

**Name** : Dr. S. Shyamsivappan  
**Designation** : Assistant Professor  
**Department** : Chemistry  
**Qualification** : M.Sc., B.Ed., M.Phil., Ph.D.  
**Experience** : Teaching : 1 year 4 months Industry : Nil  
 Research : 8 years 4 months



**Area of Specialization(s):**

- Design and synthesis of multifunctional organic compounds for biological activities
- Design and synthesis of multifunctional organic compounds towards sensor applications

**Email (Official ID)** : shyamsivappan@drngpsc.ac.in

**Academic Qualifications**

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Chemistry	Bharathiar University, Coimbatore.	January 2021
M.Phil.	Chemistry	Bharathiar University, Coimbatore.	January 2016
M.Sc.	Chemistry	PSG College of Arts & Science, Coimbatore.	May 2014
B.Ed	Physical science	Government College of Education, Kumarapalayam, Namakkal.	May 2012
B.Sc	Chemistry	Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore.	May 2011
HDCA	Computer Applications	Computer Software College, Ooty.	December 2008

**Honors and Awards received**

S. No.	Name of the Award	Awarding Agency	National / International
1.	Best Ph.D. Thesis Award	Dr. N.G.P. Arts and Science College, Coimbatore.	National
2.	University Research Fellowship (URF) 2017-2019 meritorious students	Bharathiar University, Coimbatore.	National
3.	University Research Fellowship (URF) 2017-2019 meritorious students	Bharathiar University, Coimbatore.	National
4.	Qualified in Tamil Nadu Teacher Eligibility Test (TET) 2012	Tamil Nadu Teachers Recruitment Board (TNTRB)	National

5.	PG Merit Scholarship for the <b>University Rank holder</b> 2012-2014	University Grants Commission ( <b>UGC</b> ), Delhi.	National
6.	Kuppusamy naidu manickammal endowment <b>special award</b> 2010-2011	Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore.	National
7.	Certificate of merit 2009-2010	Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore.	National
8.	Certificate of merit 2008-2009	Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore.	National

### Research Publications (Indexed)

#### International

#### Year Wise Research Publications

##### 2022

1. S. Shyamsivappan, R. Vivek, T. Suresh, P. Naveen, A. Kaviyarasu, S. Amsaveni, S. Athimoolam and P. S. Mohan, **New N-(3'-acetyl-8-nitro-2,3-dihydro-1H,30Hspiro[quinoline-4,2'-[1,3,4]thiadiazol]-5'-yl) acetamides induced cell death in MCF-7 cells via G2/M phase cell cycle arrest**, New Journal of Chemistry, Vol No.14, January 2022, Volume No. 46, pp. 2817–2828, ISSN No 1369-9261, (Indexed in Web of Science and Scopus) Impact factor- 3.925.
2. D. Anu, P. Naveen, T. Devendhiran, S. Shyamsivappan, K. Keerthika, M. C. Lin, C. S. Frampton & M. V. Kaveri, **Synthesis, Spectral characterization, X-ray crystallography and biological evaluations of Pd(II) complexes containing 4(N)-substituted thiosemicarbazone**, Journal of Coordination Chemistry, January 2022, Vol No. 74, Issue No. 21-22, pp. 3153-3169, ISSN No. 0095-8972 (Indexed in Web of Science and Scopus, Science Citation Index, etc.) Impact factor- 1.869.

##### 2021

3. V. Yasothamani, L. Karthikeyan, S. Shyamsivappan, H. Yuvaraj, S. Dayakar , R. Vivek, **Synergistic Effect of Photothermally Targeted NIR-Responsive Nanomedicine-Induced Immunogenic Cell Death for Effective Triple Negative Breast Cancer Therapy**, ACS Biomacromolecules, Vol No. 22, Issue No. 6, May 2021, pp.2472-2490. ISSN No 1526-4602 (Indexed in Web of Science and Scopus, PubMed, etc.) Impact factor- 6.978.

##### 2020

4. S. Shyamsivappan, A. Saravanan, N. Vandana, T. Suresh, S. Suresh, R. Nandhakumar, and P.S. Mohan, **Novel Quinoline-Based Thiazole Derivatives for Selective Detection of Fe<sup>3+</sup>, Fe<sup>2+</sup>, and Cu<sup>2+</sup> Ions** ACS Omega, Vol No.5, Issue No. 42, October 2020, pp. 27245-27253. ISSN No. 2470-1343, (Indexed in all major databases,) Impact factor- 4.132.

5. S. Shyamsivappan, A. Saravanan, R. Vivek, T. Suresh, R. Shankar, K. M. Gothandam, P.S. Mohan, **Novel Phenyl and Thiophene Dispiro Indenoquinoxaline Pyrrolidine Quinolones Induced Apoptosis via G1/S and G2/M Phase Cell Cycle Arrest in MCF-7 Cells**, *New Journal of Chemistry*, Vol No.14, August 2020, pp.15031-15045, ISSN No 1369-9261, (Indexed in Web of Science and Scopus) Impact factor- 3.925.
6. S. Shyamsivappan, R. Vivek, A. Saravanan, T. Arasakumar, T. Suresh, S. Athimoolam, P.S. Mohan, **A novel 8-nitro quinoline-thiosemicarbazone analogues induces G1/S & G2/M phase cell cycle arrest and apoptosis through ROS mediated mitochondrial pathway**, *Bioorganic Chemistry*, Vol No.97, Issue No. 10370, February 2020, ISSN No 1369-9261, (Indexed in Scopus, Science Citation Index, etc.) Impact factor- 5.307.
7. A. Saravanan, S. Shyamsivappan, K. Naveen Kumar, T. Suresh, M. Nikhil, N. Bhuvanesh, P. Kolandaivel, P.S. Mohan, **Application of Real Sample Analysis and Biosensing: Synthesis of New Naphthyl Derived Chemosensor for Detection of Al<sup>3+</sup> Ions**, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol No. 241, Issue No. 118684, July 2020, ISSN No. 1386-1425, (Indexed in Cambridge Scientific Abstracts, Science Citation Index, Scopus, etc.) Impact factor- 4.831.

## 2019

8. S. Shyamsivappan, R. Vivek, A. Saravanan, T. Arasakumar, G. Subashini, T. Suresh, P.S. Mohan, **Synthesis and X-Ray Study of Dispiro 8-Nitroquinolone Analogues and their Cytotoxic Properties Against Human Cervical Cancer Cells HeLa**, *MedChemComm*, Vol No. 10, pp. 439-449, Jan 2019, ISSN No. 2040-2511, (Indexed in Scopus, Science Citation Index, etc.) Impact factor- 3.470.
9. R. Vivek, V. Yasothamani, S. Shyamsivappan, Y. Haldorai, K. Saravanakumar, **Combinatorial Unique Photothermal Tumor Immunotherapy Against Targeted Triple Negative Breast Cancer Therapy of Dual Modal nanoplatform**, *Annals of Oncology*, Vol No. 30, Issue No.103, December 2019, ISSN No. 0923-7534, (Indexed in PubMed Central, Science Citation Index, Science Citation Index Expanded, etc.) Impact factor- 51.77.
10. A. Saravanan, S. Shyamsivappan, T. Suresh, G. Subashini, K. Kadirvelu, N. Bhuvanesh, R. Nandhakumar, P.S. Mohan, **An Efficient New Dual Fluorescent Pyrene Based Chemosensor for the detection of Bismuth (III) and Aluminium (III) Ions and its Applications in bio-Imaging**, *Talanta*, Vol No. 198, June 2019, pp. 249-256, (ISSN No. 0039-9140, Indexed in Science Citation Index, Scopus, Web of Science, etc.) Impact factor- 6.556.

## 2018

11. T. Arasakumar, S. Shyamsivappan, S. Gopalan, A. Ata, P.S. Mohan, **One-Pot Approach to Pyrido-4-Phenanthridinones by Palladium catalyzed Annulation of 4-Quinolones with 2-Bromobenzyl Bromides**, *Syn lett*, Vol No. 01, Issue No. 30, November 2018, 63-68, ISSN No. 0936-5214, (Indexed in Science Citation Index, Scopus, etc.) Impact factor- 2.454.

12. A. Saravanan, G. Subashini, S. Shyamsivappan, T. Suresh, K. Kadirvelu, N. Bhuvanesh, R. Nandhakumar, P.S. Mohan, **A Selective Fluorescence Chemosensor: Pyrene Motif Schiff Base Derivative for Detection of Cu<sup>2+</sup> Ions in Living Cells**, Journal of Photochemistry & Photobiology A: Chemistry, Vol No. 364, June 2018, pp. 424-432, ISSN No. 1010-6030, (Indexed in Science Citation Index, Scopus, etc.) Impact factor- 5.141.
13. G. Subashini, A. Saravanan, S. Shyamsivappan, T. Arasakumar, V. Mahalingam, R. Shankar, P. S. Mohan, **A Versatile "On-Off-On" Quinoline Pyrazoline Hybrid for Sequential Detection of Cu<sup>2+</sup> and S<sup>2-</sup> Ions towards Bio Imaging and Tannery Effluent Monitoring**. Inorganica Chimica Acta, Vol No. 483, August 2018, pp. 173-179. ISSN No. 0020-1693, (Indexed in Science Citation Index, Scopus, etc.) Impact factor – 3.118

### 2017

14. T. Arasakumar, S. Mathusalini, S. Gopalan, S. Shyamsivappan, A. Ata, P.S. Mohan, **Biologically Active Perspective Synthesis of Heteroannulated 8-Nitroquinolines with Green Chemistry Approach**, Bioorganic & Medicinal Chemistry Letters, Vol No. 27, February 2017, pp.1538-1546. ISSN No. 0960-894X, (Indexed in Web of Science, Science Citation Index, Scopus, etc.) Impact factor - 2.94

### Projects

1. **Seed-money project** grant awarded by Dr. N.G.P. Arts and Science college, 2021-2022.

### Book Publications

1. **B.Sc. Allied Chemistry, Laboratory Manual**, R. Menaka, P. Kavitha, S. Shyamsivappan, Dr. N.G.P. Arts and Science college, 2023, 978-81-960554-1-7.
2. **Physical Chemistry, Laboratory Manual for UG students**, S. Shyamsivappan, M. Myilsamy, Dr. N.G.P. Arts and Science college, 2023, 978-81-960554-0-0.
3. **Anticancer Properties of Palladium Compounds**, D. Anu, P. Naveen, S. Shyamsivappan, M.V. Kaveri, AkiNik Publications, Advanced Research in Chemistry (Volume-5), 2022, 978-93-5570-457-3.
4. **Anticancer Studies of Quinolones**, Selvaraj Shyamsivappan, Thangaraj Suresh, Palathurai Subramaniam Mohan, Scholars' Press, 2021, ISBN: 978-613-8-95017-2.
5. **Synthesis of new pyranoquinoline derivatives for antibacterial study**, Selvaraj Shyamsivappan, Thangaraj Arasakumar, Palathurai Subramaniam Mohan, Lambert Academic Publishing, 2019, ISBN: 978-620-0-21066-1.

### Book Chapters

1. **Bio actives and pharmacology of medicinal plants Volume I, Chemical Characterization and Pharmacology of Magnolia champaca (L.) Baill. Ex Pierre (Chapter 20)**, S. Amsaveni, S. Shyamsivappan, N. Vandana, A. Kaviyarasu, T. Suresh, , CRC Press, CRC press Taylor & Francis group, 2022, ISBN: 978-1-77491-028-3.

2. **Bio actives and pharmacology of medicinal plants Volume I, Biomolecules and Therapeutics of Spathodea campanulata P. Beauv (Chapter 26).**, S. Amsaveni, S. Shyamsivappan, N. Vandana, A. Kaviyarasu, T. Suresh, CRC Press, CRC press Taylor & Francis group, 2022, ISBN: 978-1-77491-028-3.

#### Faculty development programme

1. Participated in 5 days Virtual International Faculty Development Program on "Scope and Developments in Teaching & Research Strategies in Basic Science" Conducted by Sri Ramakrishna College of Arts & Science, Coimbatore from 22 - 26 November 2021.

#### Training/ Workshop Programme

1. Workshop on Recent Advances in Chemical Sciences (RACS-15) organized by Department of Chemistry, Karunya University, Coimbatore on 18<sup>th</sup> & 19<sup>th</sup> -February-2015.
2. Chemical Weapons Convention (CWC) Awareness Programme organized by Department of Chemicals and Petrochemicals, Ministry of Chemicals & Fertilizers, Government of India and Indian Chemical Council, Southern Region on 4<sup>th</sup>-December-2014.
3. Workshop on 1D and 2D NMR Spectroscopy and their application organized by Department of Chemistry, Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore on 13<sup>th</sup>-September-2010.
4. State level Intercollegiate Chemistry Students 'Meet-Exploring Chemistry CHEMFUSION' 09 organized by Department of Chemistry, Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore on 24<sup>th</sup>-July-2009.

#### Scientific Research Articles Presented

1. New quinoline for detection of Cu Ions, **International Virtual Conference on Future Prospects in Chemical Research** organised by the PG & Research Department of Chemistry, Seethalakshmi Ramaswami College, Tiruchirappalli on 21<sup>st</sup> and 22<sup>nd</sup> December 2022.
2. **Regio- and Stereo Selective Synthesis of Dispiro 8-Nitroquinolone Analogues and Their Cytotoxic Properties**, National Seminar on New Perspectives in Chemical Sciences 2019, Department of Chemistry, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, 16<sup>th</sup> & 17<sup>th</sup>-September-2019.
3. **8-Nitro Quinoline Based Thiosemicarbazone Analogues Induced Caspase-3 Dependent Apoptosis On MCF-7 Cells**, International conference on Chemical research and Innovations Today- CRIT 2019, Department of Chemistry, Bishop Heber College, Tiruchirappalli, Tamil Nadu, 24<sup>th</sup>-January-2019.
4. **A Newly Embedded System of Spiro Oxindole Pyrrolo Quinolone Derivatives and Its Anticancer Evaluation**, 4th International conference on Chemical and Environmental Research (ICCER-2018), Department of Chemistry, Jamal Mohamaed College, Tiruchirappalli, Tamil Nadu, 19<sup>th</sup>-December-2018.

5. **A New Quinoline Based “Turn Off” Fluorescent Chemosensor for Recognition of Cu<sup>2+</sup> Ions**, 8th East Asia Symposium on Functional Dyes and Advanced Materials (EAS8-2017), CSIR-NIIST, Thiruvananthapuram, Kerala, 20-22<sup>nd</sup>-September-2017.
6. **Synthesis, Characterization and Antibacterial Study of Novel Pyrano[3,2-C] Quinoline Derivatives**, Emerging Trends in Frontiers of Metal Organic Chemistry, Department of Chemistry, Nirmala College for women, Coimbatore, Tamil Nadu, 18<sup>th</sup>-February-2016.
7. **Removal of Nickel (II) From Aqueous System using Carbon Nanotubes**, National Conference on Advanced Materials for the Emerging Technologies (CAMET-2013), Department of Chemistry, Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore Tamil Nadu, 11<sup>th</sup>&12<sup>th</sup>-July-2013.

#### Participation in National/International Conferences

1. CSIR Sponsored National level seminar on Nanomaterials for Energy Harvesting and Applications, Department of Science and Humanities, KGISL Institute of Technology, Coimbatore, 26<sup>th</sup> August 2022.
2. UGC sponsored National Conference on Advanced Materials for the Emerging Technologies (CAMET-2013), Department of Chemistry, Sri Ramakrishna Mission Vidyalaya College of Arts & Science, Coimbatore, 11<sup>th</sup>& 12<sup>th</sup>-July-2013.
3. Essentials of Spectroscopy, Pericyclic Reactions and Quantum Chemistry-SPQ 2013, Department of Chemistry, Nirmala College of Arts & Science, Coimbatore, 10<sup>th</sup>-January-2013.
4. Fundamentals of Statistical Thermodynamics, Nano Chemistry Corrosion Chemistry, and Spectroscopy-STNCS 2013, Department of Chemistry, Nirmala College of Arts & Science, Coimbatore, 3<sup>rd</sup> &4<sup>th</sup>-September-2013.
5. Intelligence and Emotional Intelligence in Teacher Education, K.R.P College of Education Namakkal, 29<sup>th</sup>-February-2013.

#### Extra-Curricular Activities

- Awareness programme on ***Chemical Weapons Convention (CWC)***” by Department of Chemicals and Petrochemicals, Ministry of Chemicals & Fertilizers, Government of India and Indian Chemical Council, Southern Region on December 2014 at Coimbatore.
- ***“National Service Scheme (NSS)”*** Special camp - **“Healthy Youth for Healthy India”**.
- Inter-Departmental Cultural Competitions 2011-2012
- Awareness programme on ***“Mental Retardation”*** by Ramakrishna Mission Vivekananda University on 2009.