
Curriculum Vitae



Name : **Dr. Subhasish Das**
Designation : Associate Professor
Organisation : School of Water Resources Engineering
Jadavpur University
Kolkata – 700032, West Bengal, India
Nationality : Indian
Contact Phone No. : +9133-24146161/24572485 (Off), +91-8240493196 (M)
Fax No. : +9133-24146886
E-mail : subhasish.das@jadavpuruniversity.in, subhasishju@gmail.com
Website : www.jaduniv.edu.in, www.waterresources-ju.org

Educational Qualifications: -

Ph.D. School of Water Resources Engineering, Jadavpur University, Kolkata, 2014
(*Engineering*) (Submission: July, 2013 and Defence: March, 2014)
Thesis: Study of the Impact of Sediment Transport Dynamics on Clear Water Scour

M.E. School of Water Resources Engineering, Jadavpur University, Kolkata, 2006
Subject: Water Resources & Hydraulic Engineering, First Class First
Thesis: Study of Pipe Network & Temporal Decay of Chlorine for the Water Treatment Plant (WTP) at Dakshin Raipur, West Bengal, India

B.M.E. Dept. of Mechanical Engineering, Jadavpur University, Kolkata, 2003
Subject: Mechanical Engineering, First Class

Higher Secondary (12th Standard) Jadavpur Vidyapith under West Bengal Council of Higher Secondary Education (WBCHSE) Kolkata, 1999
Subject: Science, First Class

Secondary (10th Standard) Jadavpur Vidyapith under West Bengal Board of Secondary Education (WBBSE), First Division with Star Marks Kolkata, 1997

Details of employment (past & present): -

Present Employment: *Associate Professor* (January, 2022 - Till date)
School of Water Resources Engineering, Jadavpur University, Kolkata.
Assistant Professor/Lecturer (July, 2006 – January, 2022)
School of Water Resources Engineering, Jadavpur University, Kolkata.

Research Areas: -

- Computational Hydro Dynamics
- Applied Hydraulic Transients
- Free Surface Flow
- Pipe Flow
- Sediment Transportation
- Irrigation Water Management
- Groundwater Management
- Applied Hydrology

Experience : Teaching : 16 years

Research Guidance *at Ph.D. level* : 5 scholars (awarded) + 1 scholar (submitted)
at M.E. level : 89 scholars (completed)

Research Projects Completed : 4 (as a team member) + 3 (as a CI) + 1 (as a PI)

Consultancy Projects (as a team member) : 15 (completed)

Publications

Journal Paper : 60 (International) + 16 (National)

Book Chapter : 15 (International)

Seminar/Conference : 26 (International) + 13 (National)

SCI/SCIE + ESCI indexed : 35 (=14 + 21)

Impact Factor of SCI/SCIE Papers : Max. = 4.996, Avg. = 2.289

Web of Science (WOS): <https://publons.com/researcher/1663337/subhasish-das/>
 Researcher ID : O-7678-2018
 WOS indexed : 42
 WOS Citation index : Max. = 26, Avg. = 3.976
 WOS H-index : 7

Papers Reviewed for SCI/SCIE+ESCI Journals : 111

ORCID: <https://orcid.org/0000-0002-6512-7454>

Scopus Author: <https://www.scopus.com/authid/detail.uri?authorId=55682655864>

Scopus indexed : 68
 Scopus Citation index : Max. = 36, Avg. = 6.162
 SNIP : Max. = 1.779, Avg. = 0.602
 SJR : Max. = 1.075, Avg. = 0.292
 Scopus h-index : 12

Invited Lecturers Delivered : 31

Seminar/Workshop/Conference Attended : 8 (International) + 26 (National)

Seminar/Workshop/Conference Organised : 1 (International) + 9 (National)

Refresher/Orientation/QIP Courses Attended : 5

Refresher Courses Organized : 2

Contribution to Teaching: -

	<i>Theoretical</i>	<i>Sessional/Practical</i>	
a) <i>Subject/Paper Taught (ME Level)</i>	<ul style="list-style-type: none"> ○ Hydraulics and Sediment Transport ○ Free Surface Flow ○ Computational Hydro Dynamics ○ River Hydraulics & Engineering ○ Irrigation Engineering ○ Hydro Power Engineering 	<ul style="list-style-type: none"> ○ Hydrology Laboratory ○ Fluvial Hydraulics Laboratory ○ Application Software Laboratory ○ Water Quality Analysis Laboratory 	Theses/Dissertations in Water Resources & Hydraulics Engineering
b) <i>ME Exam. paper setter</i>	<ul style="list-style-type: none"> ○ Advanced Hydrology ○ Water Resources Management ○ Design of Water Resources System ○ Water Works Engineering ○ Principle of Water Resources Engineering 		

Member of Learned Societies and / or Professional Bodies: -

- 1) Life Member of The Association of Engineers, India.
- 2) Life Member of the Institution of Science, Education and Culture (ISEC), India.
- 3) Life Member of The Indian Society for Hydraulics, CWPRS.
- 4) Associate Member of the Institution of Engineers (India).

Ph.D. Theses supervised: -

- 1) Bernadette John (2021): A Study on Groundwater Resources for Sustainable Development of KMC Area. Jt.-guide: Dr. Rajib Das. (submitted)
- 2) Sambaran Jana (2022): Assessment of Impact of Climate Change on Water Resources and Study of Hydrological Uncertainty in Subarnarekha River Basin. Jt.-guide: Dr. Debasri Roy.
- 3) Kalyan Mahata (2022): Watershed Image Modeling and Analysis using Computational Segmentation Algorithm. Jt.-guides: Dr. Anasua Sarkar and Dr. Rajib Das.
- 4) Prabir Kumar Maity (2019): Analysis and Control of Saline Water Intrusion in Coastal Aquifers of Purba Midnapur district of West Bengal, India. Jt.-guide: Dr. Rajib Das.
- 5) Hasanur Jaman (2019): Characteristics of Vortices in Equilibrium Scour Holes at Interfering Piers. Jt.-guide: Prof. Dr. Asis Mazumdar.
- 6) Biprodip Mukherjee (2019): A Study on the Design, Analysis and Development of an Electro-mechanical Hydropower Harnessing Model by Vortex Induced Vibration. Jt.-guide: Prof. Dr. Asis Mazumdar.

ME Theses (Dissertations) supervised: -

- 1) Assessment of Raw Water Quality of Jorabagan Water Treatment Plant in Kolkata using Weighted Arithmetic and Canadian Council of Ministers of the Environment Water Quality Index Methods. (2021)
- 2) Study of Monthly Rainfall Distribution in West Bengal using Normal Distribution of Probability. (2021)
- 3) Hydraulic Analysis of Pumping Main Networks using EPANET and WaterGEMS Softwares: Case Studies of South 24 Parganas in West Bengal. (2021)
- 4) Study of accuracy with lowering of grid size for identifying waterlogging areas in Bidhannagar Municipality in West Bengal using ArcGIS. (2021)
- 5) Estimation of Clear Water Scour Depth around Pile Groups in Cohesionless Soil using Artificial Neural Networks. (2021)
- 6) Comparative Study of Gravity Flow Water Supply Network by WaterGEMS and EPANET Softwares: Case Study of Salanpur in West Bengal. (2021)
- 7) Determination of Waterlogged Points of a Plane Surface Region (Kolkata) by different methods with ArcGIS Software. (2020)
- 8) Routing of the Flood Flow in the Reservoirs of Maithon and Panchet. (2020)
- 9) An Estimation of Groundwater Flux of the Confined Aquifer of Kolkata Using GIS Approach. (2020)
- 10) A Review on Horizontal Circular Water Jet Entrainment in Quiescent Water at Ambient Temperature. (2020)
- 11) Estimating the supply transmission of potable water and variation in water head corresponding to different grids of Garden Reach Waterworks. (2020)
- 12) Clearwater Scour around Vane-attached Triangular and Rhombus Shaped Single and Eccentric Structures. (2020)
- 13) Spatial Analysis of Groundwater Level and Electrical Conductivity using Ordinary Kriging and Artificial Neural Network. (2020)
- 14) Flow Simulation of Clearwater Pipelines of a Water Supply Scheme by Hammer Software: A Case Study. (2020)
- 15) Temporal Variation of Clear Water Scour around Vane-Attached Square Structures. (2020)
- 16) Flow Characteristics of Horizontal Circular Water Jet in Quiescent and Flowing Water: A Review. (2020)
- 17) Design of Unit Sizes of a Water Treatment Plant for Guwahati Metropolitan City. (2019)
- 18) Simulation of Clearwater Pipeline Network of Bhangar II Boosting Station in West Bengal using EPANET and WaterGEMS Software. (2019)
- 19) Analysis of Time Variation of Scour around Three Cylindrical Tandem Piers. (2019)
- 20) Study of Clearwater Rising Main Network of Adityapur Municipality in Jharkhand by WaterGEMS Software. (2019)
- 21) Study of Storm and Sewer Drains for Rajarhat (Ward No 4) in West Bengal using SewerGEMS Software. (2019)
- 22) Transient Analysis of a Piped Water Network using HAMMER Software: A Case Study of South Mizoram. (2019)
- 23) Comparison of Flow Fields around a Horizontal Cylinder Placed at Different Flow Depths and Obstructed by a Downstream Vertical Plate. (2019)
- 24) Determination of Tidal Water Influx Potential in Canals for Boro Cropping on the Western Basins of South 24 Parganas in West Bengal, India. (2019)
- 25) Study of Storm and Sewer Water Drainage System at Haldia in West Bengal based on SewerGEMS Software. (2019)

-
- 26) Study of Water Distribution Network of Bhogpur G.P at Panskura in West Bengal by WaterCAD Software. (2019)
 - 27) Model Study of Water Supply Network by EPANET Software for Khatra and Ranibandh Blocks of Bankura District in West Bengal. (2019)
 - 28) A Study on Improvement of Sewerage & Drainage System for Pollution Abatement of Tolly's Nullah, Kolkata. (2018)
 - 29) Determination of Tidal Water Influx to Identify Rabi Crop Patterns at Central Basin of Magrahat, South 24-Parganas, West Bengal. (2018)
 - 30) Qualitative Analysis of Scour around Different Spur Dykes at Side Wall. (2018)
 - 31) Scour Analysis around a Flow Centered Vane Dyke of Different Shapes. (2018)
 - 32) Model Study of Water Distribution System in a Multi-Storied Institutional Building. (2018)
 - 33) Determination Of Fixture Units For Flush Valves Using Modified Hunter's Curves. (2018)
 - 34) Transient Characteristics and Analysis of a Centrifugal Pump Using Method of Characteristics. (2018)
 - 35) Experimental Approach to Determine Velocity Characteristics of B Type Hydraulic Jump and Its Numerical Simulation. (2017)
 - 36) Entrainment of Horizontal Water Jet through 10 mm Nozzle in Ambient Tranquil Water. (2017)
 - 37) Flow Characteristics around Two Identical Submerged Rectangular Vanes Positioned Eccentrically in Tandem at Clear Water Scour Condition. (2017)
 - 38) Study and Verification of Groundwater Level at Coastal Areas of Purba Midnapur District in West Bengal by Visual MODFLOW Software. (2017)
 - 39) Study of Water Distribution Network of Amalhanda Panchayat at Panskura in West Bengal by WATERGEMS Software. (2017)
 - 40) Determination of Scour around Rectangular Submerged Vanes and Flow Fields around a Similar Vane. (2017)
 - 41) Determination of Pipe Deflections and Stresses for a Power Piping Plant by CAESAR Software. (2017)
 - 42) Analysis of a Potable Water Supply Pipeline at Guwahati using WaterGEMS Software. (2017)
 - 43) Model Study of a Water Distribution Pipeline System under Anandapur Head Work in Kolkata through EPANET Software. (2017)
 - 44) Study of Storm Water Drainage System at Agarpara in West Bengal based on CivilStorm Software. (2017)
 - 45) Modification of Hunter's Curve for Flush Valve using Monte Carlo Simulation. (2017)
 - 46) Velocity Profile Analysis by Three Eccentrically Placed Submerged Rectangular Vanes. (2017)
 - 47) Flow Field around an Underwater Laying Cylinder due to Obstruction by a Plate. (2016)
 - 48) Experimental Analysis and Numerical Simulation of Hydraulic Jump. (2016)
 - 49) Effect of Vane fixed to one side of a Square Pier on Scour and Sediment Deposition. (2016)
 - 50) Transient Analysis of Purulia Piped Water Supply Line using HAMMER Software. (2016)
 - 51) Energy Estimation of Garden Reach Water Works and Its Water Transmission for Calcutta City Grid. (2016)
 - 52) Effect on Scour and Sediment Deposition downstream of a Square Pier with a Vane Fixed to it. (2016)
 - 53) Hydraulic Analysis for a Composite Piped Water Supply Network using EPANET Software: A Case Study. (2016)
 - 54) Comparison between EPANET and LOOP Softwares using a Gravity Flow Water Supply Network. (2016)
 - 55) Determination of Flow Kinematics around an underwater laying cylinder, using an acoustic Doppler velocimeter (ADV). (2016)
 - 56) Flow Features around a Submerged Cylinder placed transversely to the Flow with a Plate Obstruction. (2016)
 - 57) Variation of Scour Depth with Change in Pier Alignment Angle on Horizontal Plane. (2015)
 - 58) Stress Analysis of Steam Pipelines of 2×100 MW Captive Power Plant by CAESAR Software. (2015)
 - 59) Design of Landscape Irrigation System by AutoCAD Software and Simulations of Pipeline Distribution Network of a Proposed Site by HAMMER and WaterGEMS Softwares. (2015)
 - 60) Pipeline Analysis of Ash Slurry Disposal System of (2×520) MW Thermal Power Station by HAMMER Software. (2015)
 - 61) Analysis of Horizontal Flow Field for Three Circular Tandem Piers. (2015)
 - 62) Horizontal Circular Compound Water Jet Entrainment into Surrounding Water in Motion. (2015)
 - 63) Stress Analysis with Critical Review of Supports for a Steam Pipeline of Sagardighi Thermal Power Plant using CAESAR Software. (2015)
 - 64) Guidelines for operation and maintenance and quality assurance of Jai Hind Jal Prakalpa. (2015)
 - 65) Horizontal Turbulent Circular Water Jet Entrainment in Quiescent Ambient Water. (2014)
 - 66) Analysis of Clear Water Scour around Eccentric Triangular Piers Arranged in Tandem. (2014)
 - 67) Extended Period Simulations of Pipeline Distribution Network of Garfa Boosting Station by Hammer and WaterGEMS Softwares. (2014)

-
- 68) Design and analysis of 0.127 METRE (5") Parshall flume and long-throat flume. (2013)
 - 69) Analysis of Clear Water Scour and Horseshoe Vortex Flow Field around Eccentric Circular Piers arranged in Tandem. (2013)
 - 70) Analysis of Clear Water Scour and Wake Vortex Flow Field around Eccentric Circular Piers arranged in Tandem. (2013)
 - 71) Design and analysis of 0.127 METRE (5") cut-throat flume and long-throat flume. (2013)
 - 72) Study of the Performance and Operational Procedure of Acoustic Doppler Current Profiler in a Tidal River. (2012)
 - 73) Analysis of turbulent flow field and scour hole geometry around two eccentric circular piers. (2012)
 - 74) Study of Energy Dissipation on inclined Rectangular Contracted Chute. (2012)
 - 75) Analysis of scour hole geometry and turbulent flow field around two eccentric square and triangular piers. (2012)
 - 76) Pipeline design and analysis of distribution network of Dhapa Water Treatment Plant, KMC by EPANET and HAMMER Software. (2012)
 - 77) Laboratory Design and Calibration of a Five inch Parshall Flume. (2012)
 - 78) Vortex Characteristics in Scour Hole around a Circular Pier. (2011)
 - 79) Modification of Hunter's Curve in the Perspective of Water and Energy Conservation. (2011)
 - 80) Analysis of Scour Hole Geometry around a Circular Pier. (2011)
 - 81) Pipeline Transient analysis of Mejia Thermal Power Station, DVC by HAMMER Software. (2011)
 - 82) Feasibility Analysis of Mini Hydel Power Plant on the Tiljuga Dhar River at Nirmali, Bihar. (2010)
 - 83) Analysis of Scour around a Bridge Pier in a Clear Water Regime. (2010)
 - 84) Analysis of Pipe Line Alignment of a Thermal Power Plant Based on Pipe Line Identification with help of Geoinformatics Tools (PIGMI) and Hammer. (2010)
 - 85) A Brief Study of the Turbulent Flow Characteristics of Classical Hydraulic Jump. (2009)
 - 86) Rational Water Distribution in a Big Multi-Storied Building. (2009)
 - 87) Comparative Study of Different Pipe Materials for Water Service. (2009)
 - 88) Analysis of Electrical System of Intake Water Supply of a Power Plant. (2008)
 - 89) Transient Analysis (Both on Water Hammer and Column Separation) – A Case Study of Mejia Thermal Power Station, Damodar Valley Corporation. (2008)

Publications (International Journal): -

*: Corresponding Author

- 1) Das M., **Das S.*** and Mazumdar A. (2023). System performance evaluation for tea plants replacing sprinkler with drip irrigation using water uniformities in Dooars, India. *Asian Journal of Water, Environment and Pollution*. (Accepted)
- 2) Halder S., **Das S.*** and Basu S. (2022). Use of Support Vector Machine and Cellular Automata methods to evaluate impact of irrigation project on LULC. *Environmental Monitoring and Assessment*, Springer, (Accepted).
- 3) Halder S., **Das S.*** and Basu S. (2022). Estimation of seasonal water yield using InVEST model: a case study from West Bengal, India. *Arabian Journal of Geosciences*, Springer, **15**(14), Article No. 1293. <https://doi.org/10.1007/s12517-022-10551-2>.
- 4) John B., **Das S.*** and Das R. (2022). Natural groundwater level fluctuations of Kolkata City based on seasonal field data and population growth using geo-spatial application and characterised statistical techniques. *Environment, Development and Sustainability*, Springer. <https://doi.org/10.1007/s10668-022-02313-7>.
- 5) Bhaumik K. and **Das S.** (2022). Computational hydrodynamics based flow accumulation models to identify urban waterlogging at deltaic plain using GIS. *Environmental Earth Sciences*, Springer, **81**(7), Art. No. 201. <https://doi.org/10.1007/s12665-022-10330-y>.
- 6) Das C.R., **Das S.*** and Panda S. (2022). Groundwater quality monitoring by correlation, regression and hierarchical clustering analyses using WQI and PAST tools. *Groundwater for Sustainable Development*, Elsevier, **16**, Art. No. 100708. <https://doi.org/10.1016/j.gsd.2021.100708>.
- 7) Kuila A., **Das S.*** and Mazumdar A. (2021). Turbulence Spectrum Around a Suspended Cylinder with Vertical Endplate Effects to Enhance VIVACE Strength. *Journal of Waterway, Port, Coastal, and Ocean Engineering*, American Society of Civil Engineers (ASCE), **147**(5), Art. No. 04021024. [https://dx.doi.org/10.1061/\(ASCE\)WW.1943-5460.0000662](https://dx.doi.org/10.1061/(ASCE)WW.1943-5460.0000662).
- 8) Mandal K.R., **Das S.*** and Mazumdar A. (2021). Standardization of Fixture Units for Modern Flush Valves by optimizing Water Demand using Modified Hunter's Curve. *Journal of Pipeline Systems Engineering and Practice*, American Society of Civil Engineers (ASCE), **12**(3), Art. No. 04021022. [https://dx.doi.org/10.1061/\(ASCE\)PS.1949-1204.0000558](https://dx.doi.org/10.1061/(ASCE)PS.1949-1204.0000558).

- 9) Mukherjee P., **Das S.*** and Mazumdar A. (2021). Introducing winter rice cropping by using non-saline tidal water influx in western basins of South 24 Parganas, India. *Scientific Reports, Nature*, **11**(1), Art. No. 553. <https://dx.doi.org/10.1038/s41598-020-80797-x>.
- 10) Roy D., **Das S.*** and Das R. (2021). Characterisation of B Type Hydraulic Jump by Experimental Simulation and Numerical Modeling using MacCormack Technique. *Modeling Earth Systems and Environment, Springer*, **7**(4), pp. 2753-2768. <https://dx.doi.org/10.1007/s40808-020-01056-6>.
- 11) Chakraborty, S.* and **Das, S.** (2020): Analysis of Arsenic Content in Groundwater over the Years of Coastal Belt at Purba Medinipur in West Bengal. *Indian Science Cruiser*, **34**(6), pp. 22-30. <https://dx.doi.org/10.24906/isc/2020/v34/i6/208218>
- 12) Mondal S.*, Mukherjee S. and **Das S.** (2020). Experimental Study of Thermal Effect on Oscillating Hydraulic Jump. *Indian Science Cruiser*, **34**(4), pp. 15-19. <https://dx.doi.org/10.24906/isc/2020/v34/i4/205477>. [based on article presented in Int. Conf. ICAME 2020].
- 13) Kuila A., Mukherjee B., **Das S.*** and Mazumdar A. (2020). Comparison of Flow Fields around a Horizontal Cylinder placed at Different Depths on the Water Channel. *Indian Science Cruiser*, **34**(4), pp. 44-50. [ISSN: 0970-4256. <https://dx.doi.org/10.24906/isc/2020/v34/i4/205476>.
- 14) Mahata K., Das R., **Das S.** and Sarkar A.* (2021). Land Use Land Cover map segmentation using Remote Sensing: A Case study of Ajoy river watershed, India. *Journal of Intelligent Systems, de Gruyter*, **30**(1), pp. 273-286. <https://dx.doi.org/10.1515/jisys-2019-0155>. [based on article presented in Int. Conf. ICMAE 2018]
- 15) Chakraborty S., John B., Maity P.K. and **Das S.*** (2020). Increasing Threat on Groundwater Reserves due to Seawater Intrusion in Contai Belt of West Bengal. *Journal of the Indian Chemical Society*, **97**(5), pp. 799-817.
- 16) Mukherjee P.*, **Das S.** and Mazumdar A. (2020). Evaluating volatility in quality indexing of saline water during tidal backwater incursion in Western Canals of South 24-Parganas, West Bengal. *Journal of the Indian Chemical Society*, **97**(4), pp. 577-586. [based on the article presented in Nat. Conf. SATEM-2019].
- 17) Chakraborty S., John B., **Das S.*** and Maity P.K. (2020). Examining the extent of seawater intrusion from groundwater quality analysis at Purba Medinipur coast of India, *Journal of the Indian Chemical Society*, **97**(4), pp. 587-594. [based on the article presented in Nat. Conf. SATEM-2019].
- 18) John B.*, **Das S.** and Das R. (2020). Effect of changing land use scenario in Kolkata Metropolitan on the variation in volume of runoff using multi-temporal satellite images. *Journal of the Indian Chemical Society*, **97**(4), pp. 555-562. [based on article presented in Nat. Conf. SATEM-2019].
- 19) Maity P.K.*, **Das S.** and Das R. (2020). Geochemical Study and Remedial Measures of Seawater Ingression in the Southern Part of Purba Medinipur District in West Bengal, India. *Indian Science Cruiser*, **34**(2), pp. 36-46. <https://dx.doi.org/10.24906/isc/2020/v34/i2/196423>.
- 20) John B. and **Das S.*** (2020). Identification of risk zone area of declining piezometric level in the urbanized regions around the City of Kolkata based on ground investigation and GIS techniques. *Groundwater for Sustainable Development, Elsevier*, **11**, Art. No. 100354. <https://dx.doi.org/10.1016/j.gsd.2020.100354>.
- 21) Chakraborty S., Maity P.K., John B. and **Das S.*** (2020). Overexploitation of Groundwater Causing Seawater Intrusion in the Coastal Aquifer of Egra in West Bengal. *Indian Journal of Environmental Protection*, **40**(4), pp. 413-423.
- 22) Chakraborty S., Maity P.K. and **Das S.*** (2020). Investigation, simulation, identification and prediction of groundwater levels in coastal areas of Purba Midnapur, India, using MODFLOW. *Environment, Development and Sustainability, Springer*, **22**(4), pp. 3805–3837. <https://dx.doi.org/10.1007/s10668-019-00344-1>.
- 23) Jana S., Dutta S., **Das S.*** and Roy D. (2018). Uncertainty in Hydrologic Response of a River Basin in India to Changed Climate Scenario. *Water and Energy International*, **61**(6), pp. 68-75.
- 24) Das R., **Das S.***, Jaman H. and Mazumdar A. (2018). Impact of Upstream Bridge Pier on the Scouring Around Adjacent Downstream Bridge Pier. *Arabian Journal for Science and Engineering, Springer*, **44**(5), pp. 4359–4372. <https://dx.doi.org/10.1007/s13369-018-3418-5>.
- 25) **Das S.*** and Mazumdar A. (2018). Evaluation of Hydrodynamic Consequences for Horseshoe Vortex System developing around two eccentrically arranged Identical Piers of Diverse Shapes. *KSCE Journal of Civil Engineering, Springer*, **22**(7), pp. 2300-2314. <https://dx.doi.org/10.1007/s12205-017-1842-9>.
- 26) **Das S.***, Mukherjee B. and Mazumdar A. (2018). Comparison of outcomes through EPANET and LOOP softwares using a gravity flow water supply network at East Medinipur in West Bengal. *Journal of the Indian Chemical Society*, **95**(3), pp. 313-324. [based on article presented in Nat. Conf. SATEM-2017].
- 27) Maity P.K., **Das S.*** and Das R. (2018). A geochemical investigation and control management of saline water intrusion in the coastal aquifer of Purba Midnapur district in West Bengal, India. *Journal of the Indian Chemical Society*, **95**(3), pp. 205-210. [based on article presented in Nat. Conf. SATEM-2017].
- 28) **Das S.**, Roy D., Majumder A., Mazumdar A.* and Rit K. (2018). A Preliminary Investigation on Water Quality of Jai Hind Jal Prakalpa in Kolkata. *Indian Journal of Environmental Protection*, **38**(2), pp. 148-153.
- 29) Maity P.K., **Das S.*** and Das R. (2018). Remedial Measures for Saline Water Ingression in Coastal Aquifers of South West Bengal in India. *MOJ Ecology & Environmental Science*, **3**(1), Art. ID 00061. <https://dx.doi.org/10.15406/mojes.2018.03.00061>.

- 30) Mukherjee B., **Das S.** and Mazumdar A.* (2017). Complex Flow Phenomena of Horizontally Placed Underwater Cylinder above Water Bed. *Water and Energy International*, **60**(8), pp. 57-64.
- 31) **Das S.***, Jaman H., Chatterjee A., Das R. and Mazumdar A. (2017). Hydrodynamic behaviour of flow past three typically arranged circular piers on different horizontal planes. *International Journal of Fluid Mechanics Research*, *ASTFE*, **44**(5), pp. 457-468. <https://dx.doi.org/10.1615/InterJFluidMechRes.2017019421>.
- 32) Das R., Nayek M., **Das S.***, Dutta P. and Mazumdar A. (2017). Design and Analysis of 0.127 m (5") Cutthroat Flume. *Ain Shams Engineering Journal*, *Elsevier*, **8**(3), pp. 295-303. <https://dx.doi.org/10.1016/j.asej.2015.07.017>.
- 33) Jaman H, **Das S.***, Kuila A. and Mazumdar A. (2017). Hydrodynamic flow patterns around three inline eccentrically arranged circular piers. *Arabian Journal for Science and Engineering*, *Springer*, **42**(9), pp. 3973-3990. <https://dx.doi.org/10.1007/s13369-017-2536-9>.
- 34) Maity P.K., **Das S.*** and Das R. (2017). Methodology for Groundwater Extraction in the Coastal Aquifers of Purba Midnapur District of West Bengal in India under the Constraint of Saline Water Intrusion. *Asian Journal of Water, Environment and Pollution*, **14**(2), pp. 1-12. <https://dx.doi.org/10.3233/AJW-170011>.
- 35) Mukherjee B., **Das S.*** and Mazumdar A. (2017). Stress analysis of smart support system for a steam pipeline of Sagardighi Thermal Power Plant, West Bengal, India. *International Journal of Innovative and Emerging Research in Engineering*, **4**(1), pp. 137-146.
- 36) Maity P.K., **Das S.*** and Das R. (2017). Assessment of Groundwater Quality and Saline Water Intrusion in the Coastal Aquifers of Purba Midnapur District. *Indian Journal of Environmental Protection*, **37**(1), pp. 31-40.
- 37) Nayek M., Das R.*, **Das S.**, Dutta P. and Mazumdar, A. (2016). Open Channel Discharge Measurement Using 0.127 Metre (5 Inch) Long-Throat Flume. *Asian Journal of Water, Environment and Pollution*, **13**(2), pp. 29-38. <https://dx.doi.org/10.3233/AJW-160014>.
- 38) **Das S.***, Das R. and Mazumdar A. (2016). Comparison of Local Scour Characteristics around Two Eccentric Piers of Different Shapes. *Arabian Journal for Science and Engineering*, *Springer*, **41**(4), pp. 1199-1213. <https://dx.doi.org/10.1007/s13369-015-1817-4>.
- 39) Jana S., Das M., Roy D.*, **Das S.** and Mazumdar A. (2015). Simulation of climate change impact in a river basin in Eastern India. *International Journal of Hydrology Science and Technology*, *Inderscience*, **5**(4), pp. 314-332. <http://dx.doi.org/10.1504/IJHST.2015.072631>.
- 40) **Das S.*** and Mazumdar A. (2015). Comparison of Kinematics of Horseshoe Vortex at a Flat Plate and Different Shaped Piers. *International Journal of Fluid Mechanics Research*, *ASTFE*, **42**(5), pp. 418-448. <https://dx.doi.org/10.1615/InterJFluidMechRes.v42.i5.40>.
- 41) Mukherjee B., **Das S.** and Mazumdar A.* (2015). Environmental Study and Analysis of Silts Deposition at Maithon Reservoir. *Indian Journal of Environmental Protection*, **35**(3), pp. 177-187.
- 42) **Das S.*** and Mazumdar A. (2015). Turbulence flow field around two eccentric circular piers in scour hole. *International Journal of River Basin Management*, *Taylor & Francis*, **13**(3), pp. 343-361. <https://dx.doi.org/10.1080/15715124.2015.1012515>.
- 43) **Das S.**, Nayek M., Das S., Dutta P. and Mazumdar A.* (2014). Impact on Water Quality in Piyali River, Sundarbans, India due to Saline Water Intrusion. *Indian Journal of Environmental Protection*, **34**(12), pp. 1010-1019.
- 44) Chatterjee M., Roy D.*, **Das S.** and Mazumdar A. (2014). Assessment of Water Resources under Climate Change: Damodar River Basin, India. *ARPN Journal of Engineering and Applied Sciences*, **9**(11), pp. 2183-2191.
- 45) **Das S.***, Das R. and Mazumdar A. (2014): Variations of clear water scour geometry at piers of different effective widths. *Turkish Journal of Engineering and Environmental Sciences*, *TUBITAK*, **38**(1), pp. 97-111. <https://dx.doi.org/10.3906/muh-1308-11>.
- 46) Das R., Pal D., **Das S.*** and Mazumdar A. (2014). Study of Energy Dissipation on Inclined Rectangular Contracted Chute. *Arabian Journal for Science and Engineering*, *Springer*, **39**(10), pp. 6995-7002. <https://dx.doi.org/10.1007/s13369-014-1303-4>.
- 47) Das R.*, Khwairakpam P., **Das S.** and Mazumdar A. (2014). Clear-Water Local Scour around Eccentric Multiple Piers to shift the Line of Sediment Deposition. *Asian Journal of Water, Environment and Pollution*, **11**(3), pp. 47-54.
- 48) **Das S.***, Ghosh R., Das R. and Mazumdar A. (2014). Clear Water Scour Geometry around Circular Piers. *Ecology, Environment and Conservation*, **20**(2), pp. 479-492.
- 49) **Das S.***, Ghosh S. and Mazumdar A. (2014). Kinematics of Horseshoe Vortex in a Scour Hole around Two Eccentric Triangular Piers. *International Journal of Fluid Mechanics Research*, *ASTFE*, **41**(4), pp. 296-317. <https://dx.doi.org/10.1615/InterJFluidMechRes.v41.i4.20>.
- 50) Chatterjee M., De R., Roy D.*, **Das S.** and Mazumdar A. (2014). Hydrological Modeling Studies with HEC-HMS for Damodar Basin, India. *World Applied Sciences Journal*, **31**(12), pp. 2148-2154. <http://dx.doi.org/10.5829/idosi.wasj.2014.31.12.750>.

- 51) Mazumdar A.*, Jaman H. and **Das S.** (2014). Modification of Hunter's Curve in the Perspective of Water Conservation. *Journal of Pipeline Systems Engineering and Practice*, **American Society of Civil Engineers (ASCE)**, **5**(1), pp. 04013007, Art. No. 150. [https://dx.doi.org/10.1061/\(ASCE\)PS.1949-1204.0000150](https://dx.doi.org/10.1061/(ASCE)PS.1949-1204.0000150).
- 52) Mukherjee B.*, **Das S.** and Mazumdar A. (2013). Mathematical Analysis for the Loss of Future Storage Capacity at Maithon Reservoir, India. *ARNP Journal of Engineering and Applied Sciences*, **8**(10), pp. 841-845.
- 53) **Das, S.***, Mukherjee B. and Mazumdar A. (2013). Analysis of hammer head at increased flow demand in pipe networks: A case study. *International Review of Mechanical Engineering*, **7**(4), pp. 757-766.
- 54) **Das S.***, Das R. and Mazumdar A. (2013). Comparison of Characteristics of Horseshoe Vortex at Circular and Square Piers. *Research Journal of Applied Sciences, Engineering and Technology*, **5**(17), pp. 4373-4387. <http://dx.doi.org/10.19026/rjaset.5.4432>.
- 55) **Das S.***, Midya R., Das R. and Mazumdar A. (2013). A Study of Wake Vortex in the Scour Region around a Circular Pier. *International Journal of Fluid Mechanics Research*, **40**(1), pp. 42-59. <https://doi.org/10.1615/InterJFluidMechRes.v40.i1.40>.
- 56) **Das S.***, Das R. and Mazumdar A. (2013). Circulation characteristics of horseshoe vortex in the scour region around circular piers. *Water Science and Engineering*, **Elsevier**, **6**(1), pp. 59-77. <https://doi.org/10.3882/j.issn.1674-2370.2013.01.005>.
- 57) **Das S. ***, Roy D., Mazumdar A., Chowdhury S. and Majumder M. (2012). Hydrological feasibility of a mini hydropower plant on Tiljuga River, Bihar, India. *Water and Energy International*, **69**(12), pp. 30-37.
- 58) **Das S.***, Ghosh S. and Mazumdar A. (2012). Flow field past a Triangular Pier due to Sediment Transportation at Clear Water Equilibrium Scour Hole. *International Journal of Emerging Trends in Engineering and Development*, **7**(2), pp. 380-388.
- 59) Mukherjee B., **Das S.*** and Mazumdar A. (2012). Comparison of Pipeline Hydraulic Analysis between EPANET and HAMMER Softwares. *International Journal of Advances in Science and Technology*, **4**(6), pp. 52-63.
- 60) Khwairakpam P.*, Ray S.S., **Das S.**, Das R. and Mazumdar A. (2012). Scour hole characteristics around a vertical pier under clear water scour conditions. *ARNP Journal of Engineering and Applied Sciences*, **7**(6), pp. 649-654.

Publications (National Journal): -

- 1) Sen P., Mukherjee B. and **Das, S.*** (2020). Stress Analysis of Smart Support for Process Pipeline Systems by CAESAR Software. *Journal of the Association of Engineers, India*, **90**(1-2), pp. 5-14. <https://dx.doi.org/10.22485/jaei/2020/v90/i1-2/205381>. [based on the article presented in Nat. Conf. TAME-2019].
- 2) Chakraborty S. and **Das S.*** (2019). Assessment of Water Surface of Reservoirs with Varying Time and Increasing Population in Contai of West Bengal. *Reason – A Technical Journal*, **XVIII**, pp. 28-36. <https://dx.doi.org/10.21843/reas/2019/28-36/196164>.
- 3) Mukherjee B., Kuila A. and **Das S.*** (2019). Optimized Hydraulic Design of an Water Distribution Network at West Medinipur in West Bengal: A Case Study. *Journal of the Association of Engineers, India*, **89**(1-2), pp. 19-32. <https://dx.doi.org/10.22485/jaei/2019/v89/i1-2/185671>. [based on the article presented in Nat. Conf. TAME-2019].
- 4) Jana S., Dutta S. **Das S.*** and Roy D. (2019). Uncertainty in Hydrologic Response of a River Basin in India to Changed Climate Scenario. *NDC – WWC Journal*, **8**(2), pp. 15-23.
- 5) Mukherjee B., **Das S.** and Mazumdar A.* (2017). Simulation of Composite Pipedwater Supply by EPANET and LOOP Softwares: A Case Study. *Journal of the Institution of Public Health Engineers, India*, **45**(1), pp. 44-54.
- 6) Jaman H., **Das S.***, Das R. and Mazumdar A. (2017). Hydrodynamics of Flow Obstructed by Inline and Eccentrically-Arranged Circular Piers on a Horizontal Bed Surface. *Journal of The Institution of Engineers (India): Series A*, **Springer**, **98**(1-2), pp. 77-83. <https://dx.doi.org/10.1007/s40030-017-0187-1>.
- 7) Das S. and **Das S.*** (2016). Assessment of Electrical Energy Consumption of Jai Hind Jal Prakalpa in Kolkata, India. *Reason – A Technical Journal*, **XV**, pp. 90-101. <https://dx.doi.org/10.21843/reas/2016/90-101/158780>.
- 8) Mukherjee B., **Das S.** and Mazumdar A.* (2015). Transient Analysis of a Pipeline Network for Drinking Purpose in Assam, India. *Journal of the Institution of Public Health Engineers, India*, Vol. 2014-2015(4), pp. 26-32.
- 9) Chakraborty A., **Das S.***, Das R., Roy P.K. and Mazumdar A. (2014). An Analysis on Turbulent Flow Characteristics of a Classical Hydraulic Jump. *River Behaviour and Control, Journal of River Research Institute, WB*, Vol. 34, (2013-2014), pp. 73-84.
- 10) **Das S.***, Midya R., Chatterjee B., Ghosh R., Das R. and Mazumdar A. (2014). Bed Shear Stresses past a Flat Plate under Clear Water Equilibrium Scour State. *Journal of the Association of Engineers, India*, **84**(1&2), pp. 27-35.

- 11) **Das S.**, Das R. and Mazumdar A.* (2014). Vorticity and Circulation of Horseshoe Vortex in Equilibrium Scour Holes at Different Piers. *Journal of The Institution of Engineers (India): Series A*, Springer, **95**(2), pp. 109-115. <https://dx.doi.org/10.1007/s40030-014-0078-7>. *Awarded Hem Prabha – S N Gupta Prize by The Institution of Engineers (India)*.
- 12) **Das S.***, Majumder B., Chakraborty A., Mandal B., Roy P.K. and Mazumdar A. (2013). Aquifer Characteristics of the Intake Wells on Damodar River near Raniganj, West Bengal, India. *Reason – A Technical Journal*, **XII**, pp. 19-29.
- 13) **Das S.***, Mondal D., Das R. and Mazumdar A. (2013). Variation of Bed Shear Stresses in Clear Water Equilibrium Scour Holes at Single Piers. *River Behaviour and Control, Journal of River Research Institute, WB*, **32**(2011-2012), pp. 1-12.
- 14) **Das S. ***, Roy P.K. and Mazumdar A. (2013). A Plan for the Enhancement of Backwater for Irrigation for Sustainable Livelihood of Rural Communities at Magrahat Basin, South 24 Parganas, West Bengal. *REASON- A Technical Magazine*, **XI**, pp. 29-38.
- 15) Khwairakpam P., **Das S.**, Das R. and Mazumdar A. (2012). A Study of Local Scour Around Circular Piers. *River Behaviour and Control, Journal of River Research Institute, WB*, **31**(2010-2011), pp. 11-22.
- 16) **Das S.**, Roy P.K. and Mazumdar A.* (2008). Analysis of pipe flow & head loss of a modeled network based on EPANET in a Water Treatment Plant at Raipur, West Bengal. *Journal of the Institution of Public Health Engineers, India*, **2008-09**(3), pp. 21-28.

Publications (International Book Chapter): -

- 1) Roy P.*, **Das S.**, Dey A. and Das R. (2022). Analytical Study of Scour Mechanism Around Immersed Rectangular Vane Structures. In: C. M. Rao et al. (eds.), *Advanced Modelling and Innovations in Water Resources Engineering. Lecture Notes in Civil Engineering*, Vol. 176. Chap. 49, pp. 703-717. Springer: Singapore. https://doi.org/10.1007/978-981-16-4629-4_49. [based on the article presented in Nat. Conf. AMIWRE 2021].
- 2) Mukherjee B.*, Das P. and **Das S.** (2022). Comparison Model Study Using WaterGEMS and EPANET Software Programs for Clearwater Rising Main at Bhangar in West Bengal. In: C. M. Rao et al. (eds.), *Advanced Modelling and Innovations in Water Resources Engineering. Lecture Notes in Civil Engineering*, Vol. 176. Chap. 22, pp. 315-328. Springer: Singapore. https://doi.org/10.1007/978-981-16-4629-4_22. [based on the article presented in Nat. Conf. AMIWRE 2021].
- 3) Debnath K.*, **Das S.** and Mukherjee B. (2022). Hydraulic Analysis of Drinking Water Distribution Network Using WaterCAD Simulation: Case of Purba Medinipur in West Bengal. In: C. M. Rao et al. (eds.), *Advanced Modelling and Innovations in Water Resources Engineering. Lecture Notes in Civil Engineering*, Vol. 176. Chap. 21, pp. 301-314. Springer: Singapore. https://doi.org/10.1007/978-981-16-4629-4_21. [based on the article presented in Nat. Conf. AMIWRE 2021].
- 4) John B.*, Roy P. and **Das S.** (2021). Analysing the Influence of Groundwater Exploitation on Its Quality in Kolkata. In: Kumar S., Kalamdhad A., Ghangrekar M. (eds) *Sustainability in Environmental Engineering and Science. Lecture Notes in Civil Engineering*, Vol. 93. Chap. 9, pp. 83-89. Springer: Singapore. https://dx.doi.org/10.1007/978-981-15-6887-9_9. [based on the article presented in Int. Conf. SEES 2019].
- 5) Jana S., Roy D. and **Das S.*** (2020). Assessment of Water Availability in a River Basin of India for Changing Climate. In: Mandal J.K. (ed) *Topics in Intelligent Computing and Industry Design (ICID)*, **2**(1), pp. 5-8. <https://dx.doi.org/10.26480/cic.01.2020.05.08>. ISBN: 978-1-948012-16-4. [based on the article presented in 1st Int. Conf. ICCIC – 2020].
- 6) Chakraborty S. and **Das S.*** (2020). Present Scenario of Groundwater Table in Saline Prone Areas of Purba Medinipur in West Bengal, India. In: Mandal J.K. (ed) *Topics in Intelligent Computing and Industry Design (ICID)*, **2**(1), pp. 9-13. <https://dx.doi.org/10.26480/cic.01.2020.09.13>. ISBN: 978-1-948012-16-4. [based on the article presented in 1st Int. Conf. ICCIC – 2020].
- 7) Kuila A., Jaman H., **Das S.*** and Mazumdar A. (2020). Computing Equilibrium Flow Structures at Three Interfering Square Piers causing Relative Scour. In: Mandal J.K. (eds) *Topics in Intelligent Computing and Industry Design (ICID)*, **2**(1), pp. 20-24. <https://dx.doi.org/10.26480/cic.01.2020.20.24>. ISBN: 978-1-948012-16-4. [based on the article presented in 1st Int. Conf. ICCIC – 2020].
- 8) Mukherjee, B., **Das, S.*** and Maity, S.P. (2019). Optimum Process of Pipeline Selection in Water Distribution Network: Case Study. In: Kim D.K. (ed) *Civil, Architectural, Structural and Constructional Engineering III of the periodical “Applied Mechanics and Materials”*. Trans Tech: Switzerland, **897**, pp. 137-141. <https://dx.doi.org/10.4028/www.scientific.net/AMM.897.137>. [based on the article presented in Int. Conf. 4th ICCASCE, Jeju Island: South Korea].
- 9) Kuila, A.*, **Das, S.** and Mazumdar, A. (2019). A Comparative Analysis of Flow Fields around a Composite Hydrokinetic Device. In: Kim D.K. (ed) *Civil, Architectural, Structural and Constructional Engineering III of the periodical “Applied Mechanics and Materials”*. Trans Tech: Switzerland, **897**, pp. 173-178. <https://dx.doi.org/10.4028/www.scientific.net/AMM.897.173>. [based on the article presented in Int. Conf. 4th ICCASCE, Jeju Island: South Korea].

- 10) Mahata K., Das R., **Das S.** and Sarkar A.* (2018). Landcover Change Detection Using PSO-Evaluated Quantum CA Approach on Multi-Temporal Remote-Sensing Watershed Images. *Quantum-Inspired Intelligent Systems for Multimedia Data Analysis*, Chap. 6, pp. 178-212. IGI Global: USA. <https://dx.doi.org/10.4018/978-1-5225-5219-2.ch006>.
- 11) Mahata K., **Das S.**, Das R. and Sarkar A.* (2018). Indian river watershed image analysis using fuzzy-CA hybrid approach. *Environmental Information Systems: Concepts, Methodologies, Tools, and Applications*, Vol. 3, Chap. 51, pp. 1148-1162. IGI Global: USA. <https://dx.doi.org/10.4018/978-1-5225-7033-2.ch051>.
- 12) Mahata K., Das R., **Das S.** and Sarkar A.* (2018). Landcover change detection using PSO-evaluated quantum CA approach on multi-temporal remote-sensing watershed images. *Environmental Information Systems: Concepts, Methodologies, Tools, and Applications*, Vol. 2, Chap. 29, pp. 679-705. IGI Global: USA. <https://dx.doi.org/10.4018/978-1-5225-7033-2.ch029>.
- 13) Mahata K., Das R., **Das S.** and Sarkar A.* (2017). Watershed Image Analysis Using a PSO-CA Hybrid Approach. *Hybrid Intelligent Techniques for Pattern Analysis and Understanding*, Chap. 10, pp. 229-246. CRC Press, **Taylor & Francis Group**: USA. <https://dx.doi.org/10.1201/9781315154152>.
- 14) Mahata K., Sarkar A.*, Das R. and **Das S.** (2016). Fuzzy evaluated quantum cellular automata approach for watershed image analysis. *Quantum Inspired Computational Intelligence Research and Applications*, Chap. 8, pp. 259-284. **Elsevier**: USA. <https://dx.doi.org/10.1016/B978-0-12-804409-4.00008-5>.
- 15) Mahata K., **Das S.**, Das R. and Sarkar A.* (2016). Indian River Watershed Image Analysis using Fuzzy-CA Hybrid Approach. *Intelligent Analysis of Multimedia Information*, Chap. 8, pp. 232-246. IGI Global: USA. <https://dx.doi.org/10.4018/978-1-5225-0498-6.ch008>.

Publications (International Conference): -

- 1) Kuila A.*, Mukherjee B. and **Das S.** (2021). Comparison of Vortex Induced Velocity Kinematics around Underwater Horizontal Cylinder with Vertical End Plate. *IOP Conf. Ser.: Mater. Sci. Eng.*, 2021 3rd Int. Conf. on Advances in Mechanical Engineering and its Interdisciplinary Areas (ICAMEI-2021), Kolaghat: India, **1080**(1), Art. No. 012048, 5-7 Jan. 2021. <https://dx.doi.org/10.1088/1757-899X/1080/1/012048>.
- 2) Chakraborty S. and **Das S.*** (2020). Analysis of Arsenic Content in Groundwater over the Years of Coastal Areas of Purba Medinipur in West Bengal. *Int. Webinar on Hist. of Sci.*, Kolkata: India, p. 71, 27-28 July 2020.
- 3) Halder S., **Das S.*** and Basu S. (2020). Review on Rainwater Harvesting Structures like Hapa for Sustainable Agricultural Development in Bankura District, *Abstract Volume of the Int. Conf. on Sustain. Water Resour. Manag. under Changed Climate* (SWRMCC 2020), Kolkata: India, p. 60, 13-15 Mar. 2020.
- 4) John B., **Das S.*** and Das R. (2020). Divergent Trends of Closed-Surface Water Bodies in Borough I of Kolkata City using Multi-Temporal Satellite Imageries, *Abstract Volume of the Int. Conf. on Sustain. Water Resour. Manag. under Changed Climate* (SWRMCC 2020), Kolkata: India, p. 62, 13-15 Mar. 2020.
- 5) Nandi B.*, **Das S.** and Mazumdar A. (2020). Time Variation Analysis of Scour around Eccentrically Placed Three Tandem Cylindrical Piers. *Proc. Second ASCE India Conf. on "Challenges of Resilient and Sustain. Infrastructure Dev. Emerging Economies"* (CRSIDE2020), Kolkata: India, pp. 577-585, 2-4 Mar. 2020.
- 6) Kuila A.*, Mukherjee B., **Das S.** and Mazumdar A. (2020). Comparative Analysis of Flow Fields on the Proximity of a Horizontal Cylinder with a Vertical Plate Obstruction. *Proc. Second ASCE India Conf. on "Challenges of Resilient and Sustain. Infrastructure Dev. in Emerging Economies"* (CRSIDE2020), Kolkata: India, pp. 586-593, 2-4 Mar. 2020.
- 7) Mukherjee P.*, **Das S.** and Mazumdar A. (2020). Enhancement of Sustainable Irrigation Water Management Profile by Influx of Tidal Backwater in Western Basins of South 24 Parganas, West Bengal, India. *Proc. Second ASCE India Conf. on "Challenges of Resilient and Sustain. Infrastructure Dev. in Emerging Economies"* (CRSIDE2020), Kolkata: India, pp. 518-521, 2-4 Mar. 2020.
- 8) Halder S.*, Basu S. and **Das S.** (2020). A Review on the Decadal Irrigation System of Shali Water Reservoir. *IOP Conf. Ser.: Earth Environ. Sci.* 2020 6th Int. Conf. on Environ. and Renewable Energy (ICERE 2020), Hanoi: Viet Nam, **505**(1), Art. No. 012023, 24-26 Feb. 2020. <https://dx.doi.org/10.1088/1755-1315/505/1/012023>.
- 9) Mukherjee P.*, Das M., Mukherjee B., and **Das S.** (2020). Optimization of Irrigation Design Technique for Pumping Units through Software Simulation Analysis for Varied Landscapes. *IOP Conf. Ser.: Earth Environ. Sci.* 2020 6th Int. Conf. on Environ. and Renewable Energy (ICERE 2020), Hanoi: Viet Nam, **505**(1), Art. No. 012025, 24-26 Feb. 2020. <https://dx.doi.org/10.1088/1755-1315/505/1/012025>.
- 10) Nandi B., **Das S.*** and Mazumdar A. (2020). Experimental Analysis and Numerical Simulation of Hydraulic Jump, *IOP Conf. Ser.: Earth Environ. Sci.* 2020 6th Int. Conf. on Environ. and Renewable Energy (ICERE 2020), Hanoi: Viet Nam, **505**(1), Art. No. 012024, 24-26 Feb. 2020. <https://dx.doi.org/10.1088/1755-1315/505/1/012024>.
- 11) John B.*, and **Das S.** (2020). Role of Electrical Conductivity on Salinity and Mineralization due to Groundwater Level Fluctuations in Kolkata City, *IOP Conf. Ser.: Earth Environ. Sci.* 2020 6th Int. Conf. on Environ. and Renewable Energy (ICERE 2020), Hanoi: Viet Nam, **505**(1), Art. No. 012021, 24-26 Feb. 2020. <https://dx.doi.org/10.1088/1755-1315/505/1/012021>.

- 12) Das, M., **Das, S.*** and Mazumdar, A. (2019). Design and Development of Micro Irrigation Model for Tea Plantation in Central Dooars of West Bengal, India through Software Simulations and Analysis. *Proc. 9th Int. Micro Irrig. Conf. (9IMIC)*, Indian National Committee on Surface Water (INCSW) - CWC, India, Aurangabad: India, 16-18 Jan. 2019, pp. 183-204.
- 13) Maity P.K.*, **Das S.** and Das R. (2018). Geochemical Study and Remedial Measures of Seawater Ingression in the Southern Part of Purba Midnapur District in West Bengal. *1st Int. Conf. Emerging Trends on Engineering and Science (ETES 2018)*, Asansol Engineering College, Asansol: India, 23-24 March 2018, p. 68.
- 14) Mazumdar A., Dutta P., Nayek M., **Das S.** and Das R.* (2017). Calibration and Discharge Measurement Using 0.127 Metre (5") Parshall Flume. *Proc. 37th IAHR World Congress*, Kuala Lumpur: Malaysia, ISSN – 1562-6865 (Online), 13-18 Aug. 2017.
- 15) **Das S.***, Mukherjee R., Das R. and Mazumdar A. (2017). Enhancement of Sediment Transportation by Increasing Scour around a Square Pier with Vane attached on One Side. *Proc. 37th IAHR World Congress*, Kuala Lumpur: Malaysia, ISSN – 1562-6865 (Online), 13-18 Aug. 2017.
- 16) Mahata K.*, Das R., **Das S.** and Sarkar A. (2017). Automatic Mixed Pixel Detection using a new Hybrid Cellular Automata Approach on Satellite Image. *1st Int. Conf. on Electronics, Materials Engineering and Nano Technology 2017 (IEMENTech 2017)*, **IEEE**, 28-29 April 2017, pp. 1703-1708. <https://dx.doi.org/10.1109/IEMENTECH.2017.8076985>.
- 17) Mukherjee B., **Das S.** and Mazumdar A. (2016). Sustainable Electrical Energy Generation Technique in Shallow Water Channels. *Proc. 2016 IEEE Students' Tech. Symp.*, IIT Kharagpur, Kharagpur: India, 30 Sep.- 02 Oct. 2016, pp. 147-151. <https://dx.doi.org/10.1109/TechSym.2016.7872672>.
- 18) Mukherjee B., **Das S.** and Mazumdar A. (2016). Electrical Energy Generation by Enhancing Flow Induced Vibration, **IEEE Proc.**, *2nd Intl. Conf. on Control, Instrumentation, Energy & Communication (CIEC)*, Univ. of Calcutta, Kolkata: India, 28-30 Jan. 2016, pp. 368-371. <https://dx.doi.org/10.1109/CIEC.2016.7513804>.
- 19) **Das S.***, Das R. and Mazumdar A. (2015). Velocity profile measurement technique for scour using ADV. *Int. Conf. on Testing and Measurement: Techniques and Applications (TMTA)*, Science and Engineering Research Center Limited, Hong Kong. Phuket Island: Thailand. Chan – (Ed.), **Taylor & Francis**, London, pp. 249-252, 16-17 Jan. 2015.
- 20) **Das S.***, Das R., Kuila A. and Mazumdar A. (2014). Analysis of clear-water equilibrium scour around two eccentric circular piers to increase self dredging. *Proc. Sem. on Dredging: Equipment and Applications*, Eastern Dredging Association & The Institution of Engineers (India), Kolkata: India, pp. 1-10, 24-25 Jan. 2014.
- 21) Mukherjee B., **Das S.** and Mazumdar A. (2014). Statistical analysis to predict suitable dredging locations at the upstream of a reservoir. *Proc. Sem. on Dredging: Equipment and Applications*, Eastern Dredging Association & The Institution of Engineers (India), Kolkata: India, pp. 1-8, 24-25 Jan. 2014.
- 22) **Das S.***, Thakurta S., Das R. and Mazumdar A. (2013). Turbulent Flow Field in Clear Water Equilibrium Scour Hole at Triangular Pier. *Proc. Int. Symp. on Sustainable Infrastructure Development*, IIT Bhubaneswar, Bhubaneswar: India, pp. 401-411, 8-9 Feb. 2013.
- 23) **Das S.***, Das R. and Mazumdar A. (2012). Vortex flow field past a cylinder under clear water scour regime, *Proc. Int. Conf. on Applications of Fluid Engineering (CAFE)*, G. L. Bajaj Inst. of Tech. & Manag., Greater Noida: India, 20-22 Sept. 2012.
- 24) Dhar S. *, **Das S.** and Mazumdar A. (2010). Surface & Ground Water Exploration of the Piyali River in the Sundarbans. *Third Int. Conf. on "Hydrology and Watershed Management"*, Centre for Water Resources, Inst. of Science & Tech., Jawaharlal Nehru Tech. Univ. & UGC, Hyderabad: India, pp. 119-129, 3-6 Feb. 2010.
- 25) Dhar S.*, **Das S.** and Mazumdar A. (2009). Salinity Intrusion Impact on the Piyali River of the Sundarbans. *Int. Conf. on Emerging Tech. in Environ. Sci. and Eng.*, Aligarh: India, pp. 383-391, 26-28 Oct. 2009.
- 26) **Das S.**, Mandal M., Roy P.K. and Mazumdar A. (2007). Water Conservation Measures for Sustainable Livelihood of Rural Communities: A Case Study in West Bengal. *Proc. Int. Lake Conf., Taal 2007: 12th World Lake Conference (Conserving Lakes & Wetlands for Future)*, Jaipur: India, pp. 1278-1283, 28 Oct.-2 Nov. 2007.

Publications (National Conference): -

- 1) Kuila A., Mukherjee B., **Das S.*** and Mazumdar A. (2019). Comparison of Flow Fields around a Horizontal Cylinder placed at Different Depths in Water Channel. *Nat. Conf. on Trends and Advances in Mechanical Engineering (TAME-2019)*. Association of Engineers, India; Kalyani Govt. Eng. College and Global Inst. of Manage. and Tech., Kalyani: India, p. 49, 15-16 Feb., 2019.
- 2) Mukherjee B. and **Das S.** (2016). Ways of extraction of power from vortex induced vibration. *Proc. 103rd Indian Sci. Cong.*. The Indian Science Congress Association, Kolkata. Univ. of Mysore, Mysuru: India, pp. 73, 3-7 Jan. 2016.

- 3) Mukherjee B., **Das S.** and Mondal S. (2016). Behaviour of Stresses in Steam Pipelines of a Captive Power Plant under Various Loading Conditions: A Case Study. *Proc. 103rd Indian Sci. Cong.* The Indian Science Congress Association, Kolkata at University of Mysore, Mysuru: India, pp. 45-46, 3-7 Jan. 2016.
- 4) Mukherjee B., **Das S.**, Mazumdar A. and Sarkar P.K. (2015). Management in Real Time Operation of Drinking Water Pipeline Distribution Network: A Case Study. *Proc. 47th IWWA Annual Convention.* Indian Water Works Association Kolkata Centre, Science City, Kolkata: India, pp. 298-303, 30-31 Jan. and 1 Feb. 2015.
- 5) **Das S.***, Ghosh S., Das R. and Mazumdar A. (2012). Clear water scour around two eccentric circular and square cylinders, *Natl. Conf. on Sustainable Development through Innovative Research in Science and Technology*, DST, Jadavpur Univ., pp. 74, 28-29 Sept. 2012.
- 6) Dhar S.*, **Das S.** and Mazumdar A. (2010). Salt Water Intrusion into the Piyali River Aquifer of the Sundarbans, West Bengal. *Proc. of the Natl. Conf. on Groundw. Resour. Dev. and Manag. in Hard Rocks.* DST, GoI, Univ. of Pune: India, pp. 35-36, Feb. 2010.
- 7) Dhar S.*, **Das S.**, Debbarma J. and Mazumdar A. (2009). First Investigation of the Climate Change Impact on the Crop Productivity of the Piyali River Region. *60th Int. Executive Council Meeting & 5th Asian Regional Conf.*. New Delhi: India, 6-11 Dec. 2009.
- 8) Dhar S.*, **Das S.**, Ray S.S., Debbarma J. and Mazumdar A. (2009). Effects of Climate Change on the Crop Productivity in the Saline Soils of the Piyali River. *5th Asian Reg. Conf. of Int. Commission on Irrigation and Drainage.* New Delhi: India, pp. 300, 9-11 Dec. 2009.
- 9) Dhar S.*, **Das S.**, Ray S.S., Debbarma J. and Mazumdar A. (2009). First Investigation of the Status of potable water availability of the Piyali River. *Natl. Sem. on Good Governance in Water Supply & Sanitation Manag. in Context to Millennium Dev. Goal.* India, pp. 121-126.
- 10) Dhar S.*, **Das S.**, Ray S.S. and Mazumdar A. (2009). Environmental Monitoring of the Salt Water Intrusion Phenomenon of the Piyali River, *Proc. of Natl. Conf. on Adv. in Environ. Eng.* NIT Rourkela, Orissa: India, pp. 377-382, 14-15 Nov. 2009.
- 11) Das S.*, Majumder M., Majumder A., **Das S.**, Roy D., Roy P.K. and Mazumdar A. (2008). Impact of Constructional Activities on Rainwater Quality in and around Kolkata city during Monsoon. *Proc. 45th Annual Conf. of IAEM*, *Natl. Conf. on Integrated Water and Wastewater Manag.*, Jadavpur Univ., Kolkata: India, pp. 597-608, 20 – 22 Nov. 2008.
- 12) **Das S.***, Roy P.K. and Mazumdar A. (2008). Study of Temporal Decay of Chlorine for the Water Treatment Plant at Dakhin Raipur, West Bengal. *Proc. 45th Annual Conf. of IAEM*, *Natl. Conf. on Integrated Water and Wastewater Manag.*, Jadavpur Univ., Kolkata: India, pp. 644-653, 20-22 Nov. 2008.
- 13) Dhar S.*, **Das S.**, Mandal M., Roy P.K. and Mazumdar A. (2007). Cartography for Natural Resources Management of the Piyali River in Sundarbans of West Bengal. *Indian Cartographer-27*, *Proc. of the XXVII INCA Int. Cong. – Visakhapatnam*, *J. Indian Natl. Cartogr. Assoc.*, Andhra Pradesh: India, **27**, pp. 120-124, 21-23 Nov. 2007.

Reviewer of Journal Papers: -

- 1) *Engineering Applications of Computational Fluid Mechanics*, **Taylor & Francis**, Hong Kong.
- 2) *Scientific Reports*, **Nature**, United Kingdom.
- 3) *Measurement*, *Journal of the International Measurement Confederation*, **Elsevier**, Netherlands.
- 4) *Journal of Hydraulic Engineering*, **American Society of Civil Engineers (ASCE)**, USA.
- 5) *Journal of Pipeline Systems Engineering and Practice*, **American Society of Civil Engineers (ASCE)**, USA.
- 6) *Journal of Fluids Engineering*, *Transactions of the ASME*, **The American Society of Mechanical Engineers (ASME)**, USA.
- 7) *Environmental Fluid Mechanics*, **Springer Nature**, Netherlands.
- 8) *Arabian Journal for Science and Engineering*, **Springer Nature**, Saudi Arabia.
- 9) *Environment, Development and Sustainability*, **Springer Nature**, Netherlands.
- 10) *Environmental Monitoring and Assessment*, **Springer Nature**, Neatherlands.
- 11) *Marine Georesources & Geotechnology*, **Taylor & Francis**, United Kingdom.
- 12) *Water Resources Management*, **Springer Nature**, Netherlands.
- 13) *Journal of Hydro-environment Research*, **Elsevier**, South Korea.
- 14) *International Journal of Sediment Research*, **Elsevier**, Neatherlands.
- 15) *Science of the Total Environment*, **Elsevier**, Netherlands.
- 16) *Journal of Physical Oceanography*, **American Meteorological Society**, USA.
- 17) *Proceedings of the Institution of Civil Engineers (ICE) - Water Management*, United Kingdom.
- 18) *Arabian Journal of Geosciences*, **Springer Nature**, Saudi Arabia.
- 19) *Journal of Intelligent Systems*, **de Gruyter**, Germany.
- 20) *Water and Environment Journal*, **Wiley-Blackwell**, United Kingdom.
- 21) *Urban Water Journal*, **Taylor & Francis**, United Kingdom.

-
- 22) *Journal of The Institution of Engineers (India): Series A*, Springer, India.
 - 23) *Journal of Taibah University for Science*, Taylor & Francis, Saudi Arabia.
 - 24) *Open Geosciences*, de Gruyter, Germany.
 - 25) *Canadian Journal of Civil Engineering*, National Research Council, Canada.
 - 26) *Progress in Computational Fluid Dynamics, An International Journal*, Inderscience, United Kingdom.
 - 27) *Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics*, United Kingdom.
 - 28) *Advances in Civil Engineering*, Hindawi, United Kingdom.
 - 29) *Journal of Engineering and Applied Science*, Springer Nature, Egypt.
 - 30) *Reason- A Technical Journal, India. (Editorial Board Member)*
 - 31) *Indian Science Cruiser*, India.

Reviewer of Projects: -

- 1) *Engineering and Physical Sciences Research Council*, United Kingdom.
- 2) *National Fund for Scientific and Technological Development*, Chile.

Reviewer of Conference/Workshop Papers: -

- 1) *9th International Symposium on Hydraulic Structures (ISHS 2022)*, USA. (International Scientific Committee member).
- 2) *HYDRO 2021- International Conference (Hydraulics, Water Resources and Coastal Engineering)*, India.
- 3) *International Symposium on Hydraulic Structures (ISHS2016)*, USA.
- 4) *ASCE India conference 2020 (CRSIDE2020)*, Kolkata, India.
- 5) *6th International Conference on Environment and Renewable Energy (ICERE 2020)*, Hanoi, Vietnam (Reviewer and Technical Committee Member).
- 6) International Conference on “Sustainable Environmental Engineering and Science” (SEES 2019, SEES 2021) with College of Science and Technology, Nihon University, Japan.
- 7) *6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP 2016)*, Allahabad, India.
- 8) *Seminar on Environment and Sustainability – A Geographical Perspective*, Kolkata, India. (Editorial Board Member).
- 9) International Conference on Contemporary Issues in Computing (ICCIC-2020), Kolkata, India.
- 10) *1st International Conference on Mechanical Engineering (INCOM 2018)*, Kolkata, India.

Completed Research Projects: -

- 1) Acted as Principal Investigator: Shifting of Sediments Towards Channel Bank by Enhancing Local Scour around Bridge Pier like Structures – A Green Dredging Technique sponsored under the scheme JU-RUSA 2.0 during 2019-21.
- 2) Acted as Co-Investigator: Analysis of sediment transport mechanism in connection to reservoir life and dam safety under “Energy, Environment and Climate Change” sponsored by University with Potential for Excellence (UPE) – Phase II”, UGC during 2012 –2019.
- 3) Acted as Co-Investigator: Effect of Climate Change on Water Resources of Damodar and Subarnarekha River Basins in Eastern India sponsored by Ministry of Water Resources, Govt. of India during 2010- 2015.
- 4) Acted as Co-Investigator: Field Application and Management of Community based Arsenic Removal Units in Rural Areas of West Bengal sponsored by WTI, DST, Govt. of India during 2009-2011.
- 5) Acted as an expert: Investigation and Remedial Measures for Prevention of Salt Water Intrusion along Coastline of South Parganas (WB) sponsored by SERC Fast Track, DST, Govt. of India during 2008-2011.
- 6) Acted as a research team member: Master Plan for Augmentation of Irrigation Facilities and Creation of Diversified/ Multi-cropping pattern of Agriculture/Horticulture etc. including Pisciculture Facilities for South 24 Parganas sponsored by South 24 Parganas Zilla Parishad, WB during 2006-2009.
- 7) Acted as a research team member: Development and Application of Low Cost Technology for Augmenting Water in Drought Prone Rural Tribal Areas of West Midnapore sponsored by TEQIP, Jadavpur University during 2006-2008.

Orientation/Refresher Courses attended: -

- 1) Participated and successfully completed a Three Weeks Refresher Training Course entitled “Disaster Management: Water and Environmental Sanitation (Inter-disciplinary)”, organized by School of Water Resources Eng., Jadavpur Univ. (under the auspices of Academic Staff College, JU) at Jadavpur Univ., Kolkata from 07-30st Jan., 2019.
- 2) Participated and successfully completed a Four Weeks 54th Orientation Programme by the Academic Staff College, JU at Jadavpur Univ. Second Campus, Kolkata from 10th Nov.–6th Dec., 2014.
- 3) Participated and successfully completed a Three Weeks Training Programme on “Remote Sensing and GIS Applications in Natural Resource Management” organized by the National Bureau of Soil Survey & Land Use Planning, ICAR (sponsored by National Natural Resource Management System - ISRO) at NBSS&LUP, ICAR, Regional Centre, Salt Lake from 21st Nov.–11th Dec., 2012.
- 4) Participated and successfully completed a Three Weeks Refresher Training Course entitled “Special Topics in Fluid Mechanics”, organized by the Dept. of Mechanical Eng., Jadavpur Univ. (under the auspices of Academic Staff College, JU) at Jadavpur Univ., Kolkata from 01-21st Jan., 2007.

Orientation/Refresher Courses organized: -

- 1) Organised a Three Weeks Refresher Training Course on “Recent Applications of Water Resources Development & Management” under the auspices of Academic Staff College (ASC), Jadavpur University sponsored by UGC at School of Water Resources Engineering, Jadavpur University from 25th Aug.–13th Sept., 2014.
- 2) Organised a Three Weeks Refresher Training Course on “Advances in Water Resources Technology & Management” under the auspices of Academic Staff College (ASC), Jadavpur University sponsored by UGC at School of Water Resources Engineering, Jadavpur University during 1-21st Dec., 2009.

Computer skills: -

	<i>Diploma in Software Technology</i> from CMC, Kolkata in 2003
Operating Systems :	Windows 2007, MS-DOS, UNIX, FORTRAN Compiler
Word Processors :	Microsoft Office etc.
Software Applications:	WaterGEMS, SewerGEMS, CAESAR, HAMMER, EPANET, CivilStorm.

Professional recognition/ Awards/ Fellowships received: -

- Recipient of **University Gold Medal Award** for securing the First position in Master of Engineering.
- Awarded Graduate Aptitude Test Engineering (GATE) fellowship by All India Council for Technical Education (AICTE) during 2004-2006.
- Awarded International Travel Support Grant by the Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Government of India and INSA-CSIR-DAE/BRNS-CICS International Travel Fellowship by the Centre for International Co-operation in Science (CICS) for presenting a research paper in an international scientific conference TMTA 2015 held at Phuket Island, Thailand in 2015.
- Awarded *Hem Prabha – SN Gupta Medal* by The Institution of Engineers (India) in 2015.
- Awarded International Travel Grants by the Indian National Science Academy (INSA) and Council of Scientific and Industrial Research (CSIR), India for presenting a research paper at 37th IAHR World Congress held at Kuala Lumpur, Malaysia in 2017.
- Awarded International Travel Grant by the “RUSA 2.0 - Support to Faculty Members, Government of India” for presenting a research paper in an International Conference 4th ICCASCE held at Jeju Island, South Korea in 2019.
- *Outstanding Reviewer for 2021* of the Journal of Pipeline Systems Engineering and Practice awarded by the American Society of Civil Engineers (ASCE). <https://ascelibrary.org/page/journalsoutstandingreviewers>

Place: Jadavpur University, Kolkata

Dr. Subhasish Das