9th International Congress
Arsenic in the Environment (As2024)
Program Overview

Time/Location					
	Sunday 20 October 2024				
12:00-17:00	Short Course: Arsenic and Potentially Toxic Metals in Food and Agroecosystems [Seminar Hall 1]				
16:00-19:00	Registration, Welcome, High-Tea [Conference Venue] [Banquet Hall]				
	Monday 21 October 2024				
08:00-9:00	Registration [Conference Venue]				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
09:00-10:30	PARALLEL SESSION 1: Theme 1: Arsenic in natural environment	PARALLEL SESSON 2:Theme 2: Arsenic in food and agricultural ecosystem	PARALLEL SESSON 3: Theme 3: Health perspectives of environmental arsenic	PARALLEL SESSON 4: Theme 4: Advancements in clean water technologies for arsenic removal and immobilization	PARALLEL SESSON 5: Theme 5: Sustainable mitigation and management
10:30-11:00	Coffee break				
11:00-12:10	Inaugural session [Convention centre]				
12:10-12:50	Plenary Session 1: The Groundwater Project - Advancing Conceptual Frameworks for Understanding Groundwater Systems (In Pursuit of Holistic Thinking). Prof. *John Cherry Distinguished Emeritus Professor, University of Waterloo, Ontario and Leader of the Groundwater Project (CANADA)* Chair: Prof. Prosun Bhattacharya (KTH Royal Institute of Technology, Stockholm, Sweden) (Auditorium, Campus 6)				
12:50-14:00	Lunch [Banquet Hall]				
14:00-14:40	Plenary Session 2: PP-2: Arsenic biogeochemistry from paddy soil to rice grain. *Fangjie Zhao, College of Resources and Environmental Sciences Nanjing Agricultural University, Nanjing, P. R. China* Chair: Prof. Jyoti P Maity (School of Applied Sciences, KIIT Deemed to be University, Bhubaneshwar, Odisha, India) [Seminar Hall 1]				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
14:40-16:50	PARALLEL SESSION 6: Theme 1: Arsenic in natural environment	PARALLEL SESSON 7: Theme 2: Arsenic in food and agricultural ecosystem	PARALLEL SESSION 8: Theme 3: Health perspectives of environmental arsenic	PARALLEL SESSION 9: Theme 4: Advancements in clean water technologies for arsenic removal and immobilization	PARALLEL SESSION 10: Theme 5: Sustainable mitigation and management
16:50-17:20	Coffee break				
17.20-17:40	Inauguration: Centre for Water Research and Climate Change at KIIT				
17.40-18:30	PANEL DISCUSSION 1: Effectiveness of Jal Jeevan Mission in mitigating the geogenic and emerging pollutants - Bridging Science, Advocacy, Policy and Practice [Seminar Hall 1]				
18:30-19:00	Poster Session (Lobby)				
19:00-onwards	Cultural Program and Conference Dinner (Mingling followed by Dinner) [Banquet Hall]				
	Tuesday, 22 October 2024				
08:00-08:30	Registration [Conference Venue]				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
08:30-10:20	PARALLEL SESSION 11: Theme 1: Arsenic in natural environment	PARALLEL SESSON 12: Theme 2: Arsenic in food and agricultural ecosystem	PARALLEL SESSON 13: Theme 3: Health perspectives of environmental arsenic	PARALLEL SESSON 14:Theme 4: Advancements in clean water technologies for arsenic removal and immobilization	PARALLEL SESSON 15:Theme 5: Sustainable mitigation and management
10:20-10:40	Coffee break				

10:40-11:20	Plenary 3: Technologies for Cleaner Water: Progress and Challenges. Amit Bhatnagar, Department of Separation Science, LUT School of Engineering Science, LUT University, Mikkeli, Finland Chair:: Prof. Albert van der Wal , Evides Water Company, Department of Water Technology and Source Protection, Rotterdam, The Netherlands & Wageningen University, Department of Environmental Technology, Wageningen, The Netherlands (Seminar Hall 1)				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
11:20-12:50	PARALLEL SESSION 16: Theme 1: Arsenic in natural environment	PARALLEL SESSION 17: Session 1: Source and distribution of pollutants in different natural settings	PARALLEL SESSON 18: Session 3: Pollutants in dietary systems and health perspectives	PARALLEL SESSON 19: Session 2: Advancements in clean water technologies for pollutant removal and immobilization	PARALLEL SESSON 20: Session 5: Sensors, innovation, technologies, and artificial intelligence for pollution monitoring and management
12:50-14:00	Lunch [Banquet Hall]				
14:00-14:40	Plenary 4: Lifetime Risk and Individual Susceptibility of Multiple Health Hazards due to the Exposure to Arsenic in Drinking Water. Chien Jen Chen, Genomics Research Center, Academia Sinica, Taipei, Taiwan Chair: Gopal C. Kundu (KIIT, India) (Seminar Hall 1)				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
14:40-16:30	PARALLEL SESSION 21: Theme 1: Arsenic in natural environment	PARALLEL SESSON 22: Session 1: Source and distribution of pollutants in different natural settings	PARALLEL SESSON 23: Session 3: Pollutants in dietary systems and health perspectives	PARALLEL SESSON 24: Session 2: Advancements in clean water technologies for pollutant removal and immobilization	PARALLEL SESSION 25: Session 5: Sensors, innovation, technologies, and artificial intelligence for pollution monitoring and management
16:30-16:50	Coffee break				
16:50-18:30	Poster Session (Lobby)				
16:50-17:30	PANEL DISCUSSION 2: Role of Academia, Industry, Think Tanks and Govt collaboration in dealing the Arsenic menace in Water and Food [Seminar Hall 1]				
	Wednesday, 23 October 2024				
08:00-8:30	Registration [Conference Venue]				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
08:30-10:20	PARALLEL SESSION 26: Session 1: Source and distribution of pollutants in different natural settings	PARALLEL SESSON 27: Theme 2: Arsenic in food and agricultural ecosystem	PARALLEL SESSON 28: Session 4: Policies and sustainable management of pollutants	PARALLEL SESSION 29: Theme 1: Arsenic in natural environment	PARALLEL SESSON 30: Session 2: Advancements in clean water technologies for pollutant removal and immobilization
10:20-10:40	Coffee break				
10:40-11:20	Plenary Session 5: 24-S01-310 PFAS in drinking water in India-Health hazards. Dr. Girija Bharat, Mu Gamma Consultants Pvt. Ltd., Haryana India & Energy and Resources Institute (TERI), New Delhi, India Chair: Prof. Paromita Chakraborty, Centre for Research in Environment, Sustainability Advocacy and Climate Change (REACH), SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India [Seminar Hall 1]				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
11:20-12:50	PARALLEL SESSION 31: Session 1: Source and distribution of pollutants in different natural settings	PARALLEL SESSON 32: Theme 2: Arsenic in food and agricultural ecosystem	PARALLEL SESSON 33: Theme 4: Advancements in clean water technologies for arsenic removal and immobilization	PARALLEL SESSION 34: Theme 1: Arsenic in natural environment	
12:50-14:00	Lunch [Banquet Hall]				
14:00-14:40	Plenary Session 6: Six blind men and the Geogenic Groundwater Contamination. Prof. Abhijit Mukherjee, School of Environmental Science and Engineering, Indian Institute of Technology, Kharagpur, India Chair: Dr. Laura Richards, Department of Earth and Environmental Sciences, The University of Manchester, Manchester, United Kingdom [Seminar Hall 1]				
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
14:40-16:30	PARALLEL SESSON 35: Session 1: Source and distribution of pollutants in different natural settings	PARALLEL SESSON 36: Theme 4: Advancements in clean water technologies for arsenic removal and immobilization	PARALLEL SESSION 37: Session 5: Sensors, innovation, technologies, and artificial intelligence for pollution monitoring and management	PARALLEL SESSION 38: Arsenic and other pollutants in natural environment	PARALLEL SESSION 39: Legacy and Emerging pollutants in natural environment
16:30-16:50	Coffee break				
16:50-17:30	PANEL DISCUSSION 3: Role of Information, digital data, grassroot innovations for dealing geogenic contaminants [Seminar 1]				
17:30-18:30	Closing Session (Seminar 1)				

	Sunday, 20 October 2024
12:00-17:00	Short Course: Arsenic and Potentially Toxic Metals in Food and Agroecosystems [Seminar Hall 1]
16:00-19:00	Registration, Welcome, High-Tea [Banquet Hall]
	Note: All the participants are suggested to attend this icebreaker session

	Monday, 21 October 2024				
08:00-9:00	Registration [Conference Venue]				
Hall	**Conference Hall 1**	**Conference Hall 2**	**Conference Hall 3**	**Conference Hall 5**	**Conference Hall 6**
9:00-10:30	**PARALLEL SESSION 1: Theme 1: Arsenic in natural environment**	**PARALLEL SESSON 2: Theme 2: Arsenic in food and agricultural ecosystem**	**PARALLEL SESSON 3: Theme 3: Health perspectives of environmental arsenic**	**PARALLEL SESSON 4:Theme 4: Advancements in clean water technologies for arsenic removal and immobilization**	**PARALLEL SESSON 5: Theme 5: Sustainable mitigation and management**
	Chair: Dipankar Saha (India) Co-chair: Saugata Datta (USA)	**Chair: Prosun Bhattacharya (Sweden) Co-chair: Jajati Mandal (UK)**	**Chair: M. Faruque Parvez (USA) Co-chair: Tanushree Bhattacharya (India)**	**Chair: Bert Van der Waal (The Netherands) Co-chair: Amit Bhatnagar (Finland)**	**Chair: Abhijit Mukherjee (India) Co-chair: Joel Podgorski (Switzerland)**
9:00-9:30	**Keynote T1-1: 24-T01-222:** Arsenic occurrence in the southwestern Punjab: case study in northwest India. *G. Krishan*	**Keynote T2-1: 24-T02-933:** Navigating the Arsenic Web: Strategies for Agroecosystem Resilience and One Health. *P. Dey*	**Keynote T 3-1: 24-T03-236:** Integrating One Health Perspective: Arsenic Contamination and Health related Risk *G. C. Kundu*	**Keynote T 4-1: 24-T04-018:** Isolation of arsenic hypertolerant bacterium with arsenic bioremediation potential. *D. Chatterjee*	**Keynote T5-1: 24-T05-094: Reducing the arsenic poisoning in India. C. K. Singh**
9:30-9:50	**OP T1-1: 24-T01-003:** Geogenic groundwater arsenic in geothermal system of Upper Indus River Basin, India: Role in freshwater contamination. *S.A.Lone*	**OP T2-1: 24-T02-021:** Arsenic toxicity: a threat to food security, agricultural sustainability, and human health. *Md. I. U. Amara*	**OP T3-1: 24-T03-001:** Groundwater quality appraisal and health risk assessment in parts of Shahjahanpur, Uttar Pradesh, India. *R. Umar*	**OP T4-1: 24-T04-001:** Evolving Water Purification: Synthesis and Characterization of an Innovative Metal–Phenolic Nanocomposite Sorbent for Arsenic-Free Drinking Water. *T.R. Choudhury*	**OP T5-1: 24-T05-002:** Evaluating the available alternate drinking water sources in the arsenic affected districts of West Bengal, India: approach on safety and sustainability. *A.Das*
9:50-10:10	**OP T1-2 24-T01-007:** Spatio-temporal variations of Arsenic in groundwater of the Ghaghara River basin (Bahraich), India. *R. Umar*	**OP T2-2: 24-T02-028:** Seasonal variability of Arsenic in irrigation wells & its accumulation on agriculture soils. *S.K. Mohakud*	**OP T3-2:24-T03-002:** Low to moderate inorganic arsenic and gut microbiota species in young children aged 3-4 years. *S. L. Wang*	**OP T4-2: 24-T04-011:** Comparison of Commercial Arsenic Adsorbents in Silica-rich Groundwater. *J. R. G. Rodriguez*	**OP T5-2: 24-T05-005:** Increasing the impact and sustainability of safe drinking water supply in rural Bangladesh. *Md. A. Habib*
10:10-10:30	**OP T1-3: 24-T01-005**: The influence of the tectonics-climate-anthropogenic stress nexus on arsenic sources and mobility: a case study from two continents. *P. Coomar*	**OP T2-3: 24-T02-007:** Influence of Amendments and Moisture Regimes on Arsenic Movement from soil to Rice grain: Understanding Transporter Dynamics and Soil-Plant Interactions. *R. Khanam*	**OP T3-3 :24-T03-003:** From ground to gut: Evaluating the human health risk of potentially toxic elements in soil, groundwater, and their uptake by Cocos nucifera in arsenic-contaminated environments. *A. Biswas*	**OP T4-3: 24-S02-013:** Application of altered natural adsorbent for the decontamination of naturally occurring radionuclide from water samples. *S. Police*	**OP T5-3: 24-T05-006:**Mapping the distribution of groundwater arsenic remediation units in Bihar, India for improved water security. *A. Roshan*
10:30-11:00	**Coffee break**				
11:00-12:10	**Inaugural session [Convention centre]**				
12:10-12:50	**Auditorium, Campus 6: Plenary Session 1: The Groundwater Project - Advancing Conceptual Frameworks for Understanding Groundwater Systems (In Pursuit of Holistic Thinking).** ***Prof. John Cherry Distinguished Emeritus Professor, University of Waterloo, Ontario and Leader of the Groundwater Project (CANADA)*** **Chair: Prof. Prosun Bhattacharya (KTH Royal Institute of Technology, Stockholm, Sweden)**				
12:50-14:00	**Lunch [Banquet Hall]**				
14:00-14:40	Seminar Hall 1: Plenary Session 2: PP-2: Arsenic biogeochemistry from paddy soil to rice grain. *Fangjie Zhao, College of Resources and Environmental Sciences Nanjing Agricultural University, Nanjing, P. R. China*				Chair: Prof. Jyoti P Maity (School of Applied Sciences, KIIT Deemed to be University, Bhubaneshwar, Odisha, India)
14:40-16:50	**PARALLEL SESSION 6: Theme 1: Arsenic in natural environment**	**PARALLEL SESSON 7: Theme 2: Arsenic in food and agricultural ecosystem**	**PARALLEL SESSON 8: Theme 3: Health perspectives of environmental arsenic**	**PARALLEL SESSON 9:Theme 4: Advancements in clean water technologies for arsenic removal and immobilization**	**PARALLEL SESSON 10:Theme 5: Sustainable mitigation and management**
Hall	**Conference Hall 1**	**Conference Hall 2**	**Conference Hall 3**	**Conference Hall 5**	**Conference Hall 6**
	Chair: G. Krishan (India) Co-chair: Abhijit Mukherjee (India)	**Chair: Pradip Dey (India) Co-chair T. Roychowdhury (India)**	**Chair: Gopal C. Kundu (India) Co-chair: Julie Shu-Li Wang (Taiwan)**	**Chair: T. Pradeep (India) Co-chair: Sudip Chakraborty (Italy)**	**Chair: Michael Berg (Switzerland) Co-chair: Ashok Ghosh (India)**
14:40-15:10	**Keynote T1-2: 24-T01-033:** Large-scale prediction of groundwater quality for comprehensive risk mapping and mitigation. *M. Berg*	**Keynote:T2-2: 24-T02-031:** A Retrieval-Augmented Generation Based Tool to address Arsenic Contamination in Agricultural System. *J. Mandal*	**Keynote: T3-2: 24-T03-231:** Arsenic & Epigenetics: Retrospect and Prospect. *P. Bhattacharjee*	**Keynote: T4-2 : 24-T04-030:** Arsenic removal at a dune water treatment plant located in the Netherlands. *A. van der Waal*	**Keynote: T5-2: 24-T05-031:** Geochemical characterization of arsenic-enriched groundwater in India, Bangladesh and Taiwan. *Chien-Yen Chen*
15:10-15:30	**OP T1-4: 24-T01-013:** The factors of arsenic enrichment in groundwater in the western Hetao Basin, China: an insight from the aquifer sediments. *X. Ming*	**OP T2-4: 24-T02-023**: Arsenic Accumulation in Maize Crop, Risk to human health and Probable Mitigation Approaches. *W. Amez*	**OP T3-4: 24-T03-004:** Arsenic exposure and health risk through available drinking water sources in arsenic exposed areas of West Bengal: A study highlighting the present water quality scenario to promote proactive management. *S. Majumder*	**OP T4-4 :24-T04-017:** Fe-Cu nanoparticles by green chemistry route for adsorptive removal of arsenic (III) and (V) species from water. *B. Pradhan*	**OP T5-4:24-T05-009:** Assessing the Deployment Status of Arsenic Biosand Filters in Nepal: Efficacy, Provider Practices, and Maintenance Insights. *M. Sakamoto*
15:30-15:50	**OP T1- 5: 24-T01-026:** Low arsenic rocks can generate high arsenic groundwater: Geogenic arsenic contamination in carbonate aquifers. *T. Pichler*	**OP T2-5: 24-T02-016:** Assessment of arsenic contamination and health risk implications from drinking water and rice in West Bengal, India. *D. Das*	**OP T3-5: 24-T03-005**: Increased Gallbladder cancer incidences in Bihar (India). *A. Kumar*	**OP T4-5: 24-T04-212:** Arsenic Removal from Contaminated Groundwater Using Locally Available Rice-husk Biochar Treated with Organic Acid and Laterite. *B.Paudel*	**OP T5-5: 24-T05-008**: Impact of various amendments on arsenic geochemical distribution and CO_2-C efflux under paddy conditions. *M.M. Hussain*
15:50-16:10	**OP T1-6: 24-T01-023:** Exploring Arsenic, and Heavy Metal concentrations, Bioaccessibility, Human Health Risks and Sustainable Remediation using Native Flora in Coal Mines. *T. Bhattachrya*	**OP T2-6: 24-T02-004:** A comprehensive study on arsenic accumulation and distribution in paddy, its toxic impact on human health and domestic livestock in West Bengal, India. *N.R. Chowdhury*	**OP T3-6:24-T03-011:** Co-occurrence of arsenic—fluoride in Nadia district (West Bengal, India): A human health-risk perspective study. *P. Bhattacharya*	**OP T4-6: 24-T01-029 :** Arsenic Contamination in Bihar: The Role of Speciation in Treatment Plant Performance and Efficiency. *A. Sharan*	**OP T5-6:24-T05-011:** Managing groundwater resources under climate change: A case study of Balangir, Odisha, India. *C. Dalai*
16:10-16:30	**OP T1-7: 24-T01-010:** Arsenic hydrological seasonality in a Southern Peru stream. *R.R. Falcon*	**OP T2-7: 24-T02-014:** Arsenic contamination scenario and risk assessment through wheat (Indian flatbread) in an arsenic-exposed population from West Bengal, India. *A. Dey*	**OP T3-7:24-T03-015:** Understanding the Rare Genetic Variants in Gallbladder Cancer. *D.Kumar*	**OP T4-7 :24-T05-013:** Effect of Alkaline materials and pH on the leaching of Arsenic from solidified arsenic rich sludge materials as a mitigation measures. *S.K. Basak*	**OP T5-7:24-T05-023**: Mitigating Arsenic Contamination: Strategies for Water Security and Health in a Changing Climate. *J. Jena*
16:30-16:50	**OP T1-8: 24-S01-006:** Assessment of groundwater quality with special reference to arsenic in Yamuna River Basin of Delhi, India, *B.A.Shah*	**OP T2-8: 24-T02-009 :** Spatial distribution and soil pollution indices of PTEs in Agri-intensive region of Punjab, India. *U. Chaudhari*	**OP T3-8: 24-T03-014**: Genotoxic impacts of the exposure of arsenic and other potentially toxic elements of lithogenic origin in drinking water among a cross section of the population in the Bolivian Andes. *N.S. Tirado*	**OP T4-8 : 24-T05-015::** Assessment of arsenic binding ability of siderophore isolated from arsenic tolerant fungi. *A Singh*	**OP T5-8: 24-T05-198:** Arsenic Contamination in Bihar: The Role of Speciation in Treatment Plant Performance and Efficiency. *A. Sharan*
16:50-17:20	**Coffee break**				
17.20-17:40	**Inauguration: Centre for Water Research and Climate Change at KIIT**				
17.40-18:30	**PANEL 1: Effectiveness of Jal Jeevan Mission in mitigating the geogenic and emerging pollutants - Bridging Science, Advocacy, Policy and Practice [Seminar Hall 1]**				
16:00-19:00	**Poster Session (Lobby)**				
18:30-onwards	**Cultural Evening and Conference Dinner [Banquet Hall]**				

	Tuesday, 22 October 2024				
08:00-8:30	Registration [Conference Venue]				
08:30-10:20	PARALLEL SESSION 11: Theme 1: Arsenic in natural environment	PARALLEL SESSON 12: Theme 2: Arsenic in food and agricultural ecosystem	PARALLEL SESSON 13: Theme 3: Health perspectives of environmental arsenic	PARALLEL SESSON 14:Theme 4: Advancements in clean water technologies for arsenic removal and immobilization	PARALLEL SESSON 15:Theme 5: Sustainable mitigation and management
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
	Chair: Sougata Datta (USA) Co-chair: Agnieska.Gałuszka (Poland)	Chair: Ashok Ghosh (India) Co-chair: Jajati Mandal (United Kingdom)	Chair: C.J. Chen (Taiwan) Co-chair: Arun Kumar (India)	Chair: T. Pradeep (India) Co-chair: Jyoti Prakash Maity (India)	Chair: Prosun Bhattachrya (Sweden) Co-chair: Debasish Chaterjee (India)
8:30-9:00	Keynote T1-3: 24-T03-158: Natural occurrence and geochemical processes of As in groundwaters of Latin America. *M.A. Armienta*	Keynote:T2-3: 24-T02-019: Groundwater contamination scenario in West Bengal (India), food chain contamination, adverse health effeets and mitigation strategies with special reference to arsenic, fluoride and nitrate. *T.R. Chowdhury*	Keynote: T3-3 : 24-T03-019: Arsenic Exposure and Non-malignant Respiratory Outcomes: From Past to Recent Findings *M. F. Parvez*	Kenote T4-3- 24-T04-008: A Biotechnological Perspective on Arsenic Removal in Groundwater filters? *D. van Halem / R. Goedhart*	Keynote: T5-3: 24-S05-003: New perspectives in the management of arsenic-rich groundwater treatment sludge: Can we convert a poison to profit? *C. van Genuchten*
9:00-9:20	OP T1-9: 24-T01-028: Arsenic pollution of groundwater in the calcareous alluvium of the Burhi Gandak Basin, Bihar, India. *V. Kumar*	OP T2-9:24-T02-015: Combatting arsenic toxicity: Enhancing rice resilience to arsenic with silicon-solubilizing bacteria. *S.Chakraborty*	OP T3-9: 24-T02-006: Arsenic and lead monitoring in donated human milk from Uruguayan mothers. *I. Machado*	OP T4-9: 24-T05-012: Bioremediation of Arsenic contamination in groundwater by Bacteria Isolated from deeper soil layers of Bhojpur and Bhagalpur districts of Bihar. *M.Jha*	OP T5-9: 24-T05-016: Microbial Arsenic Degradation: A Sustainable Approach to Pollution Control. *S.H. Jeba*
9:20-9:40	OP T1-10:24-T01-024: The evaluation of arsenic mobilization, speciation, and sorption behaviour in the Brahmaputra River basin aquifers, Assam. *S.Verma*	OP T2-10:24-T02-030: Pathway of Arsenic: Transfer in Water-Soil-Rice Plant Systems and Implications for Public Health in the Brahmaputra Valley. *R. Goswami*	OP T3-10: 24-T03-016: Epigenetic Regulation of DNA Damage Repair Genes and SAM Biogenesis Pathway in Arsenic-Induced Skin Cancer Tissues. *A. Das*	OP T4-10: 24-T04-006: Evaluation of co-cultivation approach to ameliorate arsenic toxicity and reduce arsenic content in rice (Oryza sativa L.) using aquatic plants. *S. Singh*	OP T5-10:24-T05-017: Investigating the Interplay Between Arsenic and Biochar: Insights for Controlling Arsenic Levels in Soil within Rice Crop Agriculture. *A. Pandey*
9:40-10:00	OP T1-11: 24-T01-006: Hydrogeochemical and anthropogenic controls on groundwater quality in the Talensi District, northern Ghana: Implications for arsenic contamination. *E.D. Sunkari*	OP T2-11:24-T02-008: Effect of selenium (Se) on the formation of iron plaque on rice roots to reduce arsenic uptake by rice. *M. Shahid*	OP T3-11: 24-T03-017: Assessment of Arsenic Exposure and Its Impact on Public Heath: Insights from Bihar's Indo-Gangetic Plains. *Abhinav*	OP T4-11: 24-T04-007: Microbial arsenite oxidation in rapid sand filters with oxygen or nitrate as terminal electron acceptor. *D. Ghosh*	OP T5-11:24-S05-001: Assessment of improved groundwater arsenic prediction model using Hybrid machine learning approaches. *S. Samantaray*
10:00-10:20	OP T1-12: 24-T01-027: Geogenic Arsenic in the Brahmaputra Valley: Spatial Distribution and Health Risk Assessment in the Darrang District of Assam. *R. Thakur*	OP T2-12:24-T02-017: Unveiling Arsenic and other Elements of Concern in European Topsoil. *K.Y. Li*	OP T3-12: 24-T05-001 :Arsenic Bio-accessibility in Rice Grains Cultivated in Soil Amended with Agricultural and Industrial Wastes: Implications for Health Risk Assessment. *Md. B. Raza*	OP T4-11: 24-T04-007: Hydrodynamic control to prevent the Arsenic disaster for drinking water to rural population in the middle Ganga Basin through groundwater modeling and aquifer mapping. *I. Bhat*	OP T5-12:24-T05-007:Towards Sustainable Water Governance: Integrating Socio-Economic-Legal Instruments in Mid-Sized Cities. *T. Pradhan*
10:20-10:40	Coffee break				
10:40-11:20	Seminar Hall 1: Plenary 3: Technologies for Cleaner Water: Progress and Challenges. Amit Bhatnagar, Department of Separation Science, LUT School of Engineering Science, LUT University, Mikkeli, Finland 2Wageningen University, Department of Environmental Technology, Wageningen, The Netherlands			Chair:: Prof. Albert van der Wal , Evides Water Company, Department of Water Technology and Source Protection, Rotterdam, The Netherlands &	
11:20-12:50	PARALLEL SESSION 16: Theme 1: Arsenic in natural environment	PARALLEL SESSION 17: Session 1: Source and distribution of pollutants in different natural settings	PARALLEL SESSON 18: Session 3: Pollutants in dietary systems and health perspectives	PARALLEL SESSON 19: Session 2: Advancements in clean water technologies for pollutant removal and immobilization	PARALLEL SESSON 20: Session 5: Sensors, innovation, technologies, and artificial intelligence for pollution monitoring and management
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
	Chair: Chien.-Yen Chen (Taiwan, ROC) Co-chair:Thomas Pitchler (Germany)	Chair: Laura A. Richards (UK) Co-chair: Tanushree Bhattacharya (India)	Chair: Amit Krishna De (India) Co-chair: Ignacio Machado (Uruguay)	Chair: Zdzisław M Migaszewski (Poland) Co-chair: Sraddha Singh (India)	Chair: Case van Genuchten (Denmark) Co-chair: Sudip Chakraborty (Italy)
11:20-11:50	Keynote T1-4: 24-T01-008: Finding the needle in the haystack: Machine learning approach in the search for arsenic hotspots. *M. E. Donselaar*	Keynote S1-1:24-S05-214: Predicting geogenic manganese groundwater contamination and comparison with arsenic occurrence *J. Podgorski*	Keynote: S3-1: 24-S03-004: Emerging pollutants and their health outcomes: Present perspectives and future directions. *A. Ghosh*	Keynote: S2-1: 24-S02-035: Affordable clean water using advanced materials. *T. Pradeep*	Keynote: S5-1: 24-S05-009: "For want of a nail" – using artificial intelligence (AI) to predict, for Bangladesh, where zero valent iron (ZVI) may be required for more effective sorption-based groundwater arsenic remediation. *D. A. Polya*
11:50-12:10	OP T1-13: 24-T01-011: Linking hydrologic changes to arsenic mobilization in the shallow aquifer of the Hetao Basin *S Xing*	OP S1-1: 24-S01-012: River water quality and bed sediment characterization of Ganga with reference to arsenic in the Himalayan region. *S. Kumar*	OP S3-1: 24-S03-005: Promotion of environmental health in vulnerable populations. A participatory diagnostic study of potentially toxic metals in soils of recovered public spaces. *F.F. Tissot*	OP S2-1: 24-S02-002: Solar driven HVR water purification technology for fluoride and other micro-pollutants free drinking supply water in Baharda School, Balasore, Odisha, India. *E.U. Khan*	OP S5-1:24-S05-002: Nickel Ferrite Embedded 3D Graphene for Ultrasensitive Detection of Arsenic Using Voltammetry Technique. *S. Sahoo*
12:10-12:30	OP T1-14:24-T01-009: Alarming levels of As and Sr in coastal karst aquifers in northwestern Sri Lanka. *U G C Bandara*	OP S1-2: 24-S01-007:Hydrochemical and Isotopic Assessment for Characterizing Groundwater Quality and Recharge Processes in Ganges and Jamuna Floodplain in Bangladesh. *M. Moniruzannam*	OP S3-2: 24-S03-006: Lead pollution in groundwater of Wazirganj Block, Bihar, India, *R. Bala*	OP S2-2: 24-S01-013: Impact of Surficial Lithology on Formation of Natural Reactive Barrier (NRB) in Riverbanks of Tidally Fluctuating Rivers: The Hooghly River, West Bengal, India. *K. Kwak*	OP S5-2:24-S05-004: Fabrication of Gold nanoparticle and reduced graphene oxide nanocomposite as an electrochemical sensor for trace determination of As (III) in water and soil samples. *P.K. Sahoo*
12:30-12:50	OP T1-15: 24-T01-025: Origin and Mechanisms of Mobility of Geogenic Arsenic Groundwater Contamination in Silver Lake and Toutle, Washington. *W A Hoys*	OP S1-3: 24-S01-022: Spatial and Temporal Distribution of NO_3^-+NO_2^-in Coastal Groundwaters: Agricultural Contamination of Coastal Aquifer. *S.R. Saghravani*	OP S3-3: 24-S01-021: Acute toxicity of Magnesium chloride on different stages (Egg, Spawn, Fry and Fingerling) of rohu (Labeo rohita, Hamilton). *A. Mallick*	OP S2-3: 24-S02-007: Utilization of Best Quality Ranked Biochar supported with WS_2 nanosheets for integrated photocatalytic adsorptive removal of Oxytetracycline from water. *S. Chauhan*	OP S5-3:24-T05-019: Cost-effective microbial induced ZnO synthesis for building material: Antibacterial, Photocatalytic and Mechanical Characteristics. *R.K. Sharma*
12:50-14:00	Lunch [Banquet Hall]				
14:00-14:40	Seminar Hall 1: Plenary 4: Lifetime Risk and Individual Susceptibility of Multiple Health Hazards due to the Exposure to Arsenic in Drinking Water. Chien Jen Chen, Genomics Research Center, Academia Sinica, Taipei, Taiwan			Chair: Gopal C. Kundu (KIIT, India)	
14:40-16:30	PARALLEL SESSION 21: Theme 1: Arsenic in natural environment	PARALLEL SESSON 22: Session 1: Source and distribution of pollutants in different natural settings	PARALLEL SESSON 23: Session 3: Pollutants in dietary systems and health perspectives	PARALLEL SESSON 24: Session 2: Advancements in clean water technologies for pollutant removal and immobilization	PARALLEL SESSION 25: Session 5: Sensors, innovation, technologies, and artificial intelligence for pollution monitoring and management
Hall	Conference Hall 1	Conference Hall 2	Conference Hall 3	Conference Hall 5	Conference Hall 6
	Chair: David A. Polya (UK) Co-chair: William A. Hayes (USA)	Chair: Girija Bharat (India) Co-chair: Paromita Chakraborty (India)	Chair: Ashok Ghosh (India) Co-chair: Pritha Bhatacharjee (India)	Chair: Debasish Chaterjee (India) Co-chair: Laura A. Richards (UK)	Chair: Case van Genuchten (Denmark) Co-chair: Sanjeev Sharma (Sweden)
14:40-15:10	Keynote T1-5: 24-S01-032: Groundwater arsenic accumulation rates under the rapidly developing city of Patna, India: Insights from environmental tracers and residence time indicators. *L. Richards*	Keynote S1-2: 24-S01-030: Impact of microplastic pollution on the ecosystem. *P. Sharma*	Keynote: S3-2: 24-S04-311: Waste plastics and interlinked endocrine disrupting chemicals in the riverine regions along the southeast coast of the Bay of Bengal: a post COVID-19 pandemic perspective. *P. Chakraborty*	Keynote: S2-2: 24-T05-003: Treatment of emergent pollutants and metals using Zerovalent iron nanoparticles. *M.I. Litter*	Keynote: S5-2:24-S02-035: Membranes for Sustainable Environment-from Science to Society. *S. Chakraborty*
15:10-15:30	OP S1-19: 24-S01-215: Spatial Heterogeneity of Groundwater Arsenic in Ravi floodplain, Punjab India. *A. Kumar*	OP S1-4: 24-S01-235: Assessment of Microplastic Pollution in Water and Sediment of the Daya River: A Tributary of the Mahanadi river, Odisha, India. *S. Mahapatra*	OP S3-4: 24-S01-029: Fate, biotransformation, and translocation of pharmaceuticals from irrigation water in rice (Oryza sativa) crops grown under a controlled pot setup. *A. Mukhopadhyay*	OP S2-4: 24-S02-011: Advanced oxidation process for municipal wastewater treatment. *V. Cozzolino*	OP S5-4:24-S05-008: Deep literacy Models for ischemic stroke lesion segmentation in Medical Images *R. B.Vure*
15:30-15:50	OP T1-17: 24-S01-011: Vulnerability of the deeper aquifers being exploited for drinking water supply in the arsenic contaminated areas of Middle Ganga Plains. D. Saha	OP S1-4: 24-S01-016: Seasonal variation of microplastics in freshwater reservoir sediments of Ranchi, India. *A. Pal*	OP S3-5: 24-S01-025: Lead (Pb) Contamination in Soil: Impacts and Remediation. *F. Mahmood*	OP S2-5: 24-S02-012: Comparative assessment of arsenic removal from groundwater using natural and synthesized magnetic materials. *P.Y. Lin*	OP S5-5:24-S05-007: Developing decision support system for sustainable water solutions based on major water containment, geological, and hydrogeological data to facilitate the SDG 6.0 agenda on drinking water safety in Bangladesh. *A.R. Patnaik*
15:50-16:10	OP T1-18: 24-S01-020: Study of Arsenic in Groundwater of Bangladesh and Correlation of Arsenic Contamination with the Level of Iron, Manganese and Water Quality Parameters. *Md. Nur. I. Siddique*	OP S1-5: 24-S01-031: Identification Removal and Characterization of Microplastics from Prairie View A&M University Wastewater Treatment Plant. *O. Chujor*	OP S3-6: 24-S01-001: Characterization and Risk Assessment of MSW Dumpsite Soil with Special Emphasis on Heavy Metal Contamination. *S. Das*	OP S3-5: 24-S02-009: Synthesis and Application of Ag_2S embedded g-C3N4 Nanosheets for Photocatalytic Removal of Tetracycline from Water. *P. A. Taksal*	OP S5-6:24-S02-003: Interconnectedness of Water Security and One Health: A Holistic Approach. *Z. Faheem*
16:10-16:30	OP T1-19: 24-S01-015: Anaerobic and aerobic incubation of the Beas River sediments to understand arsenic mobility in the Sutlej-Indus River basin in the northwestern India. *H.V. Kulkarni*	OP S1-6: 24-S01-026: Microplastics of major Indian water bodies: Sources, fate and eco-accumulation. *G.K. Darbha*	OP S3-7: 24-S03-003: Exploring the prevalence of tobacco use among dental surgeons and its impact: a comprehensive analysis. *N. A. B. Islam*	OP S4-6: 24-S02-008: Green graphene supported Cu2O-Ag2O photocatalyst with high disinfection activity. *S. Arasavilli*	OP S5-7:24-S05-005: An Experimental Assessment of Pollutant Removal Efficiency of a Pilot Scale Constructed Wetland for Tannery Wastewater Treatment: A Case Study. *S. Saha*
16:30-16:50	Coffee break				
16:50-17:30	PANEL DISCUSSION 2: Role of Academia, Industry, Think Tanks and Govt collaboration in dealing the Arsenic menace in Water and Food [Seminar Hall 1]				
17:30-18:30	Poster Session (Lobby)				

Wednesday, 23 October 2024

08:00-8:30	Registration [Conference Venue]				
08:30-10:20	**PARALLEL SESSION 26: Session 1: Source and distribution of pollutants in different natural settings**	**PARALLEL SESSON 27: Theme 2: Arsenic in food and agricultural ecosystem**	**PARALLEL SESSON 28: Session 4: Policies and sustainable management of pollutants**	**PARALLEL SESSION 29: Theme 1: Arsenic in natural environment**	**PARALLEL SESSON 30: Session 2: Advancements in clean water technologies for pollutant removal and immobilization**
Hall	**Conference Hall 1**	**Conference Hall 2**	**Conference Hall 3**	**Conference Hall 5**	**Conference Hall 6**
	Chair: Prafulla Kumar Sahoo (India) Co-chair: Sraddha Singh (India)	**Chair: Prasanta Rath (India) Co-chair: Nupur Bose (India)**	**Chair: Prosun Bhattacharya (Sweden) Co-chair: Shuvendu Singha (India)**	**Chair: Abhijit Mukherjee (India) Co-chair: Saugata Dutta (USA)**	**Chair: Sudip Chakraborty (Italy) Co-chair: Rahul Modak (India)**
8:30-9:00	**Keynote S1-3: 24-S01-024:** Understanding processes regulating distribution of groundwater arsenic in the middle Gangetic plain, India. *P.K. Diwedi*	**Keynote T2-4: 24-T02-013**: Health risk assessment from combined exposures to arsenic and cadmium from consumption of marketed rice in Bangladesh. *M.M. Rahman*	**Keynote:S4-1: 24-S04-904:** Towards a transformative approach for groundwater management . *T. van der Voorn*	**Keynote T1-6: 24-T01-012:** Feammox as a pathway for arsenic mobilization in groundwater systems. *H. Guo*	**Keynote: S2-3: 24-S02-010:** Photocatalytic membrane reactors for wastewater treatment. *C. Aligeri*
9:00-9:20	**OP S1-7: 24-S01-018:** Vulnerability of modern groundwater to contamination by arsenic in the Brahmaputra River Basin, India. *D.A. Aind*	**OP T2-13: 24-T02-024:** Bio-concentration of heavy metal(loid)s (HMs) in root, stem, leaves, and grain tissues of barley (Hordeum vulgare) and oats (Avena sativa) irrigated with treated wastewater and groundwater in drylands. *J. M Ocha-Rivero*	**Keynote S4-2: S04-310:** Quality issues in water supplies of Urban areas of India- A case study from Noida, National Capital Region-Delhi. *R.P.Singh*	**OP T1-20: 24-T01-031:** Controls on high and low arsenic aquifers across the Gangetic basin, India. *T. Bhowmik*	**OP S2-8:24-S02-005:** Study of the kinetics and mechanism of nZVI-assisted Cr(VI) removal from water. *G. Mandal*
9:20-9:40	**OP S1-8: 24-S01-008:** Groundwater source, water quality, and health risk assessment of Holocene-Pliestocene aquifer in Bangladesh. *H. Al- Asad*	**OP T2-14: 24-T02-022:** Understanding Heavy Metal Threats in Rice Cultivation in Lower Gangetic Plains of West Bengal. *P. Mondal*	**OP S4-2:24-S04-001:** Assessing the Impact of Indirect Groundwater Recharge through Recycled Water on Public and Animal Health in Semi-Arid Regions. *M. Manisha*	**OP T1-21: 24-T01-021:** Hydrochemical assessment with respect to arsenic and boron in two volcanic zones - Sajama National Park and Laguna Colorada Basin, Bolivian Altiplano. *M.I. Chambi Topia*	**OP S2-9:24-S02-001:** Sustainable Solution for Semi-arid Areas: Indirect Groundwater Recharge Using Recycled Wastewater and its Environmental Impact Assessment. *K Verma*
9:40-10:00	**OP S1-9: 24-S01-003:** Nitrate Contamination Sources in Historically Enriched Irrigation Region of Bihar, India. *A. Verma*	**OP T2-15: 24-T02-026:** Effect of household cooking process on arsenic burden in cooked rice of rural West Bengal, India. *A.C. Samal*	**OP S4-3:24-S04-002:**Citizen Science: A Sustainable Way for Tackling Plastic Contamination in Water. *R.K. Sinha*	**OP T1-22: 24-T01-018:** Arsenic-bearing travertines associated with red-bed copper mineralization from northwestern Puna Plateau. *B. A. Blanco*	**OP S2-10:24-T0S-014:** Roots of Remediation: Can Vetiver Plant and Arbuscular Mycorrhizal Fungi Collaborate to Mitigate Chromium Pollution? *S. Banerjee*
10:00-10:20	**OP S1-10: 24-S01-028:** Effect of Urbanization on Ground Water Quality in Bhubaneswar City, Odisha India. *K.P. Samal*	**OP T2-16: 24-T02-002:** Exploring the intra-chain arsenic migration from sunned paddy to cooked rice through parboiling using varied arsenic-contaminated waters. *S. Ghosh*	**OP S4-4:24-S04-003:** Do marginal communities suffer from Arsenic in water? An excerpt from the Gangetic Plains in Bihar, India. *B. K. Thakur*	**OP T1-23: 24-T01-022:** Geogenic arsenic contamination in the Lauca River Basin Hydrological System in the Bolivian Altiplano. *L.S. Huallpara*	**OP S2-11:24-S02-004:** Fluoride removal from aqueous solution using biochar derived from agricultural waste. *A. Thakur*
10:20-10:40	**Coffee break**				
10:40-11:20	**Seminar Hall 1: Plenary Session 5: 24-S01-310 PFAS in drinking water in India-Health hazards. Dr. Girija Bharat, Mu Gamma Consultants Pvt. Ltd., Haryana India & Energy and Resources Institute (TERI), New Delhi, India** **Chair: Prof. Paromita Chakraborty, Centre for Research in Environment, Sustainability Advocacy and Climate Change (REACH), SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India**				
11:20-12:50	**PARALLEL SESSION 31: Session 1: Source and distribution of pollutants in different natural settings**	**PARALLEL SESSON 32: Theme 2: Arsenic in food and agricultural ecosystem**	**PARALLEL SESSON 33: Theme 4: Advancements in clean water technologies for arsenic removal and immobilization**	**PARALLEL SESSION 34: Theme 1: Arsenic in natural environment**	
Hall	**Conference Hall 1**	**Conference Hall 2**	**Conference Hall 3**	**Conference Hall 5**	
	Chair: Jyoti P. Maity (India) Co-chair: Tulishree Pradhan (India)	**Chair: Tarit Roychowdhury (India) Co-chair: M.M. Rahman (Australia)**	**Chair: P.Y. Lin (China) Co-chair: Rojalin Sahu (India)**	**Chair: Amika Nanda (India) Co-chair: Sanjay Kumar Majhi (India)**	
11:20-11:50	**Keynote S1-4: 24-S01-004:** Factors and processes influencing groundwater fluoride and uranium co-occurrence in the alluvial aquifers of Punjab, India *P.K. Sahoo*	**Keynote T2-5: 24-T02-005:** Arsenic stress mediated hormonal signaling and mitigation complexities. *A.K. Srivastava*	**Keynote:T4-5: 24-T-04-032:** Policy and remediation of Arsenic in Dutch Drinking Water. *P. van der Wens*	**Keynote T1-16: 24-S01-010:** Partitioning of solid phase arsenic and iron in hyporheic zone sediments along the Meghna River. *S. Datta / T.Varne r*	
11:50-12:10	**OP S1-14: 24-S01-011**:Monitoring and assessment of Fluoride contamination in the Groundwater of Khurda district, Odisha, India. *T. Mishra*	**OP T2-17: 24-T02-003:** Triticum durum L. and Triticum aestivum L., two Mediterranean wheat varieties, are screened for levels of arsenic in their grain. *Y.F. Lawgali*	**OP T4-17:24-T04-002:** Batch and Column Performance of As(V) Adsorption on Iron-Oxide-Coated Crushers Waste (IOCCW). *K. Das*	**OP T1-24: 24-T01-014:** Arsenic in acid mine drainage: Occurrence and remediation (Holy Cross Mts., Poland). *Z.M. Migaszewski*	
12:10-12:30	**OP S1-12: 24-S01-245**: Evaluation of Hydrogeochemical Processes and Saltwater Intrusion in the Coastal Aquifers in the Southern Part of Puri District, Odisha, India. *J. Kushawaha.*	**OP T2-18: 24-T02-018:** Evaluation of Zn and Cu nanoparticles application in arsenic amelioration in rice crop. *P. Yadav*	**OP T4-18:24-T04-003:** In-situ immobilization of arsenite by FeS synthesized within a three-dimensional model subsurface porous media system. *P.K. Shukla*	**OP T1-25: 24-T01-015:** Origin of As in soils of the historic copper mine in south-central Poland. *A. Gałuszka*	
12:30-12:50	**OP S1-13: 24-S01-005**: Real-time Assessment of Snap-shot Hyperspectral Imaging for Water Pollution Detection for Smart Cities. *H.C. Wang*	**OP T2-19: 24-T02-001:** Laterite Biochar Composite: A comprehensive solution of Arsenic contamination in agricultural ecosystem. *P. Singh*	**OP T4-19:24-T04-016**: Arsenic species uptake onto modified bauxite mine reject: Adsorption kinetics, isotherm and thermodynamic studies. *R. Kamble*	**OP T1-26: 24-T01-018:** Seasonal pattern of arsenic concentrations in rivers and lakes of Arctic Circle. *S.R. Saghravani*	
12:50-14:00	**Lunch [Banquet Hall]**				
14:00-14:40	**Seminar Hall 1: Plenary Session 6: Six blind men and the Geogenic Groundwater Contamination. Prof. Abhijit Mukherjee, School of Environmental Science and Engineering, Indian Institute of Technology, Kharagpur, India** **Chair: Dr. Laura Richards, Department of Earth and Environmental Sciences, The University of Manchester, Manchester, United Kingdom**				
14:40-16:30	**PARALLEL SESSON 35: Session 1: Source and distribution of pollutants in different natural settings**	**PARALLEL SESSON 36: Theme 4: Advancements in clean water technologies for arsenic removal and immobilization**	**PARALLEL SESSION 37: Session 5: Sensors, innovation, technologies, and artificial intelligence for pollution monitoring and management**	**PARALLEL SESSION 38: Arsenic and other pollutants in natural environment**	**PARALLEL SESSION 39: Legacy and Emerging pollutants in natural environment (No keynote for this session)**
Hall	**Conference Hall 1**	**Conference Hall 2**	**Conference Hall 3**	**Conference Hall 4**	**Conference Hall 5**
	Chair: N. Janardana Raju (India) Co-chair: Sutanu Satpathy (India)	**Chair: Laura A. Richards (UK) Co-chair: Sudip Chakraborty (Italy)**	**Chair: David A. Polya (UK) Co-chair: Sanjeev Sharma (Sweden)**	**Chair: Anindita Chakraborty (India) Co-Chair: Gourav Trivedi (India)**	**Chair: R.P. Singh (India) Co-Chair: J. R. G. Rodriguez (Costa Rica)**
14:40-15:10	**Kenote: 24-S01-066:** Health risks associated with exposure of fluoride and nitrate contaminated springs in the Tawi basin of Jammu and Kashmir, India. *A.K. Taloor*	**Keynote: T4-4: 24-T-05-030:** Arsenic and fluoride removal from rural groundwater - sustainable solutions. *J. Hoinkis*	**Keynote S5-3: 24-S05-219:** Detection and Degradation: a new paradigm in sensing and removal of Hg (II) from wastewater via SERS-active Au@SnS2 QDs. *K.Kesavan*	**Keynote T2-6: 24-T02-217:** Medical Agrogeology: A Tool for Assement of Crops for Heavy Metal Contamination. *K. Nghargbu*	**OP S5-19: 24-S05-236:** Optimizing Sensor Node Allocation in Wireless Sensor Networks for Air Pollution Monitoring: A Comparative Study of Proposed Heuristic and NSGA-II Method. *S. Chattopaadhyay*
15:10-15:30	**OP S1-14: 24-S01-023:** Spatial and temporal distribution of fluoride in the coastal aquifers of Lower Kelantan river Basin, Malaysia. *S.R. Saghravani*	**OP T4-13: 24-T04-009:** Biofilms on iron oxide coated sand perform As(III) oxidation in filters. *E. Kruisdijk*	**OP S5-8: 24-T05-211:** Impact of arsenic contamination of drinking water sources in parts of the Middle Ganga Plains: gender perspective. *A. Saha*	**OP T5-13: 24-T05-220:** Assessing Heavy Metal Contamination and Biodiversity through eDNA in Conventional vs. Organic Rice Fields for Sustainable Agriculture. *P. Banerjee*	**OP T5-8: 24-T04-249**: Enhanced Sensitivity in Detecting As (III) Using Nitrogen-Doped Carbon Dots. Kaniz Fatma
15:30-15:50	**OP S1-15: 24-S01-009**: Geogenic fluoride contamination of groundwater in the middle-Gangetic floodplains. *R. Bhardwaj*	**OP T4-14: 24-T04-010:** Arsenate removal by iron-aluminium oxide coated pumice. *L. G. Romero-Esquivel*	**OP S5-9: 24-S05-209:** Designed synthesis of chemosensory receptors for selective and sensitive recognition and remediation of inorganic and organic arsenicals. *S. Nag*	**OP S1-18: 24-S01-232**: Ascertainment of Groundwater with the Insight of Microplastic Pollution Load in Tiruchirappalli City and the Possible Ambivalent Effects on Human Health. *S. Chakraborty*	**OP S1-20: 24-S01-242**: Distribution and Risk assessment of Pharmaceutically Active Compounds in Surface Waters of South Indian Rivers. *M. Karayai*
15:50-16:10	**OP S1-16: 24-S01-017**: Temperature Controls for Mobilization of Arsenic and Fluoride within a Geothermally Influenced Aquifer, Mexico. *A. Aguilar*	**OP T4-15: 24-T04-013:** Green synthesis of iron oxide nanoparticles enriched banana peel biochar for efficient arsenic removal from water. *U. Lama*	**OP S5-10: 24-S05-240:** Sequential removal of arsenic and fluoride from drinking water using bauxite, gypsum and magnesite in Tanzania (BGM): A mini-scale column evaluation. *R. F. Irunde*	**OP S5-12: 24-S05-240:** Revisiting the green household practices in urban India for environmental sustainability *J. Hazarika*	**OP S1-21: 24-S01-243**: Distribution, Occurrence, and Ecotoxicological Risk of Currently Used Pesticides in South Indian Rivers. *S. Soman*
16:10-16:30	**OP S1-17: 24-S01-014**: Hydrogeochemical evolution and fluoride contamination in shallow aquifers of Jharkhand State, India. *A.K. Behera*	**OP T4-16: 24-T04-015:** Comparative analysis of As(III) and As(V) adsorption onto developed biochar nanocomposites. *P. Singh*	**OP S5-11: 24-S05-210:** Effective strategies for Arsenic scavenging in rice crop through organic amendments *S. Kumar*	**OP S5-13: 24-S05-241:** Smart Water Management Strategies for Enhancing Drought and Flood Resilience: Integrating AI, IoT, and ML Technologies *A. Yadav*	**OP S1-22: 24-S01-244**:Surveillance of Per and poly-fluoroalkyl substances (PFASs) in surface water and groundwater from southern states of India. *K Pavithra*
16:30-16:50	**Coffee break**				
16:50-17:30	**PANEL DISCUSSION 3: Role of Information, digital data, grassroot innovations for dealing geogenic contaminants [Seminar Hall 1]**				
17:30-18:30	**Closing Session (Seminar Hall 1)**				

Poster Presentations As2024

All posters will be displayed during the entire Congress

Allocated time: Monday 21 October 2024 17:30-18:30

Theme 1: Arsenic in natural environment			
PP T1-1	24-T01-030	Distribution, Speciation and Controls on As Mobilization in the Groundwater in Aquifers of The Middle Gangetic Plain, India	Kavya Agrawal
PP T1-2	24-T01-016	Hydrodynamic control to prevent the Arsenic disaster for drinking water to rural population in the middle Ganga Basin through groundwater modeling and aquifer mapping	Irfan M Bhat
PP T1-3	24-T01-002	Origins of Emerging Non-Communicable Illnesses (NCDs) in Mining Regions of Ghana:The Concealed Perils to Public Health	Emmanuel Arhin
PP T1-4	24-T01-159	Impacts of Climate Change on Groundwater Arsenic and Redox-Sensitive Elements: A Comprehensive Analysis	Snigdharani Panda
PP T1-5	24-T01-221	Abundant and Rare Benthic Bacteria in Chilika Lagoon and Their Potential Functions	Stiti Prangya Dash

Theme 2: Arsenic in food and agricultural ecosystem			
PP T2-1	24-T02-012	Evaluating the efficacy of sulphur-modified tea-waste biochar on rice growth in arsenic contaminated soil	Saurabh kumar Pathak
PP T2-2	24-T02-010	Accumulation of trace elements in native and improved rice varieties (Oryza sativa L.) grown on arsenic-rich soils.	Sammani K Manawasinghe
PP T2-3	24-T02-011	Melatonin application as a mitigating strategy for arsenic stress amelioration and enhanced yield in rice (Oryza sativa L.)	Ankita Gupta
PP T2-4	24-T02-029	Arsenic uptake mechanisms in crops: unveiling growth secrets	Sana Dhamija
PP T2-5	24-T02-025	Arsenic contamination in ground water, its causes and remedies	Sanjib Kumar Das
PP T2-6	24-T02-228	Evaluation of Arsenic Contamination and Associated Risks in Agriculture Fields.	M. Naseem
PP T2-7	24-T05-020	Impact of Parboiling and Cooking Methods on Removing Arsenic from Rice	Mahmud Hossain

Theme 5: Sustainable Mitigation and Managment			
PP T5-1	24-T05-022	Sludge Management and Leaching Toxicity Assessment for Residuals from Arsenic Adsorption Systems	Arunima Krishnan
PP T5-2	24-T05-004	Assessment of arsenic safe aquifers in arsenic contaminated lower Bengal Delta, West Bengal, India	Sunam Chatterjee
PP T5-3	24-T05-018	Sustainable E-commerce Models for NTFP Integrating Economic Growth with Environmental Conservation and Management	Biswanath Soren
PP T5-4	24-T05-021	Factors impacting the households' decisions for arsenic-safe drinking water in Buxar District, Bihar	Sushil Kumar
PP T5-5	24-T05-010	Alleviation of arsenic stress in rice seedlings using selenium nanoparticles: a special emphasis on vacuolar sequestration	Deepanjan Mridha

Allocated time: Tuesday 22 October 2024 17:30-18:30

Theme 3: Health perspectives of environmental arsenic			
PP T3-1	24-T03-006	Assessment of disease burden associated with arsenic exposed population of Saran district (Bihar)	Vidya Kumari
PP T3-2	24-T03-007	Arsenic causing health hazards in the exposed population of Bihar (India)	Surbhi Suman
PP T3-3	24-T03-008	Assessment of Breastmilk in females inhabiting in arsenic exposed districts of Bihar	Radhika Agarwal
PP T3-4	24-T03-010	Arsenic poisoning causing serious health risks in the exposed population in the Gangetic plains of Bihar (India)	Nirmal Kumar Chayal
PP T3-5	24-T03-012	Assessment of arsenic role in Gallbladder carcinogenesis – A random study	Megha Sharma
PP T3-6	24-T03-009	Multi-Causal Exploration of Chronic Arsenicosis: A Case of Buxar District	Asrarul Haque Jeelani
PP T3-7	24-T03-013	Advancing knowledge on health and economic costs of arsenic groundwater contamination: A Systematic Review	V. Gupta
PP T3-8	24-T01-002	Source and Health Impact of Arsenic in Groundwater	Trinath Biswal
PP T3-9	24-T01-230	Arsenic Exposure through Tuibur addiction and high risk of Gastric Cancer in Mizoram Population: A Genotoxicity Study	Reetish Raj Sahoo
PP T3-10	24-T01-233	Potential Role of Kaempferol in Amelioration of Arsenic-induced Chronic Kidney Disease by Inhibition of Sonic Hedgehog Pathway	Indraneel Rakshit

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PP T5-2	24-T04-005	Supplying safe drinking water through POUs: An extreme decentralized approach for arsenic contaminated areas	Nitin Kumar Singh
PP T5-3	24-T04-014	Sulfidation of nano-zero valent iron can enhance aqueous arsenic removal	Debasis Golui
PP T5-4	24-T04-004	An integrated approach for arsenic remediation from groundwater	Rasmi Mohan T.
PP T5-5	24-T04-006	Bio Synthesis of Magnetite-Zinc Ferrite Nanoparticles from Actinoscirpus Grossus: An Innovative Strategy for Arsenic removal from arsenic bearing water	Bhabani Sankar Sarangi
PP T5-6	24-T04-019	Enhancing Arsenic Removal from Water: A Study on Fe/Zn-Modified Nanobiochar	Pushpa Sharma
PP T5-7	24-T04-012	A Simplified and Affordable Arsenic Filter to address global arsenic menace	Sanjay Kumar Swain
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