PERSONAL AND CONTACT DETAILS

Name: Dr. Izharul Haq
Date of Birth: 12/01/1989
Nationality: Indian
Languages Known: English, Hindi and Urdu
Marital Status: Engaged
Email: izhar.iitr@gmail.com/izhar.iitg@gmai.com/izhar@iitg.ac.in
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Address for Correspondence: Qazipura (South), Near Dr. Prabhu Dayal, Bahraich, Uttar Pradesh, India-271801

PRESENT STATUS

Presently, I am looking for position of Assistant Professor/ Scientist in Microbiology and Biotechnology in India and abroad.

EDUCATIONL QUALIFICATIONS

- 2014-2018, **PhD in Microbiology**: Research work done at CSIR-Indian Institute of Toxicology Research (IITR) and degree awarded from Department of Biosciences, Integral University, Lucknow, India.
  PhD Thesis Title: Bioremediation Potentiality Evaluation of Ligninolytic Bacteria for Detoxification of Pulp and Paper Industry Wastewater.
- 2009-2011, **MSc in Environmental Microbiology**: Department of Environmental Microbiology, Babasaheb Bhimrao Ambedkar (A-Central) University, Lucknow, India.
  MSc Dissertation Title: Extraction of Bioactive Compounds from Medicinal Plants and Its Antimicrobial Activity against Pathogenic Microorganism of Horticulture Crops.
- 2006-2009, **BSc in Life Science**: Kisan P.G. College, Bahraich, affiliated to Dr. RML, Avadh University, Faizabad.

RESEARCH INTERESTS

- Bioremediation and toxicity evaluation of industrial wastewater
- Biodegradation of EDCs and emerging pollutants in industrial wastewater and its toxicity validation
- Solid waste management and its toxicity analysis
- Generation of value-added products from industrial and municipal waste
- Composting and vermicomposting
- Microbiology of composting
- Anaerobic digestion, bioenergy, biofuel
- Analysis of solid wastes

RESEARCH EXPERIENCE

- 2019-2022, **PDF in Environmental Microbiology:** Department of Civil Engineering, Environmental Engineering Group, Indian Institute of Technology Guwahati, Guwahati, India.

  PDF Work Title:
  - Development of an Improved Biodegradation Process for the Treatment of Endocrine Disrupting Chemicals in Industrial Wastewater.
  - Production of Enhanced Biogas from Industrial Sludge Sample through Assistance of Microorganism.
  - Development of Nutrient Rich Compost by Two Stage Biodegradation Process Using Solid Waste Substrates.
- 2017-2018, **Senior Research Fellow,** Environmental Microbiology Division, CSIR-Indian Institute of Toxicology Research (IITR), Lucknow, India.

  Project: Bio-augmentation of activated sludge for enhanced biodegradation of paper mill wastewater: An effort to restore river ecosystem-Funded by DBT, Gov of India.
- 2013-2017, **Junior Research Fellow**, Environmental Microbiology Division, CSIR-Indian Institute of Toxicology Research (IITR), Lucknow, India.

  Project: Development of a novel bioremediation technique by formulation of effective microbial consortia for detoxification of pulp and paper mill wastes-Funded by Council of Scientific and Industrial Research (CSIR).

TEACHING EXPERIENCE

- September 2018-February 2019, Appointed as **Assistant Professor** in the Department of Microbiology, JECRC University, Jaipur, India.
- July 2017-December 2017, Appointed as **Guest Faculty (Assistant Professor)** in the Department of Environmental Microbiology, Babasaheb Bhimrao Ambedkar (A-Central) University, Lucknow, India.

COURSES TAUGHT

S. No.	Title of Course Taught	Postgraduate/ Undergraduate	Year
1	Mycology, Industrial Microbiology, General Microbiology, Food Microbiology	Undergraduate	2018-19
2	Environmental Microbiology, Molecular Microbiology, Microbiology, Food Microbiology, Biochemistry & Enzymology, and Microbial Technology	Postgraduate	2018-19
3	Environmental Microbiology, Microbial Physiology, Statistics, Water Microbiology, Green Technology	Postgraduate	2017-18

STUDENTS SUPERVISED

S. No.	Course & Institute Name	Student Name	Title	Year
1	M. Tech. (Environmental Engineering), Dept of Civil Engineering, IIT Guwahati	Sushanta Roy	Pulp and paper mill wastewater characterization and toxicity analysis followed by microbial treatment	2019-20
2	M. Tech. (Environmental Engineering), Dept of Civil Engineering, IIT Guwahati	D Shekhar Rao	Monitoring and treatment of leachate generated from degradation of fresh municipal solid waste	2019-20
3	M. Tech. (Environmental Engineering), Dept of Civil Engineering, IIT Guwahati	Anwesha Banerjee	Assessment of heavy metal toxicity in terrestrial weeds during rotary drum composting through bioavailability, leachability and chemical speciation followed by plant model validation	2020-21
4	M. Tech. (Environmental Engineering), Dept of Civil Engineering, IIT Guwahati	Sumit Baraskar	Uses and treatment of digestate from anaerobic digestion of various substrates with sewage	2020-21

INSTITUTIONAL RESPONSIBILITIES (ADMIN / SERVICES)

- Exam Coordinator (Microbiology), JECRC University, Jaipur, India, October, 2018-February, 2019.
- Helped in development of a Microbiology Lab in the Department of Civil Engineering, IIT Guwahati. The Lab is well equipped with instruments like GC-MS, AAS, Shaker incubator, phase-contrast Microscope, Centrifuge, Laminar Flow, PCR, Gel electrophoresis unit for protein and DNA, Colony counter for microbial counting, ion chromatography (IC), vertex, Deep freezer (-20 °C), Autoclave etc to learned the basic techniques of Microbiology, Molecular Biology, Toxicology and Environmental Engineering.
- Guided Ph.D. and M. Tech student of the Environmental Engineering Lab, Department of Civil Engineering, IIT Guwahati in their research work and manuscript and report/thesis preparation.
- Taken care of various instrument of the Environmental Engineering Lab and giving demo/orientation of the sophisticated instruments, assist chemicals and glassware

indent to students for research work.

- Actively participated as committee member in monthly presentation and viva-voce of B. Tech, M. Tech and PhD students.
- Dynamically participated in invigilator duty of BSc, MSc and B. Tech, M. Tech semester examinations at JECRC University and IIT Guwahati respectively.
- Taken practical classes of BSc and MSc Lab of Microbiology and B. Tech Lab of Environmental Engineering at JECRC University and IIT Guwahati respectively.
- Assist in organization of sports and cultural programme at IIT Guwahati.
- Participated in M. Tech entrance exam counselling and field visit of the students, etc.

HONORS AND AWARDS

- Short-listed for DBT-Research Associateship in Biotechnology & Life Sciences, January-2022 Session.
- Share a session as a Panellist in TEQIP-III Short term course on Challenges and Opportunities in Solid and Liquid Waste Management, November 4, 2020 organised by Centre of Rural Technology, Indian Institute of Technology Guwahati, Guwahati, India.
- Share a session as a chairperson in the 3rd International Conference on Waste Management, Recycle-2020, February 13-14, 2020 organised by Department of Civil Engineering and Centre of Rural Technology, Indian Institute of Technology Guwahati, Guwahati, India.
- Short-listed for Institute Post-Doctoral Fellowship (IPDF) Program, Dept of Civil Engineering, Indian Institute of Technology Guwahati, January, 2019 Session.
- "Young Scientist Award", Selected in best four papers for oral presentation among 2400 papers in the theme of Climate change and sustainability-Biodiversity & Environment and conferred honorary memento by Prof. S. K. Barik, Director, CSIR-NBRI during Young Scientists' Conference of India International Science Festival, 2018 at Lucknow.
- Selected as Assistant Professor in the Department of Microbiology, JECRC University, Jaipur, India in 2018.
- Selected as Research Fellow in the Department of Agricultural Microbiology, Aligarh Muslim University, Aligarh, India in Indo-UK project, 2018.
- Short-listed for Institute Post-Doctoral Fellowship (IPDF) Program, Centre for the Environment, Indian Institute of Technology Guwahati, July-December, 2018 Session.
- Short-listed for DST-INSPIRE Faculty Award January-2018 in Life Sciences Plant and Animal and Agriculture Science program.
- Selected as Guest Faculty in the Department of Environmental Microbiology, Babasaheb Bhimrao Ambedkar (A-Central) University, Lucknow, India in 2017.
- Selected as Guest Faculty in the Department of Microbiology, Jiwaji University, Gwalior, India in 2017.
- Qualified National Eligibility Test (NET) in Agricultural Microbiology conducted by ICAR-ASRB in 2016.
- Qualified National Level Entrance Examination conducted by Integral University in 2014 for seeking admission in Ph.D. Microbiology Programme.

- Qualified National Level Entrance Examination conducted by AMU, Aligharh in 2013 for seeking admission in Ph.D. Microbiology Programme.
- Received fellowship from Council of Scientific and Industrial Research (CSIR), Govt. of India since 2013-2017 after qualifying CSIR Project Fellow entrance examination and interview, conducted by Indian Institute of Toxicology Research (IITR), Lucknow.
- Qualified Uttar Pradesh Common Eligibility Test (U.P.CET) in Life Science conducted by Dr. Ram Manohar Lohiya Avadh University, Faizabad in 2012.
- Qualified National Level Entrance Examination conducted by AMU, Aligarh and BBAU, Lucknow leading Indian Central Universities, in 2009 for seeking admission in M.Sc. Microbiology Programme.
- Awarded medal in quiz competition held at Kisan P.G. College Bahraich in 2008.

EDITOR IN INTERNATIONAL JOURNALS

- Review Editor in Frontiers in Environmental Science (specialty section of Water and Wastewater Management), IF-4.5.

REVIEWER IN INTERNATIONAL JOURNALS

- Journal of Hazardous Materials
- Bioresource Technology
- Environmental Research
- Ecotoxicology and Environmental Safety
- Waste Management
- Process Integration and Optimization for Sustainability
- Biomass Conversion and Biorefinery
- Frontiers in Microbiology
- Frontiers in Environmental Science
- Polish journal of Microbiology
- Energy Sources, Part A: Recovery, Utilization, and Environmental Effects
- Bioresource
- Iranian Journal of Earth Sciences (IJES)

CONFERENCE/WORKSHOP ORGANIZED

- Member of organizing committee, 3rd International Conference on Waste Management, Recycle-2020, February 13-14 2020 organised by Department of Civil Engineering and Centre of Rural Technology, Indian Institute of Technology Guwahati, Guwahati, India.
- Member of organizing committee, 58th Annual Conference of Association of Microbiologist of India (AMI-2017), November 16-19, 2017 organized by Department of Environmental Microbiology, Babasaheb Bhimrao Ambedkar (A-Central) University, Lucknow, India.

PROFESSIONAL MEMBERSHIPS

- Life member of Association of Microbiologist of India (4848-2019).
- Life member of Indian Science Congress (L38257).
- Life member of Biotech Research Society, India (LM 2429).
- Life member of Vigyan Bharati (22722).
- Annual member of American Society for Microbiology (57241895) 2014-15.

PUBLICATIONS

1. **I. Haq**, AS. Kalamdhad, Ashok Pandey: Genotoxicity evaluation of paper industry wastewater prior and post-treatment with laccase producing *Pseudomonas putida* MTCC 7525. **Journal of Cleaner Production**. (2022), 342, 130981 (**IF-9.3**).
2. K. Chaitanya, **I. Haq**, AS. Kalamdhad: Insights into the bioconversion of Ageratum conyzoides into a nutrient-rich compost and its toxicity assessment: nutritional and quality assessment through instrumental analysis. **Biomass Conversion and Biorefnery**. (2022), https://doi.org/10.1007/s13399-022-02532-y (**IF-5.0**).
3. SP Choudhury, S Panda, **I. Haq**, AS. Kalamdhad: Enhanced methane production and hydrocarbon removal from petroleum refinery sludge after *Pseudomonas putida* pretreatment and process scale-up. **Bioresource Technology.** (2022), 343, 126127 (**IF-9.6**).
4. SP Choudhury, B Dalasingh, **I. Haq**, AS. Kalamdhad: Methane production and toxicity evaluation of petroleum refinery biosludge through optimization of different modes of heat. **Process Safety and Environmental Protection**. (2021), 154, 236-248 (**IF-6.1**).
5. A Singh and **I. Haq**: Novel Coronavirus Disease (COVID-19): Origin, transmission through the environment, health effects, and mitigation strategies- A review. **Environmental Sustainability**. (2021), 4, 515-526.
6. **I. Haq**, AS. Kalamdhad: Phytotoxicity and cyto-genotoxicity evaluation of organic and inorganic pollutants containing petroleum refinery wastewater using plant bioassay. **Environmental Technology & Innovation**. (2021), 23, 101651 (**IF-5.2**).
7. H. Kauser, S. Pal, **I. Haq**, M. Khwairakpam: Evaluation of rotary drum composting for the management of invasive weed *Mikania micrantha* Kunth and its toxicity assessment. **Bioresource Technology.** (2020), 313,123678 (**IF-9.6**).
8. **I. Haq**, P. Mazumder, AS. Kalamdhad: Recent advances in removal of lignin from paper industry wastewater and its industrial applications-A review. **Bioresource Technology.** (2020), 312, 123636 (**IF-9.6**).
9. **I. Haq**, A. Raj, Markandeya: Biodegradation of Azure-B dye by *Serratia liquefaciens* and its validation by phytotoxicity, genotoxicity and cytotoxicity studies. **Chemosphere.** (2018), 196, 58-68 (**IF-7.0**).
10. **I. Haq**, S. Kumar, A. Raj, M. Lohani, GNV. Satyanarayana: Genotoxicity assessment of pulp and paper mill effluent before and after bacterial degradation using *Allium cepa* test. **Chemosphere**. (2017), 169, 642-650 (**IF-7.0**).

11. **I. Haq**, S. Kumar, V. Kumari, SK. Singh, A. Raj: Evaluation of bioremediation potentiality of ligninolytic *Serratia liquefaciens* for detoxification of pulp and paper mill effluent. **J. Hazard. Mater**. (2016), 305, 190-199 (**IF-10.5**).
12. **I. Haq**, V. Kumari, S. Kumar, A. Raj, M. Lohani, RN. Bhargava: Evaluation of the phytotoxic and genotoxic potential of pulp and paper mill effluent using *Vigna radiata and Allium cepa*. **Advances in Biology**. (2016), Article ID 8065736.
13. S. Kumar, **I. Haq**, J. Prakash, A. Raj: Improved enzyme properties upon glutaraldehyde cross-linking of alginate entrapped xylanase from *Bacillus licheniformis*. **Int. J. Biol. Macromolec**. (2017), 98, 24-33 (**IF-6.9**).
14. S. Kumar, **I. Haq**, J. Prakash, SK. Singh, S. Mishra, A. Raj: Purification, characterization and thermostability improvement of xylanase from *Bacillus amyloliquefaciens* and its application in pre-bleaching of kraft pulp. **3 Biotech**. (2017), 7, 20-31 (**IF-2.4**).
15. S. Kumar, **I. Haq**, A. Yadav, J. Prakash, A. Raj: Immobilization and biochemical properties of purified xylanase from *Bacillus amyloliquefaciens* sk-3 and its application in kraft pulp biobleaching. **J. Clin. Microbiol. Biochem. Technol**. (2017), 1, 026-034.
16. V. Kumari, A. Yadav, **I. Haq**, S. Kumar, RN. Bhargava, SK. Singh, A. Raj: Genotoxicity evaluation of tannery effluent treated with newly isolated hexavalent chromium reducing *Bacillus cereus.* **J. Environ. Manage**. (2016), 183, 204-211 (**IF-6.7**).
17. A. Singh, KC. Nair, R. Kamal, V. Bihari, MK. Gupta, MKR. Mudiam, GNV. Satyanarayana, A. Raj, **I. Haq**, NK. Shukla, AH. Khan, AK. Srivastava: Assessing hazardous risks of indoor airborne polycyclic aromatic hydrocarbons in the kitchen and its association with lung functions and urinary PAH metabolites in kitchen workers. **Clin. Chim. Act**. (2016), 452, 204-213 (**IF-3.7**).
18. V. Kumari, S. Kumar, **I. Haq**, A. Yadav, VK. Singh, Z. Ali, A. Raj: Effect of tannery effluent toxicity on seed germination, α-amylase activity and early seedling growth of mung bean (*Vigna radiata*) seeds. **IJLRST**. (2014), 4,165-170.
19. A. Raj, S. Kumar, **I. Haq**, SK. Singh: Bioremediation and toxicity reduction in pulp and paper mill effluent by newly isolated ligninolytic *Paenibacillus* sp. **Ecol. Eng**. (2014), 71, 355-362 (**IF-4.0**).
20. A. Raj, S. Kumar, **I. Haq**, M. kumar: Detection of tannery effluents induced DNA damage in mung bean by use of random amplified polymorphic DNA markers. **ISRN Biot**. (2014), Article ID 727623.
21. A. Singh, **I. Haq**, A. Kumar: Isolation, screening and characterization of arsenic resistant bacteria from arsenic resistant contaminated soils of Hoogly, West Bengal. **Annals of Plant and Soil Research**. (2014), 3, 268-270.
22. A. Singh, **I. Haq**, A. Singh: Application of nanoparticle in biology and medicine. **Indian Res. J. Genet and Biotech**. (2012), 3, 185-189.

BOOK CHAPTERS

1. SK. Sudhir, S. Bhatti, J. Godheja, S. Panda, **I. Haq**: Treatment of pharmaceutical pollutants from industrial wastewater (In Press, **Elsevier**).
2. K. Chaitanya, **I. Haq,** AS. Kalamdhad: Fate, Effects, Origins and Biodegradation of Bisphenol A in Wastewater (In Press, **Elsevier**).
3. **I. Haq,** AS. Kalamdhad: Advanced and eco-friendly technologies for the treatment of industrial wastewater to constrain environmental pollution (In Press, **Springer Nature).**
4. **I. Haq,** S. Roy, AS. Kalamdhad: Characterization of pulp and paper mill wastewater and its toxicity analysis using *Vigna radiata.* Environmental Degradation: Monitoring, Assessment and Treatment Technologies (In Press, **Springer-Nature**).
5. K. Chaitanya, A. Gupta, **I. Haq,** AS. Kalamdhad: A glance over current status of waste management and landfills across the globe: A Review: In Biodegradation and Detoxification of Micropollutants in Industrial Wastewater, **Elsevier** (2022), pp 131-143.
6. **I. Haq,** AS. Kalamdhad: Integrated technologies for paper industry waste remediation in a circular bioeconomy: In Biomass, Biofuels, Biochemicals, Circular Bioeconomy: Technologies for Waste Remediation, **Elsevier** (2022), pp 351-363.
7. K. Chaitanya, **I. Haq,** AS. Kalamdhad: Integrated terrestrial weed management and generation of valuable products in a circular bioeconomy: In Biomass, Biofuels, Biochemicals, Circular Bioeconomy: Technologies for Waste Remediation, **Elsevier** (2022), pp 41-63.
8. A. Sathyan, **I. Haq,** AS. Kalamdhad, M. Khwaraikpam: Recent advancements in anaerobic digestion: A Novel approche for waste to energy: In Advanced Organic Waste Management Sustainable Practices and Approaches, **Elsevier** (2022), pp 233-246.
9. K. Chaitanya, **I. Haq,** AS. Kalamdhad: Composting techniques: Utilization of organic wastes in urban areas of Indian cities: In Advanced Organic Waste Management Sustainable Practices and Approaches, **Elsevier** (2022), pp 43-55.
10. P. Suryateja, R. Chakma, **I. Haq,** AS. Kalamdhad: Composting and vermicomposting: Process optimization for the management of organic waste: In Advanced Organic Waste Management Sustainable Practices and Approaches, **Elsevier** (2022), pp 33-43.
11. SP. Choudhury, Biswanath Saha, **I. Haq,** AS. Kalamdhad: Use of petroleum refinery sludge for the production of biogas as an alternative energy source: A review: In Advanced Organic Waste Management Sustainable Practices and Approaches, **Elsevier** (2022), pp 277-297.
12. TG. Induchoodan, **I. Haq,** AS. Kalamdhad: Factors affecting anaerobic digestion for biogas production: a review: In Advanced Organic Waste Management Sustainable Practices and Approaches, **Elsevier** (2022), pp 223-233.
13. **I. Haq,** Devki, A. Singh, AS. Kalamdhad: Application of biochar for sustainable development in agriculture and environmental remediation: In Emerging Treatment Technologies for Waste Management, **Springer-Nature** (2021), pp 133-153.

14. P. Mazumder, **I. Haq**, A. Das, AS. Kalamdhad: Microbial remediation of soil and water metal contaminants. In: Microbial Ecology of Wastewater Treatment Plants, **Elsevier** (2021), pp 523.536.
15. **I. Haq,** A. Singh, AS. Kalamdhad: Arsenic: Environmental Contamination, Health Hazards, and Bioremediation Approaches for Detoxification. In: Bioremediation for Environmental Sustainability Toxicity, Mechanisms of Contaminants Degradation, Detoxification, and Challenges, **Elsevier** (2020), pp 121-142.
16. **I. Haq**, A. Raj: Pulp and Paper Mill Wastewater: Ecotoxicological Effect and Bioremediation Approaches for Environmental Safety. In: R. N. Bharagava, G. Saxena (Eds.), Biological Agents and Methods for Industrial Waste Management, **Springer Nature** Singapore Pte Ltd. (2019), pp 333-356.
17. **I. Haq**, A. Raj: Endocrine-Disrupting Pollutants in Industrial Wastewater and Their Degradation and Detoxification Approaches. In: R. N. Bharagava, P. Chowdhary (eds.), Emerging and Eco-Friendly Approaches for Waste Management, **Springer Nature** Singapore Pte Ltd. (2018), pp 121-142.
18. **I. Haq**, A. Raj, M. Lohani: Endocrine disruptors: An emerging pollutant in pulp and paper mill wastewaters and their removal. **Microbiology World**. (2016), 2350-8774.

BOOKS

1. **I. Haq,** AS. Kalamdhad (Eds.), Emerging Treatment Technologies for Waste Management. **Springer-Nature**, 2021, ISBN: 978-981-16-2014-0.
2. **I. Haq,** AS. Kalamdhad, Siddhant Dash (Eds.), Environmental Degradation: Monitoring, Assessment and Treatment Technologies. **Springer-Nature**, 2022, ISBN: 978-9381891704.
3. **I. Haq,** AS. Kalamdhad, MP Shah (Eds.), Biodegradation and Detoxification of Micropollutants in Industrial Wastewater. **Elsevier,** 2022, ISBN: 9780323885072.
4. **I. Haq,** AS. Kalamdhad, A. Pandey (Eds.), Current Developments in Biotechnology and Bioengineering, Bioremediation of Endocrine Disrupting Pollutants in Industrial Wastewater. **Elsevier**, 2020, ISBN: 9780323919029.
5. S. Varjani, **I. Haq**, A. Pandey, VK. Gupta, XT Bui (Eds.), Waste Management: Climate change and Sustainability. (Under process, **CRC Press, Taylor & Francis Group**).

CONFERENCES

1. **I. Haq**, AS. Kalamdhad: Bioremediation and toxicity evaluation of petroleum refinery industry wastewater prior and post bacterial treatment. Proc. Research and Industrial Conclave Integration 2022, January 20-23, 2022 at Indian Institute of Technology Guwahati, Assam, India.
2. Rituparna Addy**, I. Haq**, AS. Kalamdhad, VV Goud: Assessment of biodegradation potentiality of ligninolytic bacteria isolated from Boragaon dumpsite, Guwahati. Proc. Research and Industrial Conclave Integration 2022, January 20-23, 2022 at Indian Institute of Technology Guwahati, Assam, India.
3. **I. Haq**, AS. Kalamdhad: Biodegradation of organic pollutants from paper industry wastewater using *Pseudomonas* sp. immobilized on different biocarriers, and its

toxicity investigation. Proc. International Conference on Biotechnology for Resource Efficiency, Energy, Environment, Chemicals and Health (BRE3CH2021), December 01-04, 2021 at CSIR-Indian Institute of Petroleum, Dehradun, UK, India.

4. **I. Haq**, AS. Kalamdhad: Biological treatment and toxicity assessment of paper mill wastewaters. Proc. International Conference on Biotechnology for Sustainable Agriculture, Environment and Health (BSAEH-2021), April 04-08, 2021 at Malaviya National Institute of Technology, Jaipur, Rajasthan, India.
5. **I. Haq**, AS. Kalamdhad: Bioremediation of paper mill wastewater & its detoxification by ligninolytic bacterium. Proc. American Society for Microbiology (ASM) Microbe 2020, June 18-22, 2020, Chicago, IL (Virtual mode).
6. **I. Haq**, AS. Kalamdhad: Bioremediation and detoxification of endocrine disrupting compounds from industrial wastewaters. Proc. 3rd International Conference on Waste Management, Recycle-2020, February 13-14 2020 at Indian Institute of Technology Guwahati, Guwahati, India.
7. SP. Choudhury, **I. Haq,** AS. Kalamdhad: Biological pretretment of petroleum refinery sludge for enhanced biogas production. Proc. 3rd International Conference on Waste Management, Recycle-2020, February 13-14 2020 at Indian Institute of Technology Guwahati, Guwahati, India.
8. Sushanta Roy, **I. Haq,** AS. Kalamdhad: Pulp and paper mill wastewater characterization and toxicity analysis followed by microbial treatment. Proc. 3rd International Conference on Waste Management, Recycle-2020, February 13-14 2020 at Indian Institute of Technology Guwahati, Guwahati, India.
9. **I. Haq,** AS. Kalamdhad: Characterization and toxicity evaluation of emerging pollutants from petroleum refinery wastewater prior and after secondary treatment process. Proc. Young Scientists' Conference at India International Science Festival, November 5-7, 2019 at Biswa Bangla Convention Centre, Kolkata, India.
10. **I. Haq,** A. Raj: Biodegradation of endocrine disrupting pollutants in industrial wastewater and their detoxification approaches. Proc. Young Scientists' Conference at India International Science Festival, October 5-6, 2018 at Indira Gandhi Prathisthan, Lucknow, India.
11. **I. Haq,** A. Raj, R. Chandra: Biodegradation of Azure-B dye by *Serratia liquefaciens* and its detoxification evaluation by phytotoxicity, genotoxicity and cytotoxicity studies. Proc. 58th Annual Conference of Association of Microbiologist of India (AMI-2017), November 16-19, 2017 at Babasaheb Bhimrao Ambedkar University, Lucknow, India.
12. **I. Haq,** A. Raj: Evaluation of Kraft lignin biodegradation by toxicity assessment and chemical characterization. Proc. 36th Annual Session of the Academy of Environmental Biology (IETC), November 25-27, 2016 at Jamia Hamdard University, New Delhi, India.
13. **I. Haq,** A. Raj: Bioremediation and genotoxicity reduction in paper mill wastewater. Proc. 2nd International Toxicology Conclave (ITC), November, 15-16, 2016 at CSIR-Indian Institute of Toxicology Research, Lucknow, Uttar Pradesh, India.
14. **I. Haq,** A. Raj, M. Lohani: Genotoxicity evaluation of paper mill effluent using *Allium cepa* test and its detoxification by *Serratia liquefaciens*. Proc. 36th Annual

Conference of Society of Toxicology (STOX), August 3-5, 2016 at Amity University, Noida, Uttar Pradesh, India.

15. **I. Haq,** A. Raj, M. Lohani: Biodegradation of pulp and paper mill effluent by lignin peroxidase producing *Serratia liquefaciens*. Proc. International Conference on New Challenges in Biotechnology and Molecular Biology in the Context of 21st Century (NCBMBCC), February 27-29, 2016 at St. John College, Agra, Uttar Pradesh, India.
16. **I. Haq,** A. Raj: Isolation and characterization of laccase producing *Paenibacillus* sp. for bioremediation of pulp and paper mill effluent. Proc. 54th Annual Conference of Association of Microbiologist of India (AMI) and International Symposium on Frontier Discoveries and Innovations in Microbiology and its Interdisciplinary Relevance (FDMIR), November 17-20, 2013 at M.D. University, Rohtak, Hrayana, India.
17. A. Singh, **I. Haq,** A. Kumar: Isolation, screening and characterization of arsenic resistant bacteria from arsenic contaminated soil of West Bengal, India. Proc. 54th Annual Conference of Association of Microbiologist of India (AMI) and International Symposium on Frontier Discoveries and Innovations in Microbiology and its Interdisciplinary Relevance (FDMIR), November 17-20, 2013 at M.D. University, Rohtak, Hrayana, India.
18. A. Singh, **I. Haq**: Application of nanoparticles in biology and medicine. Proc. National Conference on Newer Horizons and Innovations in Biotechnology and Bioscience (NHIBB), April 7-8, 2012 at R.B.S. Engineering College, Bichpuri, Agra, Uttar Pradesh, India.
19. Participated in Young Scientists' Conference at India International Science Festival, 22-25 December, 2020 organized by MoST, MoES, MoHFW GoI in collaboration with CSIR and VIBHA (Virtual mode).
20. Participated in international webinar on COVID-19 and Environmental Linkage organized by BBA University and Springer-Nature, June 29, 2020.
21. Participated in online dialogue on COVID-19: A water professional's perspective organized by International Water Association, April 8, 2020.
22. Participated in online session on Strengthening research capabilities remotely: Empowering Indian Research on COVID-19 organized by BDT, GoI and Elsevier, May 30, 2020.
23. Participated in online health emergencies programme on Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19) organized by WHO, April 25, 2020.
24. Participated in online health emergencies programme on Standard precautions: Waste management organized by WHO, May 15, 2020.
25. Participated in online health emergencies programme on COVID-19: Operational Planning Guidelines and COVID-19 Partners Platform to support country preparedness and response organized by WHO, May 19, 2020.
26. Participated in online health emergencies programme on COVID-19: How to put on and remove personal protective equipment (PPE) organized by WHO, May 21, 2020.
27. Participated in online health emergencies programme on Standard precautions: Environmental cleaning & disinfection organized by WHO, June 1, 2020.

28. Participated in 104th Indian Science Congress (ISC), January 03-07, 2017 at SV University, Tirupati, Andhra Pradesh, India.
29. Participated in Symposium on Climate Change: Issue and Imperatives, February 16, 2010 at Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh, India.

WORKSHOPS

1. Participated in the Indo-South African Workshop on Water-Energy-Nexus in Process Industries, April 20-21, 2022 organized by Indian Institute of Technology Madras, Indian Institute of Technology Gandhinagar & University of the Witwatersrand.
2. Attended the digital modules of Genes to Pathways Second Edition, August 2 to August 17, 2021 organised by Decode Life, India.
3. Participated in TEQIP-III Short term course on Challenges and Opportunities in Solid and Liquid Waste Management, November 4, 2020 organised by Centre of Rural Technology, Indian Institute of Technology Guwahati, Guwahati, India.
4. Participated in TEQIP-III sponsored Short Term Course on Environmental Air and Noise Pollution: Measurements and Modelling April 22-26, 2019, Conducted by Department of Civil Engineering, Indian Institute of Technology Guwahati and Organized by: Knowledge Incubation for TEQIP Centre for Educational Technology, Indian Institute of Technology Guwahati, Assam, India.
5. Participated in two days national workshop Bioinformatics and Bioinstrumentation, January 7-8, 2019, organised by Department of Zoology, Centre for Advanced Studies, University of Rajasthan, Jaipur, India.
6. Participated in seven days workshop on Gene cloning and its expression, to produce genetically modified organism, November 20-26, 2017, organised by School of Science, Maharishi University of Information and Technology, Lucknow, India.
7. Participated in American Society for Microbiologist virtual Workshop on Art of science communication September 12th, 2014, organized by CSIR-Indian Institute of Toxicology Research, Lucknow, India.

COMPUTER AND SOFTWARE KNOWLEDGE

- MS-Word, Excel, Power point, & Internet.
- Operating systems used and familiar with: WINDOWS (8, 7, 98, 2000, XP & VISTA).

REFEREES

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I hereby declare that all the information given above is true and I hold the responsibility of its authenticity.

Izharul Haq