Arijit Dutta Gupta

Residential Address: - M II A – 80, ADA Colony, Naini, Prayagraj – 211008, Uttar Pradesh.

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Educational Qualifications

Degree	Institution	University Board	Year of Passing	Percentage / C.G.P.A.
PhD	Motilal Nehru National Institute of Technology (NIT Allahabad)	CFTI (Autonomous Institute)	2022	8.75
B.Tech	SRM University, Chennai	SRMIST	2016	8.731
12th	Bethany Convent School, Allahabad	C.B.S.E.	2012	89 %
10th	Bethany Convent School, Allahabad	C.B.S.E.	2010	91 %

Ph.D. Thesis: - Batch and Continuous Studies on Arsenic Remediation from Water using Novel Adsorbents prepared from Waste materials.

Areas of Interest

Wastewater Treatment, Adsorption, Heat & Mass Transfer Processes, Environmental Technology, Cellulose, Starch, Nanomaterials & Nanocomposites, and Catalysis.

Research Publications Total: 13

Papers in SCI indexed journals: 11

Papers in Scopus indexed journals: 2

Conferences: 8

h-index: 6

*i*10-index: 4

Papers Published

- **Gupta, A.D.,** Rene, E.R., Giri, B.S., Pandey, A., Singh, H., Adsorptive and photocatalytic properties of metal oxide towards arsenic remediation from water: A review, Journal of Environmental Chemical Engineering, 2021, 106376. https://doi.org/10.1016/j.jece.2021.106376

- **Gupta, A.D.,** Bharauria, B., Singh, H., Silica derived from rice husk ash and loaded with iron oxide for As(III) adsorption from water: experimental and modeling studies. International Journal of Environmental Analytical Chemistry, 2021. (Accepted in press). https://doi.org/10.1080/03067319.2021.1943373

- **Gupta, A.D.,** Rawat, K.P., Bharauria, B., Singh, H., Recent Trends in the Application of Modified Starch in the Adsorption of Heavy Metals from Water: A Review. Carbohydrate Polymers, 2021, 117763. https://doi.org/10.1016/j.carbpol.2021.11776

- **Gupta, A.D**., Jaiswal, V., Bharauria, B., Singh, H., Application of Chemically Modified Industrial Slag to As(III) Adsorption from Wastewater: Kinetics and Mass Transfer Analysis. Acta Chimica Slovenica, 2021, 68. 10.17344/acsi.2020.6283

- **Gupta, A.D.**, Singh, H., Jaiswal, V.K., Goswami, M., Bhadauria, V., (2020). Improved Arsenite adsorption using Iron Impregnated Marble Dust with Surface Functionalized by Quaternary Ammonium Ions. International Journal of Environmental Science and Technology (Accepted in press) 10.1007/s13762-020-03013-3

- **Gupta, A.D.**, Giri, B.S., Rene, E.R., Chaturvedi, P., Goswami, M., Singh, H., (2020). Batch and Continuous Reactor Studies for the Adsorption of As(III) from wastewater using a hybrid biochar loaded with transition metal oxides: Kinetics and Mass Transfer Analysis. Environmental Engineering Research (Accepted in press) https://doi.org/10.4491/eer.2020.438

- Jaiswal, V., Rawat, K.P.S., **Gupta, A.D.**, Bhadauria, V., Chavan, U., Kalita, D., Singh, H., (2020) Comparison of Starch Characteristics from Pigmented and Non-Pigmented Sorghum Cultivars before and after Electron Beam Irradiation. Starch/Starke (Accepted in press) https://doi.org/10.1002/star.202000143

- Ganesh, A., Singh, B., **Duttagupta, A.**, Kalita, D., Zhong, Y., Blennow, A., Singh, H., (2020). Preparation of Starch Citrates using Solvent Free Reaction and Comparison with Aqueous and Ethanol Mediated Reactions. Starch/Starke, 72, 1900260. 10.1002/star.201900260

- Goswami, M., Chaturvedi, P., Sonwani, R.K., **Gupta, A.D.**, Singhania, R.R., Giri, B.S., Rai, B.N., Singh, H., Yadav, S., Singh, R.S., (2020). Application of Arjuna (*Terminalia Arjuna*) seed biochar in hybrid treatment system for the bioremediation of Congo red dye. Bioresource Technology, 307, 123203. https://doi.org/10.1016/j.biortech.2020.123203

- **Gupta A.D.**, Singh, R., Jaiswal, V.K., Rawat, K.P., Singh, H., Bhadauria, V., Punia, R., (2020).

Functional characteristics, dry heating and irradiation treatment of starch – A short review. The Annals of the University Dunarea de Jos of Galati. Fascicle VI – Food Technology, 44, 1. https://doi.org/10.35219/foodtechnology.2020.1.13

- **Gupta, A.D**., Pandey, S., Jaiswal, V.K., Bhadauria, V., Singh, H., (2019). Simultaneous oxidation and esterification of cellulose for use in treatment of water containing Cu(II) ions. Carbohydrate Polymers, 222, 114964. https://doi.org/10.1016/j.carbpol.2019.06.003

- Singh, H., Punia, R., Ganesh, A., **Duttagupta, A**., Kaur, A., Blennow, A., (2019). Modification of Moth Bean Starch Using Mixture of Organic Acids under Dry Heating. Starch/Starke, 71, 1900061. 10.1002/star.201900061

- Pouranick, P., **Gupta, A.D.**, (2015). Green Technology – Emerging Green Technologies in Energy Sector. International Journal of ChemTech Research, 7, 2988-2992.

Conference Presentations

- **Gupta, A.D.**, Bharti, B., Singh, H. Preparation of Hydroxypropylated and Alkali modified starches and application in Cookie making with Reconstituted Flour – A step in enhancing Sorghum starch industrial application. Internation Conference on Technological Interventions fro Sustainability, MNNIT Allahabad, Prayagraj, India from April 14 – 16, 2022.

- **Gupta, A.D.**, Singh, H. Iron impregnated silica from rice husk ash for use in the Adsorption of As(III) ions from water. International Conference on Energy and Environmental technologies for Sustainable Development, MNNIT Allahabad, Prayagraj, India from February 14-16, 2020.

- **Gupta, A.D.**, Goswami, M., Singh, H. Application of ZnO doped Iron oxide nanoparticles in degradation of Rhodamine-6G dye from wastewater. International Conference on Energy and Environmental technologies for Sustainable Development, MNNIT Allahabad, Prayagraj, India from February 14-16, 2020.

- **Gupta, A.D.**, Mandavi, G., Jaiswal, V.K., Singh, H., Hasan, S. Transition metal oxides grown on Mustard Cake Biochar for efficient As(III) adsorption: Equilibrium, Thermodynamics and Optimization using RSM. International Conference on New Horizons in Biotechnology, CSIR-NIIST, Thirunanthapuram, India from November 20-24, 2019.

- Mandavi G., **Gupta, A.D.**, Giri, B.S., Rai, B.N., Singh, H., Singh, R.S. Application of Arjuna (*Terminalia Arjuna*) seed biochar in hybrid treatment system for the bioremediation of Congo red dye. International Conference on New Horizons in Biotechnology, CSIR-NIIST, Thirunanthapuram, India from November 20-24, 2019.

- **Gupta, A.D.**, Singh, H. Adsorptive removal of Arsenic(III) from water using marble dust loaded with iron and ammonium ions. International Conference on Renewable and Alternate Energy,

Assam Science and Technology University, Guwahati, India from December 4-6, 2018.

- **Gupta, A.**D., Pouranick, P. Green Technology – Emerging Green Technologies in Energy Sector. International Conference on Energy, Water and Environmental Science & Technology (ICEWEST – 2015), Presidency College, Chennai from February 4-6, 2015.

- **Gupta, A.D.**, Pouranick, P. Green technology – A boon to mankind. SCHEMCON – 2014 at Haldia Institute of Technology, West Bengal, India from September 19-20, 2014.

Patent Filed

Aditya Ganesh, **Arijit Dutta Gupta**, Harinder Singh, Mandavi Goswami, A Novel Method for preparing Octenyl Succinic Anhydride (OSA) modified Starch. (Application No. - 202011038429)

Awards & Achievements

- Reviewer Recognition Award by Journal of Environmental Chemical Engineering, Elsevier.

- Best Oral Presentation award in International Conference on Energy and Environmental technologies for Sustainable Development, MNNIT Allahabad, Prayagraj, India from February 14-16, 2020.

- First prize in CHEMFLUX'14 & '16 (National level Technical Symposium) in SRM University, Chennai with a cash prize of ₹ 2500.

Workshops & Short term courses attended

- One week short term course on "Opportunities and Challenges for Employment and Entrepreneurship in Chemical and Bio-Process Industries (OCEE – 2021)" at Motilal Nehru National Institute of Technology, Allahabad from March 16-20, 2021.
- One week short term course on "New Trends in Waste water Treatment and its Reuse" at Motilal Nehru National Institute of Technology, Allahabad from March 12-16, 2019.
- Two days "4th workshop on Analytical Instruments for Chemical and Environmental Engineers" at Birla Institute of Technology and Science, Pilani from March 25-26, 2019.
- One week short term course on "Advances in Composite Materials – II" at Motilal Nehru National Institute of Technology, Allahabad from December 17-21, 2019.
- One day "Author Workshop" at Motilal Nehru National Institute of Technology, Allahabad on February, 27, 2019.
- One week course on "Renewable and Sustainable Technologies for Fuels, Chemicals and Power Production" at Motilal Nehru National Institute of Technology, Allahabad from September 24-28, 2018.
- One day workshop on "ASPEN" at SRM University, Chennai from March 11-12, 2014.

- One day Seminar on "Safety in Chemical Industries" at Central Leather Research Institute, Chennai on August 22, 2013.

Faculty Development Programs (FDPs) attended

- One week online FDP on "An Essence of Multiphase Flow: Challenges and Futuristic Technology" at Sardar Vallabhbhai National Institute of Technology, Surat from December 20 – 24, 2021.

Industrial Experience

Experience in Vedanta Aluminium Ltd. at Jharsuguda, Orissa, India as Graduate Engineer Trainee (GET) from September 21, 2016 to April 1, 2017.

Reviewer of Peer Reviewed Journals

1. Water Science & Technology, IWA Publishing.
2. Journal of Environmental Engineering, ASCE Library.
3. Journal of Environmental Chemical Engineering, Elsevier.
4. SN Applied Sciences, Springer.
5. Frontiers in Energy research

Personal Profile

Address	- M II A 80, ADA Colony, Naini, Prayagraj, U.P. – 211008.
Date of Birth	- September 14, 1994
Father's Name	- Mr. Amit Dutta Gupta
Mother's Name	- Lt. Rupali Dutta Gupta
Mother Tongue	- Bengali
Linguistic Skills	- Bengali, Hindi, English, German (Elementary).

I hereby declare that the above information is true to the best of my knowledge

Place: - Prayagraj, India

Arijit Dutta Gupta