


## PROFILE

<b>Name</b>	<b>Dr. R. J. Krupadam</b>   M.Sc(Tech.), Ph.D., FRSC 
<b>Designation</b>	<ul style="list-style-type: none"><li>• Chief Scientist &amp; Incharge   Climate Change &amp; Green Materials</li><li>• Co-Chair   Environmental Impact Assessment, Audit and Planning</li><li>• Project Coordinator   DST – Centre of Excellence – Climate Change Research &amp; CCUS</li><li>• Professor   Academy of Scientific &amp; Innovative Research (AcSIR)</li></ul>
<b>Qualification</b>	<ul style="list-style-type: none"><li>• Post-doc (2000)   TU Dortmund, Germany</li><li>• Ph.D (1999)   Jawaharlal Nehru Technological University, Hyderabad, India</li><li>• M.Sc (Tech.) (1994)   Jawaharlal Nehru Technological University, Hyderabad, India</li><li>• B.Sc (1991)   Sri Venkateswara University, Tirupati, India</li></ul>
<b>Experience</b> (in years)	<ul style="list-style-type: none"><li>• Scientist at CSIR-NEERI, Nagpur (Since, 2000; 23 Years)</li><li>• Post-graduate teaching at JNTU, Hyderabad (3 Years) &amp; Professor, AcSIR (13 Years)</li></ul> <b>Professional Assignments</b> <ul style="list-style-type: none"><li>• Principal Investigator/Coordinator – DST- Centre of Excellence Climate Change Research &amp; Carbon Capture, Utilization and Sequestration – National Mission Project Under National Mission for Strategic Knowledge on Climate Change (Project Budget, Rs. 9.20 Cr)</li><li>• Project Leader – MoEF &amp; CC – CSIR - TANFAMA Public Private Partnership (PPP) Mode Project (Budget, Rs. 15.00 Cr) – Developed National Facility for Testing of Firework Materials &amp; Emissions (RACE Facility) in CSIR-NEERI</li></ul>

	<ul style="list-style-type: none"> <li>• Project Leader &amp; EIA Coordinator – 47 EIA projects (ECF generated, Rs. 52.50 Cr); in these projects 20-25 scientific staff worked as functional area experts (FAEs) under my supervision</li> <li>• NABET Approved Functional Area Expert (FAE) – 183 EIA projects (ECF contribution, Rs. 83.00 Cr)</li> <li>• NABL Quality Manager – Obtained ISO/IEC 17025 accreditation to CSIR-NEERI for testing of environmental matrices – Air, Water &amp; Wastewater, Soil/Sediment, Solid &amp; Hazardous Waste.</li> <li>• NABET Coordinator – Facilitated NABET accreditation to CSIR-NEERI to conduct EIA studies for various sectors and 51 scientists were accredited as FAE and EC during my tenure as the Coordinator</li> <li>• AcSIR Coordinator – Coordinated efficiently academic activities (Ph.D program) of CSIR-NEERI Centre of AcSIR and in this academic Centre about 180 Ph.D students are pursuing Academics &amp; Research.</li> <li>• Laboratories were planned and established in CSIR-NEERI are:       <ol style="list-style-type: none"> <li>1. State-of-the-art molecular modelling and simulation facility for design of environmental materials</li> <li>2. Laboratories suitable for testing of firework materials and emissions and</li> <li>3. Laboratory useful for greenhouse gases monitoring, testing and RS/GIS-based reporting</li> <li>4. Established atomic force microscopy for depicting nano-meter scale morphology of materials</li> </ol> </li> <li>• As a scientist worked on - EIA, Environmental Policy, Industrial Pollution Control and Management, Molecularly imprinted polymers, Micro/nanoplastics, Graphene and graphene nanocomposites, Firework materials, Computational Chemistry, CCUS and Climate Change Policy &amp; Research</li> <li>• Organized 3 International events &amp; 1 National Workshop as Organizing Secretary:       <ol style="list-style-type: none"> <li>1. Indo-UK Conference on Molecular imprinting</li> <li>2. International Conference on Recent Developments in EIA and</li> <li>3. International Conference on Nanobiomaterials</li> <li>4. National Conference on “Climate Change Research &amp; CCUS - An Inter-disciplinary Approach”</li> </ol> </li> </ul>
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	<ul style="list-style-type: none"> <li>• On official deputations, Dr. Krupadam visited countries,</li> <li>• 1. United States (Louisiana State University, Baton Rouge, LA; Case Western Reserve University, Cleveland OH); University of New Orleans, LA</li> <li>• 2. Germany (TU Dortmund)</li> <li>• United Kingdom (University of Leicester; Cranfield University),</li> <li>• Australia (The University of Melbourne),</li> <li>• China (Haikou for attending International Conference),</li> <li>• Singapore (National University of Singapore),</li> <li>• United Arab Emirates (International Assessor for Environmental Testing Laboratories, Dubai),</li> <li>• Qatar (International Assessor for Petroleum &amp; NG Refineries, Doha), and</li> <li>• Philippines (Philippines Nuclear Research Institute, Manila as a IAEA training on Nuclear &amp; Environmental Pollution Monitoring &amp; Testing)</li> <li>• He is a passionate advocate for environmental protection. He is committed to using his research to make a positive impact on the environment.</li> </ul>
<p><b>Expertise</b> (for e.g.: Water, Waste, Energy, Business Development etc.)</p>	<ul style="list-style-type: none"> <li>• Environmental Processes and Pollution Mitigation</li> <li>• Environmental Impact &amp; Risk Assessment developing Management Plans</li> <li>• Climate change impacts on air quality, biodiversity and land use land cover changes impacts on microclimate</li> <li>• Design and development of processes and materials for the resilience of climate and environment</li> <li>• Impact assessment of greenhouse gases and particulates emissions from industrial sources and their fate and transport related to microclimate change predictions</li> <li>• Short-lived climate forces</li> <li>• Black carbon and organic fraction of particulate matter in radiating force</li> <li>• Development of national facilities for firework testing and greenhouse gases</li> <li>• Plastic wastes and micro/nanoplastics – analytical techniques and mitigation</li> <li>• 2D nanostructures and porous materials for CO<sub>2</sub> capture</li> <li>• Computational and combinatorial chemistry for green chemistry and green engineering</li> <li>• Carbon foot-printing   GHG Inventories – ISO 14060 series</li> </ul>
<p><b>Publications</b> (in Nos.)</p>	<ul style="list-style-type: none"> <li>• 70 (Research Publications in SCI Journals)</li> <li>• 286 (EIA Reports)</li> <li>• 3 (Laboratory Manuals)</li> </ul>

	<p><b>Selected Publications</b></p> <ul style="list-style-type: none"> <li>• Aquatar MO., Bhatia U., Rayalu SS., Krupadam (2022) Reduced graphene-oxide-MnO<sub>2</sub> nanocomposites for CO<sub>2</sub> capture from flue gases at elevated temperatures. <i>Science of the Total Environment</i>, 816. <a href="https://doi.org/10.1016/j.scitotenv.2021.151522">https://doi.org/10.1016/j.scitotenv.2021.151522</a> (JIF, 10.753)</li> <li>• Sharma MD., Elanjickal AI, Mankar JS, Krupadam (2020) Assessment of cancer risk of microplastics enriched with polycyclic aromatic hydrocarbons. <i>Journal of Hazardous Materials</i>, 398. <a href="https://doi.org/10.1016/j.jhazmat.2020.122994">https://doi.org/10.1016/j.jhazmat.2020.122994</a> (JIF, 14.224)</li> <li>• Chatterjee S., Krupadam RJ (2019) Amino acid - imprinted polymers as highly selective CO<sub>2</sub> capture materials. <i>Environmental Chemistry Letters</i>, 17. <a href="https://doi.org/10.1007/s10311-018-0774-z">https://doi.org/10.1007/s10311-018-0774-z</a>. (JIF, 15.6)</li> <li>• Wankar S., Turner NW, Krupadam RJ (2016) Polythiophene nanofilms for sensitive fluorescence detection of viruses in drinking water. <i>Biosensors Bioelectronics</i>, 82. <a href="https://doi.org/10.1016/j.bios.2016.03.020">https://doi.org/10.1016/j.bios.2016.03.020</a>. (JIF, 12.6)</li> <li>• Krupadam RJ, Nesterov EE, Spivak DA (2014) Highly selective detection of oil spill polyaromatic hydrocarbons using molecularly imprinted polymers for marine ecosystems. <i>Journal of Hazardous Materials</i>, 274. <a href="https://doi.org/10.1016/j.jhazmat.2014.03.050">https://doi.org/10.1016/j.jhazmat.2014.03.050</a> (JIF, 14.224)</li> <li>• Krupadam RJ (2011) An efficient fluorescent polymer sensing material for detection of traces of benzo[a]pyrene in environmental samples. <i>Environmental Chemistry Letters</i>, <a href="https://doi.org/10.1016/j.watres.2009.09.044">https://doi.org/10.1016/j.watres.2009.09.044</a> (JIF, 15.6)</li> <li>• Krupadam RJ, Khan MS, Wate SR (2010) Removal of probable human carcinogenic polycyclic aromatic hydrocarbons from contaminated water using molecularly imprinted polymers. <i>Water Research</i>, 44. <a href="https://doi.org/10.1016/j.watres.2009.09.044">https://doi.org/10.1016/j.watres.2009.09.044</a> (JIF, 12.8)</li> <li>• Krupadam RJ, Bhagat B., Wate SR, Bodhe GL, Sellergren B., Anjaneyulu Y (2009) Fluorescence spectrometer analysis of polycyclic aromatic hydrocarbons in environmental samples based on solid phase extraction using molecularly imprinted polymer. <i>Environmental Science &amp; Technology</i>, 43. <a href="https://doi.org/10.1021/es802514c">https://doi.org/10.1021/es802514c</a> (JIF, 11.357)</li> </ul>
<b>Patents</b>	3

<p><b>Honors &amp; Awards</b> (If any)</p>	<ul style="list-style-type: none"> <li>• Fellow, Royal Society of Chemistry (London), FRSC</li> <li>• National Award for Technology Development, Govt of India, Ministry of Chemicals and Petro-chemicals</li> <li>• Fulbright-Nehru Academic &amp; Professional Excellence Fellow at Case Western Reserve University OH, United States</li> <li>• Sir C.V Raman Research Fellow, Louisiana State University, Baton Rouge LA, United States</li> <li>• INSA Visiting Fellow, Indian Institute of Science (IISc) Bangalore</li> <li>• NEERI Golden Jubilee Outstanding Scientist</li> <li>• Executive Board Member, Society for Molecular Imprinting (SMI), United Kingdom</li> <li>• Member, International Water Association, United Kingdom</li> <li>• Lead Assessor, International Accreditation Services, United States</li> <li>• Member, Technical Advisory Committee of Federation of Development of Accreditation Services (FDAS), India</li> <li>• Member, Board of Studies, Andhra Kesari University (AKU), Andhra Pradesh, India</li> <li>• Core Member, DST Expert Committee, FIST Program Environmental &amp; Atmospheric Science</li> <li>• Visiting Fellow, Technical University of Dortmund, Germany</li> <li>• Visiting Professor, Louisiana State University, Baton Rouge LA, United States</li> <li>• Visiting Professor, National University of Singapore</li> <li>• Visiting Professor, The University of Melbourne, Australia</li> <li>• Visiting Professor, Case Western Reserve University, United States</li> <li>• University First Rank for Academic Excellence in M.Sc (Tech.) JNTU Hyderabad</li> </ul>
<p><b>Research Scholars</b> (in Nos.)</p>	<p>Ph.D's Awarded: 5 Ph.D's Ongoing: 3 M.Sc/M.Tech Dissertation students: 41</p>