

MANOJ KUMAR



Mailing Address

Manoj Kumar
Assistant Professor
Department of Environmental Science
School of Earth, Environment & Space Studies
Central University of Haryana
Jant Pali, Mahendergarh-123029, India

E-mail: manojkumar6309@gmail.com

manoj.envt@gmail.com

Mobile: (+91) 9868666835

Phone: (Off) (+91-11) 26704314

Educational History:

- August 2016 onward Assistant Professor in Central University of Haryana, Mahendergarh
- 2012-2016 **Ph. D** submitted (Environmental Sciences), School of Environmental Sciences, Jawaharlal Nehru University, New Delhi.
- 2010 – 2012 **M. Phil** (Environmental sciences), **First Class (8.21/9.00, CGPA) ~ 87.1%**, School of Environmental Sciences, Jawaharlal Nehru university, New Delhi, India.
- 2008 – 2010 **M.Sc.** (Environmental Sciences), **First Class (7.18/9.00, CGPA) ~ 76.8%**, School of Environmental Sciences, Jawaharlal Nehru University.
- 2005 – 2008 **B. Sc** (Chemistry, Zoology and Botany), **First Class (67 %)**, CCS, University Meerut, Meerut, India.
- 2001 – 2003 **Class XII**, with **First Class (66%)**, U. P. Board, Uttar Pradesh.
- 2000 – 2001 **Class X** with **First Class (61%)**, U.P. Board, Uttar Pradesh.

Awards and Achievements:

- Recipient Senior Research Fellowship (**SRF**) (July 2012 to July 2015) a National level Research fellowship from **CSIR-UGC**.
- Visiting Research Student at Environmental Risk Assessment & Remediation (CERAR) at the University of South Australia (**UniSA**), **Australia**, for four months from 10th July 2013 to 10th November, 2013 supported by **Crawford Fund** (A prestigious award, Australian Government).
- A member of **consortia of scientist working on Arsenic problem in Groundwater** for preparing detail science plan for deploying a specialized drilling rig in developing countries, ICDP workshop held at Hanoi, Vietnam (24 april-28 April, 2011). Travelling and lodging supported by US National Science Foundation.
- Secured **094/0264** ranks in Council of Scientific & Industrial Research (CSIR), for Junior Research Fellowship a National level Research fellowship exam conducted by CSIR-UGC in Earth, Atmospheric, Ocean & Planetary Sciences held on December, 2009.

- Qualified University Grants Commission (UGC), in Environmental Sciences for Junior Research Fellowship (**JRF**), a national level Research fellowship exam conducted by UGC held on December 2011. Electronic Certificate No.: 112003159.
- Won best poster presentation in national seminar on Past and Present Geochemical Processes-Impacts on Climate Change by Indian Society of Applied Geochemists, Hyderabad, 22nd–23rd December, 2015 organized by SES, JNU, New Delhi.

(I) Paper in peer review Journals (9) (total IF 21.376) Citation indices (Citations 44, h-index 3, i10-index 2)

- Dipankar Chakraborti, Mohammad Mahmudur Rahman, Bhaskar Das, Amit Chatterjee, Dipankar Das, Biswajit Nayak, Arup Pal, Uttam Kumar Chowdhury, Sad Ahmed, Bhajan Kumar Biswas, Mrinal Kumar Sengupta, Md. Amir Hossain, Gautam Samanta, M.M. Roy, Rathindra Nath Dutta, Khitish Chandra Saha, Subhas Chandra Mukherjee, Shyamapada Pati, Probir Bijoy Kar, Adreesh Mukherjee, [Manoj Kumar](#). 2016. Groundwater arsenic contamination and its health effects in India, *Hydrogeology Journal*. HJ-2016-4253.R2 (manuscript accepted for the publication). ISSN:1435-0157 (IF 2.028)
- [Manoj Kumar](#), AL. Ramanathan, Ritu Tripathi, Sandhya Farswan, Devendra Kumar, Prosun Bhattacharya. 2016. A study of trace element contamination using multivariate statistical techniques and health risk assessment in groundwater of Chhaprola Industrial Area, Gautama Buddha Nagar, Uttar Pradesh, India. *Chemosphere*. 166; 135–145. DOI <http://dx.doi.org/10.1016/j.chemosphere.2016.09.086>. ISSN: 0045-6535 (IF 3.698)
- [Manoj Kumar](#), AL. Ramanathan, Mohammad Mahmudur Rahman, Ravi Naidu. 2016. Concentrations of inorganic arsenic in groundwater, agricultural soils and subsurface sediments from the middle Gangetic plain of Bihar, India. *Science of the Total Environment*. 573; 1103–1114. DOI <http://dx.doi.org/10.1016/j.scitotenv.2016.08.109>. ISSN: 0048-9697 (IF 3.976)
- [Manoj Kumar](#), M.M. Rahman, AL. Ramanathan, Ravi Naidu, 2016. Arsenic and other elements in drinking water and dietary components from the middle Gangetic plain of Bihar, India: Health risk index. *Science of the Total Environment*. 539; 125–134. DOI <http://dx.doi.org/10.1016/j.scitotenv.2015.08.039>, ISSN: 0048-9697. (IF 4.099)
- Alok Kumar, AL. Ramanathan, M. B. K. Prasad, Dilip Datta, [Manoj Kumar](#), Swati Mohan Sappal. 2016. Distribution, enrichment, and potential toxicity of trace metals in the surface sediments of Sundarban mangrove ecosystem, Bangladesh: a baseline study before Sundarban oil spill of December, 2014. *Environmental Science and Pollution Research*. 23, (9) 8985–8999. DOI 10.1007/s11356-016-6086-6. ISSN: 1614-7499 (IF 2.828)
- Goutam Kumar, [Manoj Kumar](#), AL. Ramanathan. 2015. Assessment of heavy metal contamination in the surface sediments in the mangrove ecosystem of Gulf of Kachchh, West Coast of India. *Environmental Earth Sciences*, 74(1): 545-556. Online ISSN 1866-6299, DOI 10.1007/s12665-015-4062-y (IF 1.765)
- Virendra Bahadur Singh, AL. Ramanathan, Jose George Pottakkal, [Manoj Kumar](#). 2014. Seasonal variation of the solute and suspended sediment load in Gangotri glacier meltwater, central Himalaya, India. *Journal of Asian Earth Sciences*. 79, 224–234. ISSN: 1367-9120. <http://dx.doi.org/10.1016/j.jseaes.2013.09.010> (IF 2.741)
- Virendra Bahadur Singh, AL. Ramanathan, Jose George Pottakkal, [Manoj Kumar](#), 2015. Hydrogeochemistry of meltwater of the Chaturangi glacier, Garhwal Himalaya, India. *Springer, India, Proceedings of the National Academy of Sciences, India Section A: Physical Sciences*. 85(1): 187–195. Online ISSN 2250-1762. (IF 0.242)

- AL. Ramanathan, [Manoj Kumar](#), Mukesh Kumar, Alok Kumar, Pankaj Kumar, Manish Kumar, Parijat Tripathi and Prosun Bhattacharya., 2012. Arsenic enrichment in the aquifers of the central Gangetic Plain, India. *Journal of Applied Hydrology*, Vol. XXV No. 3 & 4, pp. 77-84. ISSN 0971 – 670X. (IF awaited)

(II) Book chapters (3)

- [Manoj Kumar](#), AL. Ramanathan, Alok Kumar, Shailesh Kumar Yadav, 2016. Evolution of Arsenic Contamination Process and Mobilization in Central Gangetic Plain Aquifer System and Its Remedial Measures In Groundwater, Assessment, Modeling And Management (eds.) M.Thangarajan Vijay. P. Singh. CRC Press (A unit of Taylor & Francis Group, UK), ISBN 978-1-4020-5729-8, pp. 329-338.
- [Manoj Kumar](#), Mukesh Kumar, Alok Kumar, VB Singh, Senthil Kumar, AL. Ramanathan, and Prosun Bhattacharya (2015). Arsenic distribution and mobilization: A case study of three districts of Uttar Pradesh and Bihar (India). In: AL. Ramanathan, Scott Johnston, Abhijit Mukherjee & Bibhash Nath (eds.) “*Safe and Sustainable Use of Arsenic-Contaminated Aquifers in the Gangetic Plain: A Multidisciplinary Approach*” Co-published by Springer, International Publishing, Cham, Switzerland with Capital Publishing Company, New Delhi, India. (ISBN 978-93-81891-08-7), pp. 121-135.
- Virendra Bahadur Singh, AL. Ramanathan, P.G.Jose, [Manoj Kumar](#), Parmanand Sharma & Anurag Linda (2011). Hydro-Geochemical characteristics of Gangotri glacier. *Climate change in the Himalayas*, Editors- Vir Singh et al. pp. 125-141. Indus Publishing Company, New Delhi, ISBN 978-81-7387-228-0.

(III) Conference Proceedings with full paper (4)

- [Manoj Kumar](#), AL. Ramanathan Prosun Bhattacharya (2014). Evaluation of arsenic and its controlling factors in aquifer sands of district Samastipur, Bihar, India. In: M.I. Litter, H.B. Nicolli, M. Meichtry, N. Quici, J. Bundschuh, P. Bhattacharya and R. Naidu (eds.) “*One Century of the Discovery of Arsenicosis in Latin America (1914–2014) As 2014*”. Interdisciplinary Book Series: “*Arsenic in the Environment—Proceedings*”. Series Editors: J. Bundschuh and P. Bhattacharya, CRC Press/Taylor and Francis Group, London, UK (ISBN 978-1-138-00141-1), pp. 108-109.
- [Manoj Kumar](#), AL. Ramanathan, M.M. Rahman, Ravi Naidu, Prosun Bhattacharya. 2016, June. Arsenic and trace elements in groundwater, vegetables and selected food grains from middle Gangetic plain—human health perspective. In *Arsenic Research and Global Sustainability: Proceedings of the Sixth International Congress on Arsenic in the Environment (As2016), June 19-23, 2016, Stockholm, Sweden* (p. 320). CRC Press/Taylor and Francis Group, London, UK. ISBN: 978-1-315-62943-8. pp. 320–321.
- AL. Ramanathan, Parijat Tripathi, [Manoj Kumar](#), Alok Kumar, Pankaj Kumar, Manish Kumar, Prosun Bhattacharya., 2012. Arsenic in groundwaters of the central Gangetic plain regions of India. In *Understanding the Geological and Medical Interface of Arsenic*, Editors Jack C. Ng et al., CRC Press/Taylor and Francis Group, London, UK (ISBN 978-0-415-63763-3), pp. 63-64.
- [Manoj Kumar](#), Mukesh Kumar, Alok Kumar, Ramanathan AL. 2012. Arsenic Distribution and Mobilization in Three Districts of Central Gangetic Plain. Indo-Australian workshops on Arsenic 3rd-4th October, 2012, Organized by School of Environmental Sciences, Jawaharlal Nehru University, New Delhi. pp. 5-9.

Paper communicated (4)

- Manoj P. Singh, [Manoj Kumar](#), AL. Ramanathan. 2016. Spatio-geochemical investigations using multivariate statistical techniques and Ecological and Health Risk Assessment of Heavy Metals Pollution of Urban Soil from Northern India. In *Ecotoxicology and Environmental Safety*, EES-16-2005.
- [Manoj Kumar](#), AL. Ramanathan, Abhijit Mukherjee, Ravi Sawlani. 2016. Stable isotopic approach to understand the recharge processes and dissolved organic carbon behaviour in alluvial aquifers of arsenic affected provinces in Gangetic Basin, India. In *Hydrological Processes* HYP-16-0701.
- [Manoj Kumar](#), Ritu Tripathi, Prabhat Ranjan, AL. Ramanathan, Prosun Bhattacharya. 2016. Geospatial and multivariate analysis of trace metal in groundwater: concern from rapid urbanization in upper Ganga-Yamuna Alluvial Plain, India. In *Environmental Earth Sciences*, ENGE-D-16-01594.
- [Manoj Kumar](#), AL. Ramanathan, Shyam Ranjan, Prosun Bhattacharya. 2016. Groundwater evolution and its utility in upper Ganges-Yamuna Alluvial plain of Northern India, India: Evidence from solute chemistry and stable isotopes. In *Environmental Earth Sciences*. ENGE-D-16-01675.

Teaching Experience:

- Valued trainer cum volunteer in the **INSPIRE** (Innovation in Science Pursuit for Inspired Research) internship programme sponsored by the Department of Science and Technology, Government of India, conducted by School of Environmental Sciences, JNU, New Delhi, from 17th -21st February, 2014.

Seminar attended and Paper Presentations:

- [Manoj Kumar](#), AL. Ramanathan, Naveen Kumar, poster presented entitled “Arsenic mobilization and enrichment in the subsurface waters, Ballia, Central Gangetic Plain, India” in International Association for Mathematics Geosciences (IAMG), 16th conference, October, 2014, JNU, New Delhi.
- [Manoj Kumar](#), Mukesh Kumar, Alok Kumar, AL. Ramanathan, paper presented entitled “Arsenic distribution and mobilization in three districts of Central Gangetic Plain” in the Indo-Australian workshop on arsenic, October 3rd – 4th, 2012, JNU, New Delhi, India.
- [Manoj Kumar](#), AL. Ramanathan, Naveen Kumar, paper presented entitled “Arsenic mobilization and enrichment in the subsurface waters, Ballia, Central Gangetic Plain, India in “International Conference on Interface between Chemistry and Environment (ICICE) held on 13th – 14th December, 2012, organized by Department of Chemistry, Ramjas College University of Delhi, Delhi, India.
- AL. Ramanathan, [Manoj Kumar](#), Parijat Tripathi, Pankaj Kumar, Alok Kumar, Prosun Bhattacharya, Manish Kumar, presented paper entitled “Arsenic in the central Gangetic Plain region in India” in the National conference on sustainable Development of Groundwater resources in Industrial Regions, SDGRIR 2012.
- National seminar on, “Modern and Palaeo Sediments: Implication to Climate change, Water Resources and Environmental Changes & XXVIII Convention of Indian Association of Sedimentologists” School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, from 24th -26th November, 2011.

Training Programme:

- EAW Intensive Summer Programme, “From Synopsis to Thesis Writing” from 1st May to 10th May, Winter Semester 2013-14 Organized by Linguistic Empowerment Cell, Jawaharlal Nehru University, New Delhi.
- **Two weeks** workshop on “Hydrogeochemical modelling using PHREEQC and MODFLOW” from 21st to 31st January, 2013 at Annamalai University, Annamalai Nagar, Tamil Nadu, India.
- **One week** Summer School on “Digital Image Processing (DIP)” Organized by TERI University, New Delhi. July 20-24, 2009.
- Training Programme on “GIS Application in Hydrology and Environmental Geology” by Prof. Wolfgang Goessel, Martin Luther University, Germany Feb. 2010, at SES, Jawaharlal Nehru University, New Delhi. 16-18 February 2010.
- Training course on “Hydrological Investigations for Conservation and Management of Lakes” organized by National Institute of Hydrology, Roorkee (Uttaranchal) during March 1-3, 2011.
- **One week** “National workshop on Advance Soft computing Techniques in Hydrology and its Applications” Jointly Organized by NIH & IAH Roorkee at National Institute of Hydrology, Roorkee, Uttaranchal, India. June 20-24, 2011.
- **One week** “Training program on Hydro geochemical modeling assessment and management of urban and coastal groundwater” from 17-23rd October 2011 at SES, JNU, New Delhi.
- **One week**, DST-SERC sponsored training workshop on "Isotope hydrology" at NIH, Roorkee during 19-24 December, 2011.

Research Experience:

- Four months training title “*Analysis of arsenic and other elements in various environmental samples using advanced analytical techniques*” at Environmental Risk Assessment & Remediation (CERAR), University of South Australia, from 10 July-10 November, 2013.
- *M.Phil.(2012) dissertation entitled “Geochemical assessment of the aquifer sediments of Ballia, Central Gangetic Plain with the special reference to As mobilization and enrichment in to groundwater.”*
- *M.Sc.(2010) dissertation entitled “Preliminary studies on the Hydrogeochemical evolution of meltwaters in Gangotri glacier, Uttranchal, India” under the supervision of Prof. AL Ramanathan.*

Techniques known and Instrumentation handling:

- Analytical techniques like ICP-MS, HPLC-ICP-MS, TOC analyser, NH₄ and NO₂+NO₃ analyser, Spectrophotometer, Atomic Absorption Spectrometer, Flame photometer, Ion Chromatography Water testing kits (including pH & conductivity meters), GPS locators etc.

Computer Knowledge:

- Basic knowledge of computer operations, Operating system: Linux and Windows, Software: MS Office, Hands on experience of GIS software ArcGIS, ERDAS and hydro-geological software’s like Surfer, SPSS, WATCLAST, AQUA.

Personal Traits:

- Good communication skills, command over English (both written & spoken)
- Strong analytical aptitude, innovative & creative by nature, like research works in a team and individual as well.

Personal Details:

Name : Manoj Kumar
Father's name : Bhagwat Singh
Mother's name : Ujiddiya Devi
Date of birth : 20 Feb 1987
Nationality : Indian
Language : Hindi (mother tongue)
English (fluent)
Marital status : Never Married
Permanent address : VPO-Tilapta, Tehsil- Dadri, Disst- Gautam Budh Nagar,
Uttar Pradesh, India, Pin code - 201306

Potential Referees:

1. **Dr. AL. Ramanathan** (Supervisor, PhD)
Professor, School of Environmental sciences,
Jawaharlal Nehru University, New, Delhi-110067.
Phone-+91 9810689243
E-mails alr0400@mail.jnu.ac.in

2. **Dr. Abhijit Mukherjee** (Co-supervisor, PhD)
Assistant Professor (Hydrogeology)
Dept. of Geology and Geophysics
School of Environmental Science and Engineering
Indian Institute of Technology (IIT) - Kharagpur
Phone no. 09007228876
Email: amukh2@gmail.com