prof. Narsingh B Singh** University of Maryland, Baltimore, USA

**Prof. Rama Shanker Dubey** VC, Central University of Gujarat, India

**Prof. Raj Nath Yadava** VC, Purnea University, Purnea, India

**Prof. Rajeev Gupta** Department of Chemistry, University of Delhi,

**Prof. Dr Rameshwar Adhikari** Tribhuvan University, Kathmandu, Nepal

Prof. Ashutosh Sharma President, INSA and Prof. IIT Kanpur, India

**Prof. Sabu Thomas** VC, Mahatma Gandhi University, Kerala, India

**Prof. Gurmeet Singh** VC, Pondicherry University, Puducherry, India

**Prof. Rajiv Aggarwal** Sri Aurobindo College, University of Delhi **Prof. Adarsh Pal Vig** Chairman, PPCB, Guru Nanak Dev University, Amritsar, India.

**Prof. Mahendra Nath** Department of Chemistry, Delhi University

**Prof. R. Nagarajan** Department of Chemistry, University of Delhi

**Prof. Ram Singh** Delhi Technological University, Delhi, India

**Dr A. S. Kandadai** University of Alberta, Canada

**Prof. Maria L. Pereira** University of Aveiro, Portugal

**Prof. Yogendra Kumar Gupta** AIIMS, New Delhi, India

**Prof. Parbati Biswas** Department of Chemistry, Delhi University

**Prof. Amitabh Jha** Acadia University, Canada

**Prof. Aaron Aponick** University of Florida, USA

**Dr Supriya D. Mahajan** University at Buffalo, USA

**Dr Nidhi Jain** IIT Delhi, India

**Prof. S. Kukreti** Department of Chemistry, University of Delhi

**Dr Smriti Arora** Freie Universität Berlin, Germany

**Prof. Debabrata Maiti** IIT Bombay, Mumbai, India.

**Prof. Ramesh Chandra** VC, Maharaja Surajmal Brij University, India

**Prof. Ranjit K. Verma** Founder VC, Magadh University, Bihar, India

**Prof. Ghanshyam S. Chauhan** Himachal Pradesh University, India

**Prof. Ajay K. Mishra** Durban University of Tech., South Africa

**Prof. Sunil K. Sharma** Department of Chemistry, University of Delhi

**Prof. Anil Kumar** BITS Pilani, Rajasthan, India

**Prof. A.K. Verma** Department of Chemistry, University of Delhi

Prof. Indrajit Roy Department of Chemistry, University of Delhi Prof. Pravita Kumar Sri Aurobindo College, University of Delhi **Dr Mukesh Kumar** ZHD College, University of Delhi **Dr Amarpreet Kaur** SGTB Khalsa College, University of Delhi **Prof. Sharda Pasricha** Sri Venkateswara College, University of Delhi. Prof. Firasat Hussian Department of Chemistry, University of Delhi Dr Rakhi Thareja St. Stephen's College, University of Delhi Dr Seema Gupta S. Shraddhanand College, University of Delhi **Dr Vijay Goel** JNU, Delhi **Dr Sanjeev Mishra** ZHD College, University of Delhi. **Prof. Prashant Singh** ARSD College, University of Delhi Prof. Rajeev Singh ARSD College, University of Delhi **Prof. Sunita Bhagat** ARSD College, University of Delhi Prof. S.K. Shukla BCAS, University of Delhi **Dr Sneh Lata** ARSD College, University of Delhi Prof. Raj Kumar Mishra BHU, UP Dr Tanuja Bisht PGG PGC College, Haldwani, Uttarakhand Dr Anita Kamara Verma KM College, University of Delhi **Dr Vinod Kumar** JNU, Delhi Dr Sasanka Deka Department of Chemistry, University of Delhi Dr Ramendra Pratap Singh Department of Chemistry, University of Delhi Dr AK Bhagi Dyal Singh College, University of Delhi **Dr Beena Negi** Gargi College, University of Delhi **Dr Neera Sharma** Hindu College, University of Delhi Dr Mallika Pathak Miranda House, University of Delhi Dr Himanshu Ojha DRDO, New Delhi. Dr Uma Narang NSUT, Delhi Prof. Raj Kishore Sharma Department of Chemistry, University of Delhi **Dr Nand Kishore** IIT Bombay, Mumbai **Dr Ritu Mathur** ZHDC, University of Delhi Prof. Navneet Manav DS College, University of Delhi Prof. Mukta Sharma Rajdhani College, University of Delhi Dr. Bhupender S. Chhikara Aditi Mahavidyalaya, University of Delhi **Dr Sheetal Budhiraja** Ramjas College, University of Delhi

Link: https://sites.google.com/db.du.ac.in/iche2023/advisory-committee?authuser=0

## **CONFERENCE ADVISORY COMMITTEE**

Dr Kiran Bajaj Amity University, Noida, UP Dr Abir Sarbajna SAS, VIT Vellore, Tamilnadu Prof. Rakesh Kumar Sharma Department of Chemistry, University of Delhi Dr Brijesh Rathi Hansraj College, University of Delhi Dr Brajendra K Singh Department of Chemistry, University of Delhi **Dr Poonam** Miranda House, University of Delhi Prof. Geetanjali KM College, University of Delhi Prof. Hemant Rajor Ramjas College, University of Delhi Dr Amit Pratap Singh NIT Delhi Prof. Rajni Singh Add. director, Amity University, Noida, UP Dr Amit Kumar Rawat Hansraj College, University of Delhi Dr Rajni Rajdhani College, University of Delhi Dr Yogesh Kumar Hansraj College, University of Delhi Dr Shaswat Malhotra KM College, University of Delhi **Dr Pradeep Pratap Singh** S. Shraddhanand College, University of Delhi **Dr Anchal Singhal** St. Joseph's University Bangalore Dr Jyoti Tanwar HG College, Sonipat. **Prof. Sunita Hooda** ANDC, University of Delhi Dr. Sandeep Kaur Department of Chemistry, University of Delhi Prof. Dinesh Mohan, JNU, New Delhi

Dr Meenakshi GPG, Gaya Dr Amar Kumar HOD, RKDC, Patliputra University, Patna **Dr Amit Kumar** Jamia Milia Islamia University, Delhi Dr Ranjana Dixit Ramjas College, University of Delhi Dr Ranjana Mehrotra Former Chief Scientist, CSIR-NPL, New Delhi Dr Nityananda Agasti DDU College, University of Delhi Dr Nazia Tarannum CCS University, Meerut. **Dr Ankita Chaudhary** Maitreyi College, University of Delhi Dr Chandra Shekhar SV College, University of Delhi Dr Krishan Kumar Motilal Nehru College, University of Delhi Dr Mukesh C. Joshi KM College, University of Delhi Dr Amita BUC College, Batala, Punjab Dr Sanjay Kumar Shyam Lal College, University of Delhi Prof. Sanjiv Kumar IGNOU, New Delhi Dr Alok Kumar Rai Department of Chemistry, University of Delhi Dr Ritika Nagpal SRM University, Sonepat Dr Meenal Gupta Sharda University, Greater Noida Dr Leena Aggarwal NSUT, New Delhi

## **Conference Organizers**

Prof. Pankaj Khanna ANDC, University of Delhi Dr Leena Khanna GGS Indraprastha University, Delhi **Dr Darshan** Daulat Ram College, University of Delhi **Dr Sunny Manohar** DDU College, University of Delhi **Dr Sudarshan Kumar** Hindu College, University of Delhi Dr M. Samim Jamia Hamdard University, Delhi Dr Pinki Chakraborty Galgotias University, Noida UP. Dr Sudhish K. Shukla Manav Rachna University, Faridabad **Dr Uttpal Bora** IIT Guwahati Dr Niharika Sinha Gautam Buddha University, Noida Dr Sushil Kumar Sharma University of Kota, Rajasthan Dr Bijoy P. Mathew Vimala College, Thrissur, Kerala Dr Padma Saxena Maitreyi College, University of Delhi Dr Monika Singh INST, CSIR, Mohali Punjab **Dr Rahul Singhal** Shivaji College, University of Delhi **Dr Ashish Kumar** Sardar Patel University, Mandi, HP Dr Abhishek Dhiman Govt. Hydro Engineering College Bandla, Bilaspur Dr Satyasheel Sharma NIPER, Ahmedabad Dr. Bhupendra P. Singh Central University of Haryana, Haryana

Dr Shilpika Bali Mehta, KC, University of Delhi

Chief Patron

Prof. D.S. Chauhan (Chairman), Governing Body, Deshbandhu College, Pro Chancellor, GLA University, Mathura

Patron

Prof. Kamal Kumar Gupta, Principal, Deshbandhu College, University of Delhi, India

Teacher-in-charge

Prof. Deo Nandan Kumar, Department of Chemistry, Deshbandhu College

#### Conveners

Dr Pratibha Kumari, Associate Professor, Department of Chemistry, Deshbandhu College, DU, India Dr Siva S. Panda, Associate Professor, Department of Chemistry & Biochemistry, Augusta University, USA

#### **Co-Conveners**

Prof. Sunil Kayasth, Dr Moses R. Ngasainao, Prof. Mahesh Chandra, Dr Namita Gandhi, Dr Ishwar Dutt Vats, Mr. Sanjay Kumar

#### **Organizing Secretaries**

Prof. Ruby Mishra, Dr Bhawani Shankar, Dr Parul Singh, Dr Vineeta Kashyap, Dr Monika Sharma, Dr Rohit Kholiya **Treasurers**: Dr Shilpi Khurana, Dr Deepti Gupta, Dr Vaishali Arora

#### Coordinators

Dr Aditya Saxena, Coordinator IQAC, Deshbandhu College, University of Delhi, India Prof. Indrakant K. Singh, Coordinator DBT Star college, Deshbandhu College, University of Delhi, India

#### Members

Dr Vivek Saxena, Prof. Sushila Singhal, Mr. Jugmendra Singh, Dr Umesh Kumar, Dr Gajendra Singh, Dr Shilpi Bhatnagar, Dr Aparna Shekhar, Dr Atul K. Sharma, Dr Robin Kumar, Dr Bharti Badhani, Dr Archana Milhotra, Dr Ashawani K. Singh, Dr Maku Moronshing, Mr. Gaurav Khoker, Dr Seema Lal, Prof. Manisha Sengar, Dr. Irengbam Rocky, Mr. Mohd. Shahzad, Dr Prabha Arya, Dr Vanshika Bhatia, Dr Astha Giri, Dr. Ajay Pratap Singh Gahlot, Dr Priyanka Lamba, Dr Anil Kumar, Dr. Brijmohan, Dr. MD. Chand Asique, Dr Raju Kumar, Dr. Ashwani K. Singh, Dr. Reeta, Dr Bela Bhatia, Dr Roshini Rajamohan, Dr. Aparna Nautiyal, Dr. Kumar Shantanu, Dr. Sourav Singh Deo, Dr. Anju K. Chhibbar, Dr. Madhu Rani, Ms. Anjana Singh, Dr. Neha Yadav, Dr. Rubina Chongtham, Dr. Nisha Sogan, Dr. Ashish Kumar Choudhary, Dr. Monika Bajaj For complete list: <u>https://sites.google.com/db.du.ac.in/iche2023/organizers?authuser=0</u>