

CURRICULUM VITAE

Dr. R. SIVARAMAKARTHIKEYAN, M.Sc., PhD.,

E-mail: organic.sivaram@gmail.com

Mobile: +91-8122194509



OBJECTIVE: To build a career which allows to maximize my professional talent and develop my inside potential and contribute my wellbeing towards growth of association. To pursue an inspiring and challenging g researcher position to pharma industry in the field of Synthetic Organic Chemistry, Medicinal Chemistry and Drug Discovery.

EDUCATIONAL QUALIFICATION

Ph.D. July-2015 to Aug-2021

Title of the thesis: **“Phenothiazine / Azole Tethered Novel Heterocycles: Design, Synthesis, Biological Evaluation and Molecular Docking Studies”**.

Supervisor: Dr. C. Ramalingan, Professor, Department of Chemistry, School of Advanced Sciences, Kalasalingam Academy of Research and Education, Anand Nagar, Krishnankoil.

M. Sc. June-2013 to May-2015/ 1st Class

Title of the thesis: **“A Novel Catalyst Free Methodology for the Knoevenagel reaction in PEG-400”**.

Supervisor: Dr. C. Ramalingan, Assistant Professor, Department of Chemistry, Kalasalingam Academy of Research and Education, Anand Nagar, Krishnankoil.

B.Sc. June- 2010 – May-2013/ 1st Class

Virudhunagar Hindu Nadar’s Senthikumara Nadar (VHNSN) College, Virudhunagar, Tamilnadu.

PROFESSIONAL EXPERIENCE

Research Assistant

Feb-2016 – Jan-2019

ICMR- Funded Project **“Design of Phenothiazenylpyrimidine Decorated Novel Heterocycles as Antitubercular Agents”**.
Government of India.

Organic Synthesis Laboratory, Department of Chemistry,
Kalasalingam Academy of Research and Education, Krishnan Koil.

University Research Fellow July-2015- Jan-2016

Organic Synthesis Laboratory, Department of Chemistry,
Kalasalingam Academy of Research and Education, Krishnan Koil,
Tamilnadu, India.

LIST OF PUBLICATIONS

1. **R. Sivaramakarthikeyan**, S. Iniyaval, W. M. Lim, C. W. Mai, C. Ramalingan, "Pyrazolylphenanthroimidazole heterocycles: Synthesis, biological and molecular docking studies" *New J. Chem.*, 2020, **44**, 19612-19622.
2. **R. Sivaramakarthikeyan**, S. Iniyaval, V. Saravanan, W. M. Lim, C. W. Mai, C. Ramalingan, "Molecular hybrids integrated with benzimidazole and pyrazole structural motifs: Design, synthesis, biological evaluation and molecular docking studies," *ACS Omega.*, 2020, **5**, 10089-10098.
3. **R. Sivaramakarthikeyan**, A. Karuppasamy, S. Iniyaval, K. Padmavathy, W. M. Lim, C. W. Mai and C. Ramalingan, "Phenothiazine and amide ornamented novel nitrogen heterocyclic hybrids: Synthesis and their biological and molecular docking studies," *New J. Chem.*, 2020, **44**, 4049-4060.
4. **R. Sivaramakarthikeyan**, S. Iniyaval, K. Padmavathy, H. S. Liew, W. M. Lim, C. W. Mai, C. Ramalingan, "Phenothiazine and amide ornamented dihydropyridines via molecular hybridization approach: Design, Synthesis, biological evaluation and molecular docking studies," *New J. Chem.*, 2019, **43**, 17046-17057.
5. K. Padmavathy, K. Gokulakrishnan, C. Udhaya kumar, E. Sathiyaraj, **R. Sivaramakarthikeyan**, W. M. Lim, C. W. Mai and C. Ramalingan, "Novel acrylamide / acrylonitrile tethered carbazoles: synthesis, structural, biological and density functional theory studies," *New J. Chem.*, 2019, **43**, 13418-13429.
6. K. Padmavathy, K. Gokula Krishnan, C. Udhaya Kumar, P. Sutha, **R. Sivaramakarthikeyan**, C. Ramalingan, "Synthesis, antioxidant evaluation, density functional theory study of dihydropyrimidine festooned phenothiazine," *ChemistrySELECT.*, 2018, **3**, 5965-5974.
7. L. Jayalakshmi, K. Stalindurai, A. Karuppasamy, **R. Sivaramakarthikeyan**, V. Devadoss, C. Ramalingan, "A green and facile synthesis of biopertinent pyrazole-decorated nitriles and acrylates under catalyst-free conditions," *Synlett.*, 2015, **26**, 1857-1861.

8. L. Jayalakshmi, A. Karuppasamy, K. Stalindurai, **R. Sivaramakarthikeyan**, V. Devadoss, C. Ramalingan, "Straightforward syntheses of nitriles, acrylates, and acrylamides in aqueous propan-1,2-Diol: A catalyst free and waste free methodology," *Tetrahedron Lett.*, 2015, **56**, 4207-4210
9. L. Jayalakshmi, A. Karuppasamy, K. Stalindurai, **R. Sivaramakarthikeyan**, V. Devadoss, C. Ramalingan, "A Mechanochemical Approach for the Construction of Carbon-Carbon Double Bonds: Efficient Syntheses of Aryl/Heteroaryl/Aliphatic Acrylates and Nitriles," *Catal. Lett.*, 2015, **145**, 1322-1330.
10. **R. Sivaramakarthikeyan**, K. Padmavathy, V. Saravanan, C. Ramalingan, "Novel Benzimidazole Bejeweled Pyrazole: Synthesis, Characterization and Density Functional Theory Studies," *Inter. J. Eng. Advan. Tech.*, 2019, **9**, 260-265.
11. **R. Sivaramakarthikeyan**, K. Padmavathy, S. Iniyaval, C. Ramalingan, "Synthesis and Density Functional Theory Studies of Novel Heterocycle Tethered with Pyrazole and Benzimidazole Structural Motifs," *Inter. J. Eng. Advan. Tech.*, 2019, **9**, 272-277.
12. **R. Sivaramakarthikeyan**, K. Padmavathy, S. Iniyaval, C. Ramalingan, "Synthesis, Characterization and DFT Studies of Benzimidazolylpyrazolylacrylonitrile," *Inter. J. Eng. Advan. Tech.*, 2019, **9**, 266-271.
13. S. Iniyaval, **R. Sivaramakarthikeyan**, K. Padmavathy, V. Saravanan, C. Ramalingan, "Pyrazolylmethylene pyrimidinetrione: Synthesis, Characterization and DFT Studies," *Inter. J. Eng. Advan. Tech.*, 2019, **9**, 289-295.
14. C. Udhaya Kumar, **R. Sivaramakarthikeyan**, K. Gokula Krishnan and M. Velayutham Pillai, C. Ramalingan, "Novel Pyran Derivative Ornamented with free Amino and Nitrile Functionalities: Synthesis and Spectroscopic Characterization," *Inter. J. Eng. Advan. Tech.*, 2019, **9**, 278-282.
15. S. Iniyaval, K. Padmavathy, **R. Sivaramakarthikeyan**, C. Ramalingan, "Synthesis and Density Functional Theory Analysis of Pyrazole integrated Pyrimidinetrione," *Inter. J. Eng. Advan. Tech.*, 2019, **9**, 283-288.

LIST OF PATENTS

1. C. Ramalingan, **R. Sivaramakarthikeyan**, S. Iniyaval, S. Shasi Anand, "Phenothiazinyl dihydropyrimidines as anticancer agents and process of preparation thereof", *Indian Patent*, 2021, Grant No. 380892.

2. C. Ramalingan, **R. Sivaramakarthikeyan**, S. Iniyaval, S. Shasi Anand, “Phenothiazinyl dihydropyridines as anticancer agents and process of preparation thereof”, *Indian Patent*, 2022, Grant No. 387389.

CONFERENCES / WORKSHOP / SYMPOSIA / SEMINAR ATTENDED

1. **R. Sivaramakarthikeyan** and Chennan Ramalingan “Benzimidazole ornamented pyrazoles through molecular hybridization approach: design, synthesis, biological evaluation and molecular docking studies” presented a poster at International Conference on Synergy of Sciences (ICSS-2020) in 27th-29th Feb 2020 organized by the Department of Chemical and Biotechnology, SASTRA University, Thanjavur, India.
2. **R. Sivaramakarthikeyan** and Chennan Ramalingan “Phenothiazine ornamented Dihydropyridines: Design, Synthesis, Biological Evaluation and Molecular Docking Studies” presented a poster at 17th IAAM National Conference on Microbiology in the New Millennium (IAAM-2019) in 29th-30th Nov 2019 organized by the Department of Biotechnology, Kalasalingam Academy of Research and Education, Krishnankoil, India.
3. **R. Sivaramakarthikeyan**, K. Padmavathy, S. Iniyaval and C. Ramalingan, “Synthesis and Density Functional Theory Studies of Novel Heterocycle Tethered with Pyrazole and Benzimidazole Structural Motifs,” presented a paper at International Kalasalingam Global Conference on Sustainable Development (KGC-2019) in 18th -20th Dec 2019 organized by Department of Chemistry, School of Advanced in Science, Kalasalingam Academy of Research and Education, Krishnankoil, India.
4. **R. Sivaramakarthikeyan** and Chennan Ramalingan “Fused Thiazine and amide tethered dihydropyrimidines: Design, synthesis, biological evaluation and molecular docking studies” presented a poster at Medicinal Chemistry Conference on Natural Products Prospecting for Therapeutic Applications (MEDCHEM-2019) in 01st-02nd Nov 2019 organized by the Department of Chemistry, Indian Institute of Technology, Madras, India.
5. International Hands on Workshop “Molecular Modelling for Drug and Material Design” in 18th-21st June 2019 organized by Faculty of Science, Department of Chemistry, Annamalai University & Schrodinger Inc, Annamalai nagar, Chidambaram, Tamilnadu, India.
6. **R. Sivaramakarthikeyan** and Chennan Ramalingan “Design of Fused Thiazine Integrated Novel Dihydropyridinedicarboxamides as Biological Agents” presented a poster at National Conference on Organic Molecules as Synthons & Reagents for Innovations (OMSRI-2019) in 08th-10th Feb 2019 organized by the Department of Chemistry, Indian Institute of Technology, Roorkee, Uttarakhand, India.

7. **R. Sivaramakarthikeyan** and Chennan Ramalingan “Design and synthesis of novel Phenothiazine Fesooned Dihydropyrimidines as Anti-tubercular Agents” presented a poster at 24th ISCB International Conference on Frontier Research in Chemistry & Biology Interface (ISCBC-2018) in 11th-13th Jan 2018 organized by the Department of Chemistry, Manipal University, Jaipur, Rajasthan, India.
8. **R. Sivaramakarthikeyan** and Chennan Ramalingan “Design and Synthesis of Novel Phenothiazine Decorated Pyridine Based Heterocycles as Antitubercular Agents” presented a poster at 5th National Conference on Advanced Functional Materials and Applications (NCAFMA-2017) in 30th-31st March 2017 organized by the Department of Chemistry, Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu, India.

EXPERICES

Analytical skills	Well versed in UV-Vis, FT-IR, and NMR, MS, Elemental Analysis and purification of organic compounds using chromatography method.
Computer skills	Origin, MS-Office, MS-excel, PowerPoint, NMR software, 3D-ChemBioDraw, Chem Draw Ultra, Auto Dock. Literature Survey using Google Scholar, Scifinder and Cross fire commander
Practical skills	Synthesizing organic heterocyclic molecules for medicinal purpose and also other applications. Purification of organic compounds by chromatographic techniques like column chromatography, Preparative TLC, Flash column chromatography, purification by crystallization and washing with solvents and by using the various instruments. (eg: Isolera, Grace)

PERSONAL DETAILS

Name	R. Sivaramakarthikeyan
Nationality	Indian
Gender	Male
Marital status	Unmarried
Religion	Hindu

Language known	Tamil & English
Date of birth	24 / 04 / 1993
Permanent & Mailing Address	2/186, Kaliamman Kovil Street, Vilampatti (Po.), Sivakasi (Tt.) - 626124, Virudhunagar (Dt.), Tamil Nadu, India.

REFERENCES

Dr. C. Ramalingan
Professor & Supervisor
Department of Chemistry
School of Advanced Sciences (SAS)
Kalasalingam Academy of Research and Education
Anand Nagar, Krishnankoil - 626 126
Tamilnadu, India.
E-Mail: ramalinganc@gmail.com
Phone: +91-8489736207

Dr. E. R. Nagarajan
Associate Professor
Department of Chemistry
School of Advanced Sciences (SAS)
Kalasalingam Academy of Research and Education
Anand Nagar, Krishnankoil - 626 126
Tamilnadu, India.
E-Mail: nagarajanklu@gmail.com
Phone: +91-9976204859

DECLARATION

I hereby declare that the information provided above, are true to the best of my knowledge.

Place: Sivakasi

Sincerely Yours

Date: 04.04.2022



(R. SIVARAMAKARTHIKEYAN)