



KAZI NAZRUL UNIVERSITY ASANSOL

Faculty Profile

1. Name (Block Letter): **SUJAY BANDYOPADHYAY**
2. Department: *Geography*
3. Current Designation: *Assistant Professor*
4. Address for Communication (Present): *Department of Geography, Kazi Nazrul University, Nazrul Road, Post Office: Kalla (C.H.), Asansol, District: Paschim Bardhaman, Pin: 713 340, West Bengal*
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8. Research Degree:

Degree	Name of the University	Date of Award
<i>Ph.D. (Geography)</i>	<i>The University of Burdwan (Collaboration with Wadia Institute of Himalayan Geology, Dehradun)</i>	<i>2018 (Thesis Submitted)</i>
<i>M.Phil. (Geography)</i>	<i>The University of Burdwan</i>	<i>14/06/2010</i>

9. Teaching Experience: *More than 5 years at UG Level (Gushkara Mahavidyalaya, Gushkara, Purba Bardhaman, West Bengal) and more than 1 year at PG Level (Kazi Nazrul University)*

10. Scientific Award and Scholarship (Reverse Chronological Order)

(1) **German Federal Ministry for Education and Research (BMBF)** scholarship through the **German Academic Exchange Service (DAAD)** within the framework of the project "Indo-German Centre for Sustainability (IGCS) at IIT Madras, India", for the participation in the IGCS Summer School 2018 on "*Coastal and River Hazards & Management Strategies*" at *RWTH Aachen University, Germany*.

(2) **Quaternary Research Association (QRA), UK** 'New Research Worker's Award (NRWA)' 2017 for the research project *Pleistocene Geomorphic History of the Western Bengal Basin, India*.

(3) **International Association of Geomorphologists (IAG)** *Young Geomorphologist Award* for attending 9th International Conference on Geomorphology (9th ICG) held in *New Delhi, India* during November 06 - 11, 2017.

(4) **International Association for Mathematical Geosciences (IAMG)** Student Travel Award (\$1500) to present paper at **18th Annual Conference of the IAMG 2017**, September 02 - 09, 2017, *Esplanade Hotel, Fremantle, Perth, Australia*.

(5) **Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Government of India (GoI)** - International Travel Award and **International Association of Sedimentologists (IAS)** Travel Grant to attend and present paper at **International Association of Sedimentologists (IAS) 2016 Summer School** on "*Sediments: from Land to Sea - Archives of global change - Mesozoic and Cenozoic*", September 25 - October 2, 2016, *Alghero, Italy*.

(6) **Graduate School of Geosciences (GSGS), University of Cologne** Summer School Travel Grant (€550) to attend **GSGS Summer School** on "*Dates and Rates of Change in the Quaternary*", August 21-27, 2016, *Burg Blankenheim (near Cologne), Germany*.

(7) **International Association of Sedimentologists (IAS)** Postgraduate Grant Award - Fall 2015 with €1000 for Ph.D. Research.

(8) **International Union for Quaternary Research (INQUA)** Early Career Researcher Grant (€1400) and **Centre for International Co-operation in Science (CICS), India** - sponsored by **INSA-CSIR-DAE/BRNS-DOS/ISRO-CICS** International Travel Award to present paper at **XIX INQUA Congress 2015** on "*Quaternary Perspectives on Climate Change, Natural Hazards and Civilization*", July 26 - August 02, 2015, *Nagoya, Japan*.

(9) **Natural Resource Research Student Award 2014** from **International Association for Mathematical Geosciences (IAMG), USA** for the project on "*Use of Cartosat-1 Data in DEM generation and SWAT model for surface water resource management in Ajay River Basin, India*".

(10) **International Association for Mathematical Geosciences (IAMG)** Student Travel Grant (\$1000) to present paper at **16th Annual Conference of the IAMG** on "*Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment: Challenges, Processes and Strategies*", October 17 - 20, 2014, *New Delhi, India*.

(11) **Study Grant (Ref. No. ICSSR-ERC/2014-15/15)** for visiting libraries to collect material for research from **Indian Council of Social Science Research (ICSSR), Eastern Regional Centre, Kolkata, India**.

(12) **Best Research Paper** presented as Poster entitled '*Tectono-Climatic Variability in the Quaternary valley-fill deposits of Damodar River Valley, Eastern India*' in the **XXIV Indian Colloquium on Micropaleontology**

and Stratigraphy held at *Wadia Institute of Himalayan Geology (WIHG), Dehradun* during November 18 - 20, 2013.

11. Independent Research Project (Reverse Chronological Order)

Sl. No.	Title	Agency	Period	Grant/Amount Mobilized (Rs. in Lakh)
1.	Pleistocene Geomorphic History of the Western Bengal Basin, India	Quaternary Research Association (QRA), UK	November 2017 to September 2018	£1000 (Rs. 0.80 lakh)
2.	Use of Cartosat-1 Data in DEM generation and SWAT model for surface water resource management in Ajay River Basin, India	International Association for Mathematical Geosciences (IAMG), USA	September 2014 to March 2016	USD 2500 (Rs. 1.53 lakh)

12. Special/Invited Lectures Delivered (Reverse Chronological Order)

Sl. No.	Title of the Invited Lecture	Title of the Conference/ Seminar/Workshop etc.	Date of the Event	Invited or Organised by
1.	<i>Looking into the past through the fluvial records and luminescence dating technique</i>	Special Lecture Session on Applying Geomorphology to Environmental Management	December 06 2017	Rampurhat College, Rampurhat, Birbhum, West Bengal
2.	<i>Fundamental Concept of Statistics and Interpretation of Indian Daily Weather Map</i>	Two Day Workshop on Teachers' Skill Development of H.S. (Council) Geography New Syllabus	September 11 - 12 2015	Bangiyo Bhugol Mancha, Kolkata and Department of Geography, Sidho-Kanho-Birsha University, Purulia.

13. Research Collaborations with Other Institutions in India

(1) **Wadia Institute of Himalayan Geology (WIHG), Dehradun** with **Dr. Pradeep Srivastava** (Scientist-E) since December 2013 for Luminescence Dating and Particle Size analysis.

(2) **Indian Institute of Geomagnetism (IIG), Mumbai** with **Prof. Nathani Basavaiah** since 2015 for Environmental Geomagnetism.

14. Publications Profile (Reverse Chronological Order)

(A) Research Article

(1) **Bandyopadhyay, S.** (2018): Fluvial Processes and Evolution of Quaternary Landscape in the Ajay River Basin of West Bengal. *IAS Newsletter*, Vol. 2017, Issue 271-271, pp. 09-26 ([Online ISSN: 2294-4931](#)).

- (2) Ghosh, P.K., **Bandyopadhyay, S.**, Jana, N.C. and Mukhopadhyay, R. (2016): Sand quarrying activities in an alluvial reach of Damodar River, Eastern India: Towards a Geomorphic Assessment. *International Journal of River Basin Management*, Vol. 14, No. 4, pp. 477-489 (Taylor & Francis) (<http://dx.doi.org/10.1080/15715124.2016.1209509>) (Online ISSN: 1814-2060).
- (3) **Bandyopadhyay, S.**, Ghosh, P.K., Jana, N.C. and Sinha, S. (2016): Probability of flooding and vulnerability assessment in the Ajay River of Eastern India: implications for mitigation. *Environmental Earth Sciences*, Vol. 75, No. 7, pp. 1-22 (Science Citation Index; Impact Factor 2016: 1.569), Springer (DOI [10.1007/s12665-016-5297-y](https://doi.org/10.1007/s12665-016-5297-y)) (Online ISSN: 1866-6299).
- (4) Ghosh, P.K., **Bandyopadhyay, S.** and Jana, N.C. (2016): Mapping of groundwater potential zones in hard rock terrain using geoinformatics: a case of Kumari watershed in western part of West Bengal. *Modeling Earth Systems and Environment*, Vol. 2, No. 1, Springer (DOI [10.1007/s40808-015-0044-z](https://doi.org/10.1007/s40808-015-0044-z)) (Online ISSN: 2363-6211).
- (5) **Bandyopadhyay, S.**, Sinha, S., Jana, N.C. and Ghosh, D. (2014): Entropy application to evaluate the stability of landscape in Kunur River Basin, West Bengal, India. *Current Science*, Vol. 107, No. 11, pp. 1842-1853 (Science Citation Index; Impact Factor 2016: 0.843) (ISSN: 0011-3891).
- (6) Mandal, S., Jana, N.C. and **Bandyopadhyay, S.** (2014): Flood Frequency Analysis (FFA) of Annual Maximum Stream Flows for Dwarakeswar-Mundeswari Interfluvium in West Bengal, India, *Eastern Geographer*, Vol. 20, No. 1 (ISSN: 0973-7642).
- (7) Jana, N.C., **Bandyopadhyay, S.**, Ghosh, P.K. and Chatterjee, M. (2012): Reducing Flood Risk and Vulnerability in Dwarakeswar-Mundeswari Interfluvium, West Bengal. *Hill Geographer*, Vol. 28, No. 2, pp. 44-54: (ISSN: 0970-5023).
- (8) **Bandyopadhyay, S.** and Jana, N.C. (2010): Severity of Embankment Breaching (EMB) in the Lower Ajay Basin: An environmental threat. *Indian Journal of Geomorphology*, Vol. 15, No. 1 and 2, pp. 1-18 (NAAS Score: 2.39) (ISSN: 0973-2411).
- (9) **Bandyopadhyay, S.** and Ghosh, D. (2010): Brick kiln agglomeration adjacent to Bardhaman Town: A Geographical inquiry, *Geographical Review of India*, Vol. 72, No. 1, pp. 29-39 (ISSN: 0375-6386).
- (10) **Bandyopadhyay, S.** and Jana, N.C. (2009): Flood-induced Embankment Failures: The Least Talked But Much Harmful Environmental Hazard, *Hill Geographer*, Vol. 25, No. 1 and 2, pp. 1-11 (ISSN: 0970-5023).

(B) Chapter in Book

- (1) Jana, N.C. and **Bandyopadhyay, S.** (2017): Environmental Impacts of Embankment Breach on Ajay River in Bardhaman District. In: Thakur, B., Sharma, H.S., Misra, S., Chattopadhyay, S. and Singh, S. (eds.) *Regional Development: Theory and Practice (Professor R.P. Misra Felicitation Volumes, Volume Five: Development Challenges)*, Concept Publishing Company Pvt. Ltd., New Delhi, pp. 346-373 (ISBN: 978-93-5125-207-8).
- (2) Jana, N.C., Ghosh, P.K. and **Bandyopadhyay, S.** (2016): Climate Change Impacts on Flood Risks and Vulnerability: The case of India. In: Haldar, A. and Satpati, L.N. (eds.) *Climate and Society - A Contemporary Perspective*, Department of Geography, University of Calcutta, pp. 235-247 (ISBN: 978-81-923448-0-5).
- (3) **Bandyopadhyay, S.** and Saha, K. (2015): The Kunur River Floods: a wake-up call for Society. In: Datta, T. and Rana, K.K. (eds.) *Proceedings of the Golden Jubilee (1965-2015) Celebration of Gushkara Mahavidyalaya*, Gushkara Mahavidyalaya, Burdwan, West Bengal, pp. 123-136 (ISBN: 978-93-5235-350-7).
- (4) Chatterjee, S. and **Bandyopadhyay, S.** (2014): Integrated Approach of Remote Sensing and GIS for Watershed Management: A Case Study of wga-2a Sub-Watershed of Godavari River Basin, Nagpur,

Maharashtra. In: Singh, M. *et al.* (eds.) *Landscape Ecology and Water Management*, Springer Japan, pp. 247-255 (ISBN: 978-4-431-54870-6).

(C) News and Notes/ Meeting Report

(1) Banerjee, S. and **Bandyopadhyay, S.** (2018), Bridging the gap between sustainability and disaster management. *Eos*, Vol. 99, <https://doi.org/10.1029/2018EO110987>. Published on 17 December 2018.

(2) **Bandyopadhyay, S.**, Mendaly, S., Ray, A. and Ruikar, T. (2016): Clues to Prehistoric Human - Plant Interaction. *Heritage: Journal of Multidisciplinary Studies in Archaeology*, Vol. 4, pp. 847-851.

(3) **Bandyopadhyay, S.** and Mukhopadhyay, S. (2015): Unlocking the past. *Current Science*, Vol. 108, No. 5, pp. 767-768.

(4) **Bandyopadhyay, S.** and Ghosh, R. (2014): A mathematical treatment of geoscientifically relevant problems. *Current Science*, Vol. 106, No. 6, p. 794.

(5) **Bandyopadhyay, S.** and Acharya, T. (2013): Training Programme on Hyperspectral Remote Sensing and Applications in Water Resources (HYPERWATER-2013). *Jour. Geol. Soc. India*, Vol.82, pp. 200-201.

15. Talks and Posters (Reverse Chronological Order)

(1) "Century-scale flood dynamics in the Rarh region of lower Gangetic plains, India: climatic or anthropogenic forcing?" **Sub Theme:** Climate change and human adaption. **Presented in:** Department of Higher Education, Science and Technology and Biotechnology, West Bengal sponsored National Level Seminar on 'Environmental Change, Human Adaptation and Sustainability', February 24, 2018. **Organised by:** Department of Geography in collaboration with Department of Physics, Pandit Raghunath Murmu Smriti (PRMS) Mahavidyalaya, Baragari, Bankura, West Bengal.

(2) "Luminescence Dates from Lower Gangetic Plain, India and its implications for Quaternary evolution of the western Bengal Basin-Fill". **Sub Theme:** Palaeohydrology and Fluvial Archives - hydrological extreme and critical events (HEX). **Presented in:** 9th International Conference on Geomorphology (ICG): Geomorphology and Society, November 06 - 11, 2017, Vigyan Bhawan, New Delhi, India. **Organised by:** Indian Institute of Geomorphologists (IGI).

(3) "Using High-resolution DEM and SWAT Model for Surface Water Resource Management in Ajay River Basin, India". **Sub Theme:** Geoinformatics. **Presented in:** 18th Annual Conference of the International Association for Mathematical Geosciences (IAMG) 2017, September 02 - 09, 2017, Esplanade Hotel, Fremantle, Perth, Australia.

(4) "Assessment of the Geomorphic Response to Recorded Catastrophic Floods: case study of Damodar River, India since Twentieth Century". **Sub Theme:** Landforms and Earth System Processes. **Presented in:** 29th Indian Institute of Geomorphologists (IGI) Conference on 'Geomorphology and Natural Hazards', November 24 - 27, 2016, Kolkata. **Organised by:** University of Calcutta, Kolkata.

(5) "Signatures of climatic variability during Quaternary period from lower Gangetic plains in West Bengal, India". **Sub Theme:** Sediments: from Land to Sea - Archives of global change - Mesozoic and Cenozoic. **Presented in:** International Association of Sedimentologists (IAS) 2016 Summer School, September 25 - October 2, 2016, Alghero (Sardinia), Italy. **Organised by:** International Association of Sedimentologists (IAS), Belgium.

(6) "New luminescence dates from lower Gangetic plain, West Bengal and its implications for deciphering Climate-Eustasy and Geomorphic Responses". **Sub Theme:** Prehistory, Plants and People. **Presented in:** INQUA-HaBCom Workshop on 'Palaeoanthropological Perspectives on Plant Communities in South Asia',

January 18 - 24, 2016. **Organised by:** Sharma Centre for Heritage Education (Chennai) and French Institute of Pondicherry (IFP).

(7) "*Deciphering tectono-climatic variability from morpho-sedimentary records in the middle Damodar valley, Lower Gangetic Plain during Quaternary period*". **Sub Theme:** Records of climate change. **Presented in:** 30th Himalaya-Karakoram-Tibet (HKT), October 6 - 8, 2015. **Organised by:** Wadia Institute of Himalayan Geology (WIHG), Dehradun.

(8) "*Late Quaternary landscape development and environmental history of the western part of Lower Ganga Plain (LGP), India*". **Sub Theme:** Geomorphology. **Presented in:** XIX International Union for Quaternary Research (INQUA) Congress on 'Quaternary Perspectives on Climate Change, Natural Hazards and Civilization', July 26 - August 02, 2015. **Organised by:** Japan Association for Quaternary Research, Nagoya, Japan.

(9) "*The Oldest Sedimentological Record from Western Part of Ganga-Brahmaputra Delta: Climate-Eustasy and Geomorphic Responses*". **Sub Theme:** Geomorphology and landscape evolution. **Presented in:** National Conference on 'Quaternary Climate Change: New Approaches and Emerging Challenges', December 15 - 16, 2014. **Organised by:** Birbal Sahni Institute of Palaeobotany (BSIP), Lucknow, India.

(10) "*Long-period fluctuations (1901-2000) in rainfall and its linkages to extreme monsoon floods in Bhagirathi-Hooghly Basin (BHB), Eastern India*". **Theme:** Agriculture, Environment and Ecosystems. **Presented in:** 16th Annual Conference of the International Association for Mathematical Geosciences (IAMG) on 'Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment: Challenges, Processes and Strategies', October 17 - 20, 2014. **Organised by:** Jawaharlal Nehru University (JNU), New Delhi.

(11) "*Changing Rainfall Patterns in Bhagirathi-Hooghly Basin (BHB), Lower Ganga Plain: Implications of Tropical Climate Variability*". **Theme:** Earth Sciences. **Presented in:** 21st West Bengal State Science and Technology Congress 2014, February 20 - 21, 2014. **Organised by:** The University of Burdwan and West Bengal State Council of Science and Technology, Government of West Bengal.

(12) "*Tectono-Climatic variability in the Quaternary valley-fill deposits of Damodar River valley, eastern India*". **Theme:** Tree rings, speleothems, lacustrine, fluvial and biotic records as proxies for past climate. **Presented in:** XXIV Indian Colloquium on 'Micropaleontology and Stratigraphy', November 18 - 21, 2013. **Organised by:** Wadia Institute of Himalayan Geology (WIHG), Dehradun.

(13) "*Response and recovery from the effects of 100 years flood: significance of long term slope-channel coupling in Damodar River, North-Eastern India*". **Session:** Past changes in fluvial systems, floodplains and estuaries. **Presented in:** PAGES - 4th Open Science Meeting on 'The Past: A Compass for Future Earth', February 13 - 16 2013. **Organised by:** National Centre for Antarctic and Ocean Research (NCAOR), Goa.

(14) "*On downstream channel response to the recorded catastrophic floods: case study of Damodar River, Eastern India since twentieth century*". **Scientific Session:** Paleofloods. **Presented in:** 3rd Annual Symposium on 'Response of Asian Rivers to Climate Change - Past, Present and Future Scenario', November 14 - 16, 2012. **Organised by:** Council of Scientific and Industrial Research (CSIR) - National Geophysical Research Institute (NGRI), Uppal Road, Hyderabad 500 007, Telangana, India.

(15) "*Implications of Hydrological Change on Flood Embankment Breaching in the Lower Ajay Basin of Bardhaman District, West Bengal*". **Sub Theme:** Disasters following natural Events, Prevention/ Management of Disaster. **Presented in:** 33rd Annual Conference of the Institute of Indian Geographers (IIG) and International Seminar on 'Population, Development & Disaster Management', February 8 - 11, 2012. **Organised by:** Department of Geography & Disaster management, Tripura University.

(16) "*Entropy Application to the evaluation of River Network Equilibrium: A case study of Kunur River basin, West Bengal, India*". **Sub Theme:** River Science and processes-hydro-physical processes, morphology-ecology linkages. **Presented in:** IGCP 582 Annual Meeting and Conference on 'Tropical Rivers: Hydro-physical

processes, impacts, hazards and management', January 5 - 7, 2012. **Organised by:** Indian Institute of Technology (IIT) Kanpur.

16. Training/Workshop/Short-Term Courses (Reverse Chronological Order)

(1) Participated and presented a poster entitled *Optically Stimulated Luminescence (OSL) Dating of Sediments from Lower Gangetic Plain (LGP), India and its implications for Late Quaternary Climate Change* in the 'Workshop on **Climate Change**' (A meeting of Young Scientists in Central & South Asian Region), jointly organized and supported by **The World Academy of Sciences (TWAS) - Central & South Asia Regional Partner (CSARP)** at **Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)**, Bengaluru and *Divecha Centre for Climate Change* at **Indian Institute of Science (IISc)**, held during December 05 - 07, 2018 at Bengaluru, India.

(2) Attended Indo-German Centre for Sustainability (IGCS) Summer School 2018 on '**Coastal and River Hazards & Management Strategies**' held during July 14 - 25, 2018 in RWTH Aachen University, Germany.

(3) Participated and presented a poster entitled *Optically Stimulated Luminescence (OSL) Dating of Sediments from Lower Gangetic Plain (LGP), India* in the '**Workshop on Geochronology**' held during November 16-17, 2017 at *Inter-University Accelerator Centre (IUAC), New Delhi, India*.

(4) Participated in International Association of Geomorphologists (IAG/AIG) - European Geosciences Union (EGU) sponsored Intensive Course on '**Geomorphology Field Training in Tectonically Active Mountain Regions**' held on November 12-16, 2017 in India.

(5) Attended International Association for Mathematical Geosciences (IAMG) sponsored Short Course 11: '**Young Scientists' Course**' held on the September 3, 2017 in *Carnac Room, Esplanade Hotel, Fremantle (Perth, Australia)*.

(6) Participated in International Association of Sedimentologists (IAS) 2016 Summer School on '**Sediments: from Land to Sea - Archives of global change - Mesozoic and Cenozoic**' held on September 25 to October 2, 2016 in Alghero (Sardinia), Italy.

(7) Participated in **Graduate School of Geosciences (GSGS), University of Cologne** Summer School on "*Dates and Rates of Change in the Quaternary*" held on August 21-27, 2016 at the *Burg Blankenheim (near Cologne), Germany*.

(8) Participated in Training Workshop on '**Modern river management and historic reconstruction with advanced fluvial remote sensing**' held on April 9-10, 2016 at the *Indian Institute of Technology (IIT) Kanpur, India*.

(9) Participated and presented a poster entitled *New luminescence dates from lower Gangetic plain, West Bengal and its implications for deciphering Climate-Eustasy and Geomorphic Responses* in the **INQUA-HaBCom Workshop on Palaeoanthropological Perspectives on Plant Communities in South Asia** "Prehistory, Plants and People" organised by the *Sharma Centre for Heritage Education (Chennai)* and *French Institute of Pondicherry (IFP)* during January 18-24, 2016.

(10) Participated in '**3-Day Workshop on Software Training in Geography (Honours)**' held on February 27-March 2, 2015 at the *Department of Geography, The University of Burdwan, West Bengal*.

(11) Participated in '**Winter School on Statistical Data Analysis Methods**' held in the *Indian Statistical Institute (ISI), Kolkata*, during February 16-20, 2015.

(12) Participated in '**Winter School in Quaternary Geoarchaeology and Paleoenvironment**' held at *Deccan College Post Graduate and Research Institute (Deemed University), Pune* during December 8-13, 2014.

(13) Attended International Association for Mathematical Geosciences (IAMG) sponsored Short Course on **'Time Series Analysis in geology: An Antiquated Method?'** at *Jawaharlal Nehru University (JNU), New Delhi* during October 16, 2014.

(14) Participated in Science and Engineering Research Board (SERB), Department of Science and Technology (DST) sponsored **'Winter School in Geomathematics'** at *Wadia Institute of Himalayan Geology (WIHG), Dehradun* during December 16-30, 2013.

(15) Attended Ministry of Earth Sciences (MoES), Government of India (GoI) sponsored Training Course on **'Hydrologic modelling using RS/GIS with Special Reference to Climate Change'** organized by *National Institute of Hydrology (NIH) Roorkee* during June 03-07, 2013.

(16) Attended Department of Science and Technology (DST), Government of India (GoI) sponsored training programme on **'Hyperspectral Remote Sensing and Applications in Water Resources'** organized by the *Agricultural and Food Engineering Department, Indian Institute of Technology (IIT) Kharagpur* during March 18-23, 2013.

(17) Completed the Department of Science and Technology (DST), Government of India (GoI) sponsored **'Training Workshop on Quaternary setup of Arid NW Himalaya: Main Focus on Ladakh'** organized by the *Wadia Institute of Himalayan Geology (WIHG), Dehradun* at Leh and surrounding areas from 18th August 2012 to 6th September 2012 and secured "A" (Excellent) grade.

(18) Participated in UGC-Sponsored National Workshop on **'Climatology of Humid Tropics: Contemporary Issues and Techniques'** at *Department of Geography, University of Calcutta* held during June 01-02, 2012.

(19) Completed **'6th Course on Application of Geoinformatics for Disaster management (ISRO-GSITI collaborative Item)'** at *Geological Survey of India Training Institute (GSITI), Hyderabad* from 27th June 2011 to 27th July 2011.

(20) Attended the Workshop on **'Multivariate Statistical Analysis'** held on March 26, 2011 conducted by *School of Humanities, Social Sciences and Management, Indian Institute of Technology (IIT) Bhubaneswar, Orissa*.

(21) Completed Short Course on **'Global Positioning System'** conducted at the *Research Development and Training Division, National Atlas and Thematic Mapping Organisation (NATMO)* from October 13-17, 2008.

(22) Participated in the two weeks NNRMS (ISRO) sponsored Training Programme on **'Remote sensing and GIS'** offered by *Indian Institute of Technology (IIT) Kharagpur* during May 19-30, 2008.

17. Country Visited for Academic and Research Purpose

Germany (2018), Australia (2017), Italy (2016), Germany (2016), Japan (2015)

18. Association with Professional Bodies

(1) PhD Postgraduate Member of the British Society for Geomorphology (BSG), UK (2018-2022).

(2) Member of the Future Earth Open Network since June, 2017.

(3) Member of the Floods Working Group (2016-2018), PAGES (Past Global Changes), Switzerland.

(4) American Geophysical Union (AGU) Berkner Member (2017-2019).

(5) Student Member of Quaternary Research Association (QRA) since 2017 (*Membership No. 2017/2906*).

(6) Individual Member of the International Society for Photogrammetry and Remote Sensing (ISPRS) since 2015.

(7) Life Member, Indian Society for Prehistoric and Quaternary Studies (ISPQS) (*Membership No.: L-087*).

(8) Student Member of the International Association of Sedimentologists (IAS) since 2015.

- (9) Life Member, The Indian Science Congress Association (ISCA) (*Membership No. L27235*).
- (10) Student Member of the International Association for Mathematical Geosciences (IAMG) for the year 2014, 2017 and 2018 (*Membership No. 1505*).
- (11) Life Time Subscriber, Himalayan Geology (Journal) (*Membership No.: LTSS-340/2011*).
- (12) Life Member, Indian Association of Hydrologists (*Membership No.: LM-1666*).
- (13) Life Member, Indian Institute of Geomorphologists (IGI) (*Membership No.: L-436*).
- (14) Life Member, Institute of Indian Geographers (IIG) (*Membership No.: L-757*).
- (15) Life Member, The Geographical Society of India (*Membership No.: L/B-131*).
- (16) Life Member, Eastern Geographical Society (EGS), Bhubaneswar (*Membership No.: EGS/L25/2011*).
- (17) Life Member, Indian Geographical Foundation (*Membership No.:60*).
- (18) Life Member, Institute of Landscape, Ecology and Ekistics (ILLE).

19. Reviewer

Reviewed manuscripts for the International Journal: **International Journal of River Basin Management** (Taylor and Francis)

20. Literary, Cultural or Other Activities

- (1) Engaged in **NCC** at School Level and attended training camps.
- (2) Completed course in **Spanish Guitar** form **Bengal Music College, Kolkata**.
- (3) Actively engaged in social service for **Leprosy Foundation, India**.