













INTERNATIONAL CONFERENCE ON

CHEMICAL SAFETY & SECURITY FOR **HEALTH & ENVIRONMENT**

8 - 10 December, 2023

National Forensic Sciences University, Sector 9, Gandhinagar-382007



ORGANIZED BY

NACS - National Association for Chemical Security National Forensic Sciences University, Gujarat

Gujarat University, Ahmedabad, Gujarat Univesity of Ladakh, UT-Ladakh

SUPPORT PARTNERS

































SPONSORS



(INSERB













ABOUT CONFERENCE

"Chemical safety and security" refer to the measures to prevent non-deliberate and deliberate release of certain toxic or hazardous chemicals. Every day, a wide variety of chemicals are produced, transported, used and/or stored (in small to very large quantities) in laboratories, industries, pharma/agriculture products, food processing sector, consumer products etc. Some of these chemicals need special safety and/or security measures because of their toxicity or due to their potential use as precursors for weapons of mass destruction. So any intentional/unintentional compromise by internal or external adversary in their safety and/or security will be detrimental to our health and environment. Practicing chemists and chemical safety/security professionals need to be aware of the dual-use properties of many commonly used chemicals, and operate their facilities in accordance to the best practices, safety standards and/or their relevant conventions, and promote a culture of high professional standards that includes chemical safety and security. This conference aims to promote chemical safety and security by providing tools and knowledge to mitigate the risks arising from chemical accidents, incidents and potential misuse of toxic and dual use chemicals, including the threat of terrorism and forensic approaches. The objective is to reiterate the need for the education and outreach in order to drive the focus of everyone towards the goal that chemicals are stored safely, securely and used for peaceful purposes throughout their lifecycle, preventing any harmful effects on health and environment. The conference also highlights the importance of using substituted chemicals or green chemistry for minimizing the use of hazardous or dual use chemicals in processes. The conference will include keynote speeches, presentations, panel discussions, and poster presentations to provide a comprehensive platform for experts, researchers, industry leaders, and policymakers to share their knowledge and experiences on chemical safety and security. Ultimately, the conference aims to promote international cooperation and collaboration towards achieving a safer and more sustainable future for all.

THE ORGANIZERS

NACS - National Association for Chemical Security

The National Association for Chemical Security (NACS) was founded in India in 2021 with the objective of promoting awareness of chemical safety and security in the industrial, scientific, and academic communities. The founder members of this association have been organizing Indo-US workshops on chemical security since 2016. In addition, NACS has been working on the development of curriculum for undergraduate and graduate students to increase awareness of chemical safety and security, who would be future generation of researchers, academics, and entrepreneurs.

GUJARAT UNIVERSITY

Gujarat University was established in 1949 under the Gujarat The University of Ladakh, established in 2019, is trans-University Act and is the largest university in the state, with over 235 affiliated colleges and 34 post-graduate departments. The university is responsible for post-graduate instruction and offers a coordinated plan of instruction to ensure effective teaching. External examinations in the faculties of Arts and Commerce were introduced to support working students and those who cannot afford university education. Despite the establishment of seven additional universities in the state, Gujarat University remains a premier institution, providing education to approximately two lakh students in a wide range of disciplines

NFSU - National Forensic Sciences University

The National Forensic Sciences University was established in 2009 by the Government of Gujarat to create professional experts in the field of forensic sciences. Since then, it has introduced unique courses based on the requirement of the country to solve societal issues. The university has reached many milestones and obtained UGC recognition and NAAC accreditation. It has been successful in training professionals from various countries and has established various centres of excellence on its campus. The Ministry of Home Affairs has already annexed the Delhi Centre with this university. The university aims to establish academic centres across the globe for the benefit of scientific investigative experts.

UNIVERSITY OF LADAKH

Himalayan University in India with headquarters at Leh. It has six constituent colleges and offers core and applied academic programs, as well as courses specific to the Himalayan and South/Central Asian regions. The university began its first academic program in 2020 and also offers Ph.D. programs in various disciplines. Its goal is to provide opportunities for students to excel in higher education and shape the future of society through educational, research, and social contributions. The university has MoU with prominent institutions/ universities of India to advance knowledge in different domains.

CONFERENCE TOPICS

Chemical Safety, Security and human health - General Perspectives

Culture, ethics, communication, classification of chemicals, exposure, human health in workplace, safety data, malicious use, education and outreach.

Sensors for Chemical Safety, Security, Human Health and Environment

Chemical sensors, nano sensors, optical sensors / optoelectronics, sensor systems, signal processing & interfaces, materials for chemical sensing, biomedical

Chemical Safety and Security Areas of Concern

Chemical Safety :

Chemical/pharmaceutical industries, laboratories, Agriculture and food sector, consumer or other products.

Chemical Security: Dual-use chemicals and their applications, Control mechanisms.

Chemical Safety and Security Transportation and Storage

Storage/inventory management, supplychain management, regulations and compliance.

Surveillance, Accidents and Incidents

Chemical monitoring, surveillance, accidents, incidents, investigations.

Chemical Emergency Preparedness and Response

Chemical Safety: Chemical safety risk assessment and management, emergency plan and management, community awareness, training, capacity building, onsite/off-site emergency response, mock drills and exercises.

Chemical Security: Chemical security vulnerability assessment, emergency plan and management, training, capacity building, on-site emergency response and mock drills.

International Cooperation and Information Sharing

International regulations - Conventions and Treaties - CWC, AG, WA, Regulations for trade control - SCOMET regulations, REACH.

Cybersecurity and Emerging Technologies

Network and data security/ management, facility security and emergency management, artificial intelligence (AI).

Environmental, Social and Governance

Resources and management, hazardous waste treatment and management, chemical toxicity, environmental sustainability and development, pollution, climate change.

Advances in Science and Technology

Green Chemistry, chemical alternatives, analytical methods for the identification of toxic chemicals and their adducts or degradation products, chemical forensics.

PATRONS

Prof. (Dr.) J. M. Vyas

Padma Shri Awardee, Hon. Vice Chancellor, **National Forensic Sciences University**

Prof. (Dr.) Neerja A. Gupta

Hon. Vice Chancellor, Gujarat University

Prof. (Dr.) S. K. Mehta

Hon. Vice Chancellor, Ladakh University

Prof. (Dr.) V. K. Jain

President, National Association for Chemical Security (NACS)

Prof (Dr.) Himanshu A. Pandya

Immediate Past Vice Chancellor, Guiarat University

Co-PATRON

Prof. S. O. Junare **NFSU**

Shree C. D. Jadeja

Executive Registrar, NFSU

Dr. P. M. Patel

Registrar, Gujarat University

CONVENER

Prof. (Dr.) Pranav Shrivastav

Gujarat University

Co-CONVENER

Prof. P. Maity

NSFU, Gandhinagar

ORGANISING SECRETARIES

Dr. Dilip Vasava Dr. Manthan K. Panchal

Dr. Harshad Patel

Dr. Jasmin Kubavat Dr. Mahesh Vasava

INTERNATIONAL ADVISORY COMMITTEE

Dr. Clifford S. Glantz

PNNL, Richland, USA

Mr. Niazi Omer

CRDF Global USA

Prof. (Dr.) Michael Gradzielski

(TU, Berlin Germany)

Dr. Alex Ibhaden

(University of Hall, UK)

Dr. Manmohan Parida

Director, DRDE, Gwalior

Dr. D. Srinivasa Reddy

CSIR- IICT, India

Dr. Kannan Srinivasan

CSIR-CSMCRI, India

Dr. G. Narahari Sastrv

CSIR- NEIST, India

Dr. Santasabuj Das

NIOH. India

Dr. R. V. Jasra

Reliance Technology Group, India

Dr. Radha Kishan Motkuri

PNNL, Richland, USA

Dr. Kirpal Singh Bisht

(University South Florida)

Dr. Avtar Matharu

(University of York, UK)

Dr. Hooi Lina Lee

(Universiti Sains Malaysia)

Dr. Sundar Manoharan

(D.G. PDEU)

Prof. Rama Shankar Dubey

(Vice Chancellor, CUG)

Mr. Arvind Kumar

Director, CFEES, DRDO

REGISTRATION (Hybrid Mode)

| Offline Participates | Fees |
|-----------------------------|-------------|
| Foreign Delegate | US\$ 150.00 |
| Corporate/Industry Delegate | Rs. 5000/- |
| Delegate (Academic) | Rs. 3000/- |
| Students | Rs.1500/- |
| Life Member (NACS) | Rs.1500/- |
| Online Participates | Fees |
| Indian delegates | Rs.500/- |
| Foreign delegates | US\$ 50.00 |

Bank: Kotak Mahindra;

A/c no. 3022015093;

IFS Code: KKBK0003022

MICR Code: 380485044

Swift Code: KKBKINBBXXX

| Important Date to Remember: | |
|------------------------------------------------------|----------------------------|
| Last Date for Submission of Abstract | 20 th Nov. 2023 |
| Last date of Notification of acceptance of abstracts | 24 th Nov. 2023 |
| Last Date for Submission of Travel Plan | 27 th Nov. 2023 |



for more information

• Registration fees for the Conference once paid will not be refundable in any circumstances. • Registration is compulsory for participation /paper presentation. All authors of paper/poster presentations should register for the certificate. • Accommodation on Request and Chargeable Only soft copy of certificate will be provided for online participation

Click for Registration:

https://iccsshe.com/register.html

Last Date for Registration: 13th Nov. 2023

NATIONAL ADVISORY COMMITTEE

Prof. Y. K. Agrawal, L. J. University

Dr. G. V. M. Sharma, Yajushi Labs.

Dr. S. Prabhakar (CSIR-IICT)

Dr. M. Suriyananarayanan (CSIR-CLRI)

Dr. K. Srinivas (CSIR-IICT)

Dr. K. Ravindranath (CSIR-IICT)

Dr. Subrat Sharma (UOL)

Dr. Lakshi Saikia (CSIR-NEIST)

Prof. Anamik Shah (President, ISCB)

Prof. Purvi Pokhariyal, (NFSU-Delhi)

Prof. Naveen Choudhry, (NFSU-Goa)

Prof. H.K Pratihari, (NFSU-Tripura)

Prof. Manjunath Ghate, (NFSU-Dharwad)

Prof. Satish Kumar, (NFSU-Bhopal)

Air Commodore Kedar Thaakar, (NFSU-Uganda)

Dr. PMS Chauhan, ISCB, Lucknow

Dr. Jaimin Vasa (GCCI) Ahmedabad

Dr. Vijay Tak (DRDE-Gwalior)

Dr. R. P. Bhatt, Member Secretary (LSRB-DRDO)

Prof. Meenu Saraf, Gujarat University

Prof. Rakesh Raval, Gujarat University

Prof. Anunay Samanta, University of Hyderabad

Prof. Sunil K. Sharma, University of Delhi

Prof. Ajay K. Bhagi, University of Delhi

Prof. Narender Bhojak, Bikaner

Dr. R. Narayanan (ICC)

Mr. Vijayinder Singh (OPAL)

Prof. Sunil Khare, IIT, Delhi

Mr. Shailesh Patwari (GCCI) Ahmedabad

Dr. M.R.V.S .Murthy (Former OPCW Staff)

Dr. Bharat Jain (Member Secretary, GCPC)

Dr. Narottam Sahoo (Member Secretary, GUJCOST).

Prof. Man Singh (CUG)

D. M. Thaker (Member Secretary, GPCB)

Dr. Saurin Shah, Silver Oak University

Dr. Pina Bhatt, Silver Oak University

ORGANIZING COMMITTEE

Prof. H. D. Patel

Prof. M.M. Maisuria

Dr. Hariinder Kaur

Dr. Divya Mishra

Dr. J. J. Maru

Dr. Merool Vakil

Dr. Jayrajsinh Sarvaiya

Dr. Digvijaysinh Rathod

Dr. Bhoomika Patel

Dr. Prajesh Prajapati

Dr. Hemen Dave

Dr. Astha Pandey

ACTION COMMITTEE

Dr. Hitesh Parekh

Dr. Shibu Pillai

Dr. Bharat Makwana

Dr. Keyur Bhatt

Dr. Pinkesh Sutaria

Dr. Banabithi Koley Seth

Dr. Vinay Sharma

Dr. Disha Kothari

Dr. Syed Shahabuddin

Dr. Priyanka Shah

Dr. Nikita Mishra

Mr. Ghulam Ali

Ms. Nisha Padhivar

Mr. Mukesh P Chaudhari

Mr. Bimal Patel

Ms. Reena Hirani

Ms. Kalpana Parmar

Mr. Himanshu Parmar

Dr. Devansh Desai

Dr. Sanjay Kumar

Dr. Renuka V

Dr. Suraj Singh Yadav

Dr. Jigar Raval

Dr. Pranav Y Dave

Dr. Kanan Thakker

Dr. Rajlakshmi Chetty

Dr. Flora Shah

Dr. Karuppiah Nagaraj

Dr. Bappi Paul



FORMAT FOR ABSTRACT

The abstract must be sufficiently informative to allow fair evaluation of the intended presentation. The text should be written in clear and concise English. The entire abstract (including title, authors, affiliation, figures and references) is restricted to one page. The abstract should include a title (Times New Roman letter type 18) followed by one blank line after which authors, institutions, and e-mail address of corresponding authors are stated as shown above (Times New Roman letter type 12, authors in normal text, institutions in italic). The presenting author should be underlined. A blank line should separate authors and their institutions from the bulk text.

For submission of abstract: contact.iccsshe2023@gmail.com

ADDRESS FOR CORRESPONDENCE

PROF. PRANAV SHRIVASTAV,

DEPARTMENT OF CHEMISTRY, SCHOOL OF SCIENCES, GUJARAT UNIVERSITY, GUJARAT, AHMEDABAD -380009, INDIA. https://nacsindia.in/nachemsec@gmail.com

CONTACT US +91-9327013263