

Dr. ANBARASU G**Chemistry**chemanbarasu@gmail.com Ph: +91-9698248912**Google Scholar:**<https://scholar.google.com/citations?hl=en&user=ekGCCBUAAAAJ>

Cited by

All	Since	2017
Citations	101	101
h-index	6	6
i10-index	6	6

Academic Qualification

S.No	Degree	Year	Subject	University/Institution	% of marks
1.	B.Sc.,	2010	Major: Chemistry Ancillaries: 1. Physics 2. Mathematics	Periyar University/Sri Vdhya Mandir Arts and science college, Krishnagiri, Tamil Nadu, India	62.5
2.	M.Sc.,	2012	Chemistry	Department of Chemistry Periyar University, Salem, Tamil Nadu, India.	69.61
3.	M.Phil.,	2013	Chemistry	Department of Chemistry Periyar University, Salem, Tamil Nadu, India.	75.8
4.	P.h.D.,	2017	Chemistry	Department of Chemistry Periyar University, Salem, Tamil Nadu, India.	Highly Commented

Research and Work experience

S.No.	Positions held	Name of the Institute	Title of the Project	From	To
1	Project Scientist Department of Chemistry	Indian Institute of Technology Kharagpur Kharagpur, India -721302	Transition Metal Complexes of Bidentate Pyrrole-based P- and N-Donor Ligands with Wide Bite Angles for Catalysis Reactions	12-July- 2018	11-July- 2019
2	Research Associate Department of Chemistry & Chemical Engineering	Indian Institute of Technology Kharagpur Kharagpur, India -721302	Synthesis of Metallocene catalyst for olefin polymerization	18-July- 2019	31-Dec- 2020
3	Assistant Professor	Unique College of Arts And Science, Karapattu, Uthangarai, Krishnagiri.	Assistant Professor	10.8.2021	12.07.2022

4	Assistant Professor Department of H & S Chemistry	Malla Reddy Engineering College For Women (Autonomous Institution-UGC, Govt of India) Maisammaguda, Secunderabad, Telangana.	Assistant Professor	18.07.2022	Still now
I have gained experience in the development of novel synthetic methods and analysis using various spectroscopic tools such as modern synthesis, air-moisture sensitive compounds and characterization techniques.					

During my doctoral research work, I was extensively involved in Inorganic Chemistry and my research work was focused on the synthesis of Mesoporous Silica immobilized heterogeneous catalyst. The Silica materials were also applied as catalysts to carry out the various organic transformations in the design and the development of heterogeneous catalyst frameworks. The silica materials were also applied as catalysts for carrying out various organic transformations, which includes

Chapters	Ligands		Catalyst	Characterization	Applied to organic transformations
	Amine	Aldehyde/Ketone			
II	SiO ₂ -APTES Silica functionalized 3-aminopropyltriethoxysilane	acetylacetone	Cu(II)-complexes	FT-IR, UV-DRS, ¹ H-NMR, XRD, SEM-EDX, TEM, EPR, BET, ICP-AES	Oxidative condensation reaction of benzyl alcohol to imine
III		Thiophene-2-carbaldehyde			Oxidative coupling reaction of benzylamines to imines
IV		azo salicylaldehyde			Suzuki-miyaura cross coupling
V		2-hydroxy-1-naphthaldehyde			C-S cross-coupling

RESEARCH INTEREST

- ❖ Organic Synthesis
- ❖ Development of organometallic transition metals-homogeneous & heterogeneous catalyzed organic transformations
- ❖ Modeling heterogeneous and nanoparticle & microporous and mesoporous materials based catalysts
- ❖ Synthesis of Metallocene catalyst for olefin polymerization

Invited Talk

- ❖ National Conference on **Recent Advances in Metallocenes and Biopolymers RAMB-2019**. 1st National Conference on Explosives Detection. 12th September-2019. Kailash Women's College, Nangavalli, Salem, Tamil Nadu.

Special Lectures and FDP/ Organized

- ❖ **Special Lecture** on the topic Concept Development for Inspiring Innovations for a Futuristic Society. Eminent Speaker **Prof. S. Gunasekaran, Ph.D., D.Sc. TANSA Awardee** Dean, Research & Development St. Peters Institute of Higher Education and Research, Avadi, Chennai 600 054. Former Registrar, Periyar University, Salem. Former Head, Department of Physics, Pachaiyappas College, Chennai 600 030. Founder President Indian Spectrophysics Association. 18th -March-2022. UNIQUE COLLEGE OF ARTS & SCIENCE Karapattu, Uthangarai, Krishnagiri, Tamil Nadu – 635207.
- ❖ **NATIONAL Science Day Celebrations** 4th & 5th March, 2022. Resource Person **Dr.M. SELVAPANDIYAN, M.Sc., M.Phil., Ph.D.** Associate Professor & Head i/c Department of Physics Periyar University PG Extension Centre, Dharmapuri-636701 Topic: Raman's Discoveries for Sustainable Future Research. UNIQUE COLLEGE OF ARTS & SCIENCE Karapattu, Uthangarai, Krishnagiri, Tamil Nadu – 635207.
- ❖ **Two Days Faculty Development Programme**. 19th & 20th March 2022 UNIQUE COLLEGE OF ARTS & SCIENCE Karapattu, Uthangarai, Krishnagiri, Tamil Nadu – 635207. Venue: Don Bosco, Camp Centre, Yelagiri Hills Tirupattur Dt, Tamil Nadu, INDIA - 635 853

PUBLICATIONS

1. S. Vasudevan, K. Ashok, **G. Anbarasu** and G. Mani., Crystal structure and DFT analyses of a pentacoordinated PCP pincer nickel(II) complex. *Acta Cryst.* (2019). **C75, 734–739. Impact Factor: 1.090**
2. S. Vasudevan, B. Dutta, **G. Anbarasu** and G. Mani., Facile synthesis of Pd(II) and Ni(II) pincer carbene complexes by the double C–H bond activation of a new hexahydropyrimidine-based bis(phosphine): catalysis of C–N couplings. *Dalton Transactions* 2019, **48, 7203–7210. Impact Factor: 4.390.**
3. M. Rubiga M. Malathy Kostova Irena, **G. Anbarasu**, M. Chozhanathmisra and R. Rajavel., Designing a biomimetic catalyst for phenoxazinone synthase activity using a mesoporous Schiff base copper complex with a novel double-helix morphology. *New Journal of Chemistry* 42 (2018) 18608-1862. **Impact Factor: 3.591.**
4. **G. Anbarasu**, M. Malathy, R. Rajavel, Synthesis and catalytic properties of copper(II) Schiff-base complex immobilized silica materials. *Journal Porous Materials* ., (2017) 24 1253–1261. **Impact Factor: 2.183.**

5. **G. Anbarasu**, M. Malathy, P. Karthikeyan, R. Rajavel, Silica functionalized Cu(II) acetylacetonate Schiff base complex: An efficient catalyst for the oxidative condensation reaction of benzyl alcohol with amines. *Journal of Solid State Chemistry*, (2017) **253**, 305–312. **Impact Factor: 3.498**.
6. **G. Anbarasu**, M. Ganga, R. Gayathri, M. Malathy, P. Karthikeyan, V. Jayakkumar, R. Rajavel. Silica-Supported Azo-linked Schiff Base Cu(II) Complex as efficient heterogeneous catalysts for Suzuki–Miyaura cross coupling reaction at low catalyst loadings in green media. *Materials Today: Proceedings*. (2017) 4, 12416–12425.. **Impact Factor: 1.24**.
7. **G. Anbarasu**, T. Thamarai Kannan, R. Rajavel, Synthesis and characterization of Silica – Supported azo-based Schiff base copper(II) complex, catalytic activity of Suzuki–Miyaura cross coupling reaction, *International journal of Chemtech Research*, 2017,10(7):181-187. **Impact Factor: 0.515**.
8. P. Karthikeyan, M. Liviu, K. Pandian, **G. Anbarasu**, R. Rajavel, Electrochemical Deposition of Zn-HNT/p(EDOT-co-EDOP) Nanocomposite Coating on LN SS for Anti-bacterial and Anti-corrosive Application, *New Journal of Chemistry*. (2017),41, 4758-4762 **Impact Factor: 3. 591**.
9. R. Jayalakshmi, **G. Anbarasu**, M. Chozhanathmisra, R. Rajavel., Synthesis, Spectroscopic, anticancer, antimicrobial and antioxidant studies of Homo-Binuclear Cu(II), Co(II), Ni(II) and Mn(II) complexes with polydentate Schiff base ligand. *International journal of Advanced Research (IJAR)*, 2017, 5(7), 1176-1189. DOI: 10.21474/IJAR01/4826.
10. M.Chozhanathmisra, N.Murugan, P.Karthikeyan, S.Sathishkumar, **G.Anbarasu**, R.Rajavel., Development of antibacterial activity and corrosion resistance properties of electrodeposition of mineralized hydroxyapatite coated on titanium alloy for biomedical applications., *Materials Today: Proceedings* (2017) 4, 12393–12400. **Impact Factor: 1.24**.
11. M. Malathy, **G. Anbarasu**, M. Bharathi, K. Brundha, R. Rajavel, Ni(II)-Incorporated MCM-41 Material – Heterogeneous Catalyst for C-S and C-N Cross Coupling Reactions. *ChemistrySelect*, 1 (2016) 4833. **Impact Factor: 1.811**.
12. **G. Anbarasu**, C. Srividhya, P. Maheswaran and R. Rajavel., Isatin Based Schiff Base and Its Complexes- Synthesis, Spectral Investigation and Antibacterial Studies. *Journal of Applicable Chemistry*, 2013, 2 (5): 1315-1323. **Impact Factor: 0.654**

LIST OF PAPER PRESENTATIONS & PARTICIPATED NATIONAL/INTERNATIONAL CONFERENCES

1. Presented a paper entitled on “*Synthesis of silica immobilized Cu(II) acetyl acetone Schiff base complexes and their catalytic activities*” in the **10th Mid-year CRSI Symposium in Chemistry**” held at National Institute of Technology, Tiruchirappalli, India, on 23 – 25th July 2015, Page No.44.
2. Presented a paper entitled on “*Synthesis and catalytic activity of novel Cu(II) Schiff base complex immobilized silica*” **International Conference on Frontier Areas in Chemical Technologies (FACTs - 2016)** held at Alagappa University, Karaikudi, Tamil Nadu, India, on 21-23th March 2016, Page No.183.
3. Presented a paper entitled on “*Silica-Supported Azo-linked Schiff Base Cu(II) Complex as Efficient Heterogeneous Catalysts for Suzuki–Miyaura Cross Coupling Reaction at Low*

Catalyst Loadings in Green Media” **International Conference on Materials for Sustainable Future (ICMSF 2016)** held at SASTRA University, Thanjavur, Tamil Nadu, India, on 14-15th July 2016, Page No.58. PP:19.

4. Presented a paper Oral entitled on “*The Synthesis and characterization of immobilized Nickel Schiff base complexes and their application to efficient heterogeneous catalysts for Suzuki–Miyaura cross coupling reaction*” **National Conference on Recent Innovations in Organic Synthesis (RIOS 2016)** held at Periyar University, Salem, Tamil Nadu, India, on 15-16th Dec 2016, Page No:41
5. Presented a paper entitled on “*In-vitro microbial assay of new Schiff base complexes: preparation, characterization by spectral analysis*” in **International conference on Biological inorganic chemistry (ICBIC-2013)**, Department of Chemistry, Periyar University, salem-11 on 20-22 Feb 2013. Page No: 270

PARTICIPATION

- Participated in National Seminar on Science and Engineering Research Board (SERB) Sponsored National Seminar on “**Emerging Trends in Bio-Inorganic Chemistry (ETBIC-2015)**” organized by Department of Chemistry, VSHNS College (Autonomous), Virudhungan on 23,24-Jan-2015.
- Participated in National on “**Indian National Conference on Development in Inorganic Application (INDIA-2015)**” organized by Department of Chemistry, Periyar University, Salem-11 on 15,16-Oct-2015.
- Participated in National Conference on “**Recent Advances in Chemistry**” organized by PG & Research Department of Chemistry, E.R.K Arts & Science College, Dharmapuri, 7th-Aug-2015.
- Participated in National Conference on “**Disaster Mitigation and Management towards Sustainable Development (DMSD-2015)**” organized by Department of Geology, Periyar University, Salem-11. 16,17-Apr-2015.
- Participated in International Conference on “**International Conference on Physiology and Medicine**” held at Department of Zoology, Periyar University, Salem-11, 15,17-Oct-2014.
- Participated in National Seminar on “**Advanced Nano Materials (ANM-2012)**” organized by Centre for Nano Science and Nano Technology, Periyar University, Salem-11 on 6, 7-Feb-2012.
- Participated in National Seminar on “**Frontiers in Organic Synthesis and Medicinal Chemistry**” organized by Department of Chemistry, Periyar University, Salem-11 on 17 & 18- Feb – 2011.

SEMINAR AND WORKSHOP ATTENDED

- Volunteered in Departmental Conference on “**Functional Smart & Supramolecular Materials (FSSM-2020)**” organized by Department of Chemistry, IIT Kharagpur, on 29,30th Jan-2019.
- Participated in Short course on “**From Project to Publications**” by **Prof. Charl F.J.Faul, (University of Bristol,UK)**. Organized by Department of Chemistry, IIT Kharagpur, on 27,28th Jan-2020.
- **A one-day workshop entitled-Towards Smart Functional Materials:** An Interdisciplinary Approach Sponsored & Organized by Indian Academy of Sciences, Bangalore & Department of Chemistry, IIT Kharagpur, on 19th Mar-2019.
- International Workshop on “**Scholarly Research Publications: Writing, Citations and Plagiarism (RPCP-16)**” organized by Department of Library & Information Science, Periyar University, on 1th –Feb-2016.
- International Seminar on “**Perspectives in Modern Biology**” held at Department of Zoology, Periyar University, Salem-11, 2nd -Sep-2016.
- Workshop on “**Technical Aspects of High Speed Computers and Applications (THSCA 2015)**” organized by Centre for Instrumentation and Maintenance Facility (CIMF), Periyar University, Salem-11, 27th -Mar-2016.
- The National Workshop on “**Advanced Characterization Techniques (ACT-2015)**” held on 29-30 January 2015, at Periyar University, Department of Chemistry, Salem- 636011.
- National Workshop on “**Green Initiatives in Energy and Environment (GIEE-2014)**” held at Department of Environmental Science, Periyar University Salem, 11th –Sep-2014.
- Two days Training Programme on “**Biostatistics using Software Packages**” organized by Department of Food Science and Nutrition & Computer Center of Periyar University Salem, 30th Sep to 1 Oct-2014.
- Seminar on “**Trends in Protein Engineering**” held on **21 November 2013**, at Periyar University, Department of Zoology, Salem- 636011.
- UGC Sponsored one day Seminar on “**Recent Trends in Chemistry (RTC-2012)**” at Periyar University, Department of Chemistry, Salem- 636011.20th –Mar-2012.
- Workshop on “**Applications of Radioisotopes in Chemical Science (ARCS-2012)**” held on 28 September 2012, at Periyar University, Department of Chemistry, Salem- 636011.
- State Level Seminar on “**Recent Trends in Chemistry**” organized by PG and Research Department of Chemistry, Government Arts College, Salem-7 on 14th Mar – 2011.
- Participated in International webinar innovations In Materials Processing organized by Bharat Institute of Engineering and Technology in collaboration with Centre for Research and Development in Education and Social Integration (CRESIHRD) and Indian Ceramic Society, Hyderabad on 20.08.2022.

SCIENTIFIC AND TECHNICAL SKILLS

❖ **Synthesis:** Proficient in the synthesis of air sensitive organic & inorganic molecules in inert condition, recrystallization and purification of synthesized compounds, reagent purification and distilling dry solvents.

❖ Schlenk and glove-box techniques, FT-IR, Fluorescence and UV-Vis spectroscopy, Gas Chromatography, Electrochemical Techniques in Electrochemical Workstation (CHI Model 643B, Austin, TX, USA),

❖ Record maintaining, Literature survey, Sci-finder and Reaxys search, Knowledge in Chemdraw, etc.,

PERSONAL PARTICULARS

Date of birth : 17-01-1990

Sex : Male

Nationality : Indian, Hindu

Category : BC

Languages known: Tamil, English, Telugu.

Marital Status : Married

Address for Personal & Communication:

Gunthur (Vill),

Thathampatti (Post),

Pochampalli (Tk),

Krishnagiri (Dt), Tamil Nadu, India.

Pin : 635201.

TEACHING EXPERIENCE

During My Ph.D tenure I was teaching assistant of the M.Sc Inorganic Lab class during 2014-2017 and also mentored two M.Sc (2017) & MPhil (2016) projects. I have been actively involved in organizing various National & International Conferences & Seminars.

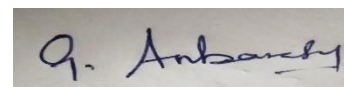
Declaration

I here declare that the above-mentioned particulars are true to the best of my knowledge and belief.

Place: Secunderabad

Yours truly,

Date: 04.02.2023



(Dr. Anbarasu G)