### **Curriculum Vitae**

Full Name	Dr. Rakesh Chand Ramola			
Designation	Senior Professor & Head			
Department	Physics			
Campus	S.R.T. Campus, Tehri			
Address	Department of Physics			
	H.N.B. Garhwal University			
	S.R.T. Campus, Badshahi Thaul			
	Tehri Garhwal – 249199, India			
Telephone	+91-1376-254055 Telefax +91-1376-254088			
Mobile	+91-9412076079			



Email	rc.ramola@hnb	<u>gu.ac.in; rcramola@gmail.co</u>	<u>m</u>	
<b>Education Qualification</b>	M.Sc. (Physics) Garhwal University, 1985			
	Ph.D. (Physics) Guru Nanak Dev University, Amritsar, 1989			
Teaching Experience	32 Years	Research Experience	39 Years	

## **Research Interest and Fields of Specialization**

- 1. Radiation Protection in Environment
- 2. Nuclear Physics/Nuclear Geophysics
- 3. Material Science (Ion-Beam Interaction)

### **Honours & Awards**

- 1. Recognised as one of the **World's Top 2% scientists in the year 2021 & 2022** by Stanford University, USA.
- 2. **Bharat Gaurav (Pride of India) Award 2016** for meritorious service, outstanding and remarkable role in Science and Higher education by India International Friendship Society.
- 3. **Dr. A.K. Ganguly National Award 1995** for original and outstanding research work in the field of Environmental Radioactivity by Indian Association for Radiation Protection
- 4. **Best Research Paper Award 2004**, Wadia Institute of Himalayan Geology, Dehradun, India. The award was presented by then Chief Minister of Uttarakhand.
- 5. **Junior Associate** of International Centre for Theoretical Physics, Trieste, Italy from January 1990 to December 1993.
- 6. **Post Doc Fellow** at University of Salzburg, Austria under Austrian Academic Exchange Programme from December 1990 to February 1992.
- 7. **Invitation Fellow** at National Institute of Radiological Sciences, Chiba, Japan under Japan Society for Promotion of Sciences (JSPS) invitation fellowship programme from June 1999 to March 2000.
- 8. **Visiting Scientist** at Vinca Institute of Nuclear Sciences, Belgrade, Serbia, June 4-26, 2005.

### **Member of Academic Institutions**

- 1. Member, Curriculum Area Group: Science, National Council of Educational Research and Training (NCERT), New Delhi, 2023.
- 2. Member, Governing Council, Inter University Accelerator Centre, New Delhi
- 3. Convener, Board of Study, Department of Physics, H.N.B. Garhwal University
- 4. Member, Academic Council, PLMS Autonomous Govt Post Graduate College, Rishikesh, Uttarakhand

- 5. Member, Academic Council, H.N.B. Garhwal University
- 6. Member, Internal Quality Assurance Cell, H.N.B. Garhwal University
- 7. Member, Academic Body, ICFAI University, Dehradun, Uttarakhand
- 8. Member, Board of Study, Applied Sciences (Physics), **Swami Ram Himalayan University, Doiwala, Dehradun**

### PARTICIPATION IN IMPORTANT ACADEMIC/ADMINISTRATIVE ACTIVITIES

- 1. Participated in MHRD sponsored Leadership for Academicians Programme (LEAP), IIT Kharagpur, 13 May to 24 May 2019.
- Participated in MHRD sponsored LEAP on the topic Leadership in Complex and Changing World, Cambridge University, 03 June to 07 June 2019.
- 3. Participated in **Training Programme on Academic Leadership**, MGA Hindi Vishwavidayalaya, Wardha from 01 May to 04 May 2018.
- 4. Participated in Assessors Orientation Programme of **National Assessment and Accreditation Council (NAAC)**, IIIT Allahabad, 30 April 2019.

# **Membership of Scientific Organization**

- 1. **President**, National Radon Network Society (2015–Continue).
- 2. Life Member, International Geo-Hazard Research Society. Head Office, Dresden, Germany. **President** (2010 2014).
- 3. Life member, Nuclear Track Society of India (2005 2009). Head Office, BARC, Mumbai. **Secretary** (2005 2009) & **Joint Secretary** (2003-2005).
- 4. Life Member of Indian Association for Radiation Protection, BARC, Mumbai
- 5. Life Member of Indian Science Congress Association, Kolkata
- 6. Life Member of Indian Aerosol Science and Technology Association, **Mumbai**
- 7. Member, Editorial Board, Journal of Radiation Research & Applied Sciences
- 8. Guest Editor, Radiation Protection Dosimetry, Acta Geophysics & Indian J Physics
- 9. Editor-in-Chief, NTSI Newsletter (2003-2009)
- 10. Reviewer of various national and international research journals.

Research Supervision: Number of Ph.D. Degree Awarded under my supervision: 18

### **Research Projects**

### Completed:

- 1. Principal Investigator of research project entitled "Environmental Radon Studies in Garhwal Himalayas", Department of Atomic Energy, Govt of India, 1993-1996.
- 2. Co-Principal Investigator of research project entitled "Radon Generation and Transport Modelling in Soil", UGC, New Delhi, India, 1994-1997.
- 3. Principal Investigator of Research Project entitled "Studies of Radon/Thoron Levels in Garhwal and Kumaun Area", Department of Atomic Energy, Govt of India, 1996-2000.
- 4. Principal Investigator of Research Project entitled "An Investigation of Geological Controls on Radon and Helium in Soil/Water and its Relation to Radon Availability in Human Environment", Department of Science and Technology, New Delhi, 2002 2006.
- 5. Principal Investigator of Research Project entitled "Study of the Risk Assessment of Radon in Drinking Water of Himalayan Region", University Grants Commission, New Delhi, 2003 2006.

- 6. Principal Investigator of Research Project entitled "Characterization of Conducting Polymers and Their Structural, Electrical, Optical Properties by using Swift Heavy Ions", Nuclear Science Centre, New Delhi, 2004 2006.
- 7. Principal Investigator of Research Project entitled "Synthesis and Characterization of Polyaniline and Polypyrrole by using Swift Heavy Ions", Inter University Accelerator Centre, New Delhi, 2005 to 2008.
- 8. Principal Investigator of Research Project "Studies of Natural Radionuclides in Himalayan Environment", Department of Atomic Energy, Government of India, 2005 to 2009.
- 9. Indian Collaborator of an International Research Project "Establishment of Network for Natural Radiation Exposure Studies in Asia", Japan Science & Technology Agency, May 2009 to March 2012.
- 10. Principal Investigator of Research Project "Retrospective Assessment of Indoor Radon Exposure in Garhwal Homes by Measurements of <sup>210</sup>Po Implanted on Glass Surface", Atomic Energy Regulation Board, 2009 to 2013.
- 11. Principal Investigator of Research Project "A Comparative Study Among Different Techniques for Radon/Thoron Progeny Measurements in the Normal and High Background Radiation Areas", Department of Atomic Energy, Gol, 2011 to 2016.
- 12. Principal Investigator, Research Project "Strengthening the Infrastructural Facility at Nodal Centre at H.N.B. Garhwal University to pursue Radon/Thoron Studies in Northern India", Department of Atomic Energy, Govt of India, 2014 to 2018.

# **Memorandum of Understanding**

# Completed:

- 1. Indian Collaborator of an International Research Project "Establishment of Network for Natural Radiation Exposure Studies in Asia", **Japan Science & Technology Agency**, May 2009 to March 2012.
- Coordinator, Nodal Calibration Centre at HNB Garhwal University, established under the MoU, signed with Bhabha Atomic Research Centre, Mumbai to strengthen radon studies in states of Delhi, Uttar Pradesh, Uttarakhand, Himachal Pradesh and Jammu & Kashmir, April 2011 – March 2016.
- 3. Coordinator, MoU for setting up DAE Technologies Display and Dissemination facility at SRT Campus, Badshahi Thaul, signed with **Bhabha Atomic Research Centre, Mumbai,** December 2016 December 2021.
- 4. Indian Collaborator of "International network for Asian and African researchers in environmental radiation for health management to radiation exposure", **Japan Society for Promotion of Science**, April 2021 to March 2024.

# **Administrative Experience**

- 1. **Head, Department of Physics,** H.N.B. Garhwal University, January 2024 to Continue.
- 2. **Director**, H.N.B. Garhwal University, S.R.T. Campus, Badshahi Thaul, Tehri Garhwal from 13 July 2013 to 31 July 2019.
- 3. **Coordinator,** Seventh (Offline) and Eighth (Online) Convocations of HNB Garhwal University, **Srinagar (Garhwal), India,** held on December 1, 2019 and December 1, 2020, respectively.
- 4. **Coordinator, Foreign Students Office,** H.N.B. Garhwal University from June 2021 to Continue.
- 5. Convener, Screening Committee for recruitment and promotion of faculty members, HNB Garhwal University (2019-2022).
- 6. **Coordinator, E-Teaching Learning Committee,** HNB Garhwal University, (2020-2021).

- 7. **Head, Department of Physics,** H.N.B. Garhwal University, S.R.T. Campus, Badshahi Thaul, Tehri Garhwal from January 2017 to January 2018.
- 8. **Deputy Dean Students Welfare**, H.N.B. Garhwal University Campus, Badshahi Thaul, Tehri Garhwal from August 2011 to July 2013.
- 9. **Chairman, Sports Council**, H.N.B. Garhwal University Campus, Badshahi Thaul, Tehri Garhwal, from September 2009 to July 2013 and Member, Sports Council, 1996-1999 and 2000-2005.
- 10. **Asst Dean Students Welfare**, H.N.B. Garhwal University Campus, Badshahi Thaul, Tehri Garhwal from August 2000 to April 2004 & Oct 2010 to August 2011
- 11. **Assistant Proctor**, H.N.B. Garhwal University Campus, Badshahi Thaul, Tehri Garhwal from July 2008 to June 2009 & August 2010 to November 2010.
- 12. Coordinator, CISCO Networking Local Academy, H.N.B. Garhwal University Campus, Badshahi Thaul, Tehri Garhwal, 2004 to 2009.
- 13. **Advisor, Guidance and Counselling Cell**, H.N.B. Garhwal University Campus, Badshahi Thaul, Tehri Garhwal, August 2004 to June 2006.
- 14. **Head, Department of Computer Science**, H.N.B. Garhwal University, Tehri from September 1997 to June 1999.
- 15. **Programme Officer**, National Service Scheme, H.N.B. Garhwal University Campus, Tehri Garhwal, 1995 to 1999.
- 16. **Chief Election Officer** of Student Union, H.N.B. Garhwal University Campus, Tehri Garhwal, 2001.
- 17. Member, **Sports Council**, H.N.B. Garhwal University Campus, Badshahi Thaul, Tehri Garhwal, 1996-1999 and 2000-2005. Actively participated on sports activities in the campus.

### **Scientific Visits Abroad**

- 1. **Italy:** To attend extended workshops at ICTP, Italy (1988; 1990; 1991; 2000) & participation in international symposium at Pisa (2010)
- 2. **Slovenia/Yugoslavia:** Visit to Research Reactor of Jozef Stefan Institute, Ljubljana (1988)
- 3. Austria: Post Doc Fellow at University of Salzburg (1990 1992)
- 4. Japan: Participation in international conferences at Fukuoka and Chiba (1997), worked as JSPS Invitation Fellow at National Institute of Radiological Sciences, Chiba (1999-2000), participation in international conference at Osaka and Chiba (2004), collaborative project meeting at Chiba (2009), international conferences at Chiba and Tokyo (2010), international conference at Hirosaki (2014), international conference at Hiroshima (2019), collaborative project meeting at Tokyo (2023).
- 5. **Serbia and Montenegro:** Participation in international workshop and worked as Visiting Scientist at Vinca Institute of Nuclear Sciences, Belgrade (**2005**).
- 6. **Germany:** Participated in international conferences at Dresden (2005; 2008; 2019)
- 7. Taiwan: Participation in international conference at Taiwan (2007; 2016)
- 8. **Poland:** Participation in international conference at Zakopane and visit to Institute of Nuclear Physics, Krakow (2009).
- 9. Turkey: Participation in international conference at Istanbul (2009)
- 10. **United States of America:** Participation in ICRP meeting at Bethesda, Washington (**2011**) and international conference at NASA, San Jose, California (**2014**)
- 11. Australia: Participation in international conference at Brisbane (2013)
- 12. **Singapore:** Participation in international conference at Singapore (**2017**)
- 13. **United Kingdom:** Participated in MHRD sponsored Leadership for Academicians Programme (LEAP), Cambridge University (**2019**).

## Conference/Symposium/Workshop Attended from 2017 onwards.

#### International

- 1. Delivered a talk and chaired a session in International Conference on Material Engineering and Nano Sciences, **NTU Singapore**, January 07-09, 2017.
- 2. Delivered a talk and chaired a session in International Conference on Environmental Impact of Advanced Materials and Energy Technologies. **Hyderabad**, January 19-21, 2017.
- 3. Delivered a talk and chaired a session in Sixth International Geo-Hazards Research Symposium, **Dresden, Germany**, March 4-9, 2018.
- 4. Delivered a talk and chaired a session in International conference on Aerosol, Air Quality and Climate Change, **Srinagar (Garhwal)**, India, Oct 21-23, 2018.
- 5. Delivered a talk and chaired a session in International Conference on Climate Change and Disaster Risk Management, **Tehri Garhwal**, October 26-28, 2018.
- 6. Delivered a talk in Third International Conference on Material Engineering and Nano Sciences, **Hiroshima, Japan**, March 26-28, 2019.
- 7. Delivered a talk and chaired a session in International Conference on Material Science and Applications, **Srinagar (Garhwal)**, Nov 25-27, 2019.
- 8. International Webinar on Air Quality, Climate Change and the Environment & Health Effects Referring to the Pandemic COVID-19 Lockdown, **Srinagar** (**Garhwal**), May 02-23, 2020.
- 9. Chaired a session in International Webinar on Impact of COVID-19 on Research and Academic Activities, **Tehri Garhwal**, June 19-20, 2020.
- 10. Delivered a talk in Seventh Terrestrial Radioisotopes in Environment International Conference on Environmental Protection, Pannonia, **Hungary**, Aug 10-13, 2020.
- 11. Delivered a talk in International Seminar on Recent Advances in Science and Technology, Mizoram University, **Aizawl**, November 16-18, 2020.
- 12. Chaired a session in Fifth International Conference on Materials Engineering and Nano Sciences, **Osaka**, **Japan**, March 23-25, 2021.
- 13. Chaired a session in International Conference on Recent Advances in Material Sciences, **Srinagar (Garhwal)**, May 15-17, 2021.
- 14. Delivered an invited talk (Online) in Training on Earthquake Early Warning System Trough Real Time Radon Gas Monitoring, **University of Pannonia, Hungary**, November 11, 2021.
- 15. Delivered an invited talk (Online) in Eight Terrestrial Radioisotopes in Environment International Conference on Environmental Protection, University of Pannonia, **Hungary**, October 4-7, 2022.
- 16. Delivered an invited talk (Online) in 2nd International Conference on Aerosols, Air Quality, and Climate Change over Himalayan Region of Uttarakhand. **Srinagar** (**Garhwal**), November 4-6, 2022.
- 17. Delivered presidential address and chaired a technical session in First International Conference on Radiation Awareness and Detection in Natural Environment, **Dehradun**, March 2-4, 2023.
- 18. Delivered address as Guest of Honour in International Conference on Computational and Mathematical Methods in Applied Science, Uttaranchal University, **Dehradun**, March 30, 2023.
- 19. Delivered an invited talk in 66<sup>th</sup> Annual Meeting of the Japan Radiation Research Society, Tokyo, **Japan**, November 6-8, 2023.
- 20. Delivered an invited talk in Workshop on Effects of Radiation and its Measurement, **Visakhapatnam**, January 9, 2024.

### **National**

- 1. Delivered a talk and chaired a session in Sixth National Conference on Nanomaterials and Nanotechnology. **Lucknow**, February 11-13, 2017.
- 2. Delivered a talk and chaired a session in Second National Conference on Radiation Awareness and Detection in Natural Environment, **Haridwar**, September 25-27, 2017.
- 3. Delivered a talk in National Symposium on Recent Trends in Physics at Different Scale. **Haridwar**, October 29-31, 2017.
- 4. Delivered a talk National Workshop on Role of Open Education Resources in Higher Education, **Srinagar (Garhwal)**, December 15-17, 2017.
- 5. Delivered a talk and chaired a session in National Conference on Earthquake: Investigation and Instrumentation, **CSIO**, **Chandigarh**, September 23-24, 2019.
- 6. Delivered a talk and chaired a session in National Symposium on Solid State Nuclear Detectors and Applications, **Amritsar**, October 18-20, 2019.
- 7. Delivered a talk and chaired a session in National Conference on Promoting the Advancement of Applied Sciences, **Tehri**, October 22-23, 2019.
- 8. Delivered a talk and chaired a session in National Conference on Environmental Radiation: Impact on Society and its Implications, Jadavpur University, **Kolkata**, November 15-16, 2019.
- 9. Delivered a talk and chaired a session in Workshop on Concepts of Physics and Development of Innovative Teaching Methods to Inspire Inquiring Spirit among School and Under Graduate Students, **Ramnagar**, February 04-05, 2020.
- 10. Delivered a talk and chaired a session in Workshop on Radiochemistry and Application of Radioisotopes, **Amritsar**, February 17-23, 2020.
- 11. Delivered Keynote Address in Seminar on Development of Scientific Temper among Students, **Tehri Garhwal**, **India**, February 27-28, 2020.
- 12. Delivered a talk in Faculty Development Programme on NAAC Accreditation Framework: An Overview in Respect of New Guidelines, Organized by Research Foundation of India, July 06-13, 2020.
- 13. Delivered a talk in Online Workshop on Science and Human Health, HNBGU, **Srinagar (Garhwal)**, July 31, 2020.
- 14. Delivered a talk in Webinar on Recent Trends in Physics, **Pithoragarh**, August 18-19, 2020.
- 15. Delivered a talk in Twenty first National Conference on Solid State Nuclear Track Detectors and Their Applications, **Delhi**, January 29-31, 2021.
- 16. Delivered a talk and chaired a Technical Session in Third National Conference on Radiation Awareness and Detection in Natural Environment, **Tehri**, March 18-20, 2021.
- 17. Chaired a technical session in National Conference on Advances in Theoretical Physics, Material and Atmospheric Physics, Govt PG College **Dakpathar**, **Dehradun**, June 16-17, 2021.
- 18. Delivered an invited talk (Online) in Faculty Development Program on Recent Developments in Physics Sciences, DAV College **Amritsar**, July 19, 2021.
- 19. Delivered an invited talk (Online) Faculty Development Programme on 'NAAC Accreditation Framework: An Overview in respect of New Guidelines. **Organized by Research Foundation of India**, August 19, 2021.
- 20. Delivered an invited talk (Online) Faculty Development Programme on Principles of Radiation Detection, measurement and Experimental Techniques. **Organized by Ramjas College, New Delhi,** April 7, 2023.
- 21. Delivered an invited talk in Workshop on Effects of Radiation and its Measurement, **Visakhapatnam**, January 9, 2024.

# Conference/Symposium/Workshop Organized during last five years (2017-2021)

- 1. Chairman, First International Conference on Radiation Awareness and Detection in Natural Environment, **Dehradun**, March 2-4, 2023.
- 2. Chairman, Third National Conference on Radiation Awareness and Detection in Natural Environment, **Tehri**, March 18-20, 2021.
- 3. Convener of International Webinar on Impact of COVID-19 on Research and Academic Activities, **Tehri Garhwal**, **India**, June 19-20, 2020.
- 4. Coordinator of Seminar on Development of Scientific Temper among Students, **Tehri Garhwal, India,** February 27-28, 2020.
- 5. Member Scientific Committee of Third International Conference on Material Engineering and Nano Sciences, **Hiroshima**, **Japan**, March 26-28, 2019.
- 6. Chairman of International Conference on Climate Change and Disaster Risk Management, **Tehri Garhwal**, **India**, October 26-28, 2018.
- 7. Member Scientific Committee of Sixth International Geo-Hazards Research Symposium, **Dresden, Germany**, March 04-09, 2018.
- 8. Member Organizing Committee of International Conference on Environmental Impact of Advanced Materials and Energy Technologies. **Hyderabad**, January 19-21, 2017.
- 9. Member Scientific Committee of International Conference on Material Engineering and Nano Sciences, NTU **Singapore** January 07-09, 2017.

# **Publications during 2017 onwards**

### **Journals**

- Study of phase transformation induced by electronic excitation in pure and Yttrium doped ZrO<sub>2</sub> thin films. R.C.Ramola, Mukesh Rawat, Kanchan Joshi, Arkaprava Das, Subodh K Gautam and Fouran Singh. *Materials Research Express* 4 (2017) 096401 (11 pp). IF: 2.3
- 2. Photoluminescence and reflectivity studies of high energy light ions irradiated polymethyl methacrylate films. Madhu Lata Bharti, Fouran Singh, **R.C.Ramola** and Veena Joshi. *Optical Materials* **73** (2017) 550-554. **IF: 3.9**
- 3. Indoor radon, thoron and their progeny concentrations in high thoron rural Serbia environments. Z.S.Zunic, Z.Stojanovska, N.Veselinovic, R.Misha, I.V. Yarmoshenko, B.K.Sapra, T.Ishikawa, Y.Omori, Z,Curguz, P.Bossew, V.Udovicic and **R.C.Ramola**. Radiation Protection Dosimetry **177** (2017) 36-39. **IF: 1.0**
- 4. Estimation of natural radionuclides in the soil samples and its radiological impact on human health. Sudhir Mittal, Asha Rani, Rohit Mehra and R.C.Ramola. Radiation Effects and Defects in Solids 173 (2018) 673-682. IF: 1.0
- 5. Dose assessment from the exposure to attached and unattached progeny of radon and thoron in indoor environment. Mukesh Prasad, Peter Bossew, G. Anil Kumar, R. Mishra, **R.C.Ramola**. *Acta Geophyica* **66** (2018) 1187-1194. **IF: 2.3**
- 6. Measurement of <sup>222</sup>Rn and <sup>220</sup>Tn radon exhalation rate from soil samples of Kumaun hills, India. P. Semwal, K. Singh, T.K.Agarwal, M. Joshi, P. Pant, T.Kandari, **R.C.Ramola**. *Acta Geophyica* **66**(2018)1203-1211.**IF: 2.3**
- 7. A comprehensive study of radon levels and associated radiation doses in Himalayan groundwater. Mukesh Prasad, G. Anil Kumar, B.K.Sahoo and R.C.Ramola. *Acta Geophysica* **66** (2018) 1223-1231. **IF: 2.3**
- 8. Study of radon flux and natural radionuclides (226Ra, 232Th and 40K) in the Main Boundary Thrust region of Garhwal Himalaya. Tushar Kandari, Mukesh Prasad, Preeti Pant, Poonam Semwal, A.A.Bourai and **R.C.Ramola**. *Acta Geophysica* **66** (2018) 1243-1248. **IF: 2.3**

- 9. Continuous measurement of equilibrium equivalent radon/thoron concentration using time-integrated flow-mode grab sampler. Preeti Pant, Tushar Kandari, Mukesh Prasad, Poonam Semwal and **R.C.Ramola**. *Acta Geophysica* **66** (2018) 1267-1272. **IF: 2.3**
- Health risks associated with the exposure to uranium and heavy metals through potable groundwater in Uttarakhand state of India. Mukesh Prasad, G. Anil Kumar, S.K.Sahoo and R.C.Ramola. J. Radioanalytical and Nuclear Chemistry 319 (2019) 13-21. IF: 1.6
- Indoor inhalation dose assessment for thoron-rich regions of Indian Himalayan belt. Poonam Semwal, Tarun Kumar Agarwal, Kuldeep Singh, Manish Joshi, G.S.Gusain, B.K.Sahoo and R.C.Ramola. Environmental Science and Pollution Research 26 (2019) 4855-4866. IF: 5.8
- 12. Radiological impact assessment of soil and groundwater of Himalayan regions in Uttarakhand, India. Mukesh Prasad, V. Ranga, G. Anil Kumar, **R.C.Ramola**. *Journal of Radioanalytical and Nuclear Chemistry* **323** (2020) 1269-1282. **IF: 1.6**
- 13. Statistical inferences from measured data on concentrations of naturally occurring radon, thoron, and decay products in Kumaun Himalayan belt. Ankur Kumar, Prakhar Singh, Tarun Agarwal, Manish Joshi, Poonam Semwal, Kuldeep Singh, P.P.Pathak and R.C.Ramola. *Environmental Science and Pollution Research* 27 (2020) 40229-40243. IF: 5.8
- 14. Significance of thoron measurements in indoor environment. **R.C.Ramola**, Mukesh Prasad. *J. Environmental Radioactivity* **225** (2020) 106453. **IF: 2.3**
- 15. First Surface Measurement of Variation of Cloud Condensation Nuclei (CCN) Concentration over the Pristine Himalayan Region of Garhwal, Uttarakhand, India. Alok Sagar Gautam, S.N.Tripathi, Abhishek Joshi, Anil Kumar Mandariya, Karan Singh, Gaurav Mishra, Sanjeev Kumar and R.C.Ramola. Atmospheric Environment 246 (2021) 118123. IF: 5.0
- 16. Quantification of radiological dose and chemical toxicity due to radon and uranium in drinking water in Bageshwar region of Indian Himalaya. Ankur Kumar, Tushar Arora, Prakhar Singh, Kuldeep Singh, Devendra Singh, P.P.Pathak and R.C.Ramola. Groundwater for Sustainable Development 12 (2021) 100491. IF: 5.9
- Study of primordial radionuclides and radon/thoron exhalation rates in Bageshwar region of Kumaun Himalaya, India. Ankur Kumar, Prakhar Singh, Poonam Semwal, Kuldeep Singh, Mukesh Prasad, R.C.Ramola. Journal of Radioanalytical and Nuclear Chemistry 328 (2021) 1361-1367. IF: 1.6
- Annealing Effects on Gas Sensing Response of Ga-Doped ZnO Thin Films.
  R.C.Ramola, Sandhya Negi, Mukesh Rawat, R.C.Singh, Fouran Singh. ACS Omega 6 (2021) 11660-11668. IF: 4.1
- 19. Study of soil-gas and indoor radon concentration in a test village at Tehri Garhwal. Pooja Panwar, Mukesh Prasad, **R.C.Ramola**. *Journal of Radioanalytical and Nuclear Chemistry* **330** (2021) 1383-1391. **IF: 1.6**
- Study of radiation exposure due to indoor radon, thoron and progeny in Ghuttu, Tehri Garhwal, India. R.S.Sajwan, Veena Joshi, Naresh Kumar, Sanjay Dutrt, Kavita Rawat, Mukesh Prasad, R.C.Ramola. Journal of Radioanalytical and Nuclear Chemistry 330 (2021) 1497-1507. IF: 1.6
- 21. Study of indoor radon, thoron and their decay products level in residences of Udham Singh Nagar district of Uttarakhand, India. Sanjay Dutt, Veena Joshi, Rohit Singh Sajwan, Manjulata Yadav, Rosaline Mishra, R.C.Ramola. Journal of Radioanalytical and Nuclear Chemistry 330 (2021) 1509-1515. IF: 1.6
- 22. Evaluation of background radiation level and excess lifetime cancer risk in Doon valley, Garhwal Himalaya. Tushar Kandari, Prakhar Singh, Poonam Semwal, Ankur Kumar, A.A.Bourai, **R.C.Ramola**. *Journal of Radioanalytical and Nuclear Chemistry* **330** (2021) 1545-1557. **IF: 1.6**

- 23. Evaluation of natural radioactivity levels and <sup>222</sup>Rn, <sup>220</sup>Rn exhalation rate in the soil of the Himalayan belt of Uttarakhand, India. Poonam Semwal, Ankur Kumar, Kuldeep Singh, Manish Joshi, T.K.Agarwal, **R.C.Ramola**. *Journal of Radioanalytical and Nuclear Chemistry* **330** (2021) 1589-1599. **IF: 1.6**
- 24. Uranium contamination in drinking water as a health concern in Uttarakhand, India. Mukesh Prasad, Poonam Semwal, Pooja Panwar, G.S.Gusain, R.C.Ramola. *Journal of Radioanalytical and Nuclear Chemistry* **331** (2022) 1933-1940. **IF: 1.6**
- 25. Variation of natural radioactivity in soil and water samples of Garhwal Himalaya, India. Manjulata Yadav, Mukesh Prasad, Sanjay Dutt, **R.C.Ramola**. *Journal of Radioanalytical and Nuclear Chemistry* **331** (2022) 1951-1958. **IF: 1.6**
- 26. Radiological dose estimation due to exposure to attached and unattached fractions of radon and thoron progeny concentrations. Pooja Panwar, Abhishek Joshi, Mukesh Prasad, R.C.Ramola. *Journal of Radioanalytical and Nuclear Chemistry* 331 (2022) 1967-1974. IF: 1.6
- 27. Monitoring of terrestrial gamma radiation exposure in different geological Stress conditions of Uttarakhand Himalayan region, India. G.Prasad, S.Kimothi, S.Chandra, A.Thapliyal, **R.C.Ramola.** Journal of Physics: Conference Series **2267** (2022) 012102. **IF: 0.48**
- 28. A systematic study on occurrence, risk estimation and health implications of heavy metals in potable water from different sources of Garhwal Himalaya, India. Mukesh Prasad, R.S.Aswal, Abhishek Joshi, G.Anil Kumar, R.C.Ramola. Scientific Reports-Nature 12 (2022) 20419. IF: 4.6
- 29. Thoron equilibrium factor observed around a Chhatrapur placer deposit, a high background radiation area in Odisha, India. Yasutaka Omori, Ganesh Prasad, Devulapalli Vidya Sagar, Sarata Kumar Sahoo, Atsuyuki Sorimachi, Miroslaw Janik, Tetsuo Ishikawa, **Rakesh Chand Ramola**, Shinji Tokonami. *Radiation Environment and Medicine* 11 (2022) 50-55.
- 30. Gas sensing response of ion beam irradiated Ga-doped ZnO thin films. **R.C.Ramola**, Sandhya Negi, R.C.Singh, Fouran Singh. *Scientific Reports-Nature* **12** (2022) 22351. **IF: 44.6**
- 31. Effective dose estimation of radon, thoron and their progeny concentrations in the environs of Himalayan belt, India. Poonam Semwal, T.K.Agarwal, M. Joshi, A.Kumar, Kuldeep Singh, R.C.Ramola. Int. J. Environ. Sci. Technol. 20 (2023) 4127-4138. IF: 3.1
- 32. <sup>234</sup>U/<sup>238</sup>U disequilibrium and <sup>235</sup>U/<sup>238</sup>U ratios measured using MC-ICP-MS in natural high background radiation area soils to understand the fate of uranium. Nimelan Veerasamy, Sharayu Kasar, Rajamanickam Murugan, Kazumasa Inoue, Thennaarassan Natarajan, **R.C.Ramola**, Masahiro Fukushi, S.K.Sahoo. *Chemosphere* **323** (2023) 138217. **IF: 8.8**
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### **Edited Books**

1. Associate Editor of special issue Journal of Nuclear and Radioanalytical Chemistry (*Springer*), **Volume 330**, **Issue 3 (2021)**, published as the Proceedings of Third National Conference of Radiation Awareness and Detection in Natural Environment, Tehri Garhwal, India, March 18-20, 2021.

### **Total Number of Research Publications:**

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Most of the listed publications can be viewed online on Scopus, Web of Science, Google Scholar, and Research Gate

Scopus Author ID: 7003348325; WoS Author ID: AAQ-3727-2021 ORCID ID http://orcid.org/0000-0003-0948-0461

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