

Name : **Dr. N. RAJA, M.Sc, M.Phil, Ph.D, Postdoc(FCS)**

Designation : Teaching Fellow

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Research Area :

- Organometallic Chemistry /Bio-Organometallic Chemistry
- Catalysis
- Anticancer Compounds
- Electron paramagnetic resonance (EPR/ESR)
- 2D-NMR techniques

Educational Qualifications:

Qualification	University	Year (From-To)	Percentage	Class
Postdoc.	University of Neuchatel, Switzerland	2012-2015	-	-
Ph.D.,	Bharathidasan University, Tiruchirappalli.	2007-2012	-	-
M.Phil.,	Bharathidasan University Tiruchirappalli.	2005-2007	78	I
M.Sc.,	Bharathidasan University Tiruchirappalli.	2003-2005	70	I
B.Sc.,	Periyar University, Salem	2000-2003	67	I

Experience: 15.7 years

Name of Company / Institutions	Designation of Post	From	To	Experience in Year
		DD-MM-YYYY	DD-MM-YYYY	
University College of Engineering, Ariyalur	Teaching Fellow	11.02.2015	Till date	7.4
Institute of Chemistry, University of Neuchatel, Switzerland.	Postdoctoral Researcher	17.09.2012	16.06.2014	1.9
School of Chemistry, Bharathidasan University, Tiruchirappalli.	Research Scholar and RFSMS Fellow.	01.04.2007	31.03.2012	5.0
Department of Chemistry, Government Arts College, Dharmapuri.	Guest Lecturer	01.07.2005	31.02.2007	1.6

List of Awards/Honors

- Swiss - FCS Fellowship during the Postdoc (Swiss Federal Commission Fellowship for International Students).
- UGC - RFSMS Fellowship during the Ph.D (Research Fellowship for Science and Meritorious Students).

Additional / Academic Responsibilities at University:

Teaching Assistance, Laboratory demonstrator and instruments in-charge at School of Chemistry, Bharathidasan University under the scheme of Research Fellowship in Sciences for meritorious students (RFSMS) fellowship.

Professional Activities:

-Nil-

Completed B.E/M.E Projects:

-Nil-

Sponsored Research Activities:

-Nil-

List of Seminar / Short Term Course /FDP/ Workshop attended: (Within India)

1. Participated in International One Week Faculty Development Programme on Research Methodology, organized by Kamla Nehru Mahavidyalaya, Nagpur from 02.05.2022 to 07.05.2022.
2. Participated in the 5-day online Refresher-1 Part 1 FDP is for preparation of faculty to teach the UHV-I module of the SIP program on “AICTE Incorporating Universal Human Values in Education (An AICTE Initiative) from 11.04.2022 to 15.04.2022.

3. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on " Faculty Development Program on Early Stage Innovation, Startups and Entrepreneurship" from 23/08/2021 to 27/08/2021 at Central University of Rajasthan.
4. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Weste Technology" from 02/08/2021 to 06/08/2021 at National Power Training Institute, Shivpuri, (M.P.).
5. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Recent trends in Drug Discovery" from 13/09/2021 to 17/09/2021 at Department of Pharmaceutical Sciences, DPS, CVR , CPAS, Ettumanoor, KERALA.
6. Participated in AICTE-ISTE sponsored online Induction/Refresher Programme on “Refresher Course in Chemistry” (Phase-III), organized by Department of Chemistry, A.V.C. College of Engineering, Mayiladuthurai from 08.03.2021 to 13.03.2021.
7. Participated in Institution's Innovation Council (IIC) and Internal Quality Assurance Cell (IQAC) AICTE-ISTE sponsored webinar on “Funding Opportunities Proposals and Research projects for faculty”, organized by Cambridge Institute of Technology, Bengaluru from 18 – 20 June 2020.
8. Participated in Workshop on “Nuclear Magnetic Resonance Spectroscopy” held at Gandhigram Rural Institute, Dindigul from 8-9th March 2018.
9. Participated in five days “Foundation Skills in Integrated Product Development” organized by Bharathidasan Institute of Technology (BIT) campus, Anna University Tiruchirappalli from 18.01.2016 to 23.01.2016.
10. Participated in seven days “Faculty Development Training Programme” held at Department of Chemistry, University College of Engineering Tindivanam, Anna University, Tindivanam from 13.11.2015 to 06.12.2015.

Invited Lecture

Delivered a lecture on “Catalytic and Anticancer Applications of Organometallic Compounds” in Faculty Development Training Programme held at Department of Chemistry, University College of Engineering Tindivanam, Anna University Tindivanam .

Paper Presented in International Conferences

1. Presented a Poster entitled "*Half-sandwich iridium(III) complex catalyzed single pot amidation reaction*" in International Conference on Chemical Research and Innovations Today" CRIT – 2019, P&G and Research Department of Chemistry, Bishop Heber College on 24th Jan. 2019.
2. Presented a paper entitled "*Synthesis, Characterization and Catalytic Transfer Hydrogenation of Arene Ruthenium(II) Pyrenyl Thiosemicarbazone Complex*" in International Conference on Advancements and Challenges in Chemical Sciences held at PG & Research Department of Chemistry, Pachaiyappa's College, Chennai from 2-3rd Feb.2018.
3. Presented a Poster entitled "*Dinuclear arene Ru(II), Rh(III) and Ir(III) Catalysts for the conversion of aldehydes to amides*" on SCS Fall Meeting, Sep 06, 2013 EPFL, Lausanne, Switzerland.
4. Presented a Poster entitled "*Catalytic organic transformation of aldehyde to amide by using ruthenium complexes*" Current challenges in Catalysis and Synthesis - Dec 13, 2012 University of Geneva, Geneva, Switzerland.
5. Presented a Poster entitled "*Synthesis, characterization and catalytic application of cationic arene ruthenium(II) phenylhydrazone complexes*" during March 07 to 09, 2012 in International Green Catalysis Symposium, Rennes. France.
6. Presented a paper entitled "*Transfer hydrogenation of ketones using recyclable (η^6 -arene) ruthenium(II) naphthylazo-p-methyl phenolate complex,*" during, March 19 to 20, 2009 in International Conference on Coordination and Organometallic Chemistry, Bharathiar University, Coimbatore-641 046, India.

Paper Presented in National Conferences Presented

7. Presented a Poster entitled "*Anticancer activity of half-sandwich ruthenium, rhodium and iridium thiosemicarbazone complexes*" in National Conference on Recent Advances in Chemistry (RAC-19) held at Department of Chemistry, CEG, Anna University, Chennai on 4th and 5th Jan. 2019.
8. Presented a Poster entitled "*Synthesis, characterization and catalytic vinylation of organic halides of palladium(II) NNO complexes*" in National Conference on Recent Developments of

Chemistry in Engineering applications held at Department of Chemistry, SRM Valliammai Engineering College, Chennai on 09th Feb. 2019.

9. Presented a paper entitled “*Oxidation of Alcohol using ruthenium(5-chloro-2-hydroxy-4-methyl)-phenyl methanone complex*” in International Conference on Modern Trends in Chemistry held at PG & Research Department of Chemistry, Vivekananda College, Madurai on 23rd Feb.2018.
10. Presented a paper entitled “*Rhodium(III) NCN pincer complexes catalyzed transfer hydrogenation of ketones*” at Modern Trends in Inorganic Chemistry during December 7 to 10, 2009 in Indian Institute of Science, Bangalore-560 012.
11. Presented a paper entitled “*Synthesis and Structure of Schiff base derivatives containing O, N donors*” at 38th National Seminar on Crystallography during February 11th to 13, 2009 in University of Mysore, Mysore-570 006.

Publications : (International Journals:)

1. Amidation of aldehydes using mono-cationic half-sandwich rhodium(III) complexes with functionalized phenylhydrazone ligands, Devika, N.; Ananthalakshmi, S; **Raja, N.;** Gupta, G., Nagesh, N., Therrien, *J. Organomet.Chem.*, **2019**, 886, 65-70.
2. NMR Spectroscopy and DFT Calculations of a Self-Assembled Arene Ruthenium Rectangle Obtained from a Combination of Coordination and Hydrogen Bonds, Appavoo, D., **Raja, N.;** Deschenaux, R., Therrien, B., Carnevale, D, *Dalton Trans.*, **2016**, 45, 1410–1421.
3. Biological Activities of Pyrene-Derived Half-sandwich Organometallic Complexes, **Raja, N.;** Devika, N., Gupta, G., Nagesh, N., Therrien, B., *J. Organomet.Chem.*, **2015**, 794, 104-114.
4. Synthesis, Characterization and Catalytic Activity of Dinuclear Half-sandwich Complexes of Ru(II), Rh(III) and Ir(III) complexes. **Raja, N.;** Therrien, B., *J. Organomet.Chem.*, **2014**, 765, 1–6.
5. Binuclear Ruthenium(II) Pyridazine Complex Catalyzed Transfer Hydrogenation of Ketones, **Raja, N.;** Ramesh, R., *Tetrahedron Lett.*, **2012**, 53, 4770–4777.
6. Ruthenium(II) NNO Pincer type Catalyst for the Conversion of Aldehyde to Amides, **Raja, N.;** Ramesh, R., *Inorg. Chem. Commun.*, **2012**, 19, 51–54.

7. Paramagnetic Ruthenium(III) Complexes Bearing O, O Chelating Ligands: Synthesis, Spectra, Molecular Structure and Electron Transfer Properties, **Raja, N.;** Ramesh, R. *Polyhedron* **2012**, *31*, 196–201.
8. Mononuclear Ruthenium(III) Complexes Containing Chelating Thiosemicarbazones: Synthesis, Characterization and Catalytic Property, **Raja, N.;** Ramesh, R. *Spectrochim. Acta Part A*, **2010**, *75*, 713–718.
9. Transfer Hydrogenation of Ketones using Recyclable η^6 -arene Ruthenium(II) Naphthylazo-*p*-methyl Phenolate Complex, Ulaganatha Raja, M.; **Raja, N.;** Ramesh, R. *The Open Catalysis Journal*, **2010**, *3*, 30–33.
10. Binuclear Ruthenium(III) Schiff base Complexes Bearing N₄O₄ Donors and their Catalytic Oxidation of Alcohols, Venkatachalam, G.; **Raja, N.;** Pandiarajan, D.; Ramesh, R. *Spectrochim. Acta Part A*, **2008**, *71*, 884–891.
11. Crystal Structure of Half-sandwich Rh(III) 2-(1-(2-(4-chlorophenyl)hydrazono)ethyl) Pyridyl Chloride Complex, Devika, N.; **Raja, N.;** Ananthalakshmi, S.; Therrien, B. **2015**, *E71*, 248–250.
12. Crystal Structure of Chlorido (2-{1-[2-(4-chlorophenyl)hydrazin-1-ylidene]N-(phenyl)methyl}pyridine-N) (η^5 -pentamethylcyclopentadienyl) iridium(III) tetraphenylborate [Ir(C₁₀H₁₅)Cl(C₁₈H₁₄ClN₃)](C₂₄H₂₀B), Devika, N.; **Raja, N.;** Ananthalakshmi, S.; Therrien, B. **2015**, *E71*, m65 -m66.

Conferences/seminar/webinar attended

1. International Virtual Conference on “Futuristic Aspects of Sensors and Biosensors” (IVCFASB-2022) organized by PG and Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli, 3rd and 4th March 2022.
2. Online National Conference on Organic Chemistry, “NITT Organic Chemistry Conference-(NITTOCC)”, Department of Chemistry, NIT Trichy, 16th –18th December 2021.
3. International webinar on “Sustainable Chemistry, IWSC-2021”, organized by Association of Chemistry Teachers, C/O Homi Bhabha Centre for Science Education, Mumbai, March 18, 2021.
4. National webinar on “Microsoft Team”, organized by School of Computer Science and Engineering (SCOPE), Vellore Institute of Technology Chennai, 12th September 2020.

5. Webinar series on “Modern Trends in Organic Synthesis” conducted by School of Chemistry, Bharathidasan University during July 27-31, 2020.
6. International webinar on "Role of Newsroom in Wildlife Conservation" organized by Biodiversity Conservation Foundation (BCF), India, 01.07.2020.
7. National webinar on “Insights on A2 Milk and Career Prospects in Dairy” Industry, organised by the Department of Nutrition & Dietetics and B.Voc. Food Processing, Seethalakshmi Ramaswami College, Tiruchirappalli, June 24, 2020.
8. Webinar on "Innovation in Nanotechnology" organized by Department of Science and Humanities, Jeppiaar SRR Engineering College, Chennai, 23.06.2020.
9. Webinar series on “Ideas of Green Chemistry for Sustainable Development of Clean Environment” organised by Department of Chemistry, Mookambigai College of Engineering, Pudukkottai, 18.06.2020.
10. National webinar on "Recent Trends in Sustainable Chemistry 2020 (RTSC 2020)' organised by PG and Research Department of Chemistry, Pachaiyappa's College, Chennai, 07.06.2020.
11. International Webinar on “Nutritional Genomics” organized by the Department of Nutrition & Dietetics and B.Voc. Food Processing, Seethalakshmi Ramaswami College, Tiruchirappalli, 13.06. 2020.
12. Webinar on “Current Technologies of Solid Waste Management in India and Covid-19 Waste Disposal” organised by the Department of Environmental Studies, St. Joseph's First Grade College, Jayalakshmiapuram, Mysore, Karnataka, 10.06.2020.
13. National Seminar on “Recent Development in Chemistry” at Bharathidasan University, Tiruchirappalli-620 024, Aug 29, 2011.
14. “11th CRSI National Symposium in Chemistry” at National Chemical Laboratory, Pune - 411 008 from February 6 to 8, 2009.
15. “3rd CRSI-RSC Symposium at National Chemical Laboratory”, Pune-411 008, February 5, 2009.
16. “National Seminar on Current trends in Chemistry”, Cochin University of Science and Technology, Cochin, Jan 18-19th, 2008.
17. “State level Inter-collegiate Seminar on NMR Spectroscopy”, St. Xavier’s College, Tirunelveli, January 20, 2005.

DECLARATION:

I CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT TO THE BEST OF KNOWLEDGE AND BELIEF.

A handwritten signature in black ink, appearing to read 'N. Raju', enclosed within a hand-drawn oval shape.

DATE:23.05.2022

Signature With date