Curriculum Vitae

Dr Atul Kumar, PhD

Scientist B, ICWMR, TERI School of Advanced Studies, Vasant Kunj, New Delhi-70 Email: atul.kumar2@terisas.ac.in; atul0096@gmail.com Google Scholar: <u>https://scholar.google.co.in/citations?user=taweTDQAAAAJ&hl=en&oi=sra</u> LinkedIn: <u>https://www.linkedin.com/in/atul-kumar-204763224/</u>

CAREER SUMMARY:

Dr. Atul Kumar is a Scientist B in ICWMR at TERI School of Advanced Studies, New Delhi. He possesses interdisciplinary research experience in the field of waste management, life cycle assessment, carbon footprint, water footprint, Agri-footprint, socioeconomic impact, sustainability assessment, etc.

EDUCATIONAL QUALIFICATIONS:

- 1. IIT (ISM) Dhanbad; PhD in Environmental Science and Engineering. 2022
- 2. IIT (ISM) Dhanbad; MTech in Environmental Science and Engineering. 2015
- 3. GGSIPU Delhi; BTech in Mechanical Engineering. 2012
- 4. AMIE Kolkata; BE in Civil Engineering. 2021
- 5. NLU Delhi; PG Diploma in Environmental Law and Policy. 2022

PROFESSIONAL EXPERIENCE:

Position	Dept./Organization	Role	Period	
Scientist B	ICWMR, TERI School of	Research,	July 2023 till now	
	Advanced Studies,	consultancy &		
	Delhi	teaching		
Postdoctoral	Rothamsted Research,	Research	July 2022 to June	
Research Scientist	United Kingdom		2023	
Research Associate	Dept. of ESE, IIT (ISM)	Research & teaching	Feb 2022 to July	
	Dhanbad		2022	
Graduate Engineer	Coca Cola, Ghaziabad	Production supply	June 2012 to Jan	
Trainee		chain	2013	

PROJECT:

S.	Title of the Project	Nature of	Funding	Amount	Duration	Status	Role
No.		the Project	Agency	(INR)			
1	Monitoring of public-	Consultancy	Municipal	81,18,000	18	Ongoing	PI
	private partnership		Corporation		Months		
	project for collection,		of Delhi				
	transportation,		(MCD)				
	treatment, and disposal of						
	municipal solid waste in						
	five zones of Municipal						

	Corporation of Delhi (MCD).						
2	Vetting of DPR Report for Preparation of DPR and Transaction Advisory Services for Assessment, Remediation Measures and Management of Legacy Waste at Kurbathang in Kargil, Ladakh	Consultancy	Urban Local Bodies, Ladakh	1,72,280	1 Month	Completed	PI
3	Estimation of impact adjusted virtual water of a production unit for water credits: a beverage industry case study.	Consultancy	Bisleri Int'l Pvt Ltd.	14,00,000	6 Months	Completed	Team Member

PUBLICATIONS: Published in Int. Journals (SCI Indexed) (Google Scholar Citations: 1840 till Oct 2024)

- Jebari, A., Pereyra-Goday, F., Kumar, A., Collins, A. L., Rivero, M. J., and McAuliffe, G. A. (2024). Feasibility of mitigation measures for agricultural greenhouse gas emissions in the UK. A systematic review. *Agronomy for Sustainable Development*, 44(1), 2. (Impact Factor: 6.4)
- 2. Aryan, Y., **Kumar, A.**, and Samadder, S.R. **(2023)**. "Environmental and economic assessment of waste collection and transportation using LCA: A case study". *Environmental Research*, 231, 116108. **(Impact Factor: 7.7)**
- 3. Kumar, A., and Samadder, S.R. (2023). "Development of lower heating value prediction models and estimation of energy recovery potential of municipal solid waste and RDF incineration". *Energy*, 274, 127273. (Impact Factor: 9)
- Kumar, A., Bharadwaj, S., and Samadder, S.R. (2023). "Evaluation of methane generation rate and energy recovery potential of municipal solid waste using anaerobic digestion and landfilling: a case study of Dhanbad, India". Waste Management & Research, 41 (2), 407 – 417. (Impact Factor: 3.7)
- McAuliffe, G.A., Takahashi, T., Lee, M.R.F., Jebari, A., Cardenas, L., Kumar, A., Pereyra-Goday, F., Scalabrino, H. and Collins, A.L. (2023). "A commentary on key methodological developments related to nutritional life cycle assessment (nLCA) generated throughout a 6-year strategic scientific programme". *Food and Energy Security*, p.e480. (Impact Factor: 4)

- 6. Kumar, A., and Samadder, S.R. (2022). "Assessment of energy recovery potential and analysis of environmental impacts of waste to energy options using life cycle assessment". *Journal of Cleaner Production*, 365, 132854. (Impact Factor: 9.7)
- 7. **Kumar, A.**, and Samadder, S.R. **(2020)**. "Performance evaluation of anaerobic digestion technology for energy recovery from organic fraction of municipal solid waste: A review". *Energy*, 197, 117253. **(Impact Factor: 9)**.
- 8. Kumar, A., Samadder, S.R., Kumar, N., and Singh, C. (2018). "Estimation of the generation rate of different types of plastic wastes and possible revenue recovery from informal recycling". *Waste Management*, 79, 781-790. (Impact Factor: 7.1)
- 9. Khan, D., Kumar, A., and Samadder, S.R. (2018). "Public Acceptance Study of Environmentally Suitable Landfill Sites: A Case Study". *Current Science*, 115 (11), 2122-2129. (Impact Factor: 1.1)
- Kumar, A. and Samadder, S.R. (2017). "An empirical model for prediction of household solid waste generation rate- A case study of Dhanbad, India". Waste Management, 68, 3-15. (Impact Factor: 7.1)
- 11. Kumar, A., and Samadder, S.R. (2017). "A review on technological options of waste to energy for effective management of municipal solid waste". *Waste Management*, 69, 407-422. (Impact Factor: 7.1)
- Khan, D., Kumar, A. and Samadder, S.R. (2016). "Impact of socioeconomic status on municipal solid waste generation rate". *Waste Management*, 49, 15-25. (Impact Factor: 7.1)