

International Conference
on
“Humanitarian Engineering Practices in Fire, Industrial
Safety & Disaster Management (IC-HEFSD 2024)”

(05th to 07th March, 2024)

In collaboration with



Science and Engineering Research Board (SERB)
Department of Science & Technology (DST)
New Delhi, Government of India



Indian Institution of Industrial
Engineering
Navi Mumbai, India

Organized by



IPS Academy
Institute of Engineering & Science

(A UGC Autonomous Institute, Affiliated to RGPV)

Fire Technology & Safety Engineering Department
Indore, Madhya Pradesh-India.

Conference Websites: <https://www.iiie-india.com>, <https://www.ies.ipsacademy.org>

SCIENCE AND ENGINEERING RESEARCH BOARD (SERB), DEPARTMENT OF SCIENCE & TECHNOLOGY (DST) GOVT. OF INDIA

Science and Engineering Research Board (SERB) was set up as a statutory body through an Act of Parliament in 2008. The Vision of the SERB to position science and technology as the fulcrum for social and economic change by supporting relevant, competitive and quality scientific research and development. Accordingly, it has been promoting basic research in emerging areas of Science and Engineering as well as to provide financial assistance to persons engaged in such research, academic institutions, research and development laboratories, industrial concerns and other agencies for such research and for matters connected therewith or incidental thereto as its primary and distinctive mandate.

INDIAN INSTITUTION OF INDUSTRIAL ENGINEERING NAVI MUMBAI & IIE INDORE CHAPTER

Indian Institution of Industrial Engineering (IIIE), established in the year 1957 as a non-profit Public Trust, has been engaged for the growth of the Industrial Engineering profession in India. The IIIE with its National Headquarters at CBD Belapur, Navi Mumbai has been consistently doing extensive and pioneering work in disseminating, fostering, developing, and advancing the discipline and profession of Industrial Engineering through its 33 Chapters including Indore Chapter spread across the country. The Industrial Engineering journal published by IIIE is a listed journal under UGC Care. The Graduate ship Examination conducted by the Institution was earlier recognized by the Government of India as equivalent to a Bachelor's Degree in Industrial Engineering for the purpose of recruitment to superior posts under the Government of India and was also recognized by A.I.U., The Institute of Engineers (India), IGNOU, Directorate of Technical Education, Maharashtra State, Mumbai University. IIIE Indore chapter, founded in the year 2012 has been actively involved in carrying out activities for the professional development of its members as well as for the well being society as per the mission and vision of IIIE.

IPS ACADEMY INSTITUTE OF ENGINEERING & SCIENCE, INDORE

IPS Academy-Institute of Engineering & Science is one of the leading self-financing NAAC accredited institutions devoted to imparting quality engineering education with the sole motto of "Knowledge, Skill & Values". The Institute was established after securing approval of AICTE, New Delhi and Govt. of M.P. from academic session 1999-2000. The Institute of Engineering & Science is a UGC autonomous institute affiliated to Rajiv Gandhi Proudyogiki Vishwavidhyalaya, Bhopal. Institute has ranked 04-star rating in IIC in the CRO zone, ranked 33rd (Times of India survey) among the top 170 engineering colleges in India. It offers UG and PG programs of Chemical, Civil, Mechanical, Electrical & Electronics, Electronics & Communication, Fire Technology & Safety Engineering, Agricultural and Computer Science & Engineering, CSE (Computer Science and Information Technology, Data Science, Artificial Intelligence & Machine Learning, Regional Language, IOT including Cyber Security & Block Chain Technology). Furthermore, UG programs have been accredited by the National Board of Accreditation, New Delhi.

DEPARTMENT OF FIRE TECHNOLOGY & SAFETY ENGINEERING

Established in 1999 as the whole South East Asia's first AICTE approved educational department offering four-year B.E. degree in Fire Technology. Each year the product of the department is well accepted by Navratna/ Mini Navratna companies of the country with good annual packages. Presently the B. Tech. program of the department is accredited by the National Board of Accreditation as a symbol of quality education. Department works on the motto "We Serve to Save" and contributes in national capacity building for industrial emergencies by providing skilled fire safety technocrats with excellent resources available to the nation. In addition department plays a pivotal role for volunteer industrial consultancy in preparation of legal documentation on safety management system, designing, commissioning, and installation of fixed and mobile fire fighting installation and conducting short-term training programme in high rise buildings & factory premises.

ABOUT CONFERENCE

India is going through a process of rapid urbanization. It has been a long felt need to inculcate a culture of safety and psych to work towards reducing the risk. Several types of manufacturing, storage and control processes are used in industry in the context of large quantities of the potentially hazardous materials handled on routine basis. The effective measures are required to be developed which ensure adequate controls and safeguards for accidents prevention. Serious consequences upon workers, communities and environment were observed in past. It is therefore, a high priority that hazards are properly identified and assessed for their potential to cause serious consequences. This awareness is effective for reducing the possible unsafe acts and unsafe conditions and in turn lowering the health and safety risk arising out of the hazards in the occupancies. The all formats of risk in the form of fire, explosion and accidents need to be addressed with structured methodologies. Mainstreaming of disaster risk reduction activities in to the development process is imperative in our present context of risk.

We at the Department of Fire Technology & Safety Engineering, IPS Academy-Institute of Engineering & Science Indore are proud to announce International Conference & Expo on “**Humanitarian Engineering Practices in Fire, Industrial Safety & Disaster Management (HEFSD 2024)**” aimed to create awareness on thrust areas of industrial emergencies and impart effective learning which develops the technical competence and national capacity building in effective management of accidents.

The conference will provide an international forum for Scientists, Researchers, Industries Safety Experts, Academicians, Engineers, Students, and Technologists to present their work/experience and discuss the most recent trends, advancement and practical challenges encountered in lieu of issues related to the topics of the conference.

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Indian Institute of Technology
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India, New Delhi

KEY NOTE SPEAKERS


Winstone G. Otieno Audi

Senior Health, Safety and Environment Officer,
Kenya Electricity Transmission Company Ltd,
Nairobi, Kenya

Winstone G. Otieno Audi is currently a government approved safety and health adviser and fire safety auditor. He has more than 26 years' experience in occupational safety and health management in both public entity settings, having worked with the Directorate of Occupational Safety and Health Services for 16 years and is currently working with the Kenya Electricity Transmission Company Ltd as a Senior Health, Safety and Environment Officer.


Dr. J. Maiti

Professor,
Indian Institute of Technology,
Kharagpur, West Bengal, India

Dr. J. Maiti is presently working as Professor Industrial and Systems Engineering and Chairman, Centre of Excellence on Safety Engineering and Analytics (COE-SEA) at Indian Institute of Technology, Kharagpur. He has received his M. Tech. and Ph.D. from Department of Mining Engineering, IIT Kharagpur. His present research interests include occupational safety and health analytics, quality analytics and virtual reality based accident modeling and simulation.


Dr. Chinmay Ghorai

Professor,
Indian Institute of Technology,
Gandhi Nagar, Gujarat, India

Dr. Chinmay Gorai is presently working as Professor at Indian Institute of Technology, Gandhi Nagar. He has received his M.E. and Ph.D. from Jadavpur University in 2000 and I.I.T. Bombay in 2007 respectively. His research area includes particle engineering, cohesive powders, surface engineering, wetting and antibacterial surfaces/ bacterial adhesion, drug formulation, nano-materials for drug delivery/ controlled release, solid-phase reactions for functional materials, water treatment.



Dr. Shorab Jain
Sr. Scientist,
Fire Research Division
CSIR- Central Building Research Institute,
Roorkee, India

Dr. Shorab Jain is presently working as Sr. Scientist in Division of Fire Research at CSIR-Central Building Research Institute, Roorkee. He has received his M. Tech. I.I.T. Delhi and Ph.D. from I.I.T. Roorkee in 1999 and 2010 respectively. His area of Specialization includes Modeling & Simulation, Computational Fluid Dynamics, Quantitative Approach to Fire Hazard Assessment, Performance- based Approach to Fire Safety.



Mr. R. M. Kshirsagar
Director,
National Fire Service College, Nagpur,
India

Mr. R.M. Kshirsagar is presently working as director National Fire Service College (NFSC) Nagpur. He has received his president of India Medal for Gallantry in 2011 for efficient handling of a fire incident at hydrocracker unit recycle gas compressor. He has more than 35 years of working experience in fire & safety field in different capacities. He had completed B.E.- Fire Engineering from NFSC, Nagpur in 1987 and PGDIS from Regional Labour Institute Chennai in year 1992.



Dr. Rakesh Dubey
Ex- Director,
Disaster Management Institute,
Bhopal, Madhya Pradesh, India

Dr. Rakesh Dubey is Director (rtd), Disaster Management Institute, Govt. of MP, Bhopal. He is having about 38 years experience in the area of Environment and industrial safety/disaster management. He has provided technical leadership in making on-site and off-site emergency management plans, risk assessment, safety audits to various hazardous industries and state Govts. like Punjab, Uttar Pradesh, Madhya Pradesh, Odisha, etc.

CONFERENCE THEMES/TRACKS**TRACK-I : FIRE ENGINEERING**

- ☞ Fire prevention and protection engineering.
- ☞ Fire dynamics (including gas explosions).
- ☞ Active fire protection systems, including detection and suppression.
- ☞ Passive fire protection methods.
- ☞ People/Fire interactions (physical, physiological and psychological).
- ☞ Fire safety management.
- ☞ Assessment and quantification of fire risk (including acceptability of risk).
- ☞ Fire investigation.
- ☞ Fire safety design (including consumer items, industrial plant, transportation, buildings).
- ☞ Fire safety legislation.
- ☞ Fire safety education.
- ☞ Automotive fire safety.
- ☞ Electrical vehicle fire safety.
- ☞ AI and IOT in fire fighting.
- ☞ Fire fighting robots.

TRACK-II: INDUSTRIAL SAFETY

- ☞ Statutory industrial safety standardization and legislation framework.
- ☞ Cyber security and safety in critical infrastructure.
- ☞ Hazardous materials handling and storage.
- ☞ Organization and administration for safety.
- ☞ Risk management: techniques and practices.
- ☞ The collection and use of accident and incident data.
- ☞ Accident investigation and compliance.
- ☞ Measuring health and safety performance.
- ☞ Practical safety management: systems and techniques.
- ☞ Human behavior and safety.
- ☞ Science in engineering safety.
- ☞ Machinery safety and mechanical handling.
- ☞ Safety in construction and demolition.
- ☞ Managing chemicals safely.
- ☞ Electrical safety.
- ☞ Storage, handling and processing of dangerous substances.
- ☞ SCM 4.0

TRACK-III : OCCUPATIONAL HEALTH & HYGIENE

- ☞ Risks to health at work.
- ☞ Principles of toxicology and epidemiology.
- ☞ Human anatomy and physiology.
- ☞ Occupational diseases.
- ☞ Radioactivity and radio-logical protection.
- ☞ Noise and vibration.
- ☞ Workplace pollution, heat and ventilation.
- ☞ Illumination and lighting.
- ☞ Hazardous waste management.
- ☞ Ergonomics.
- ☞ Work place health hazards.
- ☞ Employee stress management.

TRACK-IV: DISASTER MANAGEMENT

- ☞ Insurance cover and compensation.
- ☞ Disaster resilient.
- ☞ Seismic risk and hazard analysis.
- ☞ Resilience and risk mitigation.
- ☞ Numerical modeling and experimental techniques for disaster risk reduction.
- ☞ Environmental considerations in disaster management.
- ☞ Case studies and lessons learned.
- ☞ Emergency response and crisis management.
- ☞ IOT in Disaster Management

CALL FOR PAPERS

We encourage submissions that offer new insights, novel methodologies, and practical applications in any tracks (but not limited to) mentioned above to the international conference HEFSD 2024 from academicians, researchers, corporate executive, industry personal and U.G. / P.G. / Ph.D. students from different streams of engineering. All submitted papers will undergo a peer-review process and accepted full papers will be published in the “Book of Abstracts”. Also a few selected papers may be published in UGC care list journal of repute, subjected to further blind peer reviews and acceptance.

AUTHOR GUIDELINES

The author’s guidelines for submitting paper/review article is available on official website of the international conference HEFSD 2024.

FOREIGN AUTHOR IN ABSENTIA

Conference will be in offline mode, but online mode is open for authors from outside India. Foreign authors in absentia can present their papers through online link provided by organize chair subject to prior registration.

PAPER SUBMISSION

Category	Full Length Paper Submission	Intimation of Paper Acceptance	Paper Registration
Regular	26 th Jan. 2024	02 nd Feb. 2024	04 th Feb. 2024
Late	22 nd Feb. 2024	28 th Feb. 2024	01 st Mar. 2024

REGISTRATION FEES

Category	Participants (Paper Submission/Presented)	Attendee
Students UG Level	1,500 INR	1,000 INR
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REGISTRATION FEES COVERS

- ☞ Admission to all academic sessions and exhibition.
- ☞ Conference kit & materials.
- ☞ Tea/Coffee at the designated breaks.
- ☞ Conference lunches.

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Dr. Praveen Patel,
Convener-“HEFSD 2024”
Fire Technology & Safety Engineering Department
IPS Academy- Institute of Engineering & Science
(A UGC Autonomous Institute, Affiliated to RGPV)
Indore, Madhya Pradesh India-452012.
Email: convenerhefspd2024@ipsacademy.org
Mobile:+91-9926498602
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