

## Brief CV



### Personal and Educational Details

Employee Name	@IITD Since	Department & Designation
ARUN KUMAR	2010	Civil Engineering , Asstt. Professor

Degree	Specialization	Institute/University	Year
B.Tech.	Civil Engineering	IIT Kanpur India	2001
M.Tech.	Water treatment, Environmental Engineering	IIT Kanpur India	2004
Ph.D.	Water treatment, emerging contaminant, health risk assessment, environmental decision-making	Drexel University Philadelphia USA	2008

### Research Areas and Highlights

Human Health Risk Assessment, Nanoparticles, Water Treatment, Decision-making.

### Experience

1. Visiting Research Associate; Civil and Environmental Engineering, Michigan State University, East Lansing (USA); April 2009-June 2010; Adviser: Dr. Irene Xagorarakis
2. Visiting Research Faculty; Civil, Architectural and Environmental Engineering, Drexel University, Philadelphia (USA); January 2009-March 2009; Advisers: Dr. Patrick Gurian and Dr. Mira S. Olson
3. Project Associate; Environmental Engineering and Management Programme, IIT Kanpur (INDIA); Aug 2001-Aug 2002; Adviser: Dr. Vinod Tare

Teaching Experience	Industrial Experience
10 Years, 0 Months	0 Years, 0 Months

### Significant Publications

- Kumar, A. , Baranidharan, S., Das, P., Singh, A. P., and Ananthitha, A. "Environmental Impacts of Nanoparticles: Issues for future directions"(in press). , Books Chapter , International
- (Poster) Sundaram, B. and A. Kumar. 2nd Water Research Conf. Singapore Feb 2013. , Conference , International
- (Poster) Singh, D. and A. Kumar. 2nd Water Research Conf. Singapore Feb 2013. , Conference , International
- Teng, J., A. Kumar , H. Zhang, M.S. Olson, and P.L. Gurian. Determination of Critical Rainfall Events for Quantitative Microbial Risk Assessment of Land-applied Soil Amendments". J. Hydrolog. Engg., doi:10.1061/(ASCE)HE.1943-5584.0000444 (2012). , Journal , International
- Kumar, A. "Making a Case for Human Health Risk-based Ranking Nanoparticles in Water for Monitoring Purposes". Environ. Sci. Technol. Viewpoint. DOI: 10.1021/es301507j (2012)[Citation=2] , Journal , International
- Kumar, P., Kumar, A. , and Lead, J.R. "Nanoparticles in Indian Environment: Knowns, unknowns and awareness". Environ. Sci. Technol. Viewpoint. (2012) , Journal , International

- Sundaram, B. and A. Kumar. "Engineered Nanomaterials-based Pollution in India". Curr. Sci. 110(10) (2012) . , Journal , International
- Teng, J., A. Kumar , P.L. Gurian, and M.S. Olson. "A Spreadsheet-Based Site Specific Risk Assessment Tool for Land-Applied Biosolids" The Open Env. Engg. J. 6(7-13). (2013). , Journal , International
- Galada, H.C., Rostad, N., Gurian, P. L., Olson, M. S., Teng, J., A. Kumar ,Wardell, M., Eggers, S., Casman, E., and Richter, E. "Development and Assessment of Failure Scenarios for Biosolids Land Application Risk Assessment". Wat. Env. Res. 85(2):141-150.2013. , Journal , International
- Khanna, I. and A. Kumar Learned Discussion on "Including nanoparticles mixtures in human health risk assessment". IEAM (accepted). , Journal , International
- Singh, D. and Kumar, A. Identifying Knowledge Gaps in Assessing Health Risks due to Exposures of Nanoparticles from Contaminated Edible Plants. Springer proceeding volume \*Management of Water, Energy and Bio-resources in the Era of Climate Change: Emerging Issues and Challenges . , Journal , International
- Chawla, J. and Kumar, A. Towards reducing toxicity of carbon nanotubes and fullerenes using surface modification strategy. Springer proceeding volume \*Management of Water, Energy and Bio-resources in the Era of Climate Change: Emerging Issues and Challenges . , Journal , International
- (Oral)Ritika, A. Kumar, Mittal,A.K., and Ganguli, A.K. National Seminar Clean Water and Health April6-7th,2013, New Delhi. , Conference , National
- Sundaram, B. and A. Kumar. "Nanoparticles in Indian Water: An Emerging Contaminant Needing Regulatory Considerations ". NEBIO. Special Online Issue (2013) , Conference , National
- (Oral)Sejwal, K. and A. Kumar."Understanding the Role of Nanotechnology in Water Treatment and its Implication" National Conference- Relevance of Nanotechnology in Biology, New Delhi, Mar 2013. , Conference , National
- Ravindran, S., Pariyarath, R.V., A. Kumar, and Nema, A.K. "Health Risk Estimation of Pesticides Exposure from Ganges Water". NEBIO. Special Online Issue (2013) . , Journal , National
- Sundaram, B. and A. Kumar. "Engineered Nanomaterials-based Pollution in India". Curr. Sci. 110(10) (2012) . , Journal , National
- Galada, H.C., Rostad, N., Gurian, P. L., Olson, M. S., Teng, J., A. Kumar ,Wardell, M., Eggers, S., Casman, E., and Richter, E. "Development and Assessment of Failure Scenarios for Biosolids Land Application Risk Assessment". Wat. Env. Res. 85(2):141-150.2013. , Journal , National

## Academic and Research Contributions

Research Guidance (Total Nos. & Last 5 Years Data)

Category	Guidance Status	Total Guidance	In last 5 years
Ph.D.	In Progress	3	3
M.Tech.	Completed	10	10
B.Tech.	Completed	5	5

Sponsored Research, Consultancy & Technology Development

Category	Total Projects	Total Value
Sponsored Research Projects	5	13150000

Type of Publication	Level of Publication	Total Publication	In last 5 years
Journal	International	19	16
Journal	National	4	4
Books Chapter	International	1	1

## Patent & IPR

Course Name	L-T-P	Course Belongs To
MAJOR PROJECT PART-II	0-0-24	PG
WATER AND WASTE-WATER TREATMENT PROCESSES	3-0-0	PG
ENVIRONMENTAL ENGINEERING	3-0-4	UG

ENVIRONMENTAL RISK ASSESSMENT	3-0-0	PG
ENVIRONMENTAL SCIENCE	2-0-0	UG

### Awards & Distinctions

- Graduate Student Research Award from Department of Civil, Architectural, and Environmental Engineering, College of Engineering, Drexel University, U.S.A. (2007).
- Third Prize in Pennsylvania Section of the American Water Works Association Conference's Student-Young Professional Poster Presentation, Kumar, A., P.L. Gurian, R. H. Bucciarelli-Tieger. "Development
- George Hill, Jr. Fellowship from Department of Civil, Architectural, and Environmental Engineering, College of Engineering, Drexel University, U.S.A. (2005).

### Society Membership, Certification & Training & Any Other Details

- Society of Risk Analysis
- American Water Works Association