

## CV of Dr. S. R. Samadder

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### CONTACT ADDRESS:

**Dr. Sukha Ranjan Samadder**

**Associate Professor**

**Department of Environmental Science & Engineering**

**Indian Institute of Technology (Indian School of Mines), Dhanbad**

**Pin-826004**

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**Nationality:** Indian

### EDUCATIONAL QUALIFICATIONS:

Degree / Examination	University / Institution	From and To	Specialization
Postdoctoral Studies ( <b>Marie Curie Fellow</b> )	University College Dublin, Ireland	Jan, 2008 to Jan, 2010	Environmental Spatial Analysis
Ph. D	IIT Kharagpur	July, 2001 to June, 2005	Environmental Engineering
M. Tech.	IIT Roorkee	July, 1999 to Feb, 2001	Environmental Engineering
B. Tech	NIT Surat	July, 1995 to June, 1999	Civil Engineering

### EXPERIENCE

University / Organization	Designation	From	To	Nature of Experience
IIT (ISM), Dhanbad	Associate Professor	26 <sup>th</sup> July, 2017	Till Date	Teaching & Research
IIT (ISM), Dhanbad	Assistant Professor	6 <sup>th</sup> January, 2012	25 <sup>th</sup> July, 2017	Teaching & Research
NIT Bhopal, MP	Assistant Professor	19 <sup>th</sup> January, 2010	3 <sup>rd</sup> January, 2012	Teaching & Research
University College Dublin, Ireland	Marie Curie Experienced Postdoctoral Fellow	14 <sup>th</sup> January, 2008	11 <sup>th</sup> January, 2010	Research, Mentoring UG & PG Students, Teaching
NIT Bhopal, MP	Assistant Professor	1 <sup>st</sup> January, 2006	30 <sup>th</sup> November, 2007	Teaching & Research
NIT Bhopal, MP	Lecturer	10 <sup>th</sup> August, 2005	31 <sup>st</sup> December, 2005	Teaching & Research

## Teaching Experience:

### Subjects Taught:

- Water Supply and Treatment (M. Tech level)
- Life Cycle Assessment (M. Tech level)
- Remote Sensing and GIS (M. Tech level)
- EIA (B. Tech level)
- Environmental Hydraulics (B. Tech level)
- Principle and Design of Water Supply System (B. Tech level)

### Details of Ph. D students Guided/Continuing

S. No	Name of Student	Year	Title of the Dissertation
1.	MS. DEBISHREE KHAN	Awarded (2015)	Evaluating the Scenario and Options of Solid Waste Management Using Geographical Information Systems (GIS): A Case Study of Dhanbad City, in Jharkhand, India.
2.	MR. ASHVANI KUMAR	Awarded (2017)	Analysis of Contaminant Leaching from Coal Combustion Residues into Surface Water, Soil, and Groundwater.
3.	MS. SNEH LATA	Awarded (2018)	Assessment of Iron Impregnated Banana Pith Biochar Adsorbent for As (V) Removal from Drinking Water.
4.	MS POOJA YADAV	Defended (April 2018)	Evaluation of Environmental Impacts of Different Municipal Solid Waste Management Scenarios Using Life Cycle Assessment Approach.
5.	MR. SHIVESH KISHORE KARAN	2014-Ongoing	Study of the Transport and Fate of Contaminants due to Coal Mining for Better Water Management Practices.
6.	MR. ROSHAN PRABHAKAR	2015-Ongoing	Assessment of the Field Applicability of Nano-Adsorbents for Arsenic Removal from Groundwater.
7.	MR. ATUL KUMAR	2015-Ongoing	Evaluating the Energy Recovery Potential for Better Management of Municipal Solid Waste.
8.	MR. VIVEK SINGH	2017-Ongoing	Assessment of Water Quality Parameters and Identification of Sources of Pollutants of A River Watershed Using Remote Sensing & GIS.
9.	MR. PURNENDU SARDAR	2017-Ongoing	Assessment of the Impact of Climate Change on Mangrove Ecosystem in Sundarban Area Using Remote Sensing and GIS.

**Details of M. Tech students guided/Continuing**

S. No	Name of Student	Year of Passing	Title of the Dissertation
1.	MR. NARESH THAKRE	2006	Ambient Air Pollution Status and Health Risk of Bhopal City.
2.	MR. RAVI KANT SHARMA	2007	Analysis of Solid Wastes and Design of Sanitary Landfill for Bhopal City.
3.	MR. RAJEEV SINGH PARIHAR	2007	Route Analysis for Solid Waste Collection in Bhopal City Using GIS.
4.	MR. RAM LAKHAN RAJPUT	2007	Performance Evaluation of UASB Reactor Installed at Bhopal.
5.	MR. ABHIJEET DIJGAVNE	2012	Landfill site selection using GIS.
6.	MR. ANIL AMRAWANSHI	2012	Effect of Municipal Solid Waste (MSW) Dumping on Physical and Chemical Properties of Soil and Water.
7.	MR. PRAMOD KUMAR SINGH	2013	Study on Locally Available Adsorbents for Removal of Arsenic from Groundwater.
8.	MR. NEERAJ KUMAR SAURABH	2013	Status of Groundwater Arsenic Pollution and its Impact in Sahibganj District, Jharkhand.
9.	MR. SHIVESH KISHORE KARAN	2014	Impact of Coal Mining on Surface Water Using Remote Sensing and GIS: A Case Study.
10.	MR. RAVI KUMAR	2014	Removal of Arsenic from Groundwater Using Rice Husk.
11.	MS. RASHDA KHANAM	2014	Spatio-temporal Change Analysis of Vegetation Cover in Jharia Coalfield.
12.	MR. ADARSH KUMAR	2015	Reduction of Groundwater Contamination Using Alternative Overburden Dump Management.
13.	MS. SHRUTI	2015	Assessment of Accuracy of the Landuse Classification in Coal Mining Areas Using Remote Sensing and GIS.
14.	MR. ATUL KUMAR	2015	Impact of Socioeconomic Parameters on Generation and Characteristics of Municipal Solid Waste.
15.	MR. GAURAV VILAS KAPSE	2016	Performance of <i>Moringa Oleifera</i> Seed as a Coagulant for Removal of Fine Particles from Coal Washery Effluent.
17.	MR. GAURAV MOHANTY	2016	Impact of land use pattern on soil erosion into Panchet Reservoir, Jharkhand, India.
18.	MR. VIVEK SINGH	2016	Assessment of the Groundwater Pollution Potential due to Coal Mining in Jharia Coal Field.
19.	MR. RAJESH BARANWAL	2017	Assessment of Physico-Chemical Properties of OB Soil for Reclamation and Monitoring

			Phenological Changes through Remote Sensing.
20.	MR. NITIN KUMAR	2017	Identification of Recycling and Recovery Routes of Plastic Waste for its Better Management: A case Study of Dhanbad City.
21.	MS. JYOTSANA	2017	Synthesis of Iron Nanoparticles from Plant Wastes for Possible Use in Environmental Remediation.
22.	MS. SOMAPARNA GHOSH	2018	Performance of Metal Oxide Nanoparticles for Arsenic Removal from Groundwater.
23.	MR. CHANDRAKANT SINGH	2018	Estimation of Biomass Using Remote Sensing and GIS for Tropical Forest.
24.	MR. YASH ARYAN	2018	A Life Cycle Assessment Approach for Better Management of Plastic Wastes: A Case Study.

### Details of Short Term Courses Conducted

S. No	Period	Organization	Nature of Work	Status	Amount (Lakh)	Role	No of Co-CI if any
1.	25-27, May, 2016	Different Govt. and PSU Organizations	Short Term Course on "Water Quality and Management"	Completed	2.059	CI	01
2.	27-29, July, 2016	Different Govt. and PSU Organizations	Short Term Course on Monitoring of ecological restoration success and carbon sequestration using remote sensing and GIS	Completed	2.35	CI	01
3.	21-23, September, 2016	Different Govt. and PSU Organizations	Short Term Course on "Water Quality and Management for Thermal Power Plants"	Completed	1.902	CI	NIL

### Details of Invited Lectures

S. No	Name of the Course	Date	Lectures	Place
1.	3-day training program on Water and Waste water Treatment and Management for the Executives of Drinking Water & sanitation Department (DWSD), Ranchi	8.11.2012	Operation and Maintenance of Wastewater Treatment Plants	IIT (ISM) Dhanbad
2.	A Two-Week EDP Course on "GEOTECHNICAL ENGINEERING AND SOIL MECHANICS"	7.6.2013	1. Types of Foundation 2. Selection of	IIT (ISM) Dhanbad

			Foundation Types	
3.	Three Days Programme on “Environmental Impact Assessment & Auditing”	27.06.2013 to 29.06.2013	EIA Methods for Coal Mining	Sambalpur, Orissa
4.	Two-Weeks Training Programme on Mining Environment & Sustainable Development (16.08.2014 TO 01.09.2014)	23.08.2014	Solid and Hazardous Waste Management Issues in Mining Industries	IIT (ISM) Dhanbad
5.	3-Day Residential Training Program on “Assessment of Water Quality and Low Cost Treatment Methods for Rural Water Supply”	15.10.2014 and 16.10.2014	1. Low cost treatment method for removal of arsenic and fluoride from water 2. Laboratory Visit and Hands-on Experience for Measurement of Water Quality Parameters	IIT (ISM) Dhanbad
6.	Two-Week Training Programme on Environmental Impact Assessment of Mining Projects for Officials of Ministry of Mines, Government of Afghanistan (6 <sup>th</sup> December 2014- 22 <sup>nd</sup> December 2014)	09.12.2014	Model Terms of Reference For Mining Projects	IIT (ISM) Dhanbad

#### R & D Project: List of R & D projects

S.No.	Name of the Project	Funding agency	Amount (Lakh)	Status	Role
1.	Investigation and analysis of the status of arsenic pollution in groundwater of Sahibganj district, Jharkhand	IIT (ISM) Dhanbad	0.985	completed	PI
2.	Arsenic Removal from Groundwater Using Nano-adsorbents	DST	5.50	Completed	PI

#### Major Consultancy Projects

S. No	Period	Organization	Nature of Work	Status
1	December 2013 to July 2017	NMDC, Kirandul, CG	Setting up suitable Municipal Solid Waste Management Technique for BIOM, Kirandul Complex, Dist. South Bastar Dantewada (C. G).	Ongoing
2	June 2011	Municipal Corporation,	Geo-environmental Investigation	Completed

	to December	Bhopal, MP	of Solid Waste Dumping Site, Bhopal, MP	
3	June 2011 to December	Municipal Corporation, Jabalpur, MP	Geo-environmental Investigation of Solid Waste Dumping Site, Jabalpur, MP	Completed

**LANGUAGE PROFICIENCY:** Bengali, English, Hindi

**Membership of Professional Bodies:**

1. Life Member of Mining, Geological and Metallurgical Institute of India (MGMI).
2. Life Member of Indian Society of Remote Sensing

**PUBLICATIONS:**

**International Referred Journal SCI/SCIE (Cumulative Impact Factor: 82.13)**

1. Yadav, P., & **Samadder, S. R. (2018)**. A critical review of the life cycle assessment studies on solid waste management in Asian countries. *Journal of Cleaner Production*, 185, 492-515 (**Impact Factor: 5.715**).
2. Prabhakar, R., & **Samadder, S. R. (2018)**. Low cost and easy synthesis of aluminium oxide nanoparticles for arsenite removal from groundwater: A complete batch study. *Journal of Molecular Liquids*, 205, 192-201 (**Impact Factor: 3.648**).
3. Karan, S. K., & **Samadder, S. R. (2018)**. Improving accuracy of long-term land-use change in coal mining areas using wavelets and Support Vector Machines. *International Journal of Remote Sensing*, 39(1), 84-100 (**Impact Factor: 1.724**).
4. Yadav, P. and **Samadder, S. R. (2018)**. Environmental impact assessment of municipal solid waste management options using life cycle assessment: a case study. *Environmental Science and Pollution Research*, 25(1), pp. 838-854 (**Impact Factor: 2.741**).
5. Prabhakar, R., **Samadder, S. R.** & Jyotsana (2017). Aquatic and terrestrial weed mediated synthesis of iron nanoparticles for possible application in wastewater remediation. *Journal of Cleaner Production*, 168, 1201–1210 (**Impact Factor: 5.715**).
6. Karan, S. K., & **Samadder, S. R. (2017)**. Evaluation of geotechnical properties of overburden dump for better reclamation success in mining areas. *Environmental Earth Sciences*, 76(22), 770 (**Impact Factor: 1.569**).

7. Kumar, A., & **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: 4.030**).
8. Kumar, A., & **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: 4.030**).
9. Karan, S. K., and **Samadder, S. R. (2017)**. “Dual-Tree Complex Wavelet Transform based image enhancement for accurate long term change assessment in coal mining areas”. Geocarto International, <http://dx.doi.org/10.1080/10106049.2017.1333534> (**Impact Factor: 1.646**).
10. Yadav, P. and **Samadder, S. R. (2017)**. “Assessment of Applicability Index for Better Management of Municipal Solid Waste: A Case Study of Dhanbad, India”. *Environmental Technology*, pp. 1-16 (**Impact Factor: 1.751**).
11. Kapse, G., Patolia, P., & **Samadder, S. R. (2017)**. “Characterisation of coal washery effluent and optimization of coagulation behavior of Moringa oleifera seed as a coagulant”. *Environmental Monitoring and Assessment*, 189 (3), 133 (**Impact Factor: 1.687**).
12. Yadav, P. and **Samadder, S. R. (2017)**. “A Global Prospective of Income Distribution and Its Effect on Life Cycle Assessment of Municipal Solid Waste Management: A Review”. *Environmental Science and Pollution Research*, 24(10), pp. 9123-9141 (**Impact Factor: 2.741**).
13. **Samadder, S. R.**, Prabhakar, R., Khan, D., Kishan, D., & Chauhan, M. S. (2016). Analysis of the contaminants released from municipal solid waste landfill site: A case study. *Science of the Total Environment*. 580, 593 – 601. <http://dx.doi.org/10.1016/j.scitotenv.2016.12.003> (**Impact Factor: 4.900**).
14. Karan, S. K., **Samadder, S. R.**, Maiti, S. K. (2016). “Assessment of the Capability of Remote Sensing and GIS Techniques for Monitoring Reclamation Success in Coal Mine Degraded Lands”. *Journal of Environmental Management*, 182, pp. 272 – 283 (**Impact Factor: 4.010**).
15. Karan, S. K., and **Samadder, S. R. (2016)**. “Accuracy of Land use Change Detection using Support Vector Machine and Maximum Likelihood Techniques for Open Cast Coal Mining Areas”. *Environmental Monitoring and Assessment*, 188:486 (**Impact Factor: 1.687**).
16. Kumar, A., **Samadder, S. R.** and Elumalai, S.P., (2016). “Recovery of trace and heavy metals from coal combustion residues for reuse and safe disposal: A Review.” *JOM*, DOI: 10.1007/s11837-016-1981-3 (**Impact Factor: 1.860**).

17. Karan, S. K., and **Samadder, S. R. (2016)**. “Reduction of spatial distribution of risk factors for transportation of contaminants released by coal mining activities.” *Journal of environmental management*, 180, 280-290 (**Impact Factor: 4.010**).
18. Khan, D., and **Samadder, S. R. (2016)**. “Allocation of solid waste collection bins and route optimisation using geographical information system: A case study of Dhanbad City, India.” *Waste Management & Research*, doi: 10.1177/0734242X16649679 (**Impact Factor: 1.803**).
19. 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: 4.030**).
20. Lata, S., and **Samadder, S. R. (2016)**. “Removal of arsenic from water using nano adsorbents and challenges: a review.” *Journal of environmental management*, 166, 387-406 (**Impact Factor: 4.010**).
21. Khan, D., and **Samadder, S. R. (2015)**. “A simplified multi-criteria evaluation model for landfill site ranking and selection based on AHP and GIS.” *Journal of Environmental Engineering and Landscape Management*, 23(4), 267-278 (**Impact Factor: 0.635**).
22. Kumar, A., and **Samadder, S. R. (2015)**. “Analysis of the leaching behavior of elements from coal combustion residues for better management.” *Environmental monitoring and assessment*, 187(6), 1-12 (**Impact Factor: 1.687**).
23. Lata, S., Singh, P. K., and **Samadder, S. R. (2015)**. “Regeneration of adsorbents and recovery of heavy metals: a review.” *International Journal of Environmental Science and Technology*, 12(4), 1461-1478 (**Impact Factor: 1.915**).
24. **Samadder, S. R.**, Nagesh Kumar, D., and Holden, N. M. (2014). “An Empirical Model to Predict Arsenic Pollution Affected Life Expectancy.” *Population and Environment*, 36(2), 219-233 (**Impact Factor: 1.766**).
25. Debishree Khan and **S. R. Samadder (2014)**. “Application of GIS in Landfill Siting for Municipal Solid Waste.” *International Journal of Environmental Research and Development*. ISSN 2249-3131, 4(1), 37-40.
26. Sneha Lata and **S. R. Samadder (2014)**. “Removal of Heavy Metals Using Rice Husk: A Review”. *International Journal of Environmental Research and Development*. ISSN 2249-3131, 4(2), 165-170.
27. Debishree Khan and **S. R. Samadder (2014)**. “Municipal solid waste management using Geographical Information System aided methods: A mini



- review.” *Waste Management and Research*, 32(11), 1049-1062 (**Impact Factor: 1.803**).
28. Pooja Yadav and **S. R. Samadder (2014)**. “Life cycle assessment of solid waste management options: A Review”. *Recent Research in Science and Technology*, 6(1), 113-116. ISSN: 2076-5061.
  29. Tang, J., Macdonald, S., Peng, X., **Samadder, S. R.**, Murphy, T. M., and Holden, N. M (2011). “Application of SWAT model to better understand *Cryptosporidium* oocysts transport in small ungauged agricultural catchments”. *Water Research*, Elsevier, Vol. 45, pp. 3665-3680 (**Impact Factor: 6.942**).
  30. **Samadder, S. R (2011)**. “Impact of Arsenic Pollution on Spatial Distribution of Human Development Index (HDI)”. *KSCE Journal of Civil Engineering*, Vol. 15, No. 6, pp. 975-982 (**Impact Factor: 0.812**).
  31. **Samadder, S. R.**, Ziegler, P., Murphy, T. M., and Holden, N. M (2010). “Spatial Distribution of Risk Factors for *Cryptosporidium* spp. Transport in an Irish Catchment”. *International Journal of Water and Environment Research* (Published by Water and Environment Federation), Vol. 82, No. 8, pp. 750-758 (**Impact Factor: 0.910**).
  32. **Samadder, S. R (2010)**. “Impact of Arsenic Pollution in Drinking Water on Life Expectancy: A GIS Approach”. *KSCE Journal of Civil Engineering* (Springer Publication), Vol. 14, No. 5, pp. 681-691 (**Impact Factor: 0.812**).
  33. **Samadder, S. R.**, and Subbarao, C. (2007) “A GIS Approach of Delineation and Risk Assessment of Areas Affected by Arsenic Pollution in Drinking Water.” *J. Environmental Engineering, ASCE*, Vol. 133, No. 7, pp. 742-749 (**Impact Factor: 1.541**).

#### **International Conference**

34. Ghosh, S., Prabhakar, R., and **Samadder, S. R.**, (2018). “Assessment of aluminium oxide nanoparticles for arsenic removal” February 12 – 14, 2018. 4<sup>th</sup> International Conference on Environment and Ecology (ICEE 2018). Gauhati University, Guwahati, Assam, India.
35. Aryan, Y., and **Samadder, S. R.**, (2018). “Assessment of environmental impacts using LCA for recycling of polyethylene and polyethylene terephthalate” February 12-14, 2018. 4<sup>th</sup> International Conference on Environment and Ecology (ICEE 2018). Gauhati University, Guwahati, Assam, India.

36. Prabhakar, R., **Samadder, S.R.**, and Jyotsana (2018). “Efficiency of *Eichhornia crassipes* synthesized iron nanoparticles for nitrate and phosphate removal” February 12-14, 2018. 4<sup>th</sup> International Conference on Environment and Ecology (ICEE 2018). Gauhati University, Guwahati, Assam, India.
37. Prabhakar, R., **Samadder, S.R.**, and Jyotsana (2018). “Efficiency of *Lantana camara* synthesized iron nanoparticles for nitrate and phosphate removal” January 11-13, 2018. International Conference on Mother Earth: Environmental Crisis & Sustainable Strategies. Department of Environmental Science, University of Burdwan.
38. Prabhakar, R., **Samadder, S.R.**, and Jyotsana (2017). “Nitrate and phosphate removal efficiency of *Azadirachta indica* Synthesized Iron Nanoparticles” June 28-30, 2017. National Conference on Sustainable Advanced Technologies for Environment Management (SATEM-2017). Indian Institute of Engineering Science and Technology, Shibpur, Howrah.
39. Prabhakar, R., **Samadder, S.R.**, and Jyotsana (2016). “Nitrate and phosphate removal efficiency of phytogenic iron nanoparticles from water and wastewater” December 17-18, 2016. National Seminar on Environment and Development in Eastern India (Status, Issues and Challenges). Ranchi University, Ranchi.
40. S. Lata and **S. R. Samadder (2014)** “A Comparative Study of Arsenic Removal Techniques for Rural Areas.” **Dec. 18-20, 2014**, 19<sup>th</sup> Conference on Hydraulics, Water Resources & Environmental Engineering.), Maulana Azad National Institute of Technology, Bhopal, India.
41. D. Khan and **S. R. Samadder (2014)**. “How Geospatial Technology Helps in Landfill Site Selection.” **December 16-18, 2014**. 4<sup>th</sup> International Conference, World Science Congress. Gandhi Bhaban of Jadavpur University, Kolkata.
42. Sneha Lata and **S. R. Samadder (2014)** “Removal of Heavy Metals from Drinking Water Using Coconut Husk”. **September 15-16, 2014**, Vol. 5 (4) ISSN: 2157-7587, Proceedings of 3<sup>rd</sup> International Conference on Hydrology and Meteorology, HICC Hyderabad, India.
43. Ashvani Kumar and **S. R. Samadder (2014)**. “Groundwater Contamination by Trace Metals from Coal-Based Thermal Power Plants”. **January 23-24, 2014**. International Conference on Emerging Challenges and Issues in Environmental Protection. Raipur Institute of Technology Raipur, Chhattisgarh, India.
44. Yadav, P., **Samadder, S. R. (2014)**. “Life Cycle Assessment of Solid Waste Management Options: A Review”. **January 23-24, 2014**. International

Conference on Emerging Challenges and Issues in Environmental Protection.  
Raipur Institute of Technology Raipur, Chhattisgarh, India.

45. Sneha Lata and **S. R. Samadder (2014)**. "Removal of Heavy Metals Using Rice Husk: A Review". **January 4-5, 2014**. 2<sup>nd</sup> International Conference of Krishi Sanskriti on Sustainable Innovative techniques in Civil and Environmental Engineering (SITCEE-2014), Jawaharlal Nehru University, New Delhi, India.
46. A. Kumar and **S. R. Samadder (2013)**. "Trace and Heavy Metals in Fly Ash and Bottom Ash: A Review". **November 11-13, 2013**. International Conference: Harmony 2013 of National Environmentalist Association, Ranchi, Jharkhand, India on Harmony with Nature in Context of Ecotechnological Investigation and Climate Change. D. D. U. Gorakhpur University, Gorakhpur, Uttar Pradesh, India.
47. Khan, D. and **Samadder, S. R. (2013)**. "The Status of Municipal Solid Waste Management in Dhanbad, India and a GIS Approach for Landfill Siting." **August 16-18, 2013**. International Conference on Conserving Biodiversity for Sustainable Development (INCCBSD 2013). National Institute of Technology, Rourkela, Odisha, India.
48. Sneha Lata and **S. R. Samadder (2013)**. "Arsenic Detection Techniques and Their Drawbacks" August 16-18, 2013. **August 16-18, 2013**. International Conference on Conserving Biodiversity for Sustainable Development (INCCBSD-2013). National Institute of Technology, Rourkela, Odisha, India.
49. Khan, D., Vinod, B. V., and **Samadder, S. R. (2012)**. "Impact of Municipal Solid Waste Leachates on Groundwater and Investigate the Effectiveness of Various Geoliner to Control the Leachate Flow Behaviour." **November 2-4, 2012**. 4<sup>th</sup> International Conference of National Environmentalists Association on Anthropogenic Impact on Environment and Conservation Strategy, Ranchi, India.
50. *McDonald, S., Berzano, M., Ziegler, P., Peng, X., Samadder, S. R.,* Murphy, T., and Holden, N. M. (2009). How sensitive is qualitative risk assessment at the small agricultural catchment scale? November 27, 2009. Joint meeting of the Irish Society of Parasitology and British Association of Veterinary Parasitologists. Central Veterinary Research Laboratory, Backweston Campus, Celbridge, Co. Kildare, Ireland.
51. **Samadder, S. R,** Peng, X, McDonald, S, Murphy, T. M, Berzano, M, Ziegler, P.E, Holden, N. M (2009). Relative Risk of Cryptosporidium Spp. Transport in an Irish Catchment. October 11-15, 2009. 3<sup>rd</sup> International Giardia and Cryptosporidium Conference. Orvieto, Italy.

52. X. Peng., S. McDonald., T. Murphy., M. Berzano., P. Ziegler., **S. R. Samadder.**, and N. M. Holden (2009). The transport and attachment of *Cryptosporidium parvum* oocysts in main Irish soils. June 15-19, 2009. 18th International Soil Tillage Research Organization. Izmir, Turkey.
53. **Samadder, S. R.**, and Holden, N. M. (2009) “A GIS Approach of *Cryptosporidium* Risk Assessment of Irish Catchment.” Conference, Environmental Sciences Association of Ireland, 19<sup>th</sup> Irish Environmental Researchers’ Colloquium; February 18-20, 2009, Waterford Institute of Technology, Waterford, Ireland.
54. **Samadder, S. R.**, and *Subbarao, C.* (2007) “Capabilities of GIS in Risk Assessment due to Arsenic Pollution in Drinking Water.” Conference on “Current Trends in Remote Sensing and GIS Applications, February 15-17, 2007, IIT Kharagpur, India.

**Paper published in national conference:**

55. Yadav, P., and **Samadder, S. R.** (2014). “A Comparative Study of Composting and Land filling of Municipal Solid Wastes Using Life Cycle Assessment Technique: A Review”. January 30 to February 1, 2014. National Conference on Environmental pollution and protection. National Institute of Technology, Durgapur, India.
56. **Samadder, S. R.**, and Subbarao, C. (2014). “Effect of Arsenic Pollution in Groundwater on Life Expectancy: A GIS Approach”. March 28-29, 2014. National Conference on “Water and its Sustainability in Mining and Other Environment: Vision 2050 (WASME 2014”, ISBN 978-93-5156-850-6. IIT (ISM) Dhanbad, India.

**Proceedings Published**

57. Proceedings of the Two Days Training Programme for Field Engineers in Infrastructural Development edited by M S Chauhan, S Rokade, K Dharavath and **S R Samadder**, held in April 2010, Bhopal, **India**.
58. Pal, A. K., Maiti, S. K., Gupta, S. K., Sinha, A., Samadder, S. R. and Mishra, B. K. (2012). Edited the Training module of 3-Days Training Program for Executives of Drinking Water and Sanitation Department, Ranchi on “**Water and Wastewater Treatment And Management**”; 7-9 November, 2012, Department of Environmental Science and Engineering, IIT (ISM), Dhanbad.