


## Faculty Profile

### Basic Information

Name	M. Raja	
Department	Food Technology	
Qualification	Nano Technology	
Area of Specialization	Heat Transfer, Water Treatment	
Date of Joining EEC	23-08-2021	
Experience (Years)	12	

### Educational Qualifications

S.No.	Degree	Specialization	Name of the College	University	Year of Passing
1	PhD (Pursuing)	Water Treatment	Coimbatore Institute of Technology	Anna	<b>Pursuing</b>
2	M. Tech	Nano Technology	SASTRA	SASTRA	2007
3	B. Tech	Chemical Engineering	Shanmugha College of Engineering	Bharathidasan	2004

### Other Details

<b>Courses Handled</b>	Food Process Calculation, Biochemical Engineering, Application of Nanotechnology and Cryogenics in Food Technology, Emerging Technologies in Food Processing, Baking and Confectionery Technology, Beverage Processing Technology, Project Work
<b>Professional Membership</b>	IAENG
<b>Research Interest</b>	Water Treatment, Heat Transfer, Valorisation of Food Waste
<b>Publications</b>	<ol style="list-style-type: none"> <li>1. Kadarkarai Govindan, <b>Mohan Raja</b>, Michael Noel and E.J. James, Degradation of petachlorophenol by hydroxyl radicals and sulfate radicals using electrochemical activation of peroxomonosulfate, peroxodisulfate and hydrogen peroxide – Journal of Hazardous Materials, ELSEVIER, 2014, 272, 42-51.</li> <li>2. Kadarkarai Govindan, <b>Mohan Raja</b>, Subramanian Uma Maheshwari and Michael Noel, Analysis and understanding of amido black 10B dye degradation in aqueous solution by electrocoagulation with conventional oxidants: Peroxomonosulfate, peroxodisulfate and hydrogen peroxide - Environmental Science: <i>Water Research &amp; Technology</i>, 2015, 1, pp 109-119.</li> <li>3. Kadarkarai Govindan, Michael Noel, <b>Raja Mohan</b>, Removal of nitrate ion from water by electrochemical approaches - <i>Journal of Water Process Engineering</i>, 2015, 6, pp 58-63.</li> <li>4. Kadarkarai Govindan, <b>Mohan Raja</b>, Subramanian Uma Maheshwari, Michael Noel and Yoram Oren, Comparison and understanding of fluoride removal mechanism in Ca<sup>2+</sup>, Mg<sup>2+</sup> and Al<sup>3+</sup> ion assisted</li> </ol>

	<p>electrocoagulation process using Fe and Al electrodes - <i>Journal of Environmental Chemical Engineering</i>, 2015, 3, pp 1784-1793.</p> <p>5. Jerusha Kezia Clement, <b>Raja Mohan</b> and Jegannathan Kenthorai Raman, Catgut waste utilization for protease production using <i>Bacillus subtilis</i> - <i>Advances in Bioprocess Technology</i>, Book-Part III, Chapter 17, pp 357-370, 2015 / September, Publisher: Springer International Publishing, Print ISBN: 978-3-319-17914-8, Online ISBN: 978-3-319-17915-5.</p> <p>6. S. Uma Maheshwari, B.C. Pillai, K. Govindan, <b>M. Raja</b>, A. Raja, M.B.S Pravin, and S. Vasanth Kumar, Development of Low Resistance Thermal Interface Material (TIM) using Nanometrials – <i>International Journal of Engineering Science Invention</i>, 2017, pp 39-46.</p> <p>7. Kadarkarai Govindan, Hrisheekesh T. Chandran, <b>Mohan Raja</b>, Subramanian Uma Maheswari, and Murali Rangarajan, Electron Scavenger-assisted Photocatalytic degradation of amido black 10B dye with Mn<sub>3</sub>O<sub>4</sub> nanotubes: A response surface methodology study with central composite design – <i>Journal of Photochemistry and Photobiology A: Chemistry</i>, 2017, 341, pp 146-156.</p> <p>8. Muthusamy P, Balamurugan P, <b>Raja M</b> and Jerome D Removal of Lead (II) Ions through packed bed column from aqueous solution and using maize cob – <i>The indian Journal of Technical Education</i>, 2023, pp 217-22.</p>
<p><b>Conferences / Workshop / Seminars</b></p>	<ol style="list-style-type: none"> <li>Presented a poster in 6<sup>th</sup> Asian Thermal spray conference on ‘Prediction of substrate temperatures and stresses during plasma spraying’ organized by ARCI, Hyderabad during November 24-26, 2014, [Third Prize].</li> <li>Presented a poster in Comsol 2014 on ‘Prediction of temperatures and thermal stresses in plasma sprayed coatings’ organized by Comsol, Bangalore during November 13-14, 2014.</li> <li>Presented a poster in Plasma 2013 on ‘Analysis of thermal history and residual stress in plasma sprayed coatings’ organized by KIIT University, Bhubaneswar during December 3-6, 2013, [Second prize].</li> <li>Presented a paper in a National conference on “Challenges of power generation &amp; lighting 21<sup>st</sup> century” &amp; paper entitled on “Numerical simulation of substrate and coating temperatures during plasma spraying” conducted by Pondicherry University during 10-13 December 2012.</li> <li>Attended workshop on “Atmospheric plasma processing” held during 31 Oct to 3<sup>rd</sup> Nov 2012 at Bharathiyar University, Coimbatore, Tamil Nadu, and India.</li> <li>Presented an experimental paper in a National Seminar on “Moringa oleifera-Alum Blend as a Coagulant for Water Treatment” in Chemozale-2004 conducted by Nirma University, and Ahmedabad during 19-20 Mar 2004.</li> <li>Presented an experimental paper in TANUVAS on “Preparation and Evaluation of Pearl Millet Cup Cake in 2023 [Second Prize].</li> </ol>
<p><b>Awards / Achievements</b></p>	<p>3 and Completed FOSTAC certification</p>
<p><b>Teaching Aids</b></p>	<p>ICT Tools, Think-Pair-Share Learning, Brainstorm session, Mind Map and etc.</p> <p><a href="https://www.youtube.com/watch?v=TRuf0ZBENmw&amp;t=11s">https://www.youtube.com/watch?v=TRuf0ZBENmw&amp;t=11s</a></p>