



BIO-DATA
OF
Dr. T. R. SWAROOP
M.Sc., Ph.D.,
(TORESHETTAHALLY RAMESH SWAROOP)
Assistant Professor of Organic Chemistry
Department of Studies in Organic Chemistry
University of Mysore, Manasagangotri
Mysuru – 570 006, Karnataka, India

PLACE AND DATE OF BIRTH

Toreshettahally, Karnataka, India, Born on 16th June, 1987.

CONTACT INFORMATION

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S/o Late T. K. Ramesh
#421, Vidya Nagar
Maddur-Malavalli road
Maddur-571 428, Mandya District
Karnataka, India

PERSONAL INFORMATION

Father's Name : Late T. K. Ramesh
Mother's Name : Saralavathi
Spouse Name : A. S. Punyashree
Sex : Male
Nationality : Indian
Marital Status : Married
Languages known : English, Hindi and Kannada
Mother tongue : Kannada

EDUCATION DETAILS

Course/Exam /Position	Institution/University	Year	Remarks
B.Sc. (P.C.M)	Bharathi College Bharathi nagara, Mandya, Karnataka	2007	Distinction 8 Gold Medals & 7 Cash Prizes
M.Sc. (Chemistry)	Department of Studies in Chemistry, University of Mysore, Mysuru, Karnataka	2009	Distinction 3 Gold Medals & 1 Cash Prize
NET (Chemical Science)	Council of Scientific and Industrial Research (CSIR) New Delhi, India	2009	Qualified as CSIR-JRF
Ph.D (Chemistry)	Department of Studies in Chemistry, University of Mysore, Mysore, Karnataka	2014	Awarded in March - 2014
Postdoctoral	Department of Chemistry, Memorial University of Newfoundland, St. John's, Canada	2017	Awarded by Shastri Indo-Canadian Institute
Postdoctoral	School of Chemistry and Pharmaceutical Sciences Guangxi Normal University Guilin, China	2018	Fellowship from Guangxi Normal University
Visiting Scientist	Yildiz Technical University, Istanbul, Turkey	2020	Funded by TUBITAK
Visiting Scientist	Utrecht University, Utrecht, The Netherlands	2020-21	Funded by NWO
Visiting Scientist	Yildiz Technical University, Istanbul, Turkey	2022	Funded by TUBITAK

RESEARCH AREA

Synthesis of heterocyclic compounds, organosulfur chemistry, study of biological activities (anti-cancer, antibacterial, antioxidant, anti-inflammatory, cholinesterase inhibition, etc.), materials chemistry, computational chemistry, green chemistry, isocyanide chemistry, electro-organic synthesis and history of chemical science.

CITATION INDICES (Google Scholar)

Total citations : 1728

h-index : 26

i10-index : 49

RESEARCH ACCOMPLISHMENTS

I am actively engaged in the development of new synthetic methods for heterocyclic compounds. I have worked on exploring synthetic applications of β -thioxoketones and β -methylthio- α,β -unsaturated ketones for the synthesis of thiophene, isoxazole, thiazole and quinoline derivatives in my doctoral degree. In Canada, I have synthesized new oligothiophenes and polythiophenes, which may be potential candidates for application in solar cells and organic light emitting diodes. Also, I am using density functional theory for calculations in materials science. In China, I have worked on development of new organic electrochemical reactions. As a visiting scientist in Turkey, I have developed new synthetic methods for β -enaminones and amidines. Later, as a visiting scientist in the Netherlands, I have developed new carbohydrate ligands to treat *Pseudomonas aeruginosa* infections.

In addition, I have used cascade protocol for the synthesis of thiazolidinones, oxazoles and 2-arylquinolines from alcohols in T3P-DMSO media. Furthermore, I have synthesized biologically important molecules and explored them for antimicrobial, anti-inflammatory, anti-oxidant, anticancer, cholinesterase inhibition and platelet aggregation inhibition activities.

So far, I have developed many organosulfur building blocks such as dithioesters, xanthate esters, α -oxodithioesters, α -oxothioamides, α -oxothioesters, methyl *N(N),N'*-di(tri)substituted carbamimidothioates, thioimidates, 2-oxo-2-(amino)ethanedithioates, *S*-methyl thiouronium salts, alkyl 2-(methylthio)-2-thioxoacetates and 2,3-bis(methylthio)-1,4-di(het)arylbut-2-ene-1,4-diones and explored their applications for the synthesis of heterocyclic compounds such as quinoxalines, benzoxazoles, quinazolinones, 1,3-benzothiazinones, 1,3,4-thiadiazoles, 1,3,4-oxadiazoles, 1,2,4-thiadiazoles, thiazoles, benzimidazoles, pyridazines, tetrazoles, imidazoles, imidazo[1,5-*a*]quinoxalines etc and other compounds like β -enaminones, thioethers, carbamothioates and amidines.

Besides, in the area of green chemistry, I have employed choline chloride–urea ionic liquid for the synthesis of 4*H*-chromenes and pyranopyrazoles. I have reported solid phase regiospecific synthesis of 1,2- disubstituted 4-quinolones from enaminones. Furthermore, I have also reported the electrochemical sulfonylation of thiols with sulfonyl hydrazides, dehydrogenative coupling of alcohols with hydrogen phosphoryl compounds by employing electricity and reductive coupling of aromatic aldehydes and ketones under electrochemical conditions and, synthesized 1,2,4-thiadiazoles and 1,3,4-thiadiazoles by electrogenerated iodine.

In the area of isocyanide chemistry, I have used tosylmethyl isocyanide, isocyano acetates and benzyl isocyanides for the synthesis of thiazoles, oxazoles, imidazoles, carbamothioates and imidazo[1,5-*a*]quinoxalines.

Recently, I have been involved in research on history of chemical science, writing reviews and textbooks.

MEDALS, PRIZES AND AWARDS

1. Prof. D. S. Mahadevappa Gold Medal for **Chemistry** in **B.Sc.**
2. Prof. B. Syed Ali Gold Medal for **Chemistry** in **B.Sc.**
3. Sidlaghatta Rama Rao Gold Medal for **Physics** in **B.Sc.**
4. Sri. L. Prameshchandra Endowment Gold Medal for **Physics** in **B.Sc.**
5. Prof. M. V. Sridhar Gold Medal for **Mathematics** in **B.Sc.**
6. The Principal M Munigaviyappa Gold Medal for **Mathematics** in **B.Sc.**

7. Alamelammal H Ramanuja Iyengar Gold Medal for **B.Sc.**
8. The S. R. Dharma Pravarthan Anbil S Ramaswamy Iyengar Gold Medal for **B.Sc.**
9. M. Gopalaswamy Memorial Prize for **B.Sc.**
10. Prof. K. Sheshadri Iyengar Endowment for **B.Sc.**
11. Prof. H. Sankegowda Cash Prize for **B.Sc.**
12. The Prof. B. S. Mahadeva Rao Prize for **B.Sc.**
13. The Graduate Co-operative Bank Golden Jubilee Memorial Cash Prize for **B.Sc.**
14. Prof. N. Ramaiah Cash Prize for **B.Sc.**
15. Prof. S. V. Keshava Hegde Memorial Prize for **B.Sc.**
16. Sathyabhama Devi Roy Gold Medal for **Organic Chemistry** in **M.Sc.**
17. Prof. C. Anjanamurthy Gold Medal for **Organic Chemistry** in **M.Sc.**
18. Prof. Vrushabendrappa Endowment Gold Medal for **Organic Chemistry** in **M.Sc.**
19. Prof. M. G. Sreenivasa Rao Memorial Cash Prize for **M.Sc.**
20. Young Researcher Award – 2020 from Institute of Scholars, India
21. Best Researcher Award – 2021 from VDGOD Professional Association, India
22. Award for Excellence in Research - 2021 from Hypedge Media and I CAN Foundation, India

MEMBERSHIP IN PROFESSIONAL BODIES/ORGANIZATIONS

1. Life Member of Indian Science Congress Association (Membership No. L27085)
2. Life Member of Indian Society of Chemists and Biologists
3. Member of Materials Today-Connecting the Materials Community
4. Life member of Institute of Scholars, India

REFRESHER COURSES TAKEN

1. Online Refresher Course in Chemistry for Higher Education Faculty – 2020

SOCIAL RECOGNITIONS

1. Pratibha Puraskara – 2007 from Bharathi College, Bharathi nagara, Mandya
2. Pratibha Puraskara – 2007 from District Press Reporters Forum, Mandya
3. Yugadi Puraskara – 2008 from Chaithanya Balaga, Mandya

4. Attended **Republic Day Parade – 2008, New Delhi** as a guest of **Hon’ble Prime Minister of India** for excellent performance in academics (B.Sc.)
5. Republic Day Felicitation – 2012 from National Festival Celebration Committee - Maddur for accomplishments in the field of education

RESEARCH EXPERIENCE

1. Worked as Research Associate in **Astra Zeneca India, Pvt. Ltd.** from August - 2009 to January - 2010.
2. Worked as a Council of Scientific and Industrial Research – Junior and Senior Research Fellow (CSIR - JRF & SRF) for **Ph. D.** degree in **Chemistry** entitled “**Regiospecific approach for the synthesis of thiophene, isoxazole, thiazole and quinoline derivatives**” under the guidance of **Prof. K. S. Rangappa**, University of Mysore, Mysuru from January - 2010 to July - 2013.
3. Worked as a Shastri Postdoctoral Fellow at the **Memorial University of Newfoundland**, St. John’s, Canada under the guidance of **Prof. Paris E Georghiou** from June to August - 2017.
4. Worked as a Postdoctoral Fellow at the **Guangxi Normal University**, Guilin, China under the guidance of **Prof. Heng-Shan Wang, Prof. Ying-Ming Pan and Dr. Hai-Tao Tang** from April to August – 2018.
5. Worked as a Visiting Scientist at the **Yildiz Technical University**, Istanbul, Turkey in collaboration with **Prof. Dr. Lokman Torun** in February – 2020.
6. Worked as a Visiting scientist at the **Utrecht University**, Utrecht, The Netherlands in collaboration with **Prof. Roland J Pieters** from December – 2020 to January - 2021.
7. Worked as a Visiting Scientist at the **Yildiz Technical University**, Istanbul, Turkey in collaboration with **Prof. Dr. Lokman Torun** from May – 2022 to July - 2022.

TEACHING EXPERIENCE

1. Worked as a guest lecturer for Integrated M.Sc. Chemistry and M.Sc. Organic Chemistry at the Department of Studies in Chemistry, University of Mysore, Mysuru for the year 2010 -11 and 2011-12.
2. Worked as a guest lecturer for M.Sc. Chemistry at the Department of Chemistry, Davangere University, Davangere for the year 2013-14.

3. Worked as an Assistant Professor of Chemistry at Regional Institute of Education, Mysore for the years 2014-15, 2015-16 and 14-06-2016 to 03-10-2016.
4. Working as an Assistant Professor of Organic Chemistry at the Department of Studies in Organic Chemistry, University of Mysore, Manasagangotri, Mysuru from 04-10-2016.

CO-CURRICULAR ACTIVITIES

1. Trained in National Cadet Corps (NCC) for two years in Junior Division (JD) and four years in Senior Division (SD) where obtained the cadet rank - **Junior Under Officer** (JUO).
2. Certificate 'A' passed with 'C' grade.
3. Certificate 'B' passed with 'B' grade.
4. Certificate 'C' passed with 'B' grade.
5. Attended many training camps such as Annual Training Camp (ATC) and Combined Annual Training Camp (CATC).
6. Attended State level **Thal Sainik Camp** (TSC) representing the Mysore group.

COUNTRIES VISITED

Canada, China, Turkey, The Netherlands, Japan.

RESEARCH COLLABORATIONS

1. **Prof. K. S. Rangappa**, Distinguished Professor, University of Mysore, Mysuru, India.
2. **Dr. Basappa**, Department of Studies in Organic Chemistry, University of Mysore, Mysuru, India.
3. **Prof. K. Mantelingu**, Department of Studies in Chemistry, University of Mysore, Mysuru, India.
4. **Dr. M. Umashankara**, Department of Chemistry, Karnataka State Open University, Mysuru, India.
5. **Prof. M. Y. Sreenivasa**, Department of Studies in Microbiology, University of Mysore, Mysuru, India.
6. **Prof. Paris E Georghiou**, Department of Chemistry, Memorial University of Newfoundland, St. Johns, Canada.
7. **Prof. Lokman Torun**, Department of Chemistry, Yildiz Technical University, Istanbul, Turkey.

EDITORIAL BOARD OF JOURNALS

1. Member of *Journal of Modern Polymer Chemistry and Materials*

2. Member of *Journal of Organic Chemistry Synthesis and Process Development*
3. Section Editor to *Current Indian Science*
4. Member of *American Journal of Heterocyclic Chemistry*
5. Member of *Edwin Group of Journals*

REVIEWER TO JOURNALS

Oriental Journal of Chemistry, Journal of Pharmaceutical Research International, Current Indian Science, Journal of Modern Polymer Chemistry and Materials, European Journal of Medicinal Plants, Journal of Modern Agriculture and Biotechnology, Anti-cancer Agents in Medicinal Chemistry, Asian Journal of Research in Botany, Journal of Basic and Applied Research International, Asian Journal of Education and Social Studies, Asian Journal of Advances in Research, Innovation Discovery, Qeios, Scientific Reports, Journal of Heterocyclic Chemistry, New Journal of Chemistry, The Journal of Organic Chemistry, Chemistry - An Asian Journal, ACS Nano, Topics in Catalysis, Asian Journal of Organic Chemistry.

SEMINARS, LECTURE SERIES, WORKSHOPS, CONFERENCES, SYMPOSIA, FACULTY DEVELOPMENT PROGRAMMES ATTENDED/ORGANIZED

1. State level seminar on **Einsteinian Physics – A Retrospect** held on 16th & 17th December 2005 organized by Department of Physics, JSS College for women, Saraswathipuram, Mysore, Karnataka, India (Participation).
2. National seminar-cum-workshop on **Knowledge Construction in Physics** held on 17th – 19th February, 2006 at JSS College for women, Saraswathipuram, Mysore, Karnataka, India (Participation).
3. **International Symposium on Challenges in Drug Discovery Programme (ISCDDP-2011)** held on 16th – 17th February, 2011 at Karnataka State Open University, Manasagangotri, Mysuru, Karnataka, India (Poster presentation and member of organizing committee).
4. National conference on **Recent Trends in Chemistry (RTC-2011)** held on 16th & 17th September, 2011 at Department of Chemistry, PES college of Science, Arts and Commerce, Mandya, Karnataka, India (Participation).
5. **International Conference on Synthetic and Structural Chemistry (ICSSC-2011)** held on 8th – 10th December, 2011 at the Department of Chemistry, Mangalore University, Mangalagangotri, Mangalore, Karnataka, India (Participation).

6. National lecture series on **Bio-Prospecting for sustainable development** held on 29th & 30th November, 2012 at the University of Mysore, Manasagangotri, Mysuru, Karnataka, India (Participation).
7. National conference on **Recent Trends in Bioorganic Chemistry and its Application to Society** held on 26 & 27th September, 2014 at Sarada Vilas College, Krishnamurthypuram, Mysuru, Karnataka, India (Participation).
8. Workshop on **Computational Methods in Small Molecule and Bio-Pharmaceutical Drug Discovery** held on 7 – 9th May 2015 at University of Mysore, Mysuru, Karnataka, India (Participation).
9. One-day National Seminar on **Chemistry and Chemical Biology** held on 26th May, 2015 on the occasion of Prof. K. S. Rangappa's 60th birth day at the University of Mysore, Manasagangotri, Mysuru, Karnataka, India (Participation).
10. Plenary talks and Panel discussion on **Genetics Today** held on 10th October, 2015 at University of Mysore, Mysuru, Karnataka, India (Participation).
11. **The 103rd Indian Science Congress** held on 3 - 7th January, 2016 at the University of Mysore, Manasagangotri, Mysuru, Karnataka, India (Participation).
12. **International Conference on Science and Technology: Future Challenges and Solutions** held on 8- 9th August, 2016 at University of Mysore, Mysuru, Karnataka, India (Participation).
13. **Summer Organic Chemistry Conference on Everybody's Research (SOCCER)** held on 14th and 15th August 2017 at the Department of Chemistry, Memorial University of Newfoundland, St. John's, Newfoundland Labrador, Canada (Oral presentation).
14. International Symposium on **Developing Drugs for Tomorrow (Challenges and opportunities)** on 1st and 2nd January, 2018 at Adichunchanagiri Institute for Molecular Medicine, B G Nagara, Karnataka, India (Poster presentation).
15. **Biodiversity and Bio-prospecting for Sustainable Development – 2018 (BBSD-2018)** held on 23rd and 24th February, 2018 at Institution of Excellence, University of Mysore, Mysuru, Karnataka, India (Oral Presentation).
16. **International Conference on Nanomaterials and their applications** held on 1st and 2nd March, 2018 at the University of Mysore, Mysuru, Karnataka, India (Poster presentation).

17. **Recent Innovations in Medicinal and Material Chemistry (RIMMC - 2019)** held on 8th and 9th March 2019 at the University of Mysore, Mysuru, Karnataka, India (Organizing committee member).
18. **Advanced Materials for Health, Energy and Environment (AMHEE - 2019)** held on 6th and 7th September, 2019 at the JSS Science and Technology University, Mysuru, Karnataka, India (Oral presentation).
19. National conference on **“Science and Technology: Rural Development”** held on 17th and 18th October, 2019 at the University of Mysore, Mysuru, Karnataka, India (Oral presentation).
20. National conference on **“Innovations in Chemical Sciences (NCICS - 2020)”** held on 30th and 31st January, 2020 at the University of Mysore, Mysuru, Karnataka, India (Organizing committee member).
21. Inauguration of **Organic Chemical Society** held on 30th March, 2021 at the Department of Studies in Organic Chemistry, University of Mysore, Mysuru, Karnataka, India (Speech title: New gateways for the synthesis of β -enaminones).
22. **A lecture series** held on 22nd December, 2021 at Excel Public School, Mysuru, Karnataka, India (Invited talk: Carbon and its compounds, and hydrocarbons).
23. One day national symposium on **“Trends in Drug Discovery”** held on 26th February, 2022 at the University of Mysore, Mysuru, Karnataka, India (Organizing committee member).
24. **62nd Annual International Conference of Association of Microbiologists of India** held on 21st to 23rd September 2022 at the University of Mysore, Mysuru, Karnataka, India (Poster presentation).
25. **A lecture series** at Reva University, Bengaluru, Karnataka, India, held on 28th March, 2023. (Invited talk: Green synthetic transformations using ionic liquid, solid-phase supports and electricity).
26. Valedictory of **Organic Chemical Society** on the theme **“Research in Chemistry - Now and Then”** held on 19th August, 2023 at the Department of Studies in Organic Chemistry, University of Mysore, Mysuru, Karnataka, India (Speech title: Green synthetic transformations using ionic liquid, solid-phase supports and electricity).

27. **Special lecture programme** held on 8th November, 2023 at Government Science College, Hassan, Karnataka, India (Invited talk: Green synthetic transformations using ionic liquid, solid-phase supports and electricity).
28. **93rd Annual Session of the Academy (NASI)** held on 3rd to 5th December, 2023 at Baba Atomic Research Centre (BARC), Mumbai, Maharashtra, India (Poster presentation).
29. **International Congress on Green Environmental Catalysis** held on 1st to 3rd February, 2024 at Osaka, Japan organized by World Chemistry Forum (Invited talk: Green synthetic transformations).
30. One day conference on **Recent Advances in Organic Chemistry and Medicinal Chemistry** held on 2nd March, 2024 organized by Organic Chemical Society of the Department of Studies in Organic Chemistry, University of Mysore, Mysuru, Karnataka, India (Speech title: Synthetic applications of α -oxodithioesters).
31. A national symposium on **New Vistas in Chemical Sciences** held on 4th March, 2024 organized by the Department of Studies and Research in Organic Chemistry, Tumkur University, Tumakuru, Karnataka, India (Invited talk: Synthetic applications of α -oxodithioesters).
32. **National Level Seminar on Emerging Trends in Chemistry: From Synthesis to Applications** held on 26th March, 2024 organized by the Department of Chemistry, Periyar Maniammai Institute of Science and Technology, Thanjavur, Tamil Nadu, India (Invited talk: Synthetic applications of dithioesters).
33. **A guest lecture** held on 28th June, 2024 at the JSS College of Pharmacy, Mysuru, Karnataka, India (Invited talk: Green synthetic transformations).
34. **National conference on Recent Advances in Organic Chemistry** held on 6th and 7th January, 2025 organized by the Department of Studies in Organic Chemistry, University of Mysore, Karnataka, India in collaboration with Malaviya Mission Teachers Training Centre funded by Rashtriya Uchchatar Shiksha Abhiyan (Speech title: Synthesis and applications of dithioesters).
35. A workshop on **Innovations in Chemistry and their Applications** held from 24th to 30th January, 2025 (delivered talk on 27th January, 2025) organized by the Department of Studies in Organic Chemistry, University of Mysore, Karnataka, India in collaboration with

Malaviya Mission Teachers Training Centre funded by Rashtriya Uchchatar Shiksha Abhiyan (Organizing Secretary and Speech title: Green Chemistry).

36. A workshop on **Innovations in Chemistry and their Applications** held from 24th to 30th January, 2025 (delivered talk on 28th January, 2025) organized by the Department of Studies in Organic Chemistry, University of Mysore, Karnataka, India in collaboration with Malaviya Mission Teachers Training Centre funded by Rashtriya Uchchatar Shiksha Abhiyan (Organizing Secretary and Speech title: New gateways for the synthesis of β -enaminones).
37. Faculty Development Programme on **Recent Innovations in Energy, Health and Environment** held from 10th to 14th February, 2025 (delivered talk on 12th February, 2025) organized by the Adichunchanagiri School of Natural Sciences, Adichunchanagiri University, B G Nagara, Karnataka, India (Speech title: Synthesis and applications of dithioesters).

WEBINARS/VIRTUAL CONFERENCES ATTENDED/ORGANIZED

1. A webinar on “Opportunities & Challenges in Drug Discovery & Development!” organized by Elsevier and Dr. Reddy’s Institute of Life Sciences on 16th July, 2020.
2. A webinar on “Understanding Research Ethics and Integrity and Integrity in Academia” organized by Wiley on 21st July, 2020.
3. A webinar on “Materials Innovation for Energy and Water” organized by Materials Today on 22nd July, 2020.
4. A webinar on “Peer Review: The Backbone of the Publishing Process” organized by Wiley on 30th July, 2020.
5. A webinar on “ACS Science Talks: Molecular Engineering: Small Peptides Mimicking Proteins” organized by ACS India on 26th August, 2020.
6. A webinar on “Computer Assisted New Chemical Structure Elucidation – from ACD Labs” organized by DOS in Organic Chemistry, University of Mysore, Mysuru on 21st September, 2020.
7. A webinar on “Anton Paar Solutions for Microwave Synthesis” organized by DOS in Organic Chemistry, University of Mysore, Mysuru on 29th September, 2020.
8. An international webinar on “Trends in Chemical Science: Challenges and Opportunities” organized by St. Philomena’s college, Mysore from 4th to 6th November, 2020.

9. “One Day National Workshop: ICT Tools for Chemistry Teachers” held on 22nd February, 2021.
10. A virtual conference on “Recent advances in chemical science and medicinal chemistry” held on 14th March, 2022 at the University of Mysore, Mysuru (Organizing Secretary).

GRANTS RECEIVED

1. Shastri Conference and Lecture Series Grant by Shastri Indo-Canadian Institute, India, 2022 (₹ 42,500/-)

TEXTBOOKS WRITTEN

1. A textbook on ‘Chemistry of Heterocyclic Compounds’. **T. R. Swaroop**, K. M. Mahadevan, K. S. Rangappa, Notion Press, **2020** (ISBN: 9781636064550).
2. A book on ‘History of Chemical Science – Biographies of Chemists Volume I’. **T. R. Swaroop**, K. S. Rangappa, Notion Press, **2020** (ISBN: 9781637149676).
3. A textbook on ‘Reduction and Oxidation’. **T. R. Swaroop**, K. M. Mahadevan, K. S. Rangappa, Notion Press, **2021** (ISBN: 9781638507734).
4. A book on ‘History of Chemical Science – Biographies of Chemists Volume II’. **T. R. Swaroop**, K. S. Rangappa, Notion Press, **2024** (ISBN: 9798894465586).
5. A book on ‘Practical Organic Chemistry’. **T. R. Swaroop**, K. S. Rangappa, College Book House, **2025** (In progress).

BOOK CHAPTERS WRITTEN

1. **T. R. Swaroop**,* K. S. Rangappa. “Green synthetic transformations using ionic liquid, solid-phase supports and electricity”. **New Innovations in Chemistry and Biochemistry**. B P International. **2022**, 7, 69-86. (ISBN: 978-93-5547-478-0).
2. **T. R. Swaroop**,* M. P. Sadashiva, K. S. Rangappa. “Applications of activated methylene isocyanides in the synthesis of azoles”. **Recent Progress in Chemical Science Research**. B P International. **2023**, 6, 77-93. (ISBN: 978-81-19054-02-2).
3. **T. R. Swaroop**,* K. H. Narasimhamurthy, M. Umashankara K. S. Rangappa. “N-Heterocycles as cytotoxic agents”. **Novel Aspects on Chemistry and Biochemistry**. B P International. **2023**, 6, 135-148. (ISBN: 978-81-19491-86-5).
4. **T. R. Swaroop**,* M. Umashankara K. S. Rangappa. “Thioimides as versatile building blocks: Synthesis and their applications”. **Recent Developments in Chemistry and Biochemistry Research**. B P International. **2024**, 5, 90-108. (ISBN: 978-81-977712-8-6).

5. **T. R. Swaroop**,* R. N. Suresh, M. Umashankara, K. S. Rangappa. "Synthesis and applications of xanthate esters". **Chemistry and Biochemistry: Research Progress**. B P International. **2025**, 1, 111-122. (ISBN: 978-93-49238-76-3).
6. **T. R. Swaroop**,* R. N. Suresh, M. Umashankara, K. S. Rangappa. "Synthesis and applications of α -oxodithioesters". **Chemistry and Biochemistry: Research Progress**. B P International. **2025**, 4, 106-119. (ISBN: 978-93-49473-13-3).

PATENTS

1. S. M. Anil, **T. R. Swaroop**, A. C. Vinayaka, K. R. Kiran, K. S. Rangappa, M. P. Sadashiva. "Cytotoxic activity of 5-acyl-4-methylthiothiazoles against cutaneous T-Cell lymphoma". Indian Patent **2021** (Patent Application No.: 202141033826; Patent No.: 552579).

RESEARCH PUBLICATIONS

1. G. S. Lingaraju, **T. R. Swaroop**, A. C. Vinayaka, K. S. Sharath Kumar, M. P. Sadashiva, K. S. Rangappa. "An easy access to 4,5-disubstituted thiazoles via base-induced click reaction of active methylene isocyanides with methyl dithiocarboxylates". **Synthesis** **2012**, 44(9), 1373-1379. (ISSN: 0039-7881; Impact Factor: 2.9).
2. K. S. Sharath Kumar, **T. R. Swaroop**, K. B. Harsha, K. H. Narasimhamurthy, K. S. Rangappa. "T3P® - DMSO mediated one pot cascade protocol for the synthesis of 4-thiazolidinones from alcohols". **Tetrahedron Lett.** **2012**, 53(42), 5619-5623. (ISSN: 0040-4039; Impact Factor: 2.4).
3. C. N. Revanna, **T. R. Swaroop**, G. M. Raghavendra, D. G. Bhadregowda, K. Mantelingu, K. S. Rangappa. "Practical and green protocol for the synthesis of substituted 4*H*-chromenes using room temperature ionic liquid choline-chloride – urea". **J. Heterocycl. Chem.** **2012**, 49(4), 851-855. (ISSN: 1943-5193; Impact Factor: 2.4).
4. M. Prabhuswamy, **T. R. Swaroop**, S. Madan Kumar, K. S. Rangappa, N. K. Lokanath. "2-(4-Chlorophenyl)-6-methyl-4-(3-methylphenyl)quinoline". **Acta Cryst.** **2012**. E68, o3250. (ISSN: 2056-9890; Impact Factor: 0.4).
5. **T. R. Swaroop**, R. Roopashree, H. Ila, K. S. Rangappa. "Attempted Simmon-Smith reaction on β -alkylthio- α,β -unsaturated ketones: a regiospecific synthesis of 2,4-disubstituted thiophenes". **Tetrahedron Lett.** **2013**, 54(2), 147-150. (ISSN: 0040-4039; Impact Factor: 2.4).
6. **T. R. Swaroop**, H. Ila, K. S. Rangappa. "Cyclocondensation of β -(aryl/heteroaryl)methylaminoenones with thionyl chloride: a facile general approach for the synthesis of 2,4-bis(het)aryl-5-(het)aroylthiazoles". **Tetrahedron Lett.** **2013**, 54(39), 5288-5292. (ISSN: 0040-4039; Impact Factor: 2.4).

7. K. H. Narasimhamurthy, S. Chandrappa, K. S. Sharath Kumar, **T. R. Swaroop**, K. S. Rangappa. "Synthetic utility of propylphosphonic anhydride – DMSO media: an efficient one-pot three component synthesis of 2-aryl quinolines". **Chem. Lett.** **2013**, 42(9), 1073-1075. (ISSN: 0366-7022; Impact Factor: 1.6).
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DECLARATION

The information furnished above is correct to the best of my knowledge and belief.

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