

**G.J.Chakrapani, Professor (HAG, since 2017), Department of Earth Sciences, IIT Roorkee, Uttarakhand**

**Education:** Higher Sec (Odisha Board, 71%, High 1<sup>st</sup> class, topper in school), Intermediate Science (Khallikote College, Berhampur Univ., 77.4%, High 1<sup>st</sup> Class, among top 20 in Univ); B.Sc. Geology Honors (71%, Gold Medal, BU); M.Sc. Applied Geology, IIT Bombay, 7.74 GPA out of 10); M.Phil., JNU, Environmental Geochemistry; Research Intern; Smithsonian Environmental Research Centre, USA, Certificate of Merit, Host-Dr. Thomas E. Jordan; PhD; JNU, Environmental Geochemistry; Post-Doc, University of Delaware, USA (Host: Prof. Ronald J. Gibbs)

**Job positions:** CSIR-Pool Officer (JNU and IIT Bombay), Assistant Professor (UOR/IITR, 1996-2003); Associate Professor, IITR (2003-2008); Professor, IITR (2008-till date; HAG Professor since 2017)

**On lien service:** Dean, School of Ecology & Environmental Studies, 2017-18, Nalanda International University, Ministry of External Affairs; Vice Chancellor, Berhampur University (Odisha) 2019-22

**Visiting Professor/Scientist:** LMTG, Toulouse (Host: Prof. Bernard Dupre); IPG, Paris, France (Host: Prof. Jerome Gaillardet, Prof. Claude Allegre); Ruhr University Bochum, Germany (Host: Prof. Jan Veizer), Academia Sinica, Taiwan (Host: Prof. Bor-Ming Jahn); Stockholm University, Sweden (Host: Prof. J. Routh, Prof. Alaisdir Skeleton), University of Delaware (Host: Prof. Ronald J. Gibbs), Tongji University, China (Host: Prof. Shouye Yang)

**Research Areas:** Environmental Geochemistry, Rock-Water Interaction, Biogeochemistry, Hydrogeology (Tools: Geochemical analysis; Neural network and other models, Laboratory simulation studies, RS&GIS)

**Teaching:** Geochemistry, Hydrogeology, Sedimentology, Environmental Geoscience, Global Environment, Technical Communication, Thermodynamics & Mineral Equilibria, Marine Geology

**Research Publications:** 70+ with h-index of 37 and citations ~3900

**PhD Theses Supervised:** 14 completed, Master's: 50 completed (all graduated students are well placed in academic institutions, research organizations and industry); **Research & consultancy projects completed:** 20+ completed

**Research Publications in Journals such as,** Chemical Geology, Journal of Hydrology, Geochimica et Cosmochimica Acta, Earth & Planetary Science Letters, Science of Total Environment, Environmental Earth Science and others.

**Award/Recognition:** National Geosciences Award (Environmental Geosciences), Government of India, (2005); Elected Fellow of National Academy of Sciences (FNASc, 2012)

Others: Academic and research related activities such as, reviewer of many journals, Chairman/Member/Advisor/Expert of several committees of various Ministries of Government of India, IITS, National Labs, Awards Committees and others.

# GOVIND JOSEPH CHAKRAPANI, FNASc

Professor, Department of Earth Sciences  
Indian Institute of Technology Roorkee, Roorkee (Uttarakhand), India



Email: [govind.chakrapani@es.iitr.ac.in](mailto:govind.chakrapani@es.iitr.ac.in) / [chakrapani.govind@gmail.com](mailto:chakrapani.govind@gmail.com)

## PERSONAL INFORMATION

Born: 18<sup>th</sup> May 1963

Citizenship: Indian

Marital status: Married, Wife: Purnima, Son: Rahul, Daughter: Anjali, Daughter-in-law: Vaishali

## RESEARCH OBJECTIVE

To Understand Recent Earth Surface Processes and Human Impacts on Environment.

## RESEARCH AREA

Environmental Geochemistry, Rock-Water Interaction, Lakes Biogeochemistry

## ACADEMIC POSITIONS

2008 - TILL DATE	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE Professor (HAG since 1.1.2017)
2018	Senior Director, National Testing Agency, Government of India (did not take up the job)
2019-22	Vice Chancellor, Berhampur University (Odisha)
2020-21	Vice Chancellor, Kalahandi University (Odisha)
2017-18	Dean, Nalanda (International) University, Rajgir, Bihar School of Ecology & Environment Studies Officiating Dean, School of Buddhist Studies Director, Unnat Bharat Abhiyan (NU) Finance Officer-in-Charge
2023-26	Chairman, Environmental Assessment Committee (HE&RV), Ministry of Environment and Forests & Climate Change, Govt. of India
2003 - 2008	Associate Professor, IIT Roorkee
1996 - 2003	Assistant Professor, IIT Roorkee

- **Research Publications:** 70+ (Citations: 3900+, h-index: 38)
- **Theses Supervised:** Ph.D: 14 (Completed), M.Tech.: 29, M.Sc.: 21

- **Research Projects:** 12 (Total Funds: Rs. 35 million)
  
- **Visits Abroad:**
  - USA 1990 (Smithsonian Institution, USA)
  - USA 1991 (University of Delaware)
  - France 1999 (University Paul Sabatier, Toulouse and IPG Paris)
  - France 2000 (IPG, Paris)
  - Bangladesh 2000 (Jehangir University)
  - France 2001 (IPG, Paris)
  - USA 2003 (University of Arizona)
  - Germany 2004 (Ruhr University Bochum)
  - France 2005 (University Paul Sabatier, Toulouse)
  - Australia 2006 (University of Melbourne)
  - Sweden 2007 (Stockholm University)
  - Taiwan 2007 (Academia Sinica, Taipei)
  - France 2008 (LMTG, Toulouse)
  - Taiwan 2009 (Academia Sinica, Taipei)
  - China 2010 (Nanjing University, Nanjing)
  - China 2010 (Tongji University, Shanghai)
  - China 2011 (Tongji Univ., Shanghai, Ocean Univ. of China, Qingdao)
  - China 2011 (Nanjing University)
  - USA 2012 (University of Washington)
  - China 2012 (Tongji University)
  - Vietnam 2013 (IGCP, Hanoi)
  - USA 2014 (University of Washington, Seattle)
  - USA 2015 (University of Washington, Seattle)
  
- **Commendations:**
  - Fellow, National Academy of Sciences, India (FNASc, 2012)
  - National Geosciences (Mineral) Award  
(Environmental Geosciences, 2005), Government of India
  - Certificate of Merit, Smithsonian Institution, USA, 1990
  
- **Courses Taught:**
  - Applied Geochemistry
  - Hydrogeology
  - Sedimentology
  - Thermodynamics and Phase Equilibria
  - Global Climate
  - Environmental Geosciences
  - Technical Communication

Hydrological Processes  
Environmental Impact Assessment and Management  
Disaster Management  
Global Environment  
Coastal and Marine Environment

➤ **Courses Developed:**

Global Climate, Environmental Geochemistry,  
Global Biogeochemical Cycles, Applied Geochemistry, Global  
Environment, Hydrogeology, Contaminant Hydrogeology, Coastal and  
Marine Ecosystems, Research Communication, Environmental Impact  
Assessment and Management, Economics of Global Climate Change

➤ **Reviewer:**

Journals (Elsevier, Springer, ACS, IAHS, GSI, CS, HG, Eos, G-3, AGU etc.  
Reviewed since 2006 = 400+),  
Project Proposals (DST, CSIR, MoEF, NCPOR, CEFIPRA-France, MoES,  
Several Industries)

June-August - 2001	MAITRE DE CONFERENCE, IPG, PARIS <b>Associated Professor</b>
1999 - 2000	UNIVERSITY PAUL SABATIER, TOULOUSE INSTITUTE DE PHYSIQUE DU GLOBE, PARIS <b>Professor (Invitee) / Researcher</b>
1993 - 1995	JAWAHARLAL NEHRU UNIVERSITY, NEW DELHI AND INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, MUMBAI <b>CSIR Pool Officer</b>
1991 - 1992	HUNDSON RIVER FOUNDATION, UNIVERSITY OF DELAWARE, USA <b>Research Scientist</b>
1986 - 1991	JAWAHARLAL NEHRU UNIVERSITY, NEW DELHI <b>Research Fellow</b>

## EDUCATION

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1991	JAWAHARLAL NEHRU UNIVERSITY, NEW DELHI, INDIA <b>Ph.D. Environmental Geochemistry</b>
1990	SMITHSONIAN ENVIRONMENTAL RESEARCH CENTRE EDGEWATER, MARYLAND, USA <b>Intern</b>
1988	JAWAHARLAL NEHRU UNIVERSITY, NEW DELHI, INDIA <b>M. Phil. Environmental Geology (1<sup>st</sup> Division, 7.2/9.0)</b>

1985	INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, MUMBAI <b>M.Sc. Applied Geology (1<sup>st</sup> Division, 7.74 / 10.0)</b>
1983	BERHAMPUR UNIVERSITY, BERHAMPUR, INDIA <b>B.Sc. Geology Honors (1<sup>st</sup> Division, 71%)</b>
1981	BERHAMPUR UNIVERSITY, BERHAMPUR, INDIA <b>I.Sc. Maths, Physics, Chemistry, Geology (1<sup>st</sup> Division, 77.4%)</b>
1979	ORISSA BOARD OF EDUCATION, INDIA <b>H.S.C. (1<sup>st</sup> Division, 71%) National Merit Scholarship 1979-85</b>

## JOB AND ADMINISTRATION

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2008- Till Date	Professor, IIT Roorkee (HAG since 1.1.2017)
2003-08	Associate Professor, IIT Roorkee
1996-2003	Assistant Professor, IIT Roorkee
2019-22	Vice Chancellor, Berhampur University (Odisha)
2020-21	Founder Vice Chancellor, Kalahandi University (Odisha)
2018	Visiting Professor, Kyoto University, Japan (did not avail)
2017-18	<b>Dean, School of Ecology and Environment Studies</b> Nalanda International University (Ministry of External Affairs), Rajgir, Bihar
2019	Attended Leadership in Academicians Program (LEAP) training of 3 weeks at IITB, Mumbai and NTU, Singapore
2023-24	Member, National Testing Agency
2017-2020	<b>Member, Environmental Impact Assessment Committee</b> River Valley and Hydropower Projects MOEFCC, Government of India
2023-26	Chairman, Environment Assessment Committee, Ministry of Environment and Forests & Climate Change, Govt. of India
2016-2019	<b>Accreditation Member</b> , NABET, Quality Council of India
2016-2017	<b>Organizing Chairman, GATE 2017 &amp; Chairman, JAM 2017</b> All IITs and IISc GATE 2017
2015-2016	<b>Chairman, GATE 2016 &amp; JAM 2016</b> Indian Institute of Technology Roorkee
2014-2015	<b>Chairman, GATE 2015 &amp; JAM 2015</b> Indian Institute of Technology Roorkee
2008-2011	<b>Chairman</b> , Uttarakhand State Environment Expert Appraisal Committee (SEAC), MOEFCC, Government of India
2007-2010	<b>Member</b> , Uttarakhand State Environmental Impact Authority (SEIAA), MOEFCC, Government of India
2012-2014	<b>Chairman</b> , Department of Earth Sciences Research Committee Department of Earth Sciences, IIT Roorkee
2013-2014	<b>Vice-Chairman</b> , GATE and JAM 2014 Indian Institute of Technology Roorkee
2012-2013	<b>Vice-Chairman</b> , GATE and JAM 2013
2018-2020	Chairman, Department Administrative Committee Indian Institute of Technology Roorkee

2001-2017 In-Charge, Department of Earth Sciences Geochemistry Laboratory  
 2008-2016 In-Charge, Department of Earth Sciences Museum  
 2013-2017 In-Charge, Department of Earth Sciences Staff  
 2012-2015 In-Charge, Department of Earth Sciences Buildings & Maintenance  
 2010-2012 In-Charge, Department of Earth Sciences Sedimentology Lab  
 2006-2009 In-Charge, Department of Earth Sciences Stores  
 2005-2006 In-Charge, Department of Earth Sciences Time Table  
 2005-2006 In-Charge, Department of Earth Sciences Examinations  
 2000-2003 In-Charge, Department of Earth Sciences Library  
 2007-2010 In-Charge, Himalayan Explorers' Club, IIT Roorkee  
 2013-2015 Member, River Front Management (MoEF), MOEFCC  
 2013-2015 Member, IIT Roorkee Green Committee

2011-2014 Member, Earth Sciences Department Finance Committee

2004-2007 IPR Cell, IIT Roorkee

National Working Group, IGCP-581 Evolution of Asian River Systems  
 Scientific Advisory Board, Delta Institute Visakhapatnam  
 Technical Advisory Board, National Institute of Hydrology Roorkee  
 Board of Management, University of Petroleum & Energy Studies,  
 Member, IITR Library Committee, PhD Thesis Examiner-IIT  
 Kharagpur, JNU New Delhi, Osmania University, University of  
 Kerala, HNB Garhwal University, Anna University, University of  
 Pune, Stockholm University, Expert Member- UPSC, New Delhi,  
 CMFRI, IIT (ISM) Dhanbad, Department of Space (IISST,  
 Thiruvananthapuram), Guru Gobind Singh Indraprastha  
 University, New Delhi, WIHG Dehra Dun, NIT Rourkela,  
 Fullbright Fellowship, INSA-IASC Research Fellowships, IISER  
 Bhopal, IISER Berhampur, IIT Bhubaneswar, IISER Kolkata,  
 National Geoscience Awards, IIT Kharagpur, University of Pune,  
 DST- VAIBHAV and many others

## ASSIGNMENTS ABROAD

Visiting Professor State Key Laboratory of Marine Geology, Tongji University,  
 Shanghai (China), November 2012  
*(Host: Prof. S.Yang)*

Visiting Professor State Key Laboratory of Marine Geology  
 Tongji University, Shanghai, China 2011  
*(Host: Prof. S.Yang)*  
 Key Laboratory of Marine Geology, Ocean University of China,  
 Qingdao, China, July 2011  
*(Host: Prof. D.Fan)*

Visiting Professor State Key Laboratory of Marine Geology  
 Tongji University, Shanghai, China, July 2010  
*(Host: Prof. S.Yang)*

Visiting Scientist LMTG, Toulouse, France (June – July, 2008)  
*(Host: Dr. B.Dupre, Director, OBS-MIP)*

Visiting Scientist	Institute of Earth Sciences, Academia Sinica, Taipei, Taiwan 1-31 <sup>st</sup> Dec2007 (Host: Prof. Bor-Ming Jahn)
Visiting Scientist	Stockholm University, Sweden, June-July, 2007 (Host:Dr.J.Routh)
Visiting Scientist	LMTG-CNRS-UPS Toulouse, France June-July, 2005 (Host:Dr.B.Dupre)
Visiting Scientist	(INSA-DFG) Ruhr University Bochum, Germany July-September, 2004 (Host: Prof. J.Veizer)
Visiting Professor	IPG-University of Paris VII, June-August, 2001 (Host: Prof. J.Gaillardet)
Visiting Scientist	UPS, Toulouse- IPG, Paris, France January-December, 1999 (Host: Dr. B.Dupre, Prof. J.Gaillardet and Prof. C.J.Allegre)
Research Scientist	University of Delaware, USA 1991-92 (Host: Prof. R.J.Gibbs)
Intern	Smithsonian Environmental Research Centre Edgewater, Maryland, USA April-August, 1990 (Host:Dr.T.E.Jordan)

### **Research Publications**

81. Behera, A.K., Pradhan, R.M., Kumar, S., **Chakrapani, G.J.** and Kumar, P. (Student Supervisor) 2022 Assessment of groundwater flow dynamics using MODFLOW in shallow aquifer system of Mahanadi delta (east Coast), India, *Water*, 14, 611. <https://doi.org/10.3390/w14040611>, [www.mdpi.com/journal/water](http://www.mdpi.com/journal/water)
80. Panwar, S., Yang, S., Srivastava, P., Khan, M.Y.A., Sangode, S.J. and Chakrapani, G.J. (Student Supervisor) 2020, Environmental magnetic characterization of the Alaknanda and Ramganga river sediments, Ganga basin, India. *Catena* 190 (104529). <https://doi.org/10.1016/j.catena>
79. Behera, A.K., **Chakrapani, G.J.**, Kumar, S. and Rai, N. (student Supervisor) Identification of sea water intrusion signatures through geochemical evolution of groundwater: a case study based on coastal region of the Mahanadi delta, Bay of Bengal. *Natural Hazards*, 97(3): 1209-1230, Springer Publ. 2019
78. Gupta, H., Bisoyi, N., Padhy, N.P., and **Chakrapani, G.** (Student Supervisor) Prediction of daily sediment discharge using a back propagation neural network training algorithm: a case study of the Narmada River, India. *International Journal of Sediment Research*, 34(2): 125-135, Elsevier Publ. 2019
77. Khan, M.Y.A., Hassan, F., Tian, F. and **Chakrapani, G.** (Student Supervisor) Artificial neural network simulation for prediction of suspended sediment concentration in the River Ramganga, Ganges Basin, India, *International Journal of Sediment Research*, 34(2): 95-107, Elsevier Publ. 2019

76. Panwar, S., Gaur, D. and **G.J.Chakrapani** (Student Supervisor) (2017) Total organic carbon transport by the Alaknanda River, Garhwal Himalayas, India. *Arabian Jour. Geosci.* DOI:10.1007/s12517-017-3003-3, Springer Publ.
75. Panwar, S., Agarwal, V. and **G.J.Chakrapani** (Student Supervisor) (2017) Morphometric and sediment source characterization of the Alaknanda River basin, Headwaters of River Ganga, India, *Natural Hazards*, DOI 10.1007/s11069-017-2838-y, Springer Publ.
74. Panwar, S., Mishra, M, and **G.J.Chakrapani** (Student Supervisor) (2017) Orogeny as a controller of climate change and monsoon. In *Development of Water Resources in India*, Garg, V. et al. (Eds), Water Science and Technology Library 75, DOI 10.1007/978-319-55125-8\_27
73. Khan, Y.A.M, Gani, K.M. and **G.J. Chakrapani** (Student Supervisor) (2017) Spatial and temporal variations of physicochemical and heavy metal pollution in Ramganga river-a tributary of River Ganges, India. *Environmental Earth Sciences*, 76:1-13, DOI: 10.1007/s12665-017-6547-3, Springer publ.
72. Khan, Y.A.M, Khan, B and **G.J.Chakrapani** (Student Supervisor) (2016) Assessment of spatial variations in water quality of Gargariver at Shahjahanpur, Gannga Basin, India, *Arab. Jour. Geosci.* 9(8):1-10, DOI: 10.1007/s12517-016-2551-2, Springer publ.
71. Panwar, S. **G.J.Chakrapani** (Student Supervisor) (2016) Seasonal variability of grain size, weathering intensity and provenance of channel sediments in the Alaknanda River Basin, an upstream of Ganga River, India, *Environmental Earth Science*, DOI: 10.1007/s12665-016-5815-y, Springer publ.
70. Panwar, S. and **G.J.Chakrapani** (Student Supervisor) (2016) Spatial and temporal variability in grain sizes of Alaknanda River, Chapter in Book "Geostatistical and geospatial approaches for the characterization of natural resources in the environment", 313-319 pp, Springer International Publ.
69. Panwar, S., Khan, Y.A. and **G.J.Chakrapani** (Student Supervisor) (2016) Grain size characteristics and provenance determination of sediment and dissolved load of Alaknanda River, Garhwal Himalayas, India. *Environmental Earth Science*, DOI: 10.1007/s12665-015-4785-9, Springer publ.
68. Khan, M.Y.A. Daityari, S. and **G.J.Chakrapani** (Student Supervisor) (2016) Factors responsible for temporal and spatial variations in water and sediment discharge in Ramganga River, Ganga Basin, India, *Environmental Earth Sciences*, 75(4):1-18 Springer Publ. DOI 10.1007/s12665-015-5148-2
67. Khan, M.Y.A., Muzamil, K., and **G.J.Chakrapani** (Student Supervisor) (2016) Assessment of surface water quality and its spatial variation: A case study of Ramganga River, India, *Arabian Journal of Geosciences*, 9: 28. Springer Publ. DOI:10.1007/s12517-015-2134-7
66. Khan, M.Y.A., Hasan, F., Panwar, S. and **G.J.Chakrapani** (Student Supervisor) (2015) Neural network model for discharge and water level prediction for Ramganga river catchment of Ganga Basin, India, *Hydrological Sciences Journal (Taylor & Francis Publ.)*, 61(11):2084-2095, DOI: 10.1080/02626667.2015.1083650
65. Frings, P.J., Clymans, W., Fontorbe, G., Gray, W., **G.J.Chakrapani**, G., Conley, D.J. and Rocha C, D.L. (Research Collaborator) (2015) Silicate weathering in the Ganges alluvial plain. *Earth & Planetary Science Letters*, 427: 136-148, Elsevier Publ.
64. Singh, Nandita and **G.J.Chakrapani** (Student Supervisor) (2015) ANN modeling of sediment concentration in the dynamic glacial environment of Gangotri in Himalaya, *Environmental Monitoring and Assessment*, DO 10.1007/s10661-015-4672-6, Springer Publ.



63. Singh, Anjali, S.K.Srivastav, Sudhir Kumar and **G.J.Chakrapani**(Student Supervisor) (2015) A modified DRASTIC (DRASTICA) model for assessment of groundwater vulnerability to pollution in an urbanized environment in Lucknow, India. *Environmental Earth Science*, 74(7): 5475-5490, DOI: 10.1007/s12665-015-4558-5, Springer-Verlag Publ.
62. Purushothaman, P.and**G.J.Chakrapani**(Student Supervisor) (2014) Phosphorus biogeochemistry in sediments of high altitude lakes, Kumaun Himalayas, India, *Arab. Jour. Geosci.* DOI 10. 1007/s12517-013-1234-5, Springer Publ.
61. Mishra, M. and **G.J.Chakrapani**(Student Supervisor) (2014) A Grain size model for role of tectonics and climate on sedimentation in Siwaliks in Mohand area, *Journal of Geological Society of India*, Vol. 84, 105-113, Springer Publ.
60. Ali, A., Asadollah, M, Reza, M.H., Mahdi, N. and **G.J.Chakrapani** (Student Supervisor) (2014) Carbonate diagenesis of the upper Jurassic succession (Oxfordian-Kimmerdgian) in the west of Binalaud-Eastern Albortz (NE Iran), *Journal of Geological Society of India*, 83 (3), 311-328, Springer Publ.
59. Panwar, S. and **G.J.Chakrapani**(Student Supervisor) (2013) Climate change and its influence on groundwater resources, *Current Science*, 105 (1): 37-46
58. Mehto, A. and **G.J.Chakrapani**(Student Supervisor) (2013) Spatio-temporal variation in the hydrochemistry of Tawa River, Central India: Effect of Natural and Anthropogenic Factors, *Environmental Monitoring and Assessment*, 185(12): 9789-9802, Springer Publ.
57. Choudhary, P., J.Routh and **G.J.Chakrapani**(Student Supervisor) (2013)A 100- year record of changes in organic matter characteristics and productivity in Lake Bhimtal in the Kumaon Himalaya, NW India, *Journal of Paleolimnology*, 49: 129-143, Springer Publ.
56. Purushothaman, P., and **G.J.Chakrapani** (Student Supervisor) (2012) Trace metals biogeochemistry of Kumaun Himalayan lakes, Uttarakhand, India, *Environmental Monitoring and Assessment*, 184 (5):2947-2965, Springer Publ.
55. Purushothaman, P., S.Mishra, A.Das and **G.J.Chakrapani** (Student Supervisor) (2012) Sediment and hydro biogeochemistry of lake Nainital, Kumaun Himalaya, India, *Environmental Earth Sciences*, 65: 775-788, Springer Publ.
54. Gupta,H., **G.J.Chakrapani**, K.Selvaraj and S-J Kao (Student Supervisor) (2011) The fluvial geochemistry, contributions of silicate, carbonate and saline-alkaline components to chemical weathering flux and controlling parameters: Narmada River (Deccan Traps), India. *GeochimicaetCosmochimicaActa* 75:800-824, Elsevier Publ.
53. Yadav, S.K. and **G.J.Chakrapani** (Student Supervisor) (2011) Geochemistry, dissolved elemental flux rates, and dissolution kinetics of lithologies of Alaknanda and Bhagirathi rivers in Himalayas, India, *Environmental Earth Sciences*, 62: 593-610, Springer Publ.
52. Das, S.K. and **G.J.Chakrapani**(Student Supervisor) (2011)Assessment of metal toxicity in soils and waters from Raniganj coalfield, India, *Environmental Monitoring and Assessment*, DOI: 10.1007/s10661-010-1618x, 177: 63-71, Springer Publ.
51. Viswanathan, M. and **G.J.Chakrapani**(Student Supervisor) (2010) Laboratory Experiments on River-Estuary Geonanomaterials, *Current Science*, 99(2): 213-215, Springer Publ.
50. Choudhary, P., J.Routh and **G.J.Chakrapani**(Student Supervisor) (2010) Organic geochemical record of increased productivity in Lake Naukuchiyatal, Kumaun Himalayas, India. *Environmental Earth Sciences*, 60(4): 837-843, Springer-Verlag Publ.
49. Tripathy, G.R., V.Goswami, S.K.Singh and **G.J.Chakrapani** (Research Collaborator)(2010) Temporal variations in Sr and <sup>87</sup>Sr/<sup>86</sup>Sr of the Ganga headwaters: Estimates of dissolved

- Sr flux to the mainstream. *Hydrological Processes*, DOI: 10.1002/hyp.7572, 24: 1159-1171, Wiley Interscience Publ.
48. Dubey, P., V.Ravikant and **G.J.Chakrapani**(Student Supervisor) (2010) Strontium isotopic compositions in selected hot spring waters in northwestern Himalaya. *Himalayan Geology* 31 (1): 19-23
  47. **G.J. Chakrapani**and R.K.Saini (Student Supervisor) (2009) Influence of monsoon on the variations in water discharge and sediment load in the Alaknanda and Bhagirathi rivers in Himalayas, India. *Journal of Asian Earth Sciences*, 35(6): 545-553, Elsevier Publ.
  46. **G.J. Chakrapani**,R.K.Saini and S.K.Yadav (Student Supervisor) (2009) Chemical weathering rates in the Alaknanda-Bhagirathi river basins in Himalayas, India. *Journal of Asian Earth Sciences*,34: 347-362, Elsevier Publ.
  45. Choudhary,P., J.Routh and **G.J.Chakrapani**(Student Supervisor) (2009) Comparison of bulk organic matter characteristics in three Kumaun Himalayan Lakes, *Current Science*, 97(4): 372-375, Springer Publ.
  44. Choudhary,P., J.Routh, **G.J.Chakrapani** and B.Kumar (Student Supervisor) (2009) Biogeochemical records of paleoenvironmental changes in Nainital lake, Kumaun Himalayas, India *Journal of Paleolimnology*, Springer Publ. 42(4): 571-580
  43. Choudhary,P. J.Routh and **G.J.Chakrapani** (Student Supervisor) (2009) An environmental record of changes in sedimentary organic matter from Lake Sattal in Kumaun Himalayas, India. *Science of the Total Environment*, 407 (8) : 2783-2795, Elsevier Publ.
  42. Jain, C.K., H.Gupta and **G.J.Chakrapani** (Student Supervisor) (2008) Enrichment and fractionation of heavy metals in bed sediments of river Narmada, India. *Environmental Monitoring and Assessment*, 141(1-3): 35-47, Springer Publ.
  41. Skelton, A. L. Claesson, **G.J. Chakrapani**, C.Mahanta, J.Routh, M. Morth and P. Khanna (Research Collaborator) (2008) Coupling between seismic activity and groundwater chemistry at the Shillong Plateau, northeastern India. *Pure and Applied Geophysics*, 165:45-61 BirkhauserVerlag Publ.
  40. Purushothaman, P., A.Soren and **G.J.Chakrapani** (Student Supervisor) (2008) Phosphorus fractionation in Nainital lake sediments. *Himalayan Geology*, 29(1): 73-79
  39. Saini,R.K., S.Swain, A.Patra, G.J.Khanday, H.Gupta, P.Purushothaman and **G.J.Chakrapani**(Student Supervisor) (2008) Water geochemistry of three Himalayan lakes: Dal lake (Jammu & Kashmir), Khajjiar (Himachal Pradesh) and Nainital Lake (Uttarakhand). *Himalayan Geology*, 29(1): 63-72
  38. Yadav, S.K., **G.J.Chakrapani** and ManojK.Gupta (Student Supervisor) (2008) An experimental study on dissolution kinetics of calcite, dolomite, leucogranite and gneiss in buffer solutions at temperatures 25<sup>0</sup>C and 5<sup>0</sup>C, *Env.Geol.*53(8):1683-94, Springer Publ.
  37. Purushothaman, P., and **G.J.Chakrapani** (Student Supervisor) (2007) Heavy metals fractionation in Ganga river sediments *Environ Monit and Assess* 132 :475-489, Springer Publ.
  36. Subudhi,R.K., **G.J.Chakrapani**and R.K.Saini (Student Supervisor) (2007)Temporal variations in dissolved chemical composition in Ganga river at Rishikesh, India. *Jour. Geol.Soc.India* 69(6): 1305-131
  35. Gupta, H. and **G.J.Chakrapani** (Student Supervisor) (2007) Temporal and spatial variations in water flow and sediment load in the Narmada River. *Current Science* 92 (5): 679-684 *Ind. Acad.Sci.*

34. Patra, A.K., N.Pendkar and **G.J.Chakrapani**(Student Supervisor)(2006) Heavy metals fractionation and mineralogy in sediments of Nainital lake, Kumaun Himalayas. Jour.Geol.Soc.Ind. 68:181-185
33. Saini, R.K., **G.J.Chakrapani**and A.K.Sen (Student Supervisor) (2006) Geochemical studies of groundwater in Saharanpur, Uttar Pradesh, Jour. Geol. Soc. India 68:50-58
32. Yadav, S.K. and **G.J.Chakrapani** (Student Supervisor) (2006) Dissolution kinetics of rock-water interactions and its implications. Current Science 90(7):932-937,Ind.Acad.Sci.Publ.
31. **G.J. Chakrapani**and J.Veizer (Research Collaborator) (2006) Source of dissolved sulphate in the Alakananda-Bhagirathi rivers in the Himalayas Current Science 90(4):500-503, Ind.Acad.Sci.Publ.
30. Maiti,S., N.K.Meena, S.J.Sangode and **G.J.Chakrapani** (Student Supervisor) (2005) Magnetic susceptibility studies of soils in Delhi. Jour. Geol.Soc.Ind.66 :667-672
29. Chakrapani,G.J. (2005) Osmium and strontium isotopic compositions in Ganga river sediments. In: Hydrological Perspectives for Sustainable Development (Allied Publ.), 990-996 pp
28. **G.J.Chakrapani** (2005) Book Review: Himalayan Orogen-Foreland Interaction. Curr. Sci. 89(10): 1765-66, Ind.Acad.Sci.Publ.
27. Gupta,H. and **G.J.Chakrapani**(Student Supervisor)(2005) Temporal and spatial variations in water flow and sediment load in Narmada River Basin, India: Natural and man-made factors. Environmental Geology 48:579-589 Springer-Verlag Publ.
26. **G.J. Chakrapani** and Jan Veizer (Research Collaborator)(2005) Dissolved inorganic carbon isotopic composition in the upstream Ganga River in Himalayas. Curr.Sci. 89(3):553-556 Ind.Acad. Sci. Publ.
25. **G.J. Chakrapani** (2005) Major and trace element geochemistry in upper Ganga river in Himalayas, India, Environmental Geology 48(2):189-201, Springer-Verlag Publ.
24. Vigier, N., B.Bourdon, E.Lewin, B.Dupre,S.Turner,**G.J.Chakrapani**, P.vanCalsteren and C.J.Allegre (Research Collaborator) (2005) Mobility of U-series nuclides during basalt weathering: an example from Deccan Traps, India. Chem.Geol. 219(1-4):69-91, Elsevier Sci.Publ.
23. **G.J. Chakrapani**, Deepak Dhingra and Prasun Biswas (Student Supervisor) (2005) Chemical weathering by rivers in India. IWRS Journal 25(2):1-9
22. **G.J. Chakrapani** (2005) Factors controlling variations in river sediment loads. Current Science 88 (4):569-575 Ind. Acad. Sci. Publ.
21. Gupta,H. and **G.J.Chakrapani** (Student Supervisor) (2004)Variations in daily sediment loads of Narmada river.In:Water Quality-Monitoring, Modeling and Prediction(NIH Publ.) 31-39 pp
20. Dhingra,D. and **G.J.Chakrapani** (Student Supervisor) (2004)Estimation of silicate weathering in Upper Ganga river in Himalayas, India. Himalayan Geology 25(2):139-144. WIHG Publ.
19. **G.J. Chakrapani**(2003)Linking of major rivers of India–Bane or Boon? Correspondence Jour.Geol.Soc.India Vol. 61.Geol.Soc. Ind. Publ.
18. **G.J. Chakrapani**(2002) Chemical studies of water in Kumaun Himalayan lakes.In: Aquatic Ecosystems–Conservation,Restoration and Management(Capital Publ.),147-53 pp

17. **G.J. Chakrapani**, J.Gaillardet, B.Dupre and C.J.Allegre (Research Collaborator)(2002) Osmium isotopic composition in Ganga river sediments Current Science 83(10):1253-1255. Ind. Acad.Sci. Publ.
16. **G.J. Chakrapani** (2002) Water and sediment geochemistry of major Kumaun Himalayan lakes Environmental Geology 43:99-107, Springer-Verlag Publ.
15. Dessert, C., B.Dupre, L.M.Francois, J.Schott, J.Gaillardet, **G.J.Chakrapani** and S.Bajpai (Research Collaborator) (2001) Erosion of Deccan Traps determined by river geochemistry : Impact on the global climate and Sr<sup>87</sup>/Sr<sup>86</sup> ratio of seawater, Earth and Planetary Science Letters 188 : 459-474, Elsevier Publ.
14. Gibbs, R.J., P.K.Jha and **G.J.Chakrapani** (Research Collaborator) (2000) Clay mineralogy of the Hudson river estuary. Northeastern Geology and Environmental Sciences 22(1):26-30. Blackwell Publ.
13. **G.J. Chakrapani** and B.C.Raymahasay (Research Collaborator) (1999) Metal pollution due to mining activities. In: Biogeochemistry of rivers in tropical south and south-east Asia, SCOPE Publ., Hamburg), 255-260 pp.
12. Sharma, M., G.J.Wasserburg, A.W.Hoffmann and **G.J.Chakrapani** (Research Collaborator) (1999) Himalayan uplift and osmium isotopes in oceans and rivers. Geochimica et Cosmochimica Acta 63 (23/24) 4005-4012, Pergamon Publ.
11. **G.J. Chakrapani** and A.K.Soni (1998) Pollution due to exploitation of mineral resources. In: Environmental Biogeochemistry (SCOPE Publ. Hamburg), 423-432 pp
10. Sharma, M., G.J.Wasserburg, A.W.Hofmann and **G.J.Chakrapani** (Research Collaborator) (1998) The osmium isotopic composition of the suspended and dissolved load in the Ganges : Implications for the evolution of the seawater Os EOS 79, F519, American Geophysical Union Publ.
9. Ahmad, T., P.P.Khanna, **G.J.Chakrapani** and S.Balakrishnan (Research Collaborator) (1998) Geochemical characteristics of water and sediment of the Indus river, Trans-Himalaya, India: Constraints on weathering and erosion. Journal of Asian Earth Sciences 16(2-3) 333-346, Elsevier Sci. Publ.
8. **G.J. Chakrapani** and V.Subramanian (Student Research) (1996) Fractionation of heavy metals and phosphorus in suspended sediments of the Yamuna River, India. Environmental Monitoring and Assessment 43: 117-124, Kluwer-Academic Publ.
7. **G.J. Chakrapani**, V.Subramanian, R.J.Gibbs and P.K.Jha (Research Collaborator) (1995) Size characteristics and mineralogy of suspended sediments of the Ganges River, India. Environmental Geology 25: 192-196, Springer-Verlag Publ.
6. Gibbs, R.J. P.K.Jha and **G.J.Chakrapani** (Research Collaborator) (1994) Sediment particle size in the Hudson estuary. Sedimentology 41: 1063-1068, Blackwell Publ.
5. **G.J. Chakrapani** and V.Subramanian (Student Research) (1994) Grain size distribution and mineralogy of suspended sediments of Mahanadi River. Geological Society of India 44: 541-546. Geol. Soc.Ind. Publ.
4. **G.J. Chakrapani** and V.Subramanian (Student Research) (1993) Heavy metals distribution and fractionation in sediments of the Mahanadi river basin, India. Environmental Geology 22:80-87, Springer-Verlag Publ.
3. **G.J. Chakrapani** and V.Subramanian (Student Research) (1993) Rates of erosion and sedimentation in the Mahanadi river basin, India. Journal of Hydrology 149: 39-48, Elsevier Sci.Publ.

2. **G.J. Chakrapani** and V.Subramanian (Student Research) (1990) Factors controlling sediment discharge in the Mahanadi river basin, India. *Journal of Hydrology* 117: 169-185, Elsevier Sci. Publ.
1. **G.J. Chakrapani** and V.Subramanian (Student Research) (1990) Preliminary studies on the geochemistry of the Mahanadi river basin, India. *Chemical Geology* 81:241-253, Elsevier Sci.Publ.

## **Ph.D. THESES (SUPERVISED-14, IN PROGRESS-2)**

---

1. **Environmental Geochemistry of Narmada River Basin**  
(Harish Gupta, 2006)
2. **Paleomonsoon in NW India: An Environmental Magnetic Approach**  
(Narendra Kumar Meena, 2007)
3. **Neuro-fuzzy model application to sediment discharge in Narmada River**  
(Ms. Nibedita Bisoyi, 2007)
4. **Temporal and spatial variations on water chemistry of Alaknanda and Bhagirathi rivers of Garhwal Himalaya**  
(Ravi Kumar Saini, 2007)
5. **Determination of dissolution rates of rocks/minerals by laboratory experiments**  
(Sri Krishan Yadav, 2007)
6. **Characterisation of organic matter in sediments of Kumaun Himalayan lakes**  
(Ms. Preetam Choudhary, 2008)
7. **Nutrients and heavy metals in Kumaun Himalayan lakes**  
(P.Purushothaman, 2009)
8. **Sediment Geochemistry of Kallai River, Kerala**  
(Ms. K.J.Resmy, 2013)
9. **Sediment flow modeling in Bhagirathi River using artificial neural networks**  
(Nandita Singh, 2015)
10. **Impact of urbanization on groundwater of Lucknow area**  
(Anjali Singh, 2015)
11. **Scour around spur dikes and bridge piers founded in cohesive sediment mixtures**  
(Ajay Singh Lodhi, 2015)
12. **Characterization of sediments of the Alaknanda River, Garhwal Himalayas, India**  
(Ms. Sugandha Panwar, 2016)
13. **Sediment flow patterns and water quality in Ramganga River, Ganga Basin, India**  
(Mohd. Yawar Ali Khan, 2016)
14. **Salt water intrusion modeling in Jagatsinghpur Coastal Aquifer System, Odisha**  
(Ajit Kumar Behera, 2019)

## TALKS IN CONFERENCES / INVITED LECTURES

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1. Application of Remote sensing techniques in Hydrology, IIT Roorkee, 1988
2. Mathematical modeling in water quality, IIT-UNESCO, New Delhi 1989
3. Metals in environment, Orlando, USA 1990
4. Mercury in environment, Gavle, Sweden 1990
5. Invited talk in Centre for Ecological Sciences, IISc, Bangalore 1990
6. Environmental Pollution due to Thermal Power Plants, NTPC, New Delhi 1991
7. Accelerator Mass Spectrometer: Applications to Earth Sciences, Institute of Physics, Bhubaneswar, 1998
8. International Seminar on Applied Hydrogeochemistry, Annamalai University, 1998
9. American Geophysical Union, San Francisco, 1998
10. Recent Trends in Environmental Biogeochemistry, JNU New Delhi, 1998
11. Geological Society of France, Paris 1999
12. Hydrological and Geochemical Processes in Large -Scale River Basins, Manaus, Brazil, 1999
13. American Geophysical Union, San Francisco, USA 2000
14. International Workshop on Geoenvironmental Hazards, New Delhi 2000
15. Eleventh Annual V.M.Goldschmidt Conference 2001, Boston USA
16. International workshop on Ecohydrology, UNESCO-JNU, New Delhi Nov 26-29,2001
17. National workshop on Water Quality, New Delhi Feb 1-2, 2002
18. Earth Science Research, Annual General Meeting of Geological Society of India, Chandigarh October 23-25, 2002
19. Symposium on Conservation, Restoration and Management of Aquatic Ecosystems, Indian Institute of Science, Bangalore December 9-13, 2002
20. International Limnogeological Congress ILIC3, University of Arizona, Tucson, USA March 29- April 2, 2003
21. International Conference on Coastal and Freshwater Issues, Institute of Ocean Management, Anna University Dec. 8-10, 2003
22. International Conference on River Bank Filtration, Department of Civil Engineering, Indian Institute of Technology, Roorkee March 1-2, 2004
23. National Conference on River Links and Diversions, Jawaharlal Nehru University, New Delhi 22<sup>nd</sup>-23<sup>rd</sup> March 2004
24. National Conference on Water Quality-Monitoring, Modeling and Prediction, National Institute of Hydrology, Roorkee 22<sup>nd</sup>-23<sup>rd</sup> November 2004
25. International Conference on Conservation, Restoration and Management of lakes and Coastal Wetlands. Bhubaneswar. 9<sup>th</sup> -13<sup>th</sup> December 2004
26. International Conference on Hydrological Perspectives for Sustainable Development, Department of Hydrology, IIT Roorkee 23<sup>rd</sup>-25<sup>th</sup> February 2005

27. EU-India workshop on River Bank Filtration, Civil Engineering Department , IIT Roorkee, April 4,2005
28. Invited Lecture in IIRS Dehra Dun on 1<sup>st</sup> September 2005
29. Invited Lecture in Civil Engineering Department, IIT Kanpur on 19<sup>th</sup> September 2005
30. International symposium on “Applied geochemistry in the evaluation and management of onshore and offshore geo-resources” Osmania University, Hyderabad 28-30<sup>th</sup> September 2005
31. Indian Association of Sedimentologists National Conference on Sedimentary Basins of the Himalaya-Challenges for the Future. Wadia Institute of Himalayan Geology, Dehra Dun, 21-23, December 2005
32. Indo-US Workshop on Green Chemistry, University of Delhi, Delhi 7<sup>th</sup>-9<sup>th</sup> January 2006
33. 16<sup>th</sup>V.M.Goldschmidt Conference, August 27,2006-1<sup>st</sup> September 2006, Melbourne, Australia
34. Brainstorming session on geochemical precursors to earthquake, Saha Institute of Nuclear Physics, Kolkata September 11-13, 2006
35. 1<sup>st</sup> Uttaranchal State Science Congress, Dehra Dun (Chaired session on ‘Earth Sciences’), 10-11, November 2006
36. 12<sup>th</sup> World Lake Conference, Jaipur, India 28<sup>th</sup> October-2<sup>nd</sup> November 2007
37. Annual Geological Society of America Meeting, Denver, USA., 2007
38. Workshop on Tsunami in South China Sea, 5-7 December 2007, Academia Sinica, Taipei
39. Invited Lecture at Institute of Earth Sciences, Academia Sinica, Taipei (Taiwan) on 14<sup>th</sup> December 2007
40. Invited Lecture at the Centre of Earth Sciences, Indian Institute of Science, Bangalore on 10<sup>th</sup> April 2008
41. International Conference on Mountain Building and Climate-Tectonic Interaction, WIHG, Dehra Dun, 23-25 October 2008
42. National conference on ‘Hydropower Projects in Uttarakhand: Opportunities, Challenges and Conflict-Resolutions’, HNB Garhwal University, Srinagar, February 14-15, 2009, (Key Speaker)
43. National workshop-cum conference on ‘Environment, Energy, Occupational Health & Safety: Vital Necessity in Corporate World’, MOEF & SEARCH Foundation, WWF India Auditorium, New Delhi, February 27-28, 2009 (Guest of Honor & Key Speaker)
44. National workshop on ‘Ground Water and Water Quality in Uttarakhand’ CGWB, Dehra Dun, 19-20 March 2009 (Key Note Speaker)
45. Invited Speaker, Department of Applied Geology, HS GourSagar University, 26<sup>th</sup> Oct.2009
46. International Conference on ‘Human Impacts on Sub-Surface Environments’, Academia Sinica, Taipei, Taiwan, November 16-20, 2009 (Invited Speaker)
47. International Workshop on ‘Anthropogenic Impacts on Water Resources and Soils: An Indo-French Perspective’, Indian Institute of Science, Bangalore, 23-25 November 2009 (Invited Speaker)
48. Invited Speaker, TERI University, New Delhi-Indira Gandhi National Forest Academy, Dehra Dun, 17<sup>th</sup> February 2010

49. International Conference on 'Evolution of Asian River Systems Linking to Cenozoic Tectonics, Climate and Global Geochemical Cycles' Nanjing University, China, 8-9<sup>th</sup> May 2010 (Chaired a session on 'Drainage Development: Tectonic and Climatic Constraints)
50. Invited Talks, State Key Laboratory of Marine Geology, Tongji University, China (3<sup>rd</sup> July 2010, 5<sup>th</sup> July 2010)
51. Invited Talk, IGCP-581, Geological Survey of India (2<sup>nd</sup> November 2010)
52. National Seminar on "Drilling Technology", Institute of Drilling Technology, ONGC, Dehra Dun, 25-26 April, 2011
53. Key Speaker, State Action Plan on Climate Change (SAPCC-Uttarakhand), Dehra Dun (WWF), 7<sup>th</sup> May 2011
54. Guest of Honour, World Environment Day, 2011, CSIR-Central Building Research Institute, Roorkee (5<sup>th</sup> June 2011)
55. Dialogue initiation meet on "Mitigation and remedy of ground water arsenic menace in India", 24<sup>th</sup> June 2011 (NIH-CGWB), New Delhi
56. Invited Talk at State Key Laboratory of Marine Geology, Tongji University, Shanghai, China, 6<sup>th</sup> July 2011
57. Invited Talk at Key Laboratory of Marine Geology, Ocean University of China, Qingdao, China, 8<sup>th</sup> July 2011
58. Invited Talk at School of Environment and Natural Resources Management, Doon University, Dehra Dun, 27<sup>th</sup> July 2011
59. Invited talk at Delta Studies Institute, Visakhapatnam, 23<sup>rd</sup> September 2011
60. Invited talk at Geology Department, Andhra University, 24<sup>th</sup> September 2011
61. International Conference on Asian Marine Geology-7, NIO Goa, 10-14 October 2011
62. Invited talk at the workshop on "Hydrogeochemical modeling assessment and management of urban and coastal groundwater" at School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, 19<sup>th</sup> October 2011
63. Invited talk at the national conference on "Recent advances and future challenges in Geochemistry and Geophysics" Banaras Hindu University, Varanasi 22-24 February 2012
64. Invited talk (INSPIRE, DST), Shobhit University, Meerut, 18<sup>th</sup> June 2012
65. Guest Lectures, State Key Laboratory of Marine Geology, Tongji University, Shanghai (China) 6-14 November, 2012
66. Invited Talk, Indo-Norwegian Conference on Enhanced Oil Recovery and CO<sub>2</sub> sequestration, (NGRI Hyderabad), 26-28 November 2012
67. Invited Talk, Workshop on Application of GIS to Groundwater modeling and management, National Institute of Hydrology, Roorkee (13<sup>th</sup> February 2014)
68. Invited Talk, Workshop on Water Resources Conservation: Village Ponds and Lakes, Centre for Science & Environment, New Delhi (25<sup>th</sup> February 2014)
69. Invited Speaker, National Workshop on "Continental crust and cover sequences in the evolution of the Indian sub-continent" at the National Centre for Earth Sciences-Thiruvananthapuram (21<sup>st</sup> January 2015)
70. Resource person and invited talk at Kurukshetra University -Earth's atmosphere and global climate change, 23 December 2015



71. Invited Talk at the Indo-UK workshop on water quality and source protection, Indian Institute of Science, Bengaluru, 29<sup>th</sup> March 2016 to 1<sup>st</sup> April 2016
72. Chaired, Biodiversity Conservation and Ganga Rejuvenation WII, Patna on 5<sup>th</sup> October 2017
73. Organizing Committee Member, International Conference on Dhamma-Dharma, Nalanda University, Rajgir, 11-13 January 2018
74. Plenary Speaker and Chaired a Session at Promotion of Public Awareness on Water Development, Conservation and Management in Uttarakhand, HNB Garhwal University, Srinagar, 9<sup>th</sup> March 2018
75. As Vice Chancellor of Berhampur University (2019-22), as patron attended 60+ conferences, workshops, seminars and faculty development programs
76. Resource person talk at IIT Roorkee on “Academic Leadership: Demands and challenges in leading a university” on 27/3/24, Nurturing Future Leadership Program- under the aegis of the Malviya Mission Teacher Training Program (MoEd)
77. Delivered a talk on “Biogeochemical processes and their impacts on water quality in aquatic ecosystems” at Royal Society, London on 27Nov 2024 (Royal Society-INSA invited meeting on Biodiversity: Water Sustainability theme)

## COMMENDATIONS

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- ❖ Certificate of Merit 1990, Smithsonian Institution, USA
- ❖ Letter of appreciation (star performance) from Director, IIT Roorkee for excellence in academic and research performance 2003-04, 2005-06
- ❖ Letter of appreciation for a research paper, 2005- from Amy Young, Program Coordinator “Planet Earth” BBC London
- ❖ National Geosciences Award (Environmental Geosciences), 2005, Ministry of Mines, Government of India
- ❖ Fellow, National Academy of Sciences, India (FNASc, 2012)

## M.TECH. DISSERTATIONS

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1. Groundwater quality in parts of Muzaffarnagar District, U.P. with special reference to chemical evolution (Ruchindra Singh, 1996)
2. Geochemical and Pb-210 studies on Nainital Lake sediments, Kumaun Himalaya (AnuragPattnaik, 1997)
3. Effect of weathering on Luminescence dating (Praveen Akhouri, 1998)
4. Assessment of soil erosion from Pun Pun Sub basin (R.Saravanan, 2001)
5. Impact of urban pollution in the Adyarriver and the adjacent groundwater in Chennai city (G.V.Suresh, 2001)
6. Chemical weathering studies in upstream Ganga river basin (Deepak Dhingra, 2002)

7. Chemical composition and mineralogy of Nainital lake sediments (AshisPatra, 2002)
8. U-Th series nuclides in sediments and water column of northern Indian Ocean (A. Deymunsh, 2003)
9. Ground water quality studies in Saharanpur (Ravi K. Saini, 2003)
10. Geoenvironmental studies in Raniganj Coal Fields, West Bengal (Supriyo Kumar Das, 2003)
11. Monitoring of heavy metal loading in Dehi soil: Environmental magnetism and geochemical approach (SabyasachiMaiti, 2004)
12. Application of neural network to river chemical weathering with special reference to Ganga River at Rishikesh (Ranjit Kumar Subudhi, 2004)
13. Rock/mineral Dissolution Rate Experiments (Manoj Kumar Gupta, 2006)
14. Phosphorus Fractionation in Nainital Lake Sediments (Anand Soren, 2006)
15. Dissolved heavy metals in Kumaon Himalayan lakes (SuyashMisra, 2008)
16. Phosphorus in sediments of Kumaon Himalayan Lakes (Anindya Das, 2008)
17. Role of tectonics and climate on sedimentation in parts of Mohand area, Dehradun sub-basin Manas Mishra, 2012)
18. Spatio-temporal variation in the hydrogeochemitsry of Tawa River, Central India (AshwiniMehto, 2012)
19. Water and soil quality assessment of Talcher coalfield areas (Ms. PranatiMohanty, 2013)
20. Grain size distribution of suspended sediments in Alaknandariver (Ms. K.J.Archana, 2013)
21. Organic matter and Sediment size distribution in Siwaliks, Mohnad Area (Ajay Mishra, 2014)
22. Water Quality in Coal Mines Area in Jharkhnad (Ravikant, 2014)
23. Lakes eutrophication in Bhopal (MayankMalviya, 2014)
24. Dissolved organic carbon, inorganic carbon and silica transport in Alaknanda River (Dhruv Gaur, 2015)
25. Engineering properties of Ramganga river sediments (ShaumikDaityari, 2015)
26. Water and sediment characterization in Kallada River (Stephy Thomas, 2015)
27. Carbon dioxide sequestration potential of basalts compared to sandstone-using storage potential modeling example from DVP (Yash Gupta, 2016)
28. CO<sub>2</sub> sequestration potential of basalts compared to sandstone - using Deccan Volcanic Province (Disha Pandey, 2017)
29. Noble gas isotope cosmochemistry of deep-sea cosmic spherules (SupratimDey, 2017)

## **M.SC. DISSERTATIONS**

---

1. Grain size and mineral composition of Indus river sediments (Rudradeb Bhattacharya, 2002)

2. Global carbon dioxide consumption by silicate weathering (Prasun Biswas, 2003)
3. Dissolved load characteristics of the Upper Ganga River  
(Ms. Swagata Chatterjee, 2004)
4. Water chemistry of Khajjiarlake in Himachal Pradesh (Saraswat Swain, 2005)
5. Water Quality Studies in Kanpur City (VinayBabu, 2006)
6. Coupling Hydrogeochemistry and Seismic Activity at a Location in Assam, India  
(Abdul Wahid, 2006)
7. Water Quality Studies in Roorkee (VirenFernandes, 2006)
8. Estimation of Sediment Load at Lambagad, Alaknanda River  
(DiptaroopChakraborty, 2007)
9. Geochemistry of hot spring waters (PrashantDubey, 2008)
10. Laboratory experiments on river geonanomaterials (Ms. M.Viswanathan, 2009)
11. Sediment loads in selected locations on the Alaknanda and Bhagirathi rivers (Ashutosh Mishra, 2009)
12. Variation in sediment load and mineralogy in downstream of Mahanadi River  
(A.D.Mohanty, 2010)
13. Sediment pollution indices in Ganga River (Hrishikesh Kumar, 2011)
14. Water quality in Ganga River (SaurabhJayaswal, 2011)
15. Estimation of chemical weathering of source rock of Narmada River  
(SubhraMullick, 2012)
16. Variation in total organic matter in bed sediments of Tawa River  
(Bishnu Prasad Mishra, 2012)
17. Size characterization of bed sediments of Alaknanda River  
(Ms. PuspitaTripathy, 2013)
18. Estimation of chemical weathering of source rocks in Alaknanda River basin  
(PratapTapanSahoo)
19. Rock-alkali-acid reactions in some Himalayan rocks (Rahul Karki, 2014)
20. Chemical weathering provenance in Mahanadi River (Aumprakash Sahoo, 2015)
21. Assessment of groundwater level fluctuations in West Bengal (Aurbee Biswas, 2023)

## Post-Doc (CSIR-RA)

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1. Dr. J. Sahoo (1997-99)

## PROJECTS

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1. Water and sediment pollution indices in Kumaun Himalayan Lakes (AICTE, 2001)
2. Modernization of Laboratory (MHRD, 2003)

3. Environmental pollution in Ganga River: A study of trace element speciation (MHRD, 2006)
4. Dissolution rates of lithologies from Alaknanda-Bhagirathi river basins: Implications for chemical weathering processes (DST, 2007)
5. Sedimentary record of human-induced environmental changes and affects in the Kumaun Himalayan Lakes, India (VR-SIDA, Sweden, 2008)
6. Assessment of toxic pollutants in Kumaun Himalayan Lakes: Past and present pollution indices from studies of sediment cores (MoEnF, 2008)
7. Hydrogeochemistry of Surface and Ground Waters, Erosion Rates and Carbon-Nitrogen Fluxes in Riverine Environment of Sub-Himalayan and Lesser Himalayan Catchments (ISRO-GBP, in collaboration with IIRS Dehra Dun, 2009)
8. Arsenic contents in deep and shallow aquifer materials in UP (UNICEF-UPJNL, 2009)
9. Documentation on Bore Blasting Technology (UNICEF, In Progress)
10. Dissolution Rates of Deccan Basalts and other Lithologies in the Narmada River Basin (DST, 2010, In Progress)
11. Geochemical evolution of ground water in a limestone-granite terrain underground research laboratory site, Gulbarga District, Karnataka (BRNS, 2012, In Progress)
12. Intergenerational Equity of Iron Ore Mines in Goa (SESA, Goa, 2013)
13. Analysis of Bowli-Nandprayag Hydropower Project Materials (UJVNL, 2014)
14. Material tests of BNP-HEP, UJVNL (UJVNL, 2015)
15. Water and sediment characterization of Kallai River, Kerala: Geochemical and Sedimentological Approach (MOES, 2015)

## **JOURNAL PAPER REVIEWER**

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Geochimica et Cosmochimica Acta (Pergamon), American Geophysical Union- G cubed, Journal of Hydrology (Elsevier), Journal of Geochemical Exploration (Elsevier), Journal of Asian Earth Sciences (Elsevier), Journal of Earth Systems Sciences (Springer), Industrial & Engineering Chemistry Research (American Chemical Society), Environmental Monitoring and Assessment (Springer), Hydrological Sciences Journal (IAHS Publ.), Journal of Water Resource and Protection, Geological Society of India, Current Science Indian Water Resources Society, Hydrology Journal, Journal of Geochemistry, Gondwana Geological Magazine, PNASI, Himalayan Geology, African Journal of Biotechnology, International Journal of Environmental Analytical Chemistry, Indian Journal of Geo-Marine Sciences, Geoscience Frontiers, Estuarine and Coastal Shelf Science, Geology, Chemical Geology (Elsevier), Applied Geochemistry, International Journal of River Basin management

## **PROJECT PROPOSALS REVIEWER**

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Department of Science and Technology (DST), CSIR, IUSSTF, Ministry of Environment & Forests (MoEF), CEFIPRA (France), NCPOR (Goa), Ministry of Earth Sciences (MoES), Several Industries