



# Curriculum Vitae of Dr. Anupam Debsarkar



# **Curriculum Vitae**

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3. Date of Birth : **2<sup>nd</sup> April, 1972.**
4. Academic Qualification : **Master of Civil Engineering (Environmental Engineering), Ph. D (Engineering)**
5. Present Designation : **Professor**, Environmental Engineering Division, Department of Civil Engineering, Jadavpur University, Kolkata-700 032, West Bengal, India.
6. Research/Professional Experience :
- i) **(1997-1998)** as Institute Scholar in Indian Institute of Technology (IIT), Kharagpur.
  - ii) **(1998-1999)** as **Assistant Environmental Engineer** in West Bengal Pollution Control Board (WBPCB).
  - iii) **(1999-2004)** as **Lecturer**, Environmental Engineering Division, Department of Civil Engineering, Jadavpur University, Kolkata-700032, West Bengal.
  - iv) **(2004-2009)** as **Senior Lecturer**, Environmental Engineering Division, Department of Civil Engineering, Jadavpur University, Kolkata-700032, West Bengal.
  - v) **(2009-2012)** as **Reader**, Environmental Engineering Division, Department of Civil Engineering, Jadavpur University, Kolkata-700032, West Bengal.
  - vi) **(2012-2015)** as **Associate Professor**, Environmental Engineering Division, Department of Civil Engineering, Jadavpur University, Kolkata-700032, West Bengal.
  - vii) **2015 onwards** as **Professor**, Environmental Engineering Division, Department of Civil Engineering, Jadavpur University, Kolkata-700032, West Bengal.
  - viii) **2018 onwards** as the **Coordinator, Global Change Programme**, Jadavpur University, Kolkata-700032, West Bengal.

7. Number of M.Sc./M.E./M.Tech./M.Phil. Students guided during (2000-2021): 41

8. Number of Ph.D. candidates guiding/guided: Awarded: 11, Submitted: 0  
: Registered: 7(seven), Non-registered: 0

9. Number of Publications : i) Journal Papers - 84 no.s.  
ii) Seminar Papers - 59 no.s.  
iii) Book Chapters - 7 no.s

## **A. Research Papers Published in Journals**

1. "Vertical Distribution of Suspended Particulate Matter and Nitrogen Dioxide"- Anupam Debsarkar and Shibnath Chakrabarty, *Journal of IPHE, India, Vol-1998, No-1, Page-(6-9)*.
2. "Indoor Air Pollution with in a University Building in the City of Calcutta"- Anupam Debsarkar and Shibnath Chakrabarty, *Journal of IPHE, India, Vol-1999, No-3, Page-(41-44)*.
3. "Validation of Kerbside Urban Air Quality Model for Nitrogen Dioxide"- S.N. Chakrabarty, A. Debsarkar and S. Goswami, *Indian Journal of Environmental Protection, Vol-20, No-12, Dec-2000, Page-(913-917)*.
4. "Vertical Dispersion of Gaseous Pollutants in Ambient Air"- A.K. Misra, S. Chakrabarty, A. Debsarkar and K.A. Das, *Indian Journal of Environmental Protection, Vol-21, No-8, August-2001, Page-(734-739)*.
5. "Dispersion of Oxides of Nitrogen in the Indoor Air"- S. N. Chakrabarty, A. Debsarkar, B. Thakur and T. Mukherjee, *Indian Journal of Environmental Protection, Vol-22, No-6, June-2002, Page-(649-653)*.
6. "Kinetic Evaluation of Combined COD Removal and Ammonia Nitrification in a Single Fed Batch Reactor", P.K. Roy, A. Debsarkar and S.N. Mukherjee, *Indian Journal of Environmental Protection, Vol-23, No.-4, April-2003, Page- (373-378)*.
7. "Significance of Indoor Air Quality- A Different Perspective"- B.Thakur, M.Chanda, A. Debsarkar and S.N. Chakrabarty, *Journal of IPHE, Vol-2003, No-3*.
8. "Kinetics of Ammonia Nitrification in Single Fed Batch Reactor"- P.K. Roy, A. Debsarkar and S.N. Mukherjee, *Journal of IPHE, Vol-2004, No.-1*.
9. "Vertical Distribution of Particulate Matters and some Associated Heavy Metals", B. Thakur, A. Roy, A. Debsarkar, S.N. Chakrabarty and A. K. Misra, *Indian Journal of Environmental Protection, Vol-24, No.-6, June-2004*.
10. "Ozone Depletion Problem- A Critical Review", P. Roy Chowdhury, B. Thakur, A. Debsarkar, S.N. Chakrabarty, *Journal of IPHE, Vol-2005, No.-4, Page-(19-23)*.
11. "Performance of a Laboratory-scale Sequencing Batch Reactor (SBR) for Combined COD and Nitrogen Removal", A. Debsarkar, S.N. Mukherjee and S. Datta, *Indian Journal of Environmental Protection, Vol-26, No.-5, May-2006, Page- (411-418)*.
12. "Sequencing Batch Reactor (SBR) Treatment for Simultaneous Organic Carbon and Nitrogen Removal – A Laboratory Study"- A. Debsarkar, S.N. Mukherjee and S. Datta, *Journal of Environmental Science and Engineering. 2006, July, Vol-48, No.-3, pp-169-174*.
13. "Adsorptive Removal of Phenol Utilizing Fly Ash"- D. Datta, N. Dey Sarkar, A. Debsarkar and A. Bandopadhyay, *Journal of Institution of Engineers (India), Chemical Engineering Division, Vol-89, September, 2008, Page-3-7*.

14. **“Rice Husk Ash as a Low Cost Adsorbent for the Removal of Methylene Blue and Congo Red in Aqueous Phases”**, Anirban K. Chowdhury, Anupam D. Sarkar and Amitava Bandyopadhyay, **Clean-Soil, Air, Water, Wiley Interscience, Vol-37, No.-7, July, 2009, pp-581-591.**
15. **“Observation on Particulate Matter over a Period of 3 Years at Kaikhali „22.022°N and 8.614°E inside a Special Mangrove Ecosystem: Sundarbans”**- I. Mukherjee, N. Chakraborty, A. DebSarkar, and T. K. Mondal, **Journal of Environmental Engineering (ASCE), Vol-136, No.-1, January-2010, pages- 119-126.**
16. **“Air Pollution from Fireworks during Festival of Lights (Deepawali) in Howrah, India-A Case Study”**, B. Thakur, S. Chakraborty, A. Debsarkar, S.N Chakrabarty and R. C. Srivastava, **ATMÓSFERA, Vol-23, No.-4, pp-313-331, 2010.**
17. **“Effect of Cycle Period and Substrate Composition on Phosphorous Removal Potential of a Laboratory-scale Sequencing Batch Reactor”**, by Gargi Biswas, Anupam Debsarkar, Somnath Mukherjee, Siddhartha Datta, Sunil Kumar, Ackmez Mudhoo, **International Journal of Environmental Technology and Management (IJETM), Vol. 14, No. 1/2/3/4, page-252-268, 2011.**
18. **“Biodegradation Study and Kinetic Evaluation in a Batch-fed Reactor for Treatment of Slaughterhouse Wastewater”**, by Pradyut Kundu, Anupam Debsarkar, and Somnath Mukherjee, **Journal of IPHE, Vol-(2011-2012), No.-2, July, 2011, Page-(32-42).**
19. **“Kinetics of Biological Nutrient Removal in a Batch-fed Reactor”**, by Pradyot Kundu, Anupam Debsarkar and Somnath Mukherjee, **Indian Journal of Environmental Protection, Vol-31, No.-7, July-2011, Page- (544-551).**
20. **“A Study on Co-exposure to Traffic Related Air Pollution and Noise for an Important Urban Road of Kolkata City, India”**- Anirban Kundu Chowdhury, Anupam Debsarkar and Shibnath Chakrabarty, **Indian Journal of Air Pollution Control, Vol-XI, No.-2, September-2011, pp-34-40.**
21. **“Air Pollution and Health Impacts for Fireworks during Deepawali in India”**, Biswajit Thakur, Soumitra Chakraborty, Anupam Debsarkar and Shibnath Chakrabarty, **Indian Journal of Air Pollution Control, Vol-XI, No.-2, September-2011, pp-41-53.**
22. **“Monitoring and Assessment of Temporal Variation of Day Time Road Traffic Noise Near a Road side Urban Environment of Kolkata City, India- A Case Study”**, Anirban Kundu Chowdhury, Anupam Debsarkar and Shibnath Chakrabarty, **Journal of IPHE, Vol-(2012-2013), No.-2, July, 2012, Page-(21-23).**
23. **“Analysis of Day Time Traffic Noise Level: A Case Study of Kolkata, India”**, Anirban Kundu Chowdhury, Anupam Debsarkar and Shibnath Chakrabarty, **International Journal of Environmental Sciences and Research, Vol. 2, No. 1, 2012, pp-114-118.**
24. **“Effectiveness of Wet Handling of Coal and Concrete Aggregates in Controlling Air Pollution in Sealdah Rail Yard, Kolkata”**, B. Thakur, A. Roy, A. Debsarkar, S.N. Chakrabarty, **Indian Journal of Air Pollution Control, Vol-XII, No.-2, September-2012, pp-40-50.**
25. **“Addressing Arsenic Poisoning in South Asia”**, Ashok Gadgil, Joyashree Roy, Susan Addy, Abhijit Das, Sarah Miller, Amit Dutta and Anupam Debsarkar, **Solutions, September-October, 2012, Vol-3, Issue-5, pp-40-45.**
26. **“Application of Rural Slaughterhouse Waste as an Organic Fertilizer for Pot Cultivation of Solanaceous Vegetables in India”**, by Malancha Roy, Sukalpa Karmakar, Anupam Debsarkar,

Pradip K Sen and Joydeep Mukherjee, **'International Journal of Recycling of Organic Waste in Agriculture'**, Springer-link Publication, Vol-2, No.6, 2013.

27. **"Treatment of Slaughter House Wastewater in a Sequencing Batch Reactor: Performance Evaluation and Biodegradation Kinetics"**, by Pradyut Kundu, Anupam Debsarkar and Somnath Mukherjee, **'Biomed Research International'**, Hindawi Publishing Corporation, Volume 2013, Article ID 134872, 11 pages, Volume-2013.
28. **"Measurement of Sulphur Dioxide (SO<sub>2</sub>) and Nitrogen Dioxide (NO<sub>2</sub>) during winter over a period of three years at Kaikhali (22.022°N & 88.614°E) in Sundarbans"**, I. Mukherjee, N. Chakraborty, A. Debsarkar, T.K.Mondal, **'International Journal of Environmental Engineering (IJEE)'**, Inderscience Publication, Vol-5, No.-3, page-289-298, 2013.
29. **"Artificial Neural Network (ANN) Modeling for Biological Removal of Organic Carbon and Nitrogen from Slaughterhouse Wastewater in a Sequencing Batch Reactor,"** by Pradyut Kundu, Anupam Debsarkar and Somnath Mukherjee, **"Advances in Artificial Neural Systems"**, Hindawi Publishing Corporation, Volume 2013 (2013), Article ID 268064, 15 pages.
30. **"Simultaneous Oxidation of Organic Carbon, Nitrification and Denitrification in a Sequential Batch Reactor for Treatment of Slaughterhouse Wastewater"**, by Pradyut Kundu, Anupam Debsarkar and Somnath Mukherjee, **International Journal of Environmental Engineering Research**, Volume-2, Issue-3, 2013 page-69-80.
31. **"Artificial Neural Network Modeling in Biological Removal of Organic Carbon and Nitrogen for Treatment of Slaughterhouse Wastewater in a Batch Reactor"**, by Pradyut Kundu, Anupam Debsarkar, Somnath Mukherjee and Sunil Kumar, **Environmental Technology**, Taylor & Francis Group, 2013, page-1-12.
32. **"Biodegradation of Phosphorous in a Laboratory-scale Sequential Batch Reactor under Anoxic-Aerobic Conditions"**, by Pradyut Kundu, Anupam Debsarkar and Somnath Mukherjee **Journal of Indian Chemical Engineer**, Taylor & Francis Group, 56:1, 2014, page-43-57.
33. **"Performance Studies on Biological Treatment of Slaughterhouse Wastewater Using Mixed Culture in Sequencing Batch Reactor"**, by Pradyut Kundu, Anupam Debsarkar and Somnath Mukherjee, **Asian Journal of Water, Environment and Pollution**, IOS Press, Vol-11, No.-2 (2014), pp-67-79.
34. **"Electro-chemical Arsenic Remediation: Field trials in West Bengal"**, Susan E. Amrose, Siva R.S. Bandaru, Caroline Delaire, Case M. van Genuchten, Amit Dutta, Anupam Debsarkar, Christopher Orr, Joyashree Roy, Ashok Gadgil, **"Science of the Total Environment"**, Elsevier Publication, Vol-488-489, Issue-1, (2014), pp-539-546.
35. **"E-waste Management in India: Issues and Concern"**, Dipsikha Dasgupta, Anupam Debsarkar, Debankur Chatterjee, Amitava Gangopadhyay and Debashis Chatterjee, **"Journal of International Environmental Application and Science"**, Vol-9(2), pp-257-261 (2014).
36. **"Kinetic Modeling for Simultaneous Organic Carbon Oxidation, Nitrification, and Denitrification of Abattoir Wastewater in Sequencing Batch Reactor"**, Pradyut Kundu, Anupam Debsarkar & Somnath Mukherjee, **Bioremediation Journal**, Vol-18, (4), pp-267-286, (2014).
37. **"Hydraulic Regime Study for a Bench-Scale Electrochemical Arsenic Remediation (ECAR) Reactor Utilizing Methylene Blue as Tracer"**, Sudipta Ghosh, Anupam Debsarkar and Amit

38. **“Novel Methods for Assessing Urban Air Quality: Combined Air and Noise Pollution Approach”**, Anirban Kundu Chowdhury, Anupam Debsarkar and Shibnath Chakrabarty, **Journal of Atmospheric Pollution**, 2015, Vol. 3, No. 1, pp-1-8.
39. **“Assessment of Impact of Landfill Leachate Generation on Ground and Surface Water Quality- A Municipal Solid Waste Landfill Site, Dhapa, Kolkata Case Study”**, Sanjib Kumar Maiti , Sushmita De, Tumpa Hazra, Anupam Debsarkar and Amit Dutta, **International Journal of Engineering Technology, Management and Applied Sciences**, March 2015, Volume-3 Special Issue, ISSN 2349-4476, pp-212-224.
40. **“Assessment of groundwater pollution by municipal solid waste (MSW) landfill leachate: A case study in Kolkata, India”**, Sushmita De, Sanjib Kumar Maiti , Tumpa Hazra, Anupam Debsarkar and Amit Dutta, **International Journal of Computer & Mathematical Sciences (IJCMS)**, ISSN 2347 – 8527, Volume 4, Special Issue, March 2015, pp-12-20.
41. **“Assessment of Seasonal Variation of Landfill Leachate Quality and its Pollution Potential - A Dhapa MSW Landfill Site, Kolkata Case Study”**, Sanjib Kumar Maiti, Sushmita De, Tumpa Hazra, Anupam Debsarkar and Amit Dutta, **International Journal of Advance Engineering and Research Development**, Volume-2, Issue-4, April -2015.
42. **“Peak and Non-Peak Hour Noise-Air Quality and State of Exposure to Noise-Air Pollution at Curbside Open-Air Microenvironment of Kolkata City, India”**, Anirban Kundu Chowdhury, Anupam Debsarkar, Shibnath Chakraborty, **American Journal of Environmental Engineering and Science**, April 2015; 2(3): 18-27.
43. **“Present E-waste Handling and Disposal Scenario in India: Planning for Future Management”**, Dipsikha Dasgupta, Anupam Debsarkar, Debankur Chatterjee, Amitava Gangopadhyay and Debashis Chatterjee, **International Journal of Engineering Research and Applications**, ISSN : 2248-9622, Vol. 5, Issue 5, ( Part -3) May 2015, pp.99-107.
44. **“Seasonal Variation of Noise-Air Quality and State of Exposure to Noise-Air Pollution at Curbside Open-Air Microenvironment of Kolkata City, India”**, Anirban Kundu Chowdhury, Anupam Debsarkar, Shibnath Chakraborty, **International Journal of Environmental Pollution and Solutions** (2015) Vol. 3, No. 1 pp. 16-30.
45. **“Conversion of rural abattoir wastes to an organic fertilizer and its application in the field cultivation of tomato in India”**, Malancha Roy, Rimi Das, Anupam Debsarkar, Pradip Kumar Sen and Joydeep Mukherjee, **Renewable Agriculture and Food Systems**, Cambridge University Press, Vol-31 No.-4, pp-350-360, 2015.
46. **“Quantification and Characterization of Correlation between Traffic Noise Level and Concentration of Traffic Related Air Pollutant(s) in the Curbside Open-Air Micro-Environment of Kolkata City, India”**, Anirban Kundu Chowdhury, Anupam Debsarkar, Shibnath Chakraborty, **Pollution Research**, Vol-34, No.-2, page- 409-416 (2015).
47. **“Organic Cultivation of Tomato in India with Recycled Slaughterhouse Wastes: Evaluation of Fertilizer and Fruit Safety”**, Malancha Roy, Rimi Das, Amit Kundu, Sanmoy Karmakar, Satadal Das, Pradip Kumar Sen, Anupam Debsarkar and Joydeep Mukherjee, **Agriculture (MDPI)** 2015, Vol-5, No.-3, pp-826-856; doi:10.3390, ISSN 2077-0472.
48. **“Critical assessment of day time traffic noise level at curbside open-air microenvironment of Kolkata City, India”**, Anirban Kundu Chowdhury, Anupam Debsarkar, Shibnath Chakraborty,

49. **“Critical analysis of day time traffic noise level at curbside open-air microenvironment of two types of road network of a big city”**, Anirban Kundu Chowdhury, Anupam Debsarkar, Shibnath Chakraborty, **Journal of Environmental and Occupational Science, Vol-4, Issue-4, pp-184-189, November, 2015.**
50. **“Assessment of combined Noise-Air quality and combined exposure to Noise-Air pollution at the curbside open-air microenvironment of Kolkata city, India”**, Chowdhury, K.A., Debsarkar, A., and Chakraborty, S., **Pollution, 2(1): 35-47, Winter 2015-2016.**
51. **“Assessment of Seasonal Variations of Average Traffic Pollution Levels in Curbside Open-Air Microenvironments in Kolkata, India”**, Anirban Kundu Chowdhury, Anupam Debsarkar and Shibnath Chakraborty, **Health Scope, Vol-5, No.-2, 2016, DOI: 10.17795/jhealthscope-33081, published online 2016 January 1.**
52. **“Leachate characterization and identification of dominant pollutants using leachate pollution index for an uncontrolled landfill site”**, S. De, S. K. Maiti, T. Hazra, A. Debsarkar, A. Dutta, **Global Journal of Environmental Science and Management, Vol-2(2): pp-177-186, April, 2016.**
53. **“Scenario of future e-waste generation and recycle-reuse-landfill-based disposal pattern in India: a system dynamics approach”**, Dipsikha Dasgupta, Anupam Debsarkar, Tumpa Hazra, B.K. Bala, Amitava Gangopadhyay and Debashis Chatterjee, **Environment, Development and Sustainability (Springer Publication), Vol-19, No.-3, pp-1473–1487, 2016, DOI 10.1007/s10668-016-9815-6.**
54. **“Removal of Basic Dyes from Aqueous Solution by Adsorption Using Rice Husk Ash-A Fixed Bed Column Study”**, Soumitra Banerjee, Anupam Debsarkar and Siddhartha Datta, **International Journal of Advanced Engineering, Management and Science (IJAEMS), Vol-3, Issue-4, April, 2017, <https://dx.doi.org/10.24001/ijaems.3.4.7>.**
55. **“Adsorption of Methylene blue and Malachite Green in Aqueous Solution using Jack Fruit Leaf Ash as Low Cost Adsorbent”**, Soumitra Banerjee, Anupam Debsarkar and Siddhartha Datta, **International Journal of Environment, Agriculture and Biotechnology (IJEAB), Vol-2, Issue-3, May-Jun- 2017, <http://dx.doi.org/10.22161/ijeab/2.3.45>.**
56. **“Supportive Urban Water Management - A Case Study of Barasat Municipality, West Bengal”**, Satabdi Biswas and Anupam Debsarkar, **Indian Journal of Regional Science, Vol-XLIX, No.-2, pp-72-78, 2017.**
57. **“Quasi-natural Hazards of Groundwater and its Abatement: A Case Study of Amdanga Block, North 24 Parganas, West Bengal, India”**, Satabdi Biswas, Anupam Debsarkar and Gupinath Bhandari, **Eastern Geographer (Journal of Eastern Geographical Society), Vol-XXIV, No.-1, January, pp-75-83, 2018. ISSN 0973-7642.**
58. **“Adsorption of Two Basic Dyes Methylene Blue and Malachite Green onto Low Cost Adsorbent Rice Husk Ash: A Batch Study”**, Soumitra Banerjee, Siddhartha Datta and Anupam Debsarkar, **International Journal of Agriculture, Environment and Biotechnology, IJAEB: 11(3): 421-426, June 2018, DOI: 10.30954/0974-1712.06.2018.1.**
59. **“Rainwater Harvesting (RWH)- A path not profusely explored to solve the crisis of water scarcity”**, Satabdi Biswas, Anupam Debsarkar and Gupinath Bhandari, **Indian Ground Water, Vol-XI, July, 2018, pp-24-47.**

60. **“Hexavalent Chromium Tolerance of Bacterial Strains Isolated from Tannery Effluent Contaminated Soil”**, Piku Sen, Anupam Debsarkar and Debasish Pal, **International Journal of Innovative Research & Studies**, 2018, Volume 8, Issue IV, pp-92-99, DOI: 16.10086/IJIRS.
61. **“Impact of water demand on hydrological regime under climate and LULC change scenarios”**, Satiprasad Sahoo, Anirban Dhar, Anupam Debsarkar and Amlanjyoti Kar, **Environmental Earth Sciences**, Springer-Verlag GmbH Germany, Part of Springer Nature, 2018, Vol-77, page-341-359, <https://doi.org/10.1007/s12665-018-7531-2>.
62. **"Future Scenarios of Land-Use Suitability Modeling for Agricultural Sustainability in a River Basin"**, Satiprasad Sahoo, Indrani Sil, Anirban Dhar, Anupam Debsarkar, Pulakesh Das and Amlanjyoti Kar, **Journal of Cleaner Production**, Elsevier Publication, Vol-205, Page- 313-328, September- 2018, <https://doi.org/10.1016/j.jclepro.2018.09.099>.
63. **“Concrete stabilization of arsenic-bearing iron sludge generated from an electrochemical arsenic remediation plant”**, Abhisek Roy, Case M. van Genuchten, Indranil Mookherjee, Anupam Debsarkar and Amit Dutta, **Journal of Environmental Management**, Elsevier Publication, Vol-233, page-141–150, 2019, <https://doi.org/10.1016/j.jenvman.2018.11.062>.
64. **“Technology alternatives for decontamination of arsenic-rich groundwater—A critical review”**, Sudipta Ghosh (Nath), Anupam Debsarkar and Amit Dutta, **Environmental Technology & Innovation, Elsevier Publication**, Vol- 13, page-277–303, January, 2019, <https://doi.org/10.1016/j.eti.2018.12.003>.
65. **“Future Scenarios of Environmental Vulnerability Mapping Using Grey Analytic Hierarchy Process”**, Satiprasad Sahoo, Anirban Dhar, Anupam Debsarkar and Amlanjyoti Kar, **Natural Resources Research, Springer Publication**, Vol-28, No.-4, pp.-1461-1483, January, 2019, <https://doi.org/10.1007/s11053-019-09462-z>.
66. **“On projected hydrological scenarios under the influence of bias-corrected climatic variables and LULC”**, Satiprasad Sahoo, Saumava Dey, Anirban Dhar, Anupam Debsarkar and Biswajeet Pradhan, **Ecological Indicators**, Elsevier Publication, Vol-106, May-2019, 105440, pp-1-17, <https://doi.org/10.1016/j.ecolind.2019.105440>.
67. **“Lead Removal from Landfill Leachate by Electrocoagulation process using Iron Electrodes: Influence of pH and Direct Current”**, Maiti Sanjib Kumar, Hazra Tumpa and Debsarkar Anupam, **Research Journal of Chemistry and Environment**, Vol. 23 (6), pp - 62-69, June-2019.
68. **"Identification of water-stressed area based on the interrelationship of soil moisture and seasonal rice cultivation"**, Satiprasad Sahoo; Anirban Dhar; Anupam Debsarkar; Amlanjyoti Kar; Narayan Kayet, **Paddy & Water Environment**, Springer Publication, Vol-18, pp.-193-209, August, 2019.
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70. **“Efficacy of Rainwater Harvesting (RWH) in Overcoming Water Scarcity Problem of Amdanga Block, North 24 Parganas, West Bengal – A Statistical Approach”**, Satabdi Biswas, Anupam Debsarkar and Gupinath Bhandari, **Indian Journal of Regional Science**, Vol-II, No.-2, December, 2019, pp-8-15.(ISSN:0046-9017).



71. **“Artificial neural network modeling for decolorization of textile dye mixture using low cost adsorbent”**, Soumitra Banerjee, Siddhartha Datta and Anupam Debsarkar, **Research Journal of Chemistry and Environment**, Vol. 24, (No. 5), pp - 57-60, May-2020.
72. **“Future Water Use Planning by Water Evaluation and Planning System Model”**, Satiprasad Sahoo<sup>1</sup>, Anirban Dhar, Anupam Debsarkar, Biswajeet Pradhan and Abdullah M. Alamri, **Water Resources Management (Springer Publication)**, Vol-34, pp-4649-4664, Sept-Oct-2020, <https://doi.org/10.1007/s11269-020-02680-8>.
73. **“Can Groundwater Scenarios Be Predicted from Future Regional Climatic Input Variables?”**, Satiprasad Sahoo, Anirban Dhar, Anupam Debsarkar & Amlanjyoti Kar, **Water Resources Management (Springer Publication)**, Vol-34, pp.-4815-4830, Oct-2020, <https://doi.org/10.1007/s11269-020-02692-4>.
74. **“Water Insufficiency, Health Hazards and Rainwater Harvesting in North 24 Parganas, West Bengal, India: Results of a Socioeconomic Survey”**, Satabdi Biswas, Anupam Debsarkar and Manoranjan Paul, **Journal of Economic Theory and Practice (Arthaniti)** (Sage Publication) pp-1-19, Vol- ,No.- , November, 2020, <https://doi.org/10.1177/0976747920963399>
75. **“Removal of total chromium from landfill leachate by electrocoagulation process using iron electrodes: effect of some major operational and chemical parameters”**, Sanjib Kumar Maiti, Tumpa Hazra\* and Anupam Debsarkar, *J. Indian Chem. Soc.*, Vol. 97, No. 11b, November 2020, pp. 2453-2460.
76. **“Assessment of Noise Pollution of Kolkata Metro Railway System and Its Impact on Urban Receptors- A Case Study”**, Argha Kamal Guha, Anirban Kundu Chowdhury, Anupam Debsarkar and Shibnath Chakrabarty, **International Journal of Research in Advent Technology**, Vol.8, No.11, November 2020, E-ISSN: 2321-9637, Available online at [www.ijrat.org](http://www.ijrat.org) <https://ijrat.org/downloads/Vol-8/November-2020/812202002.pdf>
77. **“Delivering Arsenic-free Drinking Water - Made Practically Possible: Continuous Scale Electrochemical Arsenic Remediation Process Furnished, based on Experimental Studies and ANN Simulation”**, Sudipta Ghosh (Nath), Anupam Debsarkar, Amit Dutta, Subhrajyoti Bhandary, Deepak Chopra, **Environment, Development and Sustainability (Springer Publication)**, Vol-23, No.-10, pp-13087-13112, January, 2021, <https://doi.org/10.1007/s10668-020-01200-3>
78. **“Application of recycled slaughterhouse wastes as an organic fertilizer for successive cultivations of bell pepper and amaranth”**, Shantanu Bhunia, Ankita Bhowmik, Rambilash Mallick, Anupam Debsarkar, Joydeep Mukherjee, **Scientia Horticulturae (Elsevier Publication)**, 280, Jan (2021) 109927, <https://doi.org/10.1016/j.scienta.2021.109927>
79. **“Particulate Matter and Adverse Respiratory Health Outcome: Exposure of Street Vendors in Kolkata City in India”**, N Ghosh, B Das, N Das, S Chatterjee, A Debsarkar, S. Chakraborty, A. Dutta & J. Roy, *Pollution*, Issue-7, No.-4, September, 2021, pp - 769-785. DOI: 10.22059/POLL.2021.321814.1059
80. **“Assessment of adoption potential of rooftop rainwater harvesting to combat water scarcity: a case study of North 24 Parganas district of West Bengal, India”**, Satabdi Biswas, Satiprasad Sahoo, Anupam Debsarkar & Manoranjan Pal, **Arabian Journal of Geosciences (Springer Publication)**, Vol- 14, No.-1636, pp-1-16, August, 2021, <https://doi.org/10.1007/s12517-021-07989-1>
81. **“Spatio-temporal Variations in PM<sub>10</sub> and PM<sub>2.5</sub> on Landuse during Diwali Festival in parts of the City of Kolkata, India”**, Sohini Sen, Ashwini Kumar Singh, Debashish Das, Anupam Debsarkar, Shibnath Chakraborty and Raja Ghosh, **Indian Journal of Spatial Science**, Autumn Issue,

82. **“Development of a Novel Helical-Ribbon Mixer Dryer for Conversion of Rural Slaughterhouse Wastes to an Organic Fertilizer and Implications in the Rural Circular Economy”**, Ankita Bhowmik, Shantanu Bhunia, Anupam Debsarka, Rambilash Mallick, Malancha Roy and Joydeep Mukherjee, **Sustainability (MDPI publication)**, 2021, Vol-13, 9455, pp-17, <https://doi.org/10.3390/su13169455>
83. **“Towards a Zero-Carbon Electricity System for India in 2050: IDEEA Model-Based Scenarios Integrating Wind and Solar Complementarity and Geospatial Endowments”**, Oleg Lugovoy, Varun Jyothiprakash, Sourish Chatterjee, Samridh Sharma, Arijit Mukherjee, Abhishek Das, Biswajit Thakur, Shreya Some, Disha L. Dinesha, Nandini Das, Parthaa Bosu, Lavanya Padhi, Biswanath Roy, Anupam Debsarkar, Balachandra Patil, Shyamasree Dasgupta and Joyashree Roy, **Energies (MDPI Publication)**, 2021-October, Vol-14, 7063, pp-1-55, <https://doi.org/10.3390/en14217063>
84. **“Assessment and development of air quality forecasting models by the combination of PCA and ANN at metropolis Kolkata, India”**, Roy Abhishek, Sarkar Biswajit, Debsarkar Anupam, Dutta Amit and Chakrabarty Shibnath, **Research Journal of Chemistry and Environment, Vol. 26, (No. 1), pp - 110-124, Jan-2022.**

## **B. Research Papers contributed/presented in the Seminars**

1. **"Vertical Distribution of Two Gaseous Pollutants (NO<sub>2</sub> & SO<sub>2</sub>)"**- Anupam Debsarkar and Shibnath Chakrabarty, Seminar on 'Air Pollution: at what cost?', organized by Indian Association for Air Pollution Control, University of Baroda, Vadodara, India, October-1999.
2. **"Air Quality Indexing System for the City of Calcutta"**- Anupam Debsarkar and Shibnath Chakrabarty, Seminar on 'Industrial Pollution & Control: IPC-2000', organized by Department of Chemical Engineering, Banaras Hindu University, Feb-2000.
3. **"Application of SBR Technology for Treatment of Various Industrial Wastewater- An Overview"**- A. Debsarkar and S.N. Mukherjee, paper presented at the “Seminar on Industrial Pollution & Control: IPC-2000”, organized by Department of Chemical Engineering, Banaras Hindu University, Feb-2000.
4. **"Air Quality Indexing System with Particular Reference to the City of Calcutta"**- Anupam Debsarkar and Shibnath Chakrabarty, paper presented at the “VII West Bengal State Science & Technological Congress”, organized by Jadavpur University, Feb-March (2000).
5. **"Arsenic Reduction from Aqueous System by some Water Plants"**- A. Debsarkar and S.N. Mukherjee, paper presented at the “VII West Bengal State Science & Technological Congress”, organized by Jadavpur University, Feb-March (2000).
6. **"Validation of Kerbside Urban Air Quality Model for Nitrogen Dioxide"**- S.Chakrabarty, A. Debsarkar and S. Goswami, paper presented at the “IX- National Symposium on Environment (NSE-9”, organized by Bangalore University, 2000.
7. **"Monitoring Indoor Air- A Case Study"**- J. Maitra, A. Debsarkar and S.N. Chakrabarty, paper presented at the “III-All India People's Technology Congress”, Science City, Calcutta, Feb-2001.
8. **"A General Overview on Alternative Fuels with Special Emphasis on CNG"**- R. Ganguly, B. Thakur, A. Debsarkar and S.N. Chakrabarty, paper presented at the “National Workshop cum Seminar on Environmental Pollution and its Management”, organized by USIC, Jadavpur University, Dec-2002.

9. **"Biomedical Waste Management- Problems and Solutions"**- I. Mukherjee, B. Thakur, A. Debsarkar and S.N. Chakrabarty, paper presented at the "IVth All India People's Technology Congress", Science City, Calcutta, Feb-2002.
10. **"An Overview of Fine Particulate Pollution"**- I. Mukherjee, B. Thakur, A. Debsarkar and S.N. Chakrabarty, paper presented at the "National Seminar on Urban Air Pollution- Issues and Solutions", Vadodara, March-2003.
11. **"Dispersion of Sulfur Dioxide in the Indoor Air"**- B. Thakur, A. Debsarkar and S.N. Chakrabarty and A.K. Misra, paper presented at the "International Conference on Environment and Development", Science City, Kolkata, February-2004.
12. **"Ozone Depletion Problem- The Current Status"**- P. Roychowdhury, B. Thakur, A. Debsarkar and S.N. Chakrabarty, paper presented at the "National Seminar on Disaster and its Management- Perspective and Future Approaches", organized by Krishnanagar Government College, April-2004.
13. **"Biomedical Waste Management- An Indian Perspective"**- S.N. Chakrabarty, B. Thakur, I. Mukherjee and A. Debsarkar, paper presented at the "International Conference on Environment & Development", Institute of Social Study, Feb-2004.
14. **"Vertical Profile of Air Pollution with Emphasis on Gaseous Pollutants"**- S.N. Chakrabarty, A. Debsarkar & U. Bhattacharya- paper presented at the "IVth All India People's Technology Congress", Science City, Feb-2003.
15. **"Rainwater Harvesting and its Feasibility in the city of Kolkata"**- P.S Ghosal, A. Debsarkar and S.N. Chakraborty, paper presented at the "International Conference on Crisis Management in Water and Environment, 2005", organized by Indian Association of Hydrologists
16. **"Hazardous Waste Management: E- Waste- A Critical Review"**- B. Roy, A. Debsarkar and S.N. Chakraborty, paper presented at IIT Kanpur
17. **"Sequencing Batch Reactor (SBR)- An Emerging Technology for Wastewater Treatment"**- A. Debsarkar, S.N. Mukherjee and S. Datta, paper presented at the "All India Seminar on Water & Wastewater Management", organized by Civil Engineering Department, Jadavpur University, 26.08.2006.
18. **"Aerobic- Anoxic Treatment for Simultaneous SCOD Removal, Nitrification and Denitrification- A Laboratory-Scale SBR Study"**- A. Debsarkar, S.N. Mukherjee and S. Datta, paper accepted for presentation at the "International Conference on Civil Engineering in the New Millennium: Opportunities & Challenges", BESU, (11-14)<sup>th</sup> January, 2007.
19. **"Low Cost Surface Water Treatment Technologies–Recent Scenario"**–S. Mukhopadhyay, D. Mukherjee and A. Debsarkar, paper presented at the "VIth All India People's Technology Congress", Science City, 10–11<sup>th</sup> Feb–2007
20. **"Scope of an Alternative, Cost–Effective Approach to Power Generation in India: Recent Trends"**–N. Manna, A. Chakrabarty and A. Debsarkar, paper presented at the "VIth All India People's Technology Congress", Science City, 10–11<sup>th</sup> Feb–2007.
21. **"Cleaner Production Strategies for Small-Scale Rural Slaughterhouses-A Case Study"**- Tirtha Banerjee, Nayna Datta, Anupam Debsarkar, Joydeep Mukherjee, Shibnath Chakrabarty and Amitava Gangopadhyay, paper presented at "National Conference on Integrated Water and Wastewater Management", November-2008, Jadavpur University, Kolkata.
22. **"Solar Disinfection of Stored Rainwater –An Alternative and Cost-Effective Approach for Obtaining Drinking Water in Rural India"**-Arkaprabha Majumder, Anupam Debsarkar & Prof.

Arunabha Majumder, paper presented at “National Conference on Integrated Water and Wastewater Management”, November-2008, Jadavpur University, Kolkata.

23. **“Utilization of Waste Blood for Preparation of Blood Meal and Soil Conditioner –A Solution to Slaughter House Waste Problem”**- Nayna Datta, Anupam Debsarkar and Joydeep Mukherjee, paper presented at the “VIIth All India People’s Technology Congress”, Science City, 6–7<sup>th</sup> Feb–2009.
24. **“Carbon Capture and Storage- The Technological Challenge of The Next Decades”**- Tirtha Banerjee, Md. Rushdie Ib-ne Islam, Angshuman Singha, Anirban Kundu Chowdhury and Anupam Debsarkar, paper presented at the “VIIth All India People’s Technology Congress”, Science City, 6–7<sup>th</sup> Feb–2009.
25. **“Potential Health Effects of Radio Frequency Emitted from Mobile Telephones and Its Base Stations - A Critical Review”**- Anirban Kundu Chowdhury, Tirtha Banerjee, Tuhin Subhra Konar, Anupam Debsarkar and Amitava Bandopadhyay, paper presented at the “VIIth All India People’s Technology Congress”, Science City, 6–7<sup>th</sup> Feb–2009.
26. **“Quality Evaluation of Surface and Ground Water Sources in the Adjacent Areas of Dhapa Solid Waste Dumping Ground”**- Kankan Mukhopadhyay, Sumona Mukherjee, Anupam Debsarkar, Amit Dutta and Amitava Gangopadhyay, paper presented at the “National Conference on Agricultural and Industrial Metabolism for Sustainable Development”, IISWBM, 3-4 December, 2010.
27. **“Quality Assessment of Soil in an Agricultural Land having Age-old Practice of Co-recycling of Solid and Liquid Waste”**, Sumona Mukherjee, Kankan Mukhopadhyay, Anupam Debsarkar, Amit Dutta and Amitava Gangopadhyay, paper presented at the “National Conference on Agricultural and Industrial Metabolism for Sustainable Development”, IISWBM, 3-4 December, 2010.
28. **“Combined COD Removal and Nitrification Kinetics for Treatment of Slaughterhouse Wastewater in a Batch Fed Reactor”**, Pradyut Kundu, Anupam Debsarkar and Somnath Mukherjee, paper presented at the “National Conference on Case Studies in Environmental Management (CSEM)”, VNIT, Nagpur, 5-6 March, 2011.
29. **“Performance Evaluation of a Sequencing Batch Reactor (SBR) for Treatment of Slaughterhouse Wastewater”**, Pradyut Kundu, Suman Sen, Sujan Pal, Sumana Mitra, Anupam Debsarkar and Somnath Mukherjee, paper presented at the “International Conference on Recent Innovations in Technology (ICRIT-2012)”, RIT-Kottayam, Kerala, 12-14 January, 2012.
30. **“Application of Sequencing Batch Reactor (SBR) Technology for Treatment of Slaughter House Wastewater”**, Pradyut Kundu, Suman Sen and Anupam Debsarkar, paper presented at the **“National Conference on Challenges for Civil Engineering due to Environmental Degradation”**, BIET, Suri, Birbhum, West Bengal, 18-19 February, 2012.
31. **“Enrichment of Nitrogen and Phosphorous through Waste Recycling in Agricultural Area at Dhapa, Kolkata”**, Sanjib Kumar Maiti, Sushmita De, Anupam Debsarkar, Amit Dutta, Amitava Gangopadhyay, paper presented at the **“National Conference on Challenges for Civil Engineering due to Environmental Degradation”**, BIET, Suri, Birbhum, West Bengal, 18-19 February, 2012.
32. **“Heavy Metal Pollution in Environmental Components due to Waste Recycling for Agricultural Purposes at Dhapa, Kolkata”**, Sushmita De, Sanjib Kumar Maiti, Anupam Debsarkar, Amit Dutta, Amitava Gangopadhyay, paper presented at the **“National Conference on Challenges for Civil Engineering due to Environmental Degradation”**, BIET, Suri, Birbhum, West Bengal, 18-19 February, 2012.

33. **“Locally Affordable and Scalable Arsenic Remediation for South Asia using ECAR”**, by S.E. Amrose, A.J. Gadgil, S.R.S. Bandaru, C. Delaire, C.M. van Genuchten, L. Li, C. Orr, A. Dutta, A. Debsarkar, A. Das, J. Roy in the **36th WEDC International Conference, Nakuru, Kenya, 2013** on **“Delivering Water, Sanitation and Hygiene Services in an Uncertain Environment”**.
34. **“Addressing arsenic mass poisoning in South Asia with innovative technology: ECAR field tests in West Bengal, 2009 – 2013”**, Susan E. Amrose, Siva R.S. Bandaru, Caroline Delaire, Case M. van Genuchten, Andrew A. Torkelson, Lei Li, Amit Dutta, Anupam DebSarkar, Christopher Orr, Joyashree Roy, Ashok Gadgil, presented in the **International GEOGEN Conference, 2013, Addis Ababa, Ethiopia**.
35. **“Performance and Application of Alternative Arsenic Mitigation Options in West Bengal (India): Community Response”**, Abhijit Das, Anupam Debsarkar & Amit Datta, presented in the International Seminar on **“Current Status of Arsenic, Fluoride and Pathogens in Drinking Water: Treatment Methods and Experiences”**, organized by **International Centre for Ecological Engineering (ICEE) & Kalyani Shine India (KSI)** in cooperation with **Federal Ministry of Economic Cooperation and Development, Germany / HEGO Biotec GmbH Germany** on **1<sup>st</sup> April, 2013**.
36. **“Chromium-tolerant bacteria in diversified soil microbial community in the bank of tannery waste water discharging canal of East Calcutta, West Bengal”** at **National Conference on Biodiversity NCB – 2014 – Issues, Concern and Future Strategies**, organized by West Bengal Biodiversity Board (Dept. of Environment, Govt. of West Bengal) 16-18 January 2014, Science City Mini Auditorium, Kolkata and TEQUIP Hall, Jadavpur University, Kolkata.
37. **“Isolation of Chromium-tolerant bacteria in diversified soil microbial community”** at **“International Conference on Molecular Biology and Its Applications”** organized by Department of Life Science and Biotechnology, Jadavpur University, February 14 & 15, 2014.
38. **“Impact of Landfill Leachate on Ground and Surface Water Quality- A Municipal Solid Waste Landfill Site, Dhapa, Kolkata Case Study”**, Sanjib Kumar Maiti, Sushmita De, Tumpa Hazra, Anupam Debsarkar, Amit Dutta, presented in TEQIP-II Symposium on **“Management and Procurement of Integrated Waste Management System”**, (6-7 February, 2015), conducted by Department of Civil Engineering, IITG, organized by Knowledge Incubation Cell, Centre for Educational Technology, Indian Institute of Technology Guwahati, pp. 21.
39. **“A Study on the Leachate Pollution Potential and Sub-leachate Pollution Indices of Municipal Solid Waste (MSW) Landfill Leachate in Kolkata”**, Sushmita De, Sanjib Kumar Maiti, Tumpa Hazra, Anupam Debsarkar, Amit Dutta, presented in TEQIP-II Symposium on **“Management and Procurement of Integrated Waste Management System”**, (6-7 February, 2015), conducted by Department of Civil Engineering, IITG, organized by Knowledge Incubation Cell, Centre for Educational Technology, Indian Institute of Technology Guwahati, pp. 20.
40. **“E-waste Scenario in India: Existing Practice and Planning for Future Management System”**, Dipsikha Dasgupta, Anupam Debsarkar, Amitava Gangopadhyay and Debashis Chatterjee, presented in TEQIP-II Symposium on **“Management and Procurement of Integrated Waste Management System”**, (6-7 February, 2015), conducted by Department of Civil Engineering, IITG, organized by Knowledge Incubation Cell, Centre for Educational Technology, Indian Institute of Technology Guwahati, pp.-3.
41. **“Characterization of arsenic bearing ECAR sludge and its immobilization in concrete”**, Abhisek Roy, Indranil Mookherjee, **Amit Dutta**, Anupam Debsarkar, Naru Gopal Das, Soumil Gupta Bhaia. International Conference on Emerging Trends in Informatics & Communication (ICETIC), organized by Brainware Group of Institutions, Kolkata. 20-21<sup>st</sup> February, 2016.

42. **“Sustainable Management of Arsenic Bearing Sludge”**, I. Mookherjee, A. Roy, A. Dutta, A. Debsarkar, P. Aitch, presented in **6th International Conference on Solid Waste Management, 6th IconSWM 2016, Jadavpur University, Kolkata, India, November 24 - 26, 2016.**
43. **“Assessment of Ecological and Health Risk associated with Informal Handling of E-waste: A Case Study of Sangrampur, South 24 Parganas”**, Dipsikha Dasgupta, Anupam Debsarkar, Amitava Gangopadhyay and Debasish Chatterjee, presented in **6th International Conference on Solid Waste Management, 6th IconSWM 2016, Jadavpur University, Kolkata, India, November 24 - 26, 2016.**
44. **“Electrocoagulation Process for Landfill Leachate Treatment: A Review”**, S.K. Maiti, T. Hazra and A. Debsarkar, presented in **6th International Conference on Solid Waste Management, 6th IconSWM 2016, Jadavpur University, Kolkata, India, November 24 - 26, 2016.**
45. **“Conversion of abattoir wastes and its subsequent use as organic fertilizer: A Sustainable approach towards waste management”**, Malancha Roy, Joydeep Mukherjee and Anupam Debsarkar, presented in **6th International Conference on Solid Waste Management, 6th IconSWM 2016, Jadavpur University, Kolkata, India, November 24 - 26, 2016.**
46. **“Investigation on arsenic leaching from sludge embedded concrete for different size ranges using TCLP”**, Abhisek Roy, Indranil Mookherjee, Saikat Sit, Amit Dutta, Anupam Debsarkar, **National Conference on Sustainable Advanced Technologies for Environmental Management**, Department of Civil Engineering, Indian Institute of Engineering Science and Technology, Shibpur, **June (28-30), 2017.**
47. **“Diurnal trends and seasonal variation of few criteria air pollutants (suspended particulate matters, gaseous and heavy metal) in the ambient air of Jadavpur, Kolkata”**, Abhisek Roy, Shibnath Chakraborty, Amit Dutta, Anupam Debsarkar, **National Conference on Sustainable Advanced Technologies for Environmental Management**, Department of Civil Engineering, Indian Institute of Engineering Science and Technology, Shibpur, **June (28-30), 2017.**
48. **“The quest for mechanistic insights for bioaccumulation of hexavalent chromium: a white route for bioremediation”**, Piku Sen, Debasish Pal and Anupam Debsarkar at LERIG organised by CLRI in Chennai, 2017.
49. **“Remediation of Chromium: An Overview of Chemical and Microbial Processes and Mechanisms”**, Piku Sen, Debasish Pal and Anupam Debsarkar, Research Conclave, 2018, IIT-Guwahati.
50. **“Integrated Arsenic Remediation from Contaminated Groundwater: Field Trials in Dhapdhapi, South 24 Parganas”**, Sudipta Ghosh (Nath), Abhisek Roy, Anupam Debsarkar & Amit Dutta, paper presented at national workshop on **‘Arsenic Contamination And Sustainable Technological Solutions In India (ACASTSI-2019)’**, organized by NSHM, Faculty of Business and Management Studies, in collaboration with **“Save the Environment (STE)”**, during **26 -27 February, 2019**, at NSHM Knowledge Campus, Durgapur.
51. **“Electrochemical Arsenic Remediation-An Alternative to get Arsenic Safe Water”**, Sudipta Ghosh (Nath), Anupam Debsarkar & Amit Dutta, paper presented at the National Seminar on **“Groundwater Arsenic Contamination Problem in Ganga-Meghna-Bramhaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”**, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University, on **25<sup>th</sup> March, 2019** at Vijaygarh Jyotish Ray College, Kolkata.

52. **“Stabilization of Arsenic Remediation Plant Generated Arsenic Sludge in Building Materials”**, Abhisek Roy, Anupam Debsarkar & Amit Dutta, paper presented at the National Seminar on **“Groundwater Arsenic Contamination Problem in Ganga-Meghna-Bramhaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”**, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University, on 25<sup>th</sup> March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.
53. **“Socio-economic Appraisal of Arsenic Pollution and Rain Water Harvesting (RWH): A case study of Amdanga Block, North 24 Parganas, West Bengal, India”**, Satabdi Biswas, Anupam Debsarkar and Gupinath Bhandari, paper presented at the National Seminar on **“Groundwater Arsenic Contamination Problem in Ganga-Meghna-Bramhaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”**, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University, on 25<sup>th</sup> March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.
54. **“Investigating Real Time Ambient Air Quality Status and Land Surface Temperature during Kalipuja/Diwali Festival in different Land Use types –Case study Kolkata”**, Sohini Sen, Debashish Das, Anupam Debsarkar and Raja Ghosh, paper presented at International conference (IASTEM) , 14-15<sup>th</sup> November, 2019 at Shanghai, China.
55. **“Socio-Economic Assessment of Arsenic and Iron Contamination Of Groundwater And Feasibility of Rain Water Harvesting (RWH): A Case Study of Amdanga Block, North 24 Parganas, West Bengal, India”**, Satabdi Biswas and Anupam Debsarkar at the Technical Session-IA on **“Water Scarcity Challenge Ahead”** of the **“International Conference on Sustainable Water Resources Management- Under Changed Climate”** held on March 13 (13-15), 2020 organized by School of Water Resources Engineering, Jadavpur University at Jadavpur University.
56. **“Perception Study Towards Rainwater Harvesting in Qualitative Water Stressed Areas”**, by Satabdi Biswas, Anupam Debsarkar & Shyamaprasad Sinharay, in the Webinar entitled R&D Exposition-2021, organized under the auspices of TEQIP-III of Jadavpur University, 27<sup>th</sup> February, 2021.
57. **“Recycling of Slaughterhouse Waste in Organic Agriculture: An Initiative to Protect Environment and Economy”**, by Shantanu Bhunia, Ankita Bhowmik, Rambilash Mallick, Anupam Debsarkar & Joydeep Mukherjee, in the Webinar entitled R&D Exposition-2021, organized under the auspices of TEQIP-III of Jadavpur University, 27<sup>th</sup> February, 2021.
58. **“Adsorption Potential of Selected Low Cost Adsorbents for Removal of Two Basic Dyes (Methylene Blue and Malachite Green) from Binary System: A Comparative Study”**, by Soumitra Banerjee, Anupam Debsarkar and Siddhartha Datta, in the Webinar entitled R&D Exposition-2021, organized under the auspices of TEQIP-III of Jadavpur University, 27<sup>th</sup> February, 2021.
59. **“Valorization of Rural Abattoir Waste as Fertilizer for Sustainable Agricultural Production and Socio-Economic Development”**, Shantanu Bhunia, Ankita Bhowmik, Anupam Debsarkar, Rambilash Mallick and Joydeep Mukherjee, presented in the virtual poster session of the International Nature Conferences on **“Waste Management and Valorization for a Sustainable Future”**, organized on and from October 26 (Tue.) – 28 (Thu.), 2021 by Korea University at LG Science Park, Seoul, Korea.

### **C. Book Chapters**

1. Amit Dutta and Anupam Debsarkar. **“Arsenic Contamination of Groundwater and its Remediation – A West Bengal Perspective”**. Published in a book as an outcome of UGC

sponsored state level seminar, “Access in Ground Water: Complexities and challenges Ahead in West Bengal”, edited by Abhijit Das. pp 91 – 108. ISBN: 978-81-924432-07. Published in 2014.

2. Mookherjee, I., Roy, A., Dutta, A., **Debsarkar, A.**, and Aitch, P. “**Sustainable Management of Arsenic-Bearing Sludge**”, *Waste Management and Resource Efficiency*. (Springer Publication), (2019).
3. Abhisek Roy, Biswajit Thakur, and Anupam Debsarkar, “**Water Pollution and Treatment Technologies**”, published in the book “**Environmental Management: Issues and Concerns in Developing Countries**” as book chapter, page-79-106, 2021, ISBN 978-3-030-62528-3 ISBN 978-3-030-62529-0 (eBook), <https://doi.org/10.1007/978-3-030-62529-0>
4. **Satabdi Biswas** and Anupam Debsarkar, “**Socio-economic Assessment of Arsenic and Iron Contamination of Groundwater and Feasibility of Rain Water Harvesting (RWH): A Case Study of Amdanga Block, North 24 Parganas, West Bengal, India**”, *Advances in Water Resources Management for Sustainable Use*, Springer, ISBN 978-981-33-6412-7 (eBook), <https://doi.org/10.1007/978-981-33-6412-7>, pp- 85-96, October, 2021.
5. **Satabdi Biswas**, Satiprasad Sahoo and Anupam Debsarkar, “**Social Vulnerability of Arsenic Contaminated Groundwater in the Context of Ganga-Brahmaputra-Meghna Basin: A Critical Review**”, *Geospatial Technology for Environmental Hazards, Modeling and Management in Asian Countries*, Springer, pp- 39-62, December, 2021. <https://doi.org/10.1007/978-3-030-75197-5>
6. **Satabdi Biswas**, Satiprasad Sahoo and Anupam Debsarkar, “**Impact of LULC and Socio-economic Changes on Groundwater Availability: A Case Study of Barrackpore-II Block, West Bengal, India**”, *Environmental Degradation in Asia: Land Degradation, Environmental Contamination and Human Activities*, Springer, 2021.
7. Satiprasad Sahoo, Anirban Dhar and Anupam Debsarkar, “**Impact of Climate Change and Human Interventions on a River Basin: Hydro-Environmental Regime of a Dwarakeswar-Gandheswari Basin**”, *Scholars' Press (October 30, 2020)*.

#### **D. Special Research Achievement**

1. Worked as Research Team Member of “**Arsenic Research Group**” of University of California, Berkeley under Prof. Ashok Gadgil, Division Director, and Faculty Senior Scientist, Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory (2011-2017).

#### **E. Other Important Achievements**

1. Participated as **panelist** in the UGC-sponsored State Level Seminar on “**Access to Safe Water: Socio-Economic & Technical Challenges in Arsenic Affected Areas of Murshidabad**”-10-11<sup>th</sup> January, 2012, Kandi Raj College, Mushidabad.
2. Delivered Lecture on “**Defluoridation of Groundwater**” at the National Workshop on “**Application of Different Techniques for Wastewater Management under Current Scenario**”, at College of Engineering & Management, Kolaghat, under TEQIP-Phase-II on (March 23-24, 2013).
3. Participated in the “**Rural Drinking Water Roundtable: Thirst for a Business Model**”, organized by the **Embassy of the United States of America** and the **Department of Science & Technology** with support from the **Federation of Indian Chambers of Commerce & Industry**, April 8, 2013, at the Committee Hall of Federation House, FICCI, New Delhi.



4. Visited UCB and LBNL as Visiting Scholar during 21<sup>st</sup> July to 28<sup>th</sup> August, 2013.
5. Delivered invited lecture on **“Global Climate Change and Relevance of Green Industry”** at TSPDL, Tata Centre on 26<sup>th</sup> June, 2014.
6. Delivered lecture in the National Seminar on **“Emerging Trends in Civil Engineering”** organized under **“Special Assistance Programme - UGC”** at Department of Civil Engineering , Jadavpur University on **“Landfill Leachate and its Impact on the Surrounding Surface and Ground Water Quality - A Dhapa MSW Dumping Site, East Kolkata Case Study”** on 20<sup>th</sup> October, 2014.
7. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **“Recent Advances in Civil & Structural Engineering”** held at the Department of Civil Engineering, Jadavpur University on the topic **“Environmental Impact Assessment in India-An Appraisal”** on 22<sup>nd</sup> January, 2015.
8. Delivered lecture in the three-week long **UGC-Sponsored special course** on **“Disaster Management”** held at the Department of Civil Engineering, Jadavpur University on the topic **“Environmental Impact Assessment”** on 12<sup>th</sup> March, 2015.
9. Delivered lecture in the three-week long **UGC-Sponsored special course** on **“Disaster Management”** held at the Department of Civil Engineering, Jadavpur University on the topic **“Hazardous Waste Management from Indian Perspective”** on 20<sup>th</sup> March, 2015.
10. Delivered invited lecture in the seminar on **“Smart Cities: Issues & Challenges”** organized by **“Society of Civil Engineers, Jadavpur University”**, held at the New Seminar Room, Department of Civil Engineering, Jadavpur University on the topic **“Smart Cities: Issues & Challenges- From Environmental Perspective”** on 26<sup>th</sup> September, 2015.
11. Delivered invited lecture on **“Arsenic Remediation of Groundwater”** at Ellite Institute of Engineering & Management, on 8<sup>th</sup> October, 2015.
12. Delivered invited lecture on **“Arsenic Remediation of Groundwater”** as a Resource Person during **60<sup>th</sup> Orientation Programme** at UGC-HRDC, Salt Lake Campus, Jadavpur University on **25<sup>th</sup> February, 2016.**
13. Delivered invited lecture on **“NSS & its Objectives”** as a Resource Person during **60<sup>th</sup> Orientation Programme** at UGC-HRDC, Salt Lake Campus, Jadavpur University on **25<sup>th</sup> February, 2016.**
14. Delivered invited lecture on **“Arsenic Remediation of Groundwater”** as a Resource Person during **61<sup>st</sup> Orientation Programme** at UGC-HRDC, Salt Lake Campus, Jadavpur University on **20<sup>th</sup> June, 2016.**
15. Delivered invited lecture on **“NSS & its Objectives”** as a Resource Person during **61<sup>st</sup> Orientation Programme** at UGC-HRDC, Salt Lake Campus, Jadavpur University on **20<sup>th</sup> June, 2016.**
16. Delivered invited lecture on **“Arsenic Remediation of Groundwater”** as a Resource Person during **62<sup>nd</sup> Orientation Programme** at UGC-HRDC, Salt Lake Campus, Jadavpur University on **5<sup>th</sup> September, 2016.**
17. Delivered invited lecture on **“NSS & its Objectives”** as a Resource Person during **62<sup>nd</sup> Orientation Programme** at UGC-HRDC, Salt Lake Campus, Jadavpur University on **5<sup>th</sup> September, 2016.**
18. Delivered invited lecture on **“Defluoridation of Groundwater”** at Ellite Institute of Engineering & Management, on 28<sup>th</sup> October, 2016.

19. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **“Disaster Management”** held at the **Department of Civil Engineering, Jadavpur University** on the topic **“Environmental Impact Assessment in India-An Appraisal”** on **4<sup>th</sup> November, 2016**.
20. Delivered invited lecture on **“Arsenic Remediation of Groundwater”** as a Resource Person during **63<sup>rd</sup> Orientation Programme** at **UGC-HRDC, Salt Lake Campus, Jadavpur University** on **21<sup>st</sup> November, 2016**.
21. Delivered invited lecture on **“NSS & its Objectives”** as a Resource Person during **63<sup>rd</sup> Orientation Programme** at **UGC-HRDC, Salt Lake Campus, Jadavpur University** on **21<sup>st</sup> November, 2016**.
22. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **“Built Environment & Sustainable Technologies (BEST)”** held at the **Department of Architecture, Jadavpur University** on the topic **“Air Pollution & Human Health”** on **13<sup>th</sup> January, 2017**.
23. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **“Built Environment & Sustainable Technologies (BEST)”** held at the **Department of Architecture, Jadavpur University** on the topic **“Air Quality Management”** on **14<sup>th</sup> January, 2017**.
24. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **'Current Environmental Issues: Impact, Measurement and Mitigation'**, organized by **'School of Environmental Studies, Jadavpur University'** at the **Seminar Room of School of Energy Studies, Jadavpur University** on the topic **“Defluoridation of Drinking Water”** on **19<sup>th</sup> January, 2017**.
25. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **'Current Environmental Issues: Impact, Measurement and Mitigation'**, organized by **'School of Environmental Studies, Jadavpur University'** at the **Seminar Room of School of Energy Studies, Jadavpur University** on the topic **“Hazardous Waste Management-from Indian Perspective”** on **20<sup>th</sup> January, 2017**.
26. **Organized a short term course** on **“Engineering & Materials for Sustainable Development”** as Course Coordinator under the aegis of **“Global Initiative of Academic Network (GIAN)”** programme of **MHRD, Government of India** from **27.01.2017 to 02.02.2017** at the seminar room of **Department of Electrical Engineering, Jadavpur University**.
27. Delivered invited lecture on **“Arsenic Remediation of Groundwater”** as a Resource Person during **64<sup>th</sup> Orientation Programme** at **UGC-HRDC, Salt Lake Campus, Jadavpur University** on **14<sup>th</sup> February, 2017**.
28. Delivered invited lecture on **“NSS & its Objectives”** as a Resource Person during **64<sup>th</sup> Orientation Programme** at **UGC-HRDC, Salt Lake Campus, Jadavpur University** on **14<sup>th</sup> February, 2017**.
29. Delivered invited lecture on the topic **“Air Pollution & Human Health”** on **21<sup>st</sup> April, 2017** at the day-long seminar on **“Environmental Pollution & Control”** organized by **Department of Civil Engineering, Calcutta Institute of Engineering & Management, Tollygunge**.
30. Delivered lecture in the one-week long **AICTE-sponsored QIP short-term course** on **“Solid & Hazardous Waste Management”**, organized by **“Department of Civil Engineering, IIT-KGP”** at the **Maitrayee Hall of Indian Institute of Technology, Kharagpur** on the topic **“Hazardous Waste Management-An Indian Perspective”** on **28<sup>th</sup> June, 2017**.
31. Chaired the **Technical Session-VI** on **“Solid & Hazardous Waste Management”** of the **“National Conference on Sustainable Advanced Technologies for Environmental Management”** held on **June 29 (28-30), 2017** at the **Department of Civil Engineering, Indian Institute of Engineering Science and Technology (IIEST), Shibpur**.

32. Delivered invited lecture on the topic **“Elements of Environmental Engineering”** on **9<sup>th</sup> August, 2017** under the purview of **“Value Added Training Programme”** organized by **Department of Civil Engineering, Netaji Subhas Institute of Engineering & Management, Garia.**
33. Delivered **ten** invited lectures on the topic **“Rural Solid & Liquid Waste Management”** over the months **August-November, 2017** under the purview of **“Value Added Training Programme for Nirman Sahayaks of Government of West Bengal”** organized by **Department of Civil Engineering, Meghnad Saha Institute of Technology** over the period of **August-November, 2017.**
34. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **“Recent Advances in Civil Engineering”** held at the **Department of Civil Engineering, Jadavpur University** on the topic **“Urban Air Quality Management in India- Initiatives & Challenges”** on **6<sup>th</sup> January, 2018.**
35. Delivered lecture in the three-week long **UGC-Sponsored refresher course** on **“Recent Advances in Civil Engineering”** held at the **Department of Civil Engineering, Jadavpur University** on the topic **“Arsenic Remediation of Groundwater”** on **12<sup>th</sup> January, 2018.**
36. Delivered lecture in the two-day long **Faculty Development Programme** organized by **Tripura Institute of Technology (TIT), Narsingarh** on **“Ground water Contamination & Management”** on **26-27 July, 2018** on the topic **“Groundwater scenario of India”** under **TEQIP-III.**
37. Delivered lecture in the two-day long **Faculty Development Programme** organized by **Tripura Institute of Technology (TIT), Narsingarh** on **“Ground water Contamination & Management”** on **26-27 July, 2018** on the topic **“Fluoride Contamination in Ground water”** under **TEQIP-III.**
38. Delivered invited lecture on **“Groundwater Contamination – An Indian Scenario”** at **Elite Institute of Engineering & Management,** on **27<sup>th</sup> September, 2018.**
39. Delivered invited lecture on **“Plastic Waste Management – An Indian Scenario”** at the **State Level Seminar** on **“Our Legacy of Wild Life & Environment: Today & Tomorrow”**, organized by **Department of Zoology, Serampore College** in collaboration with **WWF** and at **CLRC Auditorium, Serampore College** on **13<sup>th</sup> October, 2018.**
40. Delivered **five** invited lectures on the topic **“Rural Solid & Liquid Waste Management”** over the months **August-November, 2017** under the purview of **“Value Added Training Programme for Nirman Sahayaks of Government of West Bengal”** organized by **Department of Civil Engineering, Meghnad Saha Institute of Technology** over the period of **November-December, 2018.**
41. Chaired the **Technical Session-VIII** on **“Innovative Technologies in Industrial Waste Management”** of the **“International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC-2018)”** held on **December 18 (17-19), 2018** at the **Department of Civil Engineering, Indian Institute of Engineering Science and Technology (IIST), Shibpur.**
42. Delivered lecture in the three-week long **UGC-HRDC Sponsored Refresher Course** on **“Disaster Management: Water and Environmental Sanitation”** organized by **School of Water Resources Engineering, Jadavpur University,** at the **Seminar Room of School of Energy Studies, Jadavpur University** on the topic **“Disaster Management: Water Pollution”** on **28<sup>th</sup> January, 2019.**

43. Jointly conducted short term course with Dr. Gupinath Bhandari on “Air & Water Pollution” under Green Skill Development Programme, MoEF&CC, Govt. of India from 20<sup>th</sup> Nov, 2018 to 14<sup>th</sup> Jan, 2019 at Seminar Room-II, Department of Civil Engineering, Jadavpur University.
44. Participated in the workshop entitled “Community Dialogue on Kolkata’s Air Pollution” organized by Institute of Future Studies, University of Strathclyde, UK and Environment Governed Integrated Organization (EnGIO), Kolkata on 8<sup>th</sup> February, 2019 at Lions’ Club Auditorium, Deshapriya Park, Kolkata.
45. Participated in the Panel Discussion on “A step towards a consensus on fighting Air Pollution: A Pulmonologist's perspective”, as an expert at ACPCON-2019, held on 16<sup>th</sup> February, 2019 at Raas Mancha, Swabhumi, Salt Lake.
46. Delivered invited lecture on “Integrated Arsenic Remediation from Contaminated Groundwater: Field Trials in Dhapdhapi, South 24 Parganas”, at the National Seminar on “Groundwater Arsenic Contamination Problem in Ganga-Meghna-Brahmaputra (GMB) Plain: It’s Health Effects, Socio-Economic Implications and Mitigation Strategies”, jointly organized by Department of Economics, Vijaygarh Jyotish Ray College and School of Environmental Studies, Jadavpur University, on 25<sup>th</sup> March, 2019 at Vijaygarh Jyotish Ray College, Kolkata.
47. Worked as Expert Team Member constituted by CPCB, ERD for conducting “Performance Audit of SPCBs/PCC” in compliance with the order of Hon’ble NGT dated 11.01.2019. (May-June, 2019)
48. Delivered invited Keynote lecture on “Cleaning the Air: Combating Air Pollution”, as a part of observance of World Environment Day-2019, at The Institution of Engineers (India), R.N. Mukherjee Hall on 5<sup>th</sup> June, 2019.
49. Delivered lecture on “Urban Air Quality & Its Management: From Indian Perspective” in the National workshop on 'Need of Urban Planning to Mitigate Air Pollution' organized jointly by the Institute of Town Planners, India, West Bengal Regional Chapter and the Indian Institute of Technology, Kharagpur on 13th July, 2019 (Saturday) at The Rotary Sadan, Kolkata.
50. Delivered invited lecture on “Careers in Civil Engineering” in the 3 week long Induction Programme for B. Tech first year CE students on 30.07.2019(Tuesday) from 10:00am to 11:45am at the Department of Civil Engineering of Meghnad Saha Institute of Technology.
51. Delivered five invited lectures on the topic “Rural Solid & Liquid Waste Management” over the months August-September, 2019 under the purview of “Value Added Training Programme for Nirman Sahayaks of Government of West Bengal” organized by Department of Civil Engineering, Meghnad Saha Institute of Technology.
52. Participated in the discussion on “Kolkata’s Ambient Air Quality” convened by Hon’ble Consul General of United States of America at CG’s residence on 26<sup>th</sup> September, 2019 between 12:30-2:30 PM.
53. Delivered invited lecture on “Water Scarcity Issues and Plastic Waste Management” at Naba Barracpore Prafulla Chandra Mahavidyalaya on 1<sup>st</sup> October, 2019 at 12:30 PM.
54. Chaired the Technical Session-I on “Air Pollution Solid & Hazardous Waste Management” of the “National Conference on Sustainable Advanced Technologies for Environmental Management” held on December 18 (18-20), 2019 at the Department of Civil Engineering, Indian Institute of Engineering Science and Technology (IEST), Shibpur.

55. Delivered two lectures in the short term course organized by Department of Metallurgical and Materials Engineering of NIT-Durgapur on **"Waste to Wealth - The Current Scenario and Sustainable Technology - WTW - 2020"** during **January 20-24, 2020**, under **TEQIP-III** on **"Hazardous Waste Management"** and **"Air and Noise Pollution"** respectively.
56. Delivered lecture in the two-week long **UGC-Sponsored refresher course** on **"Disaster Management"** undertaken by **"Centre for Disaster Preparedness & Management, Jadavpur University"** held at the **Department of Civil Engineering, Jadavpur University** on the topic **"Environmental Impact Assessment in India-An Appraisal"** on **11<sup>th</sup> February, 2020**.
57. Delivered invited lecture in the Certificate Course on **"Water Pollution Monitoring"** under **Green Skill Development Programme (GSDP)** sponsored by Ministry of Environment, Forest and Climate Change (MoEF&CC) Government of India on **"Elements of Water Pollution"** on **25<sup>th</sup> February, 2020** at **Department of Zoology, University of Kalyani**.
58. Delivered invited lecture on **"Integrated Arsenic Remediation from Contaminated Groundwater: Field Trials in Dhapdhapi, South 24 Parganas"**, at the National Workshop on **"Arsenic Pollution – Problem, Effects and Remedial Measures"**, organized by **Department of Environmental Studies, Rabindra Bharati University** on **28<sup>th</sup> February, 2020** at **RBU-Jorasanko Campus, Kolkata**.
59. Chaired the **Technical Session-VIIA** on **"Wastewater Treatment Technology"** of the **"International Conference on Sustainable Water Resources Management- Under Changed Climate"** held on **March 14 (13-15), 2020** organized by **School of Water Resources Engineering, Jadavpur University** at **Jadavpur University**.
60. Delivered an invited lecture on **"Waste Recycling & its Application in Rural Slaughterhouses-A Case Study"** at the SERB-DST sponsored online Workshop on **'Recent Trends of Pollution Control Strategies for Wastewater Treatment (RTPCSWT-2020)'** organized by **Department of Chemical Engineering, Jadavpur University** on **20<sup>th</sup> December, 2020** at **2:00 PM**.
61. Delivered lecture in the short term online course sponsored by **Atal Academy, Govt of India** and organized by **N.I.T Durgapur** **"Creating Wealth from Waste - CWW-2021"** on **January 19, 2021** on **"Hazardous Waste Management- From Indian Perspective"**.
62. Delivered an invited lecture in the FDP on **"Green Technology and Sustainability - GTS2022"** on the topic **"Sustainable Air Quality Management for Urban Metropolis"** on **February 21, 2022** organized by **Department of Metallurgical and Materials Engineering, N.I.T Durgapur** along with **ATAL Academy, Government of India**.
63. Delivered an invited lecture on **"Laboratory Wastewater Treatment"** at the Workshop on **'Chemical Waste Management'** organized by **Department of Chemistry, Jadavpur University** on **23<sup>rd</sup> June, 2022** at **3:30 PM**.
64. Delivered an invited special lecture on **"Technology Innovation for Sustainable Liquid Waste Management"** organized by **South Asian Institute of Advanced Research Development (SAIARD)** on **25<sup>th</sup> June, 2022** at **4:00 PM**.
65. Delivered an invited special lecture on **"Kolkata's Air Quality and its Sustainable Management"** organized by **Indian Statistical Institute (ISI)**, as a part of observance of **"Azadi ka Amrit Mahotsav"**, at **P.J. Auditorium**, on **1<sup>st</sup> July, 2022** at **3:30 PM**.

## 10. Experience as a Consultant:

- i) As a member of **Expert Committee** formed by Hon'ble Kolkata High Court on **'Improvement of Ambient Air Quality in Sealdah Railway Siding'**-2001
- ii) As **EIA consultant** for **'EIA & EMP study for Proposed KPC Medical College & Hospital, Jadavpur'**- 2005.
- iii) As **EIA consultant** for **'EIA & EMP for Proposed Underground Car Park and Beautification of BBD Bag Area, Kolkata'**- 2006.
- iv) As an **expert** of the Special Multi-disciplinary team for **'Preparation of Comprehensive Rejuvenation Plan (CRJP) for Rabindra Sarobar Area, Kolkata'** – 2007.
- v) As **EIA consultant** for **'Rapid Environmental Impact Assessment for the Proposed Auditorium at Rabindra Sadan-Nandan Complex, Kolkata'**- 2009.
- vi) As an **expert member** for preparation of **'Environmental Management Plan for a Sustainable Building at EM Bye pass, Kolkata'**-2009.

## 11. Contribution to Institutional Corporate Life:

- i) **Member of Faculty Council for P.G & U.G studies in Engineering** constituted for the period (2006 - 2010).
- ii) **Member of Planning & Development (P& D) Committee** nominated from Faculty Council for P.G & U.G studies in Engineering constituted for the period (2006 - 2010).
- iii) **Member of the Committee constituted to review the proposal of Future Business School** for Integrated Master Degree Course under Jadavpur University (2006-2007).
- iv) **Administrative Committee member of 'School for Advanced Studies in Industrial Pollution Control Engineering'**, Jadavpur University (2003 onwards).
- v) **Administrative Committee member of 'Regional Centre of National Afforestation & Eco-Development Board'**, Jadavpur University (2002 – 2003).
- vi) **Administrative Committee member of 'School of Water Resources Engineering'**, Jadavpur University (2008 onwards).
- vii) **Academic Committee member of 'School of Environmental Studies'**, Jadavpur University (2009 onwards).
- viii) **Member of the Court of Jadavpur University** constituted for the period (2010 - 2014).

- ix) **Member of Executive Council of Jadavpur University** constituted for the period (2010 - 2014).
- x) **Member of Faculty Council for P.G & U.G studies in Engineering** constituted for the period (2010 - 2014).
- xi) **Coordinator of Global Change Programme, Jadavpur University** from (July, 2018)

## **List of Projects (Sanctioned/Applied for)**

Sl. No.	Title of the Project	Status of the Project	Duration / Value of the Project	Own Designation	Name of Other Investigators	Funding Authority
1.	“Dispersion of Coarse and Fine Particulate Matter”	Sanctioned & Completed in the year 2004.	2.0 years/ Rs.44,000/-	Co-investigator	Prof. Shibnath Chakrabarty	UGC- Unassigned Grant
2.	“Assessment of Pollution from Different Sources: Status of Municipal Solid Waste (MSW) Collection, Treatment and Disposal as per MSW Rules in the State of West Bengal”	Sanctioned in the year 2008. Completed	1.0 year/ Rs.5,59,350/-	Co-investigator	Prof. Arunava Majumdar, Prof. Ashis Majumdar and Dr. Pankaj Kumar Roy	West Bengal Pollution Control Board
3.	“Assessment of Environmental Consequences for Sustainability of Waste Recycling in Present Urban Agricultural Practices”	Completed (2009-2013)	3.0 years/ Rs.15,86,200/-	Principal Investigator	Prof. Somnath Mukherjee, Prof. Amitava Gangopadhyay and Prof. S.K. Mukhopadhyay	Department of Environment, Govt. of West Bengal
4.	“Capacity Building for Efficient Utilization of Coal Based Thermal Power Plant Ash in the State of West Bengal”	Completed (2009-2012)	3.0 years/ Rs.49,82,000/-	Co-investigator	Dr. Tapas Kumar Gupta, and Shri Debashis Sarkar.	Department of Science and Technology, Govt. of India
5.	“A Study to Correlate Air and Noise Quality with Urban Traffic Characteristics for Kolkata Metropolis”	Completed (2010-2013)	3.0 Years/ Rs.12,00,000/-	Principal Investigator	Prof. P. Aitch, Prof. S. N. Chakrabarty, Prof. J. Guhaniyogy and Prof. G.N. Bhandari	Department of Science and Technology (DST-PURSE)
6.	Energy-Efficient Arsenic Remediation of Contaminated Groundwater by Electro-Coagulation Process	Completed (2013-2017)	4.0 Years/ Rs.18,00,000/-	Principal Investigator	Dr. Amit Dutta	UPE-II, under University Grants Commission, MHRD
7.	“Demonstrating a Sustainable Solution for Arsenic Removal from Drinking Water”	Completed (2014-2015)	1.0 Year, \$92,732	Principal Investigator	Dr. Amit Dutta	USAID-DIL- University of California, Berkeley



Sl. No.	Title of the Project	Status of the Project	Duration / Value of the Project	Own Designation	Name of Other Investigators	Funding Authority
8	“Sustainable Arsenic Bearing Sludge Management” with University of California Berkeley, US.	Completed (2014-2016)	2.0 years, \$75,000	Co-investigator	Dr. Amit Dutta	US-AID DIL, Co-Investigator
9	“Commercializing a scalable low-cost arsenic remediation technology for societal impact”	Completed (2014-2017)	Total Cost- Rs.2,49,90,868	Member	Prof. Ashok Gadgil, Prof. Joyashree Roy, Dr. Amit Dutta	IUSSTF, member
10	“Production of organic fertilizer by utilizing slaughter house wastes and its application for the cultivation of potato and other vegetables”	Sanctioned (2018-2021)	1.0 years, Total Project Cost: Rs. 22,99,600/-	Co-PI	Dr. Joydeep Mukherjee & Dr. Rambilash Mallick	DST-GoWB
11	“Sustainable Urban Pollution Management and Associated Socio-Economic Impact: A Study of Kolkata Megacity”	Sanctioned (2019-2020)	1.0 year, Total Project Cost: Rs. 15,41,000/-	Principal Investigator	Dr. Amit Dutta	RUSA-2.0
12	“IDEEA: Indian Zero Carbon Energy Pathway”	Sanctioned (2020 – till date)	1.0 year Total Project Cost : USD 52,800/-	Principal Investigator	Prof. Biswanath Roy	Environmental Defense Fund (EDF), US
13	“Preparation of GHG inventory with emission targets and Assessment of Seasonal, Diurnal, Geo Spatial and Temporal Variation of Respirable and Fine Particulates for New Town Kolkata”	Sanctioned (2021-2022)	8.0 months Total Project Cost : Rs. 38,27,024/-	Principal Investigator	Dr. Abhisek Roy, Dr. Biswajit Thakur,	New Town Kolkata Green Smart City Corporation Ltd.

## List of Ph.D. Researches

Sl. No.	Title of the Research	Name of the Researcher	Year of the Degree Awarded
1	“Performance Modeling of a Laboratory-scale Sequential Batch Reactor (SBR) for Treatment of Carbon, Nitrogen and Phosphorous Bearing Industrial Wastewater”	Pradyut Kundu	2015
2	“A Study on Combined Noise-Air Quality and Exposure to Noise-Air Pollution at the Curbside Open-Air Microenvironment of Kolkata City, India”.	Anirban Kundu Chowdhury	2016
3	‘Assessment of e-waste generation, disposal pattern and environmental consequences – A computational and field scale approach’	Dipsikha Dasgupta	2017
4	“Utilization of slaughterhouse wastes as soil conditioner for plantation of vegetable crops: A feasible option for waste minimization”	Malancha Roy	2018
5	“Microbial Remediation of Hexavalent Chromium – A Mechanistic and Batch Kinetic Approach”	Piku Sen	2019
6	“Impact of Climate Change and Anthropogenic Interventions on Hydro-Environmental Regime of Dwarakeswar-Gandheswari River Basin”	Satiprasad Sahoo	2019
7	“Assessment of Environmental Consequences of Uncontrolled Leachate Disposal and its Treatment Potential through Appropriate Physico-Chemical Technology – A Dhapa, Kolkata Perspective”	Sanjib Kumar Maiti	2020
8	“Arsenic Remediation by Electrochemical Process-A Continuous Mode Operational Approach”	Sudipta Ghosh (Nath)	2020
9	“Immobilization of Iron Based Arsenic Bearing Sludge in Cement Concrete and Mortar”	Abhisek Roy	2020
10	“Adsorptive Removal of Two Basic Dyes (Methylene Blue and Malachite Green) from Binary System using Low Cost Adsorbents”	Soumitra Banerjee	2022
11	“Socio-economic Analysis of Rain Water Harvesting as a Tool for Alternative Water Management - A Case Study of Four Blocks under North 24 Parganas District of West Bengal”	Satabdi Biswas	2022

*Anupam Debsarkar.*

Date: 11.07.2022

(ANUPAM DEBSARKAR)