

Ramanujan College

FACULTY PROFILE

FIRST NAME	Sandeep	MIDDLE NAME (if any)		PHOTOGRAPH (ATTACH BELOW)
LAST NAME	Thakur			
DEPARTMENT	Environmental Studies			
DESIGNATION	Assistant Professor			
GENDER	Male			
LANGUAGE PROFICIENCY	English, Hindi, Maithili, Assamese, Bangla, Bodo, Sadri			
ADDRESS	Ekta Apartments, Flat 13, Sector 3, Pocket 1 and 2, Dwarka, New Delhi 110078			
EMAIL	sandeep.thakur@ramanujan.du.ac.in			
EDUCATIONAL QUALIFICATIONS:				
DEGREE	INSTITUTION		YEAR	
B.Sc.	Cotton College, Gauhati University		2009	
M.Sc.	Pondicherry University		2012	
PhD	University of Calcutta		2020 Submitted, 2022 (Awarded)	
CSIR NET	Earth Sciences		2012	
CAREER PROFILE: TEACHING EXPERIENCE				
Assistant Professor in the Department of Environmental Studies, Ramanujan College, since August 2023				
CAREER PROFILE: INDUSTRY EXPERIENCE				
Assistant Geologist at Geological Survey of India (2019-2023) Senior Team Member, RAF, Pragma- (2013-2014) Research Intern NIDM- 2013				

ADMINISTRATIVE ASSIGNMENTS: (List any administrative roles or responsibilities you have held)			
TIC Department of Environmental Studies, Ramanujan College (2025-26) Member, Equal Opportunity Cell, Ramanujan College (2024-26) Member, College Sports Committee, Ramanujan College (2024-2026) Member, North East Society, Ramanujan College (2025-26) Member, Time Table Committee, Ramanujan College (2025-26) Member, Cultural committee, Ramanujan College (2023-24)			
AREAS OF INTEREST / SPECIALIZATION: (Highlight your specific areas of interest or fields of specialization within your subject area)			
Environmental Monitoring- Remote Sensing & GIS applications Disaster Management Environmental Impact Assessment Environmental Earth Sciences Coastal & Fluvial Geomorphology			
SUBJECTS TAUGHT: (List all the subjects you have taught)			
Water and Water Resources Global Atmosphere and Climate Changes Energy and Environment Natural Hazards and Disaster Management Watershed Management Environmental Sustainability and Data Analytics Environmental Sustainability and Data Visualizations Environmental Impact and Risk Assessment AECC- Environmental Science, Theory into Practice			
COURSE DEVELOPMENT: (Mention any courses you have developed or contributed to designing)			
1.Foundation Course on Application of Geospatial technology in Environmental Studies			
RESEARCH GUIDANCE: (Provide details on research supervision, indicating the number of doctoral and postgraduate students guided)			
1. Co-supervisor for PhD students in the Department of Marine Sciences, University of Calcutta 2. Post Graduate students Guided- 01 3. Undergraduate students guided (NEP 4 year Degree program) - 05			
PUBLICATIONS PROFILE: RESEARCH PAPERS (List your published research papers, including the title, journal, and year)			
SL.NO	TITLE	AUTHORS & YEAR	JOURNAL NAME & PUBLISHER

1	Estimation of Chlorophyll-a, TSM and salinity in Mangrove dominated Tropical Estuarine areas of Hooghly River, North East Coast of Bay of Bengal Using Sentinel-3 data	Mondal I, De A, Nandi S, Thakur S, Raman M, Jose F, De TK (2023)	Acta Geophysica & Springer Nature
2	Assessing the multi-decadal shoreline dynamics along the Purba Medinipur-Balasore coastal stretch, India by integrating remote sensing and statistical methods	Hossain SK, Mondal I, Thakur S, Linh NTT, Anh DT (2022)	Acta Geophysica & Springer Nature
3	Coastal vulnerability assessment of India's Purba Medinipur-Balasore coastal stretch: A comparative study using empirical models	Hossain SKA, Mondal I, Thakur S, Al-Quraishi AMF (2022)	International Journal of Disaster Risk Reduction & Elsevier
4	Application of the METRIC model for mapping evapotranspiration over the Sundarban Biosphere Reserve, India	Mondal I, Thakur S, De A, De TK (2022)	Ecological Indicators & Elsevier
5	Comparative analysis of forest canopy mapping methods for the Sundarban biosphere reserve, West Bengal, India	Mondal I, Thakur S., Juliev M., & De TK (2021)	Environment, Development and sustainability, Springer Nature
6	Shoreline changes and its impact on the mangrove ecosystems of some Islands of Indian Sundarbans, North- East coast of India	Thakur S., Bar S, Mondal I, Ghosh P.B., Das P. and De T.K (2020)	Journal of cleaner Production; Elsevier
7	Spatio-temporal modelling of shoreline migration in Sagar Island, West Bengal, India	Mondal I, Thakur S., Juliev M., Bandyopadhyay J., & De T K (2020)	Journal of coastal conservation; Springer Nature
8	Spatial and seasonal distribution of multi-elements in suspended particulate matter (SPM) in tidally dominated Hooghly River estuary and their ecotoxicological relevance	Mitra S., Sudarshan M., Jonathan MP., Sarkar SK., and Thakur S (2020)	Environmental Science and Pollution Research & Springer Nature
9	The Assessment of changes in Land Use Land Cover and Land Surface Temperature in the Mangrove Forest of Sundarbans, North-East Coast of India	Thakur S., Maity D, Mondal I, Basumatary G, Ghosh P.B., Das P. and De T.K, (2020)	Environment sustainability and Development, Springer Nature
10	Delineating Lateral Channel Migration and Risk Zones of Ichamati River, West Bengal, India	Mondal I, Thakur S, Bandyopadhyay J(2019)	Journal of cleaner production & Elsevier
11	Application of multispectral remote sensing in the study of mangrove ecosystems with special emphasis on Image processing techniques: A Review	Thakur S., Mondal I, Ghosh P.B., Das P. and De T.K (2019)	Spatial Information Research, Springer Nature

12	Shoreline Change Detection Using Remote Sensing in the Bakkhali Coastal Region, West Bengal, India	Thakur S. , Dey D., Das P., Ghosh P.B., De T.K. (2017)	Indian journal of Geosciences, GSI , Ministry of Mines
13	Influence of anthropogenic activities on the land use patterns of South Andaman Islands	Thakur S. , Dharanirajan K, Ghosh P.B., Das P. and De T.K. (2017)	Research Journal of Marine Sciences, ISCA
14	A report on salinity-governance of auxospore size in euryhaline diatoms of a well-mixed estuary on North-Eastern Coastal Bay of Bengal	Mukherjee A, Chakraborty S, Das S, Mondal R, Basu S, Thakur S and De TK (2015)	Brazilian Journal of Biological Sciences; ISSN 2358-2731

PUBLICATIONS PROFILE: BOOK CHAPTERS (List your published book chapters, including the title, publisher, ISBN and year)

1. Mondal I., **Thakur S.**, De. A., Bandopadhyay J., De T.K. (2022) Estimating water quality of Sundarban Coastal Zone Area using Landsat series satellite data; River Health and Ecology in South Asia; pp 155-176
2. Mondal I., **Thakur S.**, Ghosh P.B., De T.K. (2021) Assessing the Impacts of Global Sea Level Rise (SLR) on the Mangrove Forests of Indian Sundarbans Using Geospatial Technology; Geographic Information Science for Land Resource Management; Scrivener Publishing Wiley

PUBLICATIONS PROFILE: OTHERS (Mention any other relevant publications details)

1. **Thakur S.**, Mondal I, Das P, Ghosh P.B., De T.K. (2018), Time Series Analysis of Shoreline Oscillations and Its Repercussion on the Mangrove Ecosystems Around Bakkhali Island in Sundarban Delta, Eastern India, conference proceedings, BIODIVERSE 2018
2. **Thakur S.**, Maity D., Ghosh PB, Das P, De TK (2017), Analyzing Land Surface Temperature Distribution From Land Use Landcover Changes In Sundarbans, India, Conference proceedings, ACRS 2017, <http://www.a-a-r-s.org/acrs/index.php/acrs/acrs-overview/proceedings1?view=publication&task=show&id=2785> .(Scopus indexed)
3. Mondal I., **Thakur S.**, Ghosh P.B., De T.K., Bandyapadhyay J (2018), Assessing the Impacts of Global Sea Level Rise (SLR) on the mangrove forests of Indian Sundarbans using Geospatial Technology, BIOSPECTRUM 2018, 2nd International Conference on Biotechnology and Biological Sciences
4. **Thakur S.**, Mondal I, Ghosh P.B., De T.K. (2018) Thunderstorm characteristics over the North Eastern Region (NER) of India during the Pre-Monsoon season, 2011 using Geosynchronous Satellite Data, Emerging Technologies in Data Mining and Information Security; Proceedings of IEMIS 2018, Volume 2, Springer publications, ISSN No- 21945357
5. Mondal I., **Thakur S.**, Ghosh P.B., De T.K., Bandyapadhyay J (2018), Land Use/Land Cover Modelling of Sagar Island, India using Remote Sensing and GIS Techniques, Emerging Technologies in Data Mining and Information Security; Proceedings of IEMIS 2018, Volume 2, Springer publications, Springer publications, ISSN No- 21945357
6. **Thakur S.**, Mondal I, Ghosh P.B., De T.K. (2018), Assessment of changes in the environmental components during a Thunderstorm using Automated Weather Station (AWS) data, SPECTRUM 2018 *Emerging Trends in Science and Technology*, Narosa publications, ISBN – 978-81-8487-642-0

7. Mondal I., **Thakur S.**, Ghosh P.B., De T.K., Bandyapadhyay J (2018), Morpho dynamic study of Ichamati River basin using Geospatial Techniques and its impact on the local environment, SPECTRUM 2018 *Emerging Trends in Science and Technology*, Narosa publications, ISBN – 978-81-8487-642-0

CONFERENCE / WORKSHOPS/ REFRESHER/ FDP/ TRAINING ORGANIZED

1. One-day International Conference on Research Methodology: Knowledge and Discipline 2026

CREATION OF ICT MEDIATED TEACHING LEARNING PEDAGOGY AND CONTENT

CONFERENCE/WORKSHOPS/TRAINING ATTENDED AS FACULTY MEMBER

TRAININGS/CERTIFICATIONS

- Completed one week **Interdisciplinary One-Week Faculty Development Programme / Capacity Building Programme** titled “**Data Analytical Tools for Research**”, conducted from **28 January to 03 February 2026**, organised by **IQAC, Ramanujan College**, under the aegis of the Malviya Mission Teacher Training Centre (MMTTC), Ramanujan College, University of Delhi
- Completed one week Interdisciplinary One Week Faculty Development Programme on “**RESEARCH METHODOLOGY**” from 29th April 2025 to 05th May 2025.
- Completed online workshop on Forest fire monitoring
- Completed online workshop on “Species Distribution Modelling” on 13th May 2024, from TGIS, Ahmedabad, Gujarat
- Completed 20-day certificate Course on “**Shrimad Bhagvad Gita: Enlightenment and Relevance**” from 22nd December 2023- 10th January, 2024 with grade A from Bharatam- Bharatiya Gyan Parampara: Adhyayan, Adhyapan evam Anusamdhan Kendra, Ramanujan College, University of Delhi
- Completed four-week Induction/Orientation programme for “**Faculty in Universities/Colleges/Institutes of Higher Education**” from 02nd December – 31st December, 2023 from Teaching and Learning Centre, Ramanujan College, University of Delhi
- Completed two-week Interdisciplinary Refresher Course in “**Environmental Science**” from 29th August - 12th September, 2023 with grade A+ from Teaching and Learning Centre, Ramanujan College, University of Delhi.

- Completed “**Advanced training on Quaternary Mapping**” conducted by the Geological Survey of India, Regional Training Division, Lucknow, from 05.05.2022 to 14.05.2022.
- Completed E-Training on “**Basic Course on Photo Geology and Remote Sensing using ArcGIS for pre-field studies**” conducted by RTD, NER, GSI Training Institute, NER, Shillong from 04.06.2021 to 10.06.2021.
- Completed E-training on “**Basic Course on ArcGIS and its Application for RMT**” conducted by RTD, ER, GSITI, Kolkata from 08.10.2020 to 15.10.2020
- Completed E-training on “**Basic Course on Application of Geochemical Analytical Data in Earth Sciences**” conducted by RTD, WR, GSI, Jaipur from 21.09.2020 to 25.09.2020.
- Completed ‘**Orientation Course for Assistant Geologist**’ conducted by Geological Survey of India Training Institute, Hyderabad from 19.12.2019 to 10.08.2020
- Completed 12 weeks’ certificate programme on “**Applications of Geospatial technologies**” at NRSC, ISRO, Hyderabad from Nov 2015-Jan 2016
- Completed 1-week certificate programme on “**Hyperspectral Remote Sensing**” at NRSC, ISRO, Hyderabad from 08.08.2016 to 12.08.2016
- Completed 2-week certificate programme on **Microwave Remote Sensing** at NRSC, ISRO, Hyderabad in 2016

CONFERENCES ATTENDED/PAPER PRESENTED/PARTICIPATED

<i>SI.No</i>	<i>Level</i>	<i>CONFERENCE NAME & Date</i>	<i>Paper Title & Authors</i>	<i>Status</i>	<i>Venue</i>
1	International	EGU General Assembly March 2026,	Human-nature interactions in the Chambal Badlands, India: geomorphological perspectives on the dual challenges of land degradation and geoheritage promotion M Singh, V Ranga, A Kumar, J Mukherjee, SS Shukla, M Singhal, A Raj, P Dubey, P Pani, N Chauhan, S Thakur , AH Laskar, V jain, S Tooth.	Co author (POSTER)	Vienna, Austria
2	National	Environmental Sustainability in the 21st century: Science, Society and Solutions, April 2026	Role of wetlands in the regulation of urban flood: a case study of Delhi NCT L Mishra, A Mishra, S Thakur	Co author/Supervisor (POSTER)	Jamia Milia Islamia, New Delhi

3	National	Environmental Sustainability in the 21st century: Science, Society and Solutions, April 2026	Urban flood risk assessment in Delhi floodplains of Yamuna basin: increasing socio-economic vulnerabilities due to urbanization and geomorphological changes G Maurya, S Thakur , M Singh	Co author/Supervisor (POSTER)	Jamia Milia Ismalia, New Delhi
4	National	Environmental Sustainability in the 21st century: Science, Society and Solutions, April 2026	Urban Flood Hazard in Delhi NCT: Geospatial Assessment M kumar, M Singh, S Thakur	Co author/Supervisor (POSTER)	Jamia Milia Ismalia, New Delhi
5	National	Environmental Sustainability in the 21st century: Science, Society and Solutions, April 2026	Underutilized Solar Potential in India: Regional Gaps, Barriers and Renewable Transition Pathway for Reducing Greenhouse Gas E Parihar, S Thakur , Prahalad	Co author/Supervisor (POSTER)	Jamia Milia Ismalia, New Delhi
6	International	E conference on River Mouth Systems and Marginal Seas – Natural Drivers and Human Impacts Dec 05-07, 2022	Influence of regional tectonics, sedimentation, and human intervention in smaller seabound river systems: A case study from the Subarnarekha River Ghatak M, Gupta S, and Thakur S	Online Presentation	University of Szczecin, Helmholtz Zentrum Hereon
7	International	BIODIVERSE 2018- 27-29 Jan' 2018	Time Series Analysis of Shoreline Oscillations and Its repercussion on the Mangrove ecosystems around Bakhali Island in Sundarban Delta, Eastern India Thakur S , Mondal I, Ghosh PB, Das P, & De TK	POSTER presentation	IIT Guwahati, India
8	International	SPECTRUM 2018 <i>Emerging Trends in Science and Technology- 17 Feb' 2018</i>	Assessment of changes in the environmental components during a Thunderstorm using Automated Weather Station (AWS) data Thakur S , Mondal I, Ghosh PB, and De TK	ORAL Presentation	IEM, Kolkata, India
9	International	SPECTRUM 2018 <i>Emerging Trends in Science and Technology- 17 Feb' 2018</i>	Morphodynamic study of Ichamati River basin using Geospatial Tehniques and its impact on the local environment Mondal I, Thakur S , Ghosh PB, De TK, and Bandyopadhyay J	Co-author/ ORAL	IEM Kolkata, India
10	International	IEMIS 2018 <i>International Conference on Emerging Technologies in Data</i>	Thunderstorm characteristics over the North Eastern Region (NER) of India during the Pre-Monsoon season, 2011 using Geosynchronous Satellite Data	ORAL Presentation	UEM, Kolkata, India

		<i>Mining and Information Security- 23-25 Feb' 2018</i>	Thakur S , Mondal I, Ghosh PB, and De TK		
11	International	IEMIS 2018 <i>International Conference on Emerging Technologies in Data Mining and Information Security- 23-25 Feb' 2018</i>	Land Use/Land Cover Modeling of Sagar Island, India using Remote Sensing and GIS Techniques Mondal I, Thakur S , Ghosh PB, De TK, and Bandyopadhyay J	Co-author/ ORAL	UEM, Kolkata, India
12	International	BIOSPECTRUM' 2018	Assessing the impacts of global sea level rise on the mangrove forests of the Indian Sundarbans using geospatial technology Mondal I, Thakur S , Ghosh PB, De TK, and Bandyopadhyay J	Co-author/ ORAL	UEM, Kolkata, India
13	International	Asian conference on Remote Sensing (ACRS) 2017- 23-27 Oct' 2017	Analyzing Land Surface Temperature Distribution from Land Use Land Cover Changes in Sundarbans, India. Thakur S , Maity D, Ghosh PB, Das P, De TK	ORAL Presentation	The Ashok Hotel, New Delhi
14	National	3 rd Indian National Congress for Landslides and Natural Disasters, 2012	Impacts of heat waves on the coastal districts of Odisha Thakur S , Ramanujan N, Mishra BN	Presented paper	Pondicherry University

INVITED LECTURES AS RESOURCE PERSON AND PAPER PRESENTATIONS:

1. Resource Person in two days workshop on "Importance of Avifauna in ecosystem, identification techniques and field survey methodology." Organized by SDGC Jewar, Gautambuddhnagar (CCS University constituent college).

RESEARCH PROJECTS (MAJOR GRANTS/RESEARCH COLLABORATION)

SI. No	DETAILS	DETAILS OF WORK DONE	Year	INSTITUTION
1	Minor Project (Co-PI)	Survey on feasibility for restoration and conservation of water bodies in Delhi and NCR	Ongoing since 2025	Ramanujan College, DU
2	In House Project of GSI	Geochemical Mapping in Toposheet No 72P/8 covering parts of Jamtara, Dumka, Gumbla districts of Jharkhand and Birbhum district of West Bengal	2020-21	Geological Survey of India ER

3	In House Project of GSI	Updation of the repository of the geochemical database for NGCM items of Eastern region and upgradation of NGCM reports from interim to final with 60/62 elements upto FS 2016-17	2020-21	Geological Survey of India ER
4	In House Project of GSI	Updation of the repository of the geochemical database for NGCM items of Eastern region and upgradation of NGCM reports from interim to final with 60/62 elements upto FS 2017-18	2021-22	Geological Survey of India ER
5	In House Project of GSI	Coastal Morphodynamics of Odisha from Subarnarekha Delta in North east to Chandipur Beach in South West in order to understand the future of this coastline and related land cover land use over the next 50 years	2021-22	Geological Survey of India ER
6	In House Project of GSI	Regional Geochemical Mapping in Toposheet Nos 72F/3,4,7 and 8 in and around East Champaran, Sheohar, Muzaffarpur, Saran, Vaishali and Sitamarhi districts , Bihar	2021-22	Geological Survey of India ER
7	In House Project of GSI	Integrated geomorphic, sedimentary and paleoclimate studies of Subarnarekha River in the middle and lower reaches in parts of Jharkhand, West Bengal and Odisha states from Jamshedpur town to the river mouth in Bay of Bengal	2022-24	Geological Survey of India ER
8	Ph.D. Thesis	Assessment of Environmental stress on the mangrove ecosystems of Sundarbans India	2014-2019	University of Calcutta
9	M.Sc. Dissertation/ Project work	Analysis of characteristic features of Cyclones in the North Indian Ocean for 122 years and a case study of the recent Cyclone THANE using satellite imageries	2012/5 months	Pondicherry University
10	Internship	Impact of Heat wave over the coastal districts of Orissa	2011/1 month	Orissa State Disaster Management Authority (OSDMA)
11	Internship	A Study of Thunderstorm Characteristics in the North-Eastern Region of India during the Pre-Monsoon Season 2011	2011/1 month	North Eastern Space Application centre (NESAC)

AWARDS AND DISTINCTIONS:

- Cleared **UPSC Assistant Geologists** examination 2016-17
- **DST INSPIRE FELLOWSHIP** for pursuing Ph.D.
- Recipient of **PONDICHERY UNIVERSITY GOLD MEDAL** in M.Sc. examinations
- Recipient of **DISTRICT AWARD FOR OUTSTANDING MARKS** in high school exams.

ASSOCIATION WITH PROFESSIONAL BODIES:

- Indian Society of Remote Sensing (ISRS)
- Indian National Science Association (INSA)
- International Association for Promoting Geoethics (IAPG)
- Indian Red Cross Society (IRCS)
- International Society for Photogrammetry and Remote Sensing (ISPRS)

OTHER ACTIVITIES: (Include any additional relevant activities or contributions not covered in the above sections.)

PEER REVIEWER OF THE FOLLOWING JOURNALS

- Ocean and Coastal Management
- Environment Development and Sustainability
- Geocarto International
- Journal of Cleaner Production
- Spatial Information Research
- Heylion
- Journal of Coastal Research
- Qeios
- Environmental Monitoring and Assessment
- Journal of Coastal Conservation
- Scientific Reports