

ரா. ரஞ்சித் குமார்
இணைப் பேராசிரியர்
வேதியியல் துறை
தமிழ்நாடு மத்திய
பல்கலைக்கழகம்
திருவாரூர் – 610005

Dr. R. RANJITH KUMAR
Associate Professor
Department of Chemistry
Central University of Tamil Nadu
Thiruvarur – 610005
Tamil Nadu, INDIA

डॉ. रा. रंजीत कुमार
सह-प्राध्यापक
रसायन विज्ञान विभाग
तमिलनाडु केन्द्रीय विश्वविद्यालय
तिरुवरूर – 610005

E-mail: ranjithkumar@cutn.ac.in; raju.ranjithkumar@gmail.com
Phone: +91 9655591445; +91 9787722916
<https://cutn.ac.in/staff-members/dr-r-ranjith-kumar/>
<https://vidwan.inflibnet.ac.in/profile/171829>
<https://www.scopus.com/authid/detail.uri?authorId=15135978300>
<http://orcid.org/0000-0002-9926-7770>
<https://publons.com/researcher/2866433/ranjith-kumar-raju/>



BIRTHPLACE & DATE

Madithorai Village, The Nilgiris, Tamil Nadu; 12 July 1977

ACADEMIC PROFILE

Associate Professor of Chemistry, CUTN, Thiruvarur, 01.12.2022 till date
Assistant Professor of Organic Chemistry, MKU, Madurai, 18.03.2010 to 30.11.2022
Visiting Scientist, Universidad Complutense, Madrid, Spain, Sep–Nov 2011
Post-Doctorate Fellow under Prof. Henri B. Kagan, University of Paris, France, 2008–09
Ph.D. in Chemistry, Madurai Kamaraj University, Madurai, 2003–2008
Software Engineer, SSi Ltd., Coimbatore, 2001–2003
M.Sc. in Chemistry, Govt. Arts College, Ooty (Bharathiar University), 2001
Certificate Course in Software Programming Languages, SSi Ltd. Coimbatore, 1999
B.Sc. in Chemistry, Govt. Arts College, Ooty (Bharathiar University), 1997
HSC (Tamil Nadu State Board), Green Valley Matric. Hr. Sec. School, Kotagiri, 1994
SSC (CBSE), Rex Higher Secondary School, Ooty, 1992

TEACHING

One- and Two-Dimensional NMR Spectroscopy, UV, IR, Mass Spectroscopy, Reaction Mechanism, General Chemistry, Physical Organic Chemistry, Retrosynthesis, Reagents, Asymmetric Synthesis, Steroids, Organic and Inorganic Practical, Research Methodology, Course Work, Good Lab Practices, Project Guidance.

RESEARCH INTEREST

Synthesis and photophysical studies of small-molecule fluorogenic chemosensors
Synthesis of hybrid heterocycles of biological importance
Structural elucidation by one- and two-dimensional NMR and X-ray crystallography

RESEARCH GUIDANCE

	Awarded	Submitted	Ongoing
Ph.D.	Guide: 12 ; Co-guide: 1	–	4
M.Phil.	13	–	–
P.G. + Summer Project/Intern	37 + 22	–	6 + 4

PUBLICATIONS (UGC Listed/Scopus/Web of Science Indexed/ISSN Journals/Book Chapters): **140**

Peer Reviewed Journals	:	76
Single Crystal X-ray Publications	:	64 (Total No. of Single Crystals: 151)
Single Crystal X-ray Deposits in CCDC	:	39
Contribution to Book Chapters	:	02
<i>h</i> Index (03.06.2025)	:	24 (Scopus)
<i>i10</i> Index (03.06.2025)	:	45 (Scopus)
Citations (03.06.2025)	:	1969 (Scopus)
Cumulative Impact Factor	:	209.44 (Based on JCR Impact Factor 2024)

CONFERENCES / SEMINARS / WORKSHOPS

International (paper presented)	:	24
National (paper presented)	:	26
Participation	:	03

CONFERENCES / SEMINARS ORGANIZED

1. **Organizing Secretary**, National Workshop on NMR Spectroscopy, Central University of Tamil Nadu, 13-14 Nov 2024 (Partially sponsored by Bruker India Pvt. Ltd.)
2. **Coordinator**, UGC Sponsored Online Refresher Course – “Frontiers in Chemistry” UGC-HRDC, Madurai Kamaraj University, 10–23, Nov 2021
3. **Convenor**, DST-sponsored National Seminar, “Current Trends in Organic Synthesis” School of Chemistry, Madurai Kamaraj University, 19 Jun 2013

GRANTS RECEIVED UNDER MAJOR RESEARCH PROJECTS

Title of Research Project	Funding Agency	Period	PI/ Co-PI/ Joint PI	Amt. Rs in Lakhs	No of Papers
Development of Functional Nanomaterials for Green Energy and Environment	RUSA	2020 to 2022	Joint PI	20	6
Synthesis and biological evaluation of novel thienopyridine derivatives <i>(Out of the 165 major research projects evaluated during the midterm evaluation on 10th Dec 2014, this project has been rated as “VERY GOOD” – one among the three rated so)</i>	UGC, New Delhi	2013 to 2017	PI	11.94	19 Single crystal: 17
Synthesis and Anti-tubercular Evaluation of Some Modified Steroids <i>(The progress made on the project was graded as “VERY GOOD” by the Fast-Track Expert Committee in the Group Monitoring Workshop meeting held on March 15 and 16, 2013, at IIT-Guwahati)</i>	DST, New Delhi	2010 to 2013	PI	7.20	9 Single crystal: 34

MENTORING DST-INSPIRE JRF/SRF

Name of the DST-INSPIRE JRF	Title of the Project	Period	Ph.D. Status
Dr. S. S. Roja	Synthesis, Characterization, and Biological Evaluation of Novel Hybrid Heterocycles	2017 to 2022	Degree Awarded
Dr. A. Shylaja	Synthesis of Novel Heterocycles Employing Green Protocols	2016 to 2020	Degree Awarded

MEMBERSHIP IN PROFESSIONAL BODIES

1. Life Member – Chemical Research Society of India
2. Life Member – National Magnetic Resonance Society of India

ACTIVE REVIEWER

ACS, RSC, Elsevier, Wiley, Thieme, Taylor & Francis, Bentham Science, Springer
No. of manuscripts reviewed (2015 till date): **100**

Ph.D. EVALUATION

1. Ph.D. Viva-Voce Examiner: **01** Ph.D. Thesis Evaluated: **03**

AWARDS & HONORS

1. Citation award in appreciation of remarkable research contribution from Jan 2016 to Jul 2017, by Madurai Kamaraj University on 15 Jul 2017
2. Visiting Scientist, Universidad Complutense, Madrid, Spain, Sep–Dec 2011
3. Young Scientist Fellowship, DST, New Delhi, 2009–2010
4. CNRS Post-doctorate Fellowship, Paris, France, 2008–2009

ACADEMIC ACTIVITIES

1. In-charge, 400 MHz NMR, Dept. of Chemistry, CUTN, Thiruvavur, Dec 2022 to date
2. Member, BoS, Dept. of Physics, CUTN, 01.04.2024 (for three years)
3. Univ. Nominee, BoS, UG Chemistry, SN College, Madurai, 02.07.2021 to 30.11.2022
4. Univ. Nominee, BoS, UG Chemistry, MTN College, 26.03.2021 to 30.11.2022
5. Member, PG Non-semester Central Valuation Board, DDE, MKU, 2015–2022
6. External Examiner, PG Chemistry, Bharathidasan University, Trichy, 2017 to date
7. Member, PI Group, DST-PURSE, School of Chemistry, MKU, Nov 2016–2022
8. External Examiner, PG Chemistry, Bharathiar University, Coimbatore, 2015 to date
9. Member, BoS, UG & PG Chemistry, Lady Doak College, Madurai, 2015 to date
10. Univ. Nominee, BoS, MPhil Chemistry, VHNSN College, 20.05.2019 to 19.05.2021
11. Univ. Nominee, BoS, UG Chemistry, Sourashtra College, 26.11.2018 to 25.11.2020
12. In-charge, 300 MHz NMR, School of Chemistry, MKU, Jul 2011 to Mar 2020
13. Exam Coordinator, School of Chemistry, MKU, 01.07.2016 to 31.07.2017
14. Member 400 MHz NMR Instrument Committee (DST-FIST) GRI, Dindigul, 2014–15
15. DC Member: GRI, Dindigul, Bharathiar University, Karunya University, Coimbatore, BS Abdur Rahman University, Chennai, VIT University, Vellore & Chennai (2012–25)
16. External Examiner, Madras Univ., Bharathiar Univ., Bharathidasan Univ., Alagappa Univ., Lady Doak College, American College, Sadakathulla Appa College (2012 to date)

INVITED LECTURES / RESOURCE PERSON (54 Lectures)

1. Central Marine Fisheries Research Institute, Kochi, Kerala (ICAR-CMFRI)
2. Mangalore University, Mangaluru, Karnataka
3. The Srinivasa Ramanujan Institute of Basic Sciences, Kottayam, Kerala – Kerala State Council for Science, Technology and Environment, Govt of Kerala
4. Government Victoria College, Palakkad, Kerala
5. Government Arts and Science College, Kozhikode, Kerala
6. Government College, Kattappana, Kerala
7. T. M. Jacob Memorial Government College, Ernakulam, Kerala
8. Sree Narayana College, Punalur, Kerala
9. T. K. Madhava Memorial College, Nangiarkulangara, Kerala
10. Maharaja's College, Ernakulam, Kerala
11. Mar Athanasius College, Kothamangalam, Kerala
12. Central University of Tamil Nadu, Thiruvarur, Tamil Nadu
13. Bharathiar University, Coimbatore, Tamil Nadu
14. Mother Teresa University, Kodaikanal, Tamil Nadu
15. School of Advanced Sciences, VIT University, Vellore, Tamil Nadu
16. Dr. NGP College of Arts and Science, Coimbatore, Tamil Nadu
17. Government Arts College, Ooty, Tamil Nadu
18. V.V. Vanniaperumal College for Women, Virudhunagar, Tamil Nadu
19. Hajee Karutha Rowther Howdia College, Uthamapalayam, Tamil Nadu
20. Kandaswamy Kandar's College, Namakkal, Tamil Nadu
21. APC Mahalakshmi College for Women, Thoothukudi, Tamil Nadu
22. Virudhunagar Hindu Nadars Senthikumara Nadar College, Virudhunagar, Tamil Nadu
23. Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu
24. Nanjil Catholic College of Arts and Science, Kanyakumari, Tamil Nadu
25. VPMM Arts and Science College for Women, Krishnankovil, Tamil Nadu
26. Vivekananda College, Madurai, Tamil Nadu
27. Lady Doak College, Madurai, Tamil Nadu
28. Fatima College, Madurai, Tamil Nadu
29. Madura College, Madurai, Tamil Nadu
30. Nadar Mahajana Sangam S Vellaichamy Nadar College, Madurai, Tamil Nadu
31. UGC-HRDC, Madurai Kamaraj University, Madurai, Tamil Nadu

ADMINISTRATIVE RESPONSIBILITIES

1. Member, OBC Cell, CUTN (19.02.2025 till date)
2. Member, Students Grievance Redressal Committee, CUTN (27.09.2024 till date)
3. Deputy Director, IQAC, CUTN, Thiruvarur (22.06.2023 to 20.05.2025)
4. Member, IQAC, CUTN, Thiruvarur (06.01.2023 to 21.06.2023)
5. Nodal Officer, Welfare of the Differently-abled, MKU (13.02.2021 to 30.11.2022)
6. Member Secretary, Internal Quality Assurance Cell, MKU (22.11.2018 to 30.11.2022)
7. Univ. Representative, Managing Committee, NMSSVN Coll., Madurai, (2021 to 2022)
8. Member, NIRF Core Working Committee, MKU (2017–2018)
9. In charge of the “Earn While You Learn” program at School of Chemistry, MKU, under the UGC-University with Potential for Excellence scheme (2010–2012)
10. Organizing Committee Member, “Virtual Training on Psychosocial Interventions During COVID-19”, MKU (with Technical Support of NIMHANS, Bengaluru, Apr 2020)

OTHER CONTRIBUTIONS

1. External Expert, NAAC SSR Committee, Gandhigram Institute, 23 Sep 2024
2. Coordinator, NAAC Mock Peer Team, Alagappa University, 10-11 Sep 2024
3. Member, NAAC SSR review Committee, SN College, Madurai, 10.06.2024
4. Member, NAAC SSR review Committee, Bharathiar University, 21.10.2022
5. Member, NAAC Mock Peer Review Team, Annamalai University, 5-7 Mar 2022
6. Member, NAAC SSR Review Committee, Yogi Vemana University, Kadappa, Dec 2021
7. Expert Member, NAAC SSR Review Committee, Periyar University, Salem, 28-30 Jul 2021 and 20-21 Mar 2021
8. Member, NAAC SSR Review Committee, Mother Teresa University, Apr 2021
9. Member, NAAC SSR Review Committee, Annamalai University, 27-29 Mar 2021
10. Member, NAAC Mock Peer Review Team, Sankara College, CBE, 06.08.2022
11. Member, NAAC SSR Committee, Hindustan Coll. of Arts & Science, CBE, 18.02.2022

FACULTY DEVELOPMENT PROGRAMS/WORKSHOPS ATTENDED

Name of the Program	Place	Duration	Sponsor
AICTE-ATAL Online FDP on “Organic Semiconductor Innovations: A Faculty Development Initiative”	Central University of Tamil Nadu	09.12.2024 to 14.12.2024	AICTE
National Skill Development Workshop on "Intellectual Property Rights, Start-up & Innovation"	Madurai Kamaraj University	01.07.2022	RUSA
Refresher Course in ICT in Education – “Technology Enabled Teaching, Learning and Assessment”	UGC-HRDC, Madurai Kamaraj University	08.12.2021 to 21.12.2021	UGC
Clarivate Journal Citation Reports (JCR) Certification Series	Online	08.07.2021	---
AICTE-ATAL Online Elementary FDP on “Novel Materials”	Online	05.07.2021 to 09.07.2021	AICTE
One-day State Level Workshop on “Global Rankings of Universities: Present Scenario”	Madurai Kamaraj University	22.03.2019	IQAC, MKU
Refresher Course in Basic Science – “Progresses in Basic Sciences Through Interdisciplinary Approach”	UGC-HRDC, Madurai Kamaraj University	09.03.2018 to 29.03.2018	UGC
Workshop on “Intellectual Property Rights and Innovation Management in Knowledge Era”	Madurai Kamaraj University	10.04.2017	IQAC, MKU
Refresher Course in Chemistry – “Current Trends in Chemistry”	UGC-ASC, MKU	12.07.2012 to 01.08.2012	UGC
Orientation Programme	UGC-ASC, MKU	27.07.2011 to 23.08.2011	UGC
Induction Programme	UGC-ASC, MKU	23.04.2010 to 29.04.2010	UGC-ASC, MKU

LANGUAGES KNOWN

Read, Write, and Speak : English, Tamil
Read and Speak : Hindi
Speak : Kannada, Baduga

DETAILS OF PUBLICATIONS

(Scopus h-Index – 24, Total Citations since 2007: 1969)

S No	Journal Name	Impact Factor (IF)*	Papers Published				Total No of Papers
			17.08.2003 to 31.08.2008 (PhD)	01.09.2008 to 31.08.2009 (Post-Doc)	18.03.2010 to 30.11.2022 (MKU)	01.12.2022 to date (CUTN)	
1	J Med Chem	6.9	1				1
2	Eur J Med Chem	6.0	1		1		2
3	Org Lett	4.9			2		2
4	Bioorg Chem	4.5			1		1
5	Spectrochim. Acta A	4.3				1	1
6	Adv Synth Catal	4.4		1			1
7	Molecules	4.2			1		1
8	Dyes Pigm	4.1			1		1
9	J Mol Struct	4.0			7	1	8
10	RSC Adv	3.9			2		2
11	ACS Comb Sci	3.9			4		4
12	Mol Divers	3.9			1		1
13	Front. Chem	3.8			1		1
14	J Org Chem	3.3			1		1
15	Bioorg Med Chem	3.3	1				1
16	Asian J Org Chem	2.8			1		1
17	New J Chem	2.7			1		1
18	Eur J OrgChem	2.5			1		1
19	Bioorg Med Chem Lett	2.5	2		2		4
20	Synthesis	2.2			1		1
21	Beilstein J Org Chem	2.2			2		2
22	Steroids	2.1			2		2
23	Tetrahedron	2.1	5		2		7
24	J Heterocycl Chem	2.0			2		2
25	Chem Select	1.9			4	2	6
26	SynthCommun	1.8	1		5		6
26	Synlett	1.7		1			1
28	Tetrahedron Lett	1.5	1		9		10
29	Aust J Chem	1.0			1		1
30	Acta Cryst C	0.7			3		3
31	Acta Cryst E	0.5	13		42		55
32	ChemDataColl	NA			2		2
33	IUCrData	NA			1		1
34	J Mol Biochem	NA			4		4
35	Phy Sci Int J	NA			1		1
36	CSTA	NA			1		1
TOTAL			25	2	109	04	140

*Based on JCR Impact Factor 2024

CONTRIBUTIONS TO BOOK CHAPTERS

1. "Seven-membered Rings with Three Heteroatoms 1,2,5"

Comprehensive Heterocyclic Chemistry III – A review of the literature 1995–2007
Volume 13, Chapter 15, pp 433–487, March 2008, Elsevier publications
Executive Editor: Alan R Katritzky, ISBN: 978-0-08-044992-0
R. Ranjith Kumar, S. Perumal and M. Balasubramanian
<https://doi.org/10.1016/B978-008044992-0.01215-3>

2. "Name Reactions for Homologation, Part 2"

Chapter 1, March 2009, Wiley publications
Editor: Jie Jack Li, Foreword: E. J. Corey; ISBN: 978-0-470-46721-3
Section 1.1.10. Wolff Rearrangement
R. Ranjith Kumar and M. Balasubramanian
Section 1.2.1. Beckmann Rearrangement
R. Ranjith Kumar, K. A. Vanitha, and M. Balasubramanian
Section 1.3.1. Benzilic Acid Rearrangement
R. Ranjith Kumar and M. Balasubramanian
Section 1.3.6. Payne Rearrangement
R. Ranjith Kumar and S. Perumal
Section 1.3.7. Smiles Rearrangement
R. Ranjith Kumar and S. Perumal
Section 1.3.8. Stevens Rearrangement
R. Ranjith Kumar, K. A. Vanitha and M. Balasubramanian
<https://onlinelibrary.wiley.com/doi/book/10.1002/9780470487044>

PUBLICATIONS IN UGC LISTED PEER-REVIEWED JOURNALS (Scopus/Web of Science Indexed Journals)

76. One-Pot Three-Component Cascade Synthesis of Pyrazolopyrido[2,3-*h*]quinazolines: Effective Fluorescent Turn-Off Probes for Sensing Pd²⁺ Ions, P. R. Stalin, S. Murugesan, J. Prakash, **R. Ranjith Kumar**,* *ChemistrySelect* **2025**, 10, e01643, **IF: 1.9** <https://doi.org/10.1002/slct.202501643>

75. Seven-Component Domino Synthesis of Quinolino[7,8-*j*][1,7]phenanthrolines: Fluorescent Sensors for Selective Picric Acid Detection and Live-Cell Imaging, P. R. Stalin, S. S. Roja, V. Ajithkumar, P. Varalakshmi, S. Murugesan, **R. Ranjith Kumar**,* *ChemistrySelect* **2025**, 10, e01191 **IF: 1.9** <https://doi.org/10.1002/slct.202501191>

74. Benzo[4,5]imidazole[2,1-*b*]quinazoline-1(2*H*)-one: An efficient fluorescent probe for the selective and sensitive detection of Cu(II) ions, S. S. Roja, P. Sneha Sunil, M. D. Maqsood, M. Vidhyashree, John Prakash,* **R. Ranjith Kumar*** *Spectrochim. Acta A Mol. Biomol. Spectrosc.* **2025**, 333, 125853, **IF: 4.3** <https://doi.org/10.1016/j.saa.2025.125853>

73. Blue luminescent pyridine-tethered quinazoline framework: Highly selective and sensitive picric acid chemosensor, A. Shylaja, S. S. Roja, **R. Ranjith Kumar*** *J. Mol. Struct.*, **2025**, 1320, 139637, **IF: 4.0** <https://doi.org/10.1016/j.molstruc.2024.139637>

72. One-Pot Three-Component Domino Synthesis of Isoxazolo[5,4-*b*]pyrano[2,3-*f*]quinolines: An Efficient Fluorescent Turn-off Chemosensor for Picric Acid, S. Raja Rubina, S. Indhu Leka, K. Sathya Priya, **R. Ranjith Kumar***, S. Murugesan,* *ChemistrySelect* **2022**, 7, e202203902, **IF: 1.9** <https://doi.org/10.1002/slct.202203902>

71. Synthesis of Epiminocyclohepta[*b*]pyrazolo[4,3-*e*]pyridines from Tropinone: Fluorescent "Turn On–Off" Chemosensors for the Sequential Detection of Al³⁺, Cd²⁺ and Pb²⁺ in Nanomolar Concentration, S. Raja Rubina, P. Stalin, C. S. Meenatchi, S. Murugesan*, **R. Ranjith Kumar***, *J. Mol. Struct.*, **2022**, 1269, 133724, **IF: 4.0** <https://doi.org/10.1016/j.molstruc.2022.133724>

70. Phenothiazine Tethered Biaryls as Fluorescent Probes for Multi-analyte Detection, S. S. Roja, S. Raja Rubina, A. Shylaja, **R. Ranjith Kumar***, *ChemistrySelect* **2022**, 7, e202200217, **IF: 1.9** <https://doi.org/10.1002/slct.202200217>

69. Pyrano[2,3-*f*]pyrazolo[3,4-*b*]quinoline-3-carbonitriles: A three-component synthesis and AChE inhibitory studies, R. V. Sumesh, **R. Ranjith Kumar**,* A. I. Almonsour, R. Suresh Kumar, M. K. M. Ashraf, *Synth. Commun.* **2021**, *51*, 1058–1065, **IF: 1.8**
<https://doi.org/10.1080/00397911.2020.1866612>
68. Imidazolium ylide mediated tandem Knoevenagel–Michael–O-cyclization sequence for the synthesis of multi-substituted 4,5-dihydrofurans, S. Sivakumar, A.I. Almonsour, R. Suresh Kumar, N. Arumugam, **R. Ranjith Kumar*** *Synth. Commun.* **2021**, *51*, 234–244, **IF: 1.8**
<https://doi.org/10.1080/00397911.2020.1821226>
67. Structural, Hirshfeld, spectroscopic, quantum chemical and molecular docking studies of N'-(4-(4-Chlorophenyl)-1,3-dicyano-5,6,7,8,9,10-hexahydrobenzo[8]annulen-2-yl)N,N-dimethyl-formimidamide as CCR2 inhibitors, S. Pangajavalli, **R. Ranjith Kumar**, S. Ramaswamy, *J. Mol. Struct.*, **2021**, *1239*, 130503, **IF: 4.0**
<https://doi.org/10.1016/j.molstruc.2021.130503>
66. Coordinated compliance of chloro-methyl and bromo-methyl exchange rule in two dihydrofuran carbonitrile derivatives, V. Rajni Swamy, R.V. Krishnakumar, N. Srinivasan, S. Sivakumar, **R. Ranjith Kumar**, *J. Mol. Struct.* **2021**, *1228*, 129741, **IF: 4.0**
<https://doi.org/10.1016/j.molstruc.2020.129741>
65. Ionic liquid mediated synthesis and *in vitro* mechanistic exploration of polycyclic cage-like heterocyclic hybrid, R. Suresh Kumar, A. I. Almonsour, N. Arumugam, D. Kotresha, J. C. Menendez, **R. Ranjith Kumar**, *J. Heterocycl. Chem.* **2021**, *58*, 580–588, **IF: 2.0**
<https://doi.org/10.1002/jhet.4197>
64. Thiazole-Tethered Biaryls as Fluorescent Chemosensors for the Selective Detection of Fe³⁺ Ions, B. Mariammal, A. Shylaja, S. Vivek Kumar, S. Raja Rubina, **R. Ranjith Kumar*** *J. Heterocycl. Chem.* **2020**, *57*, 3882–3889, **IF: 2.0**
<https://doi.org/10.1002/jhet.4093>
63. Phenothiazine Tethered 2-Aminopyridine-3-carbonitrile: Fluorescent Turn-off Chemosensor for Fe³⁺ Ions and Picric Acid, S. S. Roja, A. Shylaja, **R. Ranjith Kumar*** *ChemistrySelect* **2020**, *5*, 2279–2283, **IF: 1.9**
<https://doi.org/10.1002/slct.201904425>
62. Novel Blue Emissive Dimethylfuran Tethered 2-Aminopyridine-3-carbonitrile: Dual Responsive Fluorescent Chemosensor for Fe³⁺ and Picric Acid in Nanomolar Detection Limit, A. Shylaja, S. Raja Rubina, S. S. Roja, **R. Ranjith Kumar*** *Dyes Pigments* **2020**, *174*, 108062, **IF: 4.1**
<https://doi.org/10.1016/j.dyepig.2019.108062>
61. Access to highly substituted Oxazoles by the reaction of α -Azidochalcone with potassium thiocyanate, M. Harisha, P. Dhanalakshmi, R. Suresh, **R. Ranjith Kumar**, S. Muthusubramanian, *Beilstein J. Org. Chem.* **2020**, *16*, 2109–2118, **IF: 2.2**
<https://doi.org/10.3762/bjoc.16.178>
60. Azafluorene derivatives as inhibitors of SARS CoV-2 RdRp: Synthesis, physicochemical, quantum chemical, modeling and molecular docking analysis, M. Venkateshan, M. Muthu, J. Suresh, **R. Ranjith Kumar**, *J. Mol. Struct.*, **2020**, *1220*, 128741, **IF: 4.0**
<https://doi.org/10.1016/j.molstruc.2020.128741>
59. In vitro Mechanistic Exploration of Novel Spiropyrrolidine Heterocyclic Hybrids as Anticancer Agents, R. Suresh Kumar, A. I. Almonsour, N. Arumugam, F. Mohammad, **R. Ranjith Kumar**, *Front. Chem.* **2020**, *8*, Article 465, doi: 10.3389/fchem.2020.00465, **IF: 3.8**
<https://doi.org/10.3389/fchem.2020.00465>
58. Structural, Hirshfeld, spectroscopic, quantum chemical and molecular docking studies on 6b', 7', 8',9'-Tetrahydro-2*H*,6'*H*-spiro[acenaphthylene-1,11'-chromeno[3,4-*a*]pyrrolizine]-2,6' (6a'*H*,11a'*H*) dione, S.Pangajavalli, **R. Ranjith Kumar**, S.Ramaswamy, *J.Mol.Struct.*, **2020**,*1209*, 127921, **IF: 4.0**
<https://doi.org/10.1016/j.molstruc.2020.127921>

57. Substitution induced switch between Pictet-Spengler and Eschweiler-Clarke reactions: Selective synthesis of spiro acenaphthylene pyrrolo[1,2-*b*]isoquinoline/pyrrolidine hybrids, R. S. Kumar, A.I. Almansour, N. Arumugam, **R. Ranjith Kumar**, *Tetrahedron Lett.* **2020**, 61, 151606, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2020.151606>
56. TMSOTf-Catalysed Synthesis of 2,4,5-Trisubstituted Imidazoles from Vinyl Azides and Nitriles, M. B. Harisha, P. Dhanalakshmi, R. Suresh, **R. Ranjith Kumar**, S. Muthusubramanian, N. Bhuvanesh, *ChemistrySelect* **2019**, 4, 2954-2958, **IF: 1.9**
<https://doi.org/10.1002/slct.201801543>
55. Discovery of novel cage-like heterocyclic hybrids as anti-inflammatory agents through the inhibition of nitrite, PGE2 and TNF- α , R. Suresh Kumar, P. Antonisamy, A. I. Almansour, N. Arumugam, D. M. Al-thamili, **R. Ranjith Kumar**, H-R. Kim, K-B. Kwon, *Bioorg. Chem.* **2019**, 91, 103180, **IF: 4.5**
<https://doi.org/10.1016/j.bioorg.2019.103180>
54. Four-Component Domino Synthesis of Pyrazolo[3,4-*h*]quinoline-3-carbonitriles: "Turn-Off" Fluorescent Chemosensor for Fe³⁺ Ions, A. Shylaja, S.S. Roja, R. Vishnu Priya, **R. Ranjith Kumar**,* *J. Org. Chem.* **2018**, 83, 14084-14090, **IF: 3.3**
<https://doi.org/10.1021/acs.joc.8b01991>
53. A one-pot access to pyridine/benzo fused cyclododecanes via multi-component tandem reactions, S. Vivek Kumar, M. Anusha Rani, A.I. Almansour, R. Suresh Kumar, S. Athimoolam, **R. Ranjith Kumar**,* *Tetrahedron*, **2018**, 74, 4569-4577, **IF: 2.1**
<https://doi.org/10.1016/j.tet.2018.07.020>
52. Synthesis of spiro-linked quinolinone-pyrrolidine/pyrrolo[1,2-*c*]thiazole-oxindole/acenaphthalene hybrids via multi-component [3+2] cycloaddition, R.V. Sumesh, A. Shylaja, **R. Ranjith Kumar**,* A.I. Almansour, R. S. Kumar, *Tetrahedron Lett.* **2018**, 59, 4086-4089, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2018.10.002>
51. Synthesis of indole-cycloalkyl[*b*]pyridine hybrids via a four-component six-step tandem process, M. Muthu, R. Vishnu Priya, A.I. Almansour, R. Suresh Kumar, **R. Ranjith Kumar*** *Beilstein J. Org. Chem.* **2018**, 14, 2907-2915, **IF: 2.2**
<https://doi.org/10.3762/bjoc.14.269>
50. Dipolar cycloaddition based multi-component reaction: synthesis of spiro tethered acenaphthylene-indolizine-pyridinone hybrids, R. Suresh Kumar, A.I. Almansour, N. Arumugam, G. Periyasami, S. Athimoolam, **R. Ranjith Kumar**, M. Asad, M. Asiri, *Tetrahedron Lett.* **2018**, 59, 3336-3340, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2018.07.051>
49. Stereoselective green synthesis and molecular structures of highly functionalized spirooxindole-pyrrolidine hybrids: A combined experimental and theoretical investigation, R. Suresh Kumar, A. I. Almansour N. Arumugam S. M. Soliman, **R. Ranjith Kumar** M. Altaf, H.A. Ghabbour B. S. Krishnamoorthy, *J. Mol. Struct.* **2018**, 1152, 266-275, **IF: 4.0**
<https://doi.org/10.1016/j.molstruc.2017.09.073>
48. A one-pot multicomponent 1,3-dipolar cycloaddition strategy: combinatorial synthesis of dihydrothiophene engrafted dispiro hybrid heterocycles, M. Anusha Rani, S. Vivek Kumar, K. Malathi, M. Muthu, A. I. Almansour, R. Suresh Kumar, **R. Ranjith Kumar*** *ACS Comb. Sci.* **2017**, 19, 308-314. **IF: 3.9**
<https://doi.org/10.1021/acscombsci.6b00186>
47. Synthesis of penta- and tetra-cyclic cage-like compounds and dispiro heterocycles through microwave-assisted solvent-free multi-component domino reactions, S. Maharani, S. Vivek Kumar, A. I. Almansour, R. S. Kumar, K. Anitha, **R. Ranjith Kumar*** *New J. Chem.* **2017**, 41, 11009-11015, **IF: 2.7**, <https://doi.org/10.1039/C7NJ01673E>

- 46.** Synthesis of cycloalkano[*b*]pyridines by multicomponent strategy: ring-size mediated product selectivity, substitution-induced axial chirality and influence of the ¹⁴N quadrupole-relaxation, S. Maharani, A. I. Almansour, R. Suresh Kumar, N. Arumugam, **R. Ranjith Kumar*** *Tetrahedron* **2016**, 72, 4582–4592, **IF: 2.1**
<https://doi.org/10.1016/j.tet.2016.06.030>
- 45.** Multicomponent dipolar cycloaddition strategy: combinatorial synthesis of novel spiro tethered pyrazolo[3,4-*b*]quinoline hybrid heterocycles, R. V. Sumesh, M. Muthu, A. I. Almansour, R. Suresh Kumar, N. Arumugam, S. Athimoolam, E. A. J. Yasmi Prabha, **R. Ranjith Kumar*** *ACS Comb. Sci.* **2016**, 18, 262–270, **IF: 3.9**
<https://doi.org/10.1021/acscombsci.6b00003>
- 44.** Synthesis of highly functionalized 2-thiaspiro[4.5]deca-6,8-dienes via atom efficient tandem Michael addition/Thorpe-Ziegler cyclization, M. Anusha Rani, S. Vivek Kumar, S. S. Roja, A. I. Almansour, R. Suresh Kumar, S. Athimoolam, **R. Ranjith Kumar*** *RSC Adv.* **2016**, 6, 40585–40592, **IF: 3.9**
<https://doi.org/10.1039/C6RA05572A>
- 43.** Highly functionalized dispiro oxindole-pyrrolo[1,2-*c*]thiazole-piperidone hybrid: Synthesis, characterization and theoretical investigations on the regiochemistry, R. Suresh Kumar,* A. I. Almansour, N. Arumugam, S.M. Soliman, **R. Ranjith Kumar,*** H. A. Ghabbour *J. Mol. Struct.* **2016**, 1121, 93–103, **IF: 4.0**
<https://doi.org/10.1016/j.molstruc.2016.05.061>
- 42.** A sustainable approach to the stereoselective synthesis of diazaheptacyclic cage systems based on a multicomponent strategy in an ionic liquid, R. S. Kumar, A. I. Almansour, N. Arumugam, M. Altaf, J. C. Menéndez, **R. Ranjith Kumar**, H. Osman *Molecules* **2016**, 21, 165, **IF: 4.2**
<https://doi.org/10.3390/molecules21020165>
- 41.** Divergent reactivity of amino acid alkyl ester hydrochlorides with 2-oxoaldehydes: Role of selenium dioxide to promote regioselective synthesis of imidazoles, A. K. Padala, **R. Ranjith Kumar**, S. Athimoolam, Q. N. Ahmed *Org. Lett.* **2016**, 18, 96–99, **IF: 4.9**
<https://doi.org/10.1021/acs.orglett.5b03321>
- 40.** Air-assisted 2-oxo driven dehydrogenative α,α-diamination of 2-oxoaldehydes to 2-oxoacetamidines, A. Kumar, N. Battini, **R. Ranjith Kumar**, S. Athimoolam, Q. N. Ahmed *Eur. J. Org. Chem.* **2016**, 3344–3348, **IF: 2.5**
<https://doi.org/10.1002/ejoc.201600587>
- 39.** Multicomponent [3+2] cycloaddition strategy: Stereoselective synthesis of novel polycyclic cage-like systems and dispiro compounds, K. Malathi, S. Kanchithalaivan, **R. Ranjith Kumar,*** A. I. Almansour, R. Suresh Kumar, N. Arumugam *Tetrahedron Lett.* **2015**, 56, 6132–6135, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2015.09.095>
- 38.** A facile tandem Michael addition/*O*-cyclization/elimination route to novel chromeno[3,2-*c*]pyridines, R. V. Sumesh, A. Malathi, **R. Ranjith Kumar*** *Mol. Divers.* **2015**, 19, 233–249, **IF: 3.9**
<https://doi.org/10.1007/s11030-015-9576-4>
- 37.** Regioselective synthesis of novel dispiro oxindole–pyrrolizine–thiazolidine-2,4-dione hybrids, S. Ponnuchamy, R. V. Sumesh, **R. Ranjith Kumar*** *Tetrahedron Lett.* **2015**, 56, 4374–4376, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2015.05.090>
- 36.** Synthesis of novel dispiro 1,4-benzothiazine hybrid heterocycles through 1,3-dipolar cycloaddition, K. Malathi, V. Jeyachandran, K. Kalaiselvan, **R. Ranjith Kumar*** *Synth. Commun.* **2015**, 45, 503–512, **IF: 1.8**
<https://doi.org/10.1080/00397911.2014.965329>
- 35.** Domino four-component synthesis of novel cycloocta[*b*]pyridines, S. Maharani, **R. Ranjith Kumar*** *Tetrahedron Lett.* **2015**, 56, 179–181, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2014.11.052>

34. Efficient green protocol for the synthesis of novel dihydroindeno[1,2-*b*]pyrroles, V. Jeyachandran, M. Muthu, **R. Ranjith Kumar*** *Synth. Commun.* **2015**, *45*, 1137–1144, **IF: 1.8**
<https://doi.org/10.1080/00397911.2015.1005631>
33. Straightforward synthesis of pyrrolo[3,4-*b*]quinolines through intramolecular Povarov reactions, A. I. Almansour, N. Arumugam, R. Suresh Kumar, J. C. Menéndez, H. A. Ghabbour, H-K Fun, **R. Ranjith Kumar** *Tetrahedron Lett.* **2015**, *56*, 6900–6903, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2015.10.107>
32. Dipolar cycloaddition-based multicomponent reactions in ionic liquids: A green, fully stereoselective synthesis of novel polycyclic cage systems with the generation of two new azaheterocyclic rings, R. Suresh Kumar, A. I. Almansour, N. Arumugam, J. C. Menendez, H. Osman, **R. Ranjith Kumar** *Synthesis* **2015**, *47*, 2721–2730, **IF: 2.2**
<https://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0034-1379931>
31. 2-Oxo driven unconventional reactions; Microwave assisted approaches to tetrahydrofuro[3,2-*d*]oxazoles and furanones, B. Narsaiah, B. Satyanarayana, **R. Ranjith Kumar**, Q. N. Ahmed *Org. Lett.* **2015**, *17*, 2992–2995, **IF: 4.9**
<https://doi.org/10.1021/acs.orglett.5b01271>
30. Ionic liquid-promoted synthesis and cholinesterase inhibitory activity of highly functionalized spiropyrrolidines, R. Suresh Kumar, A. I. Almansour, N. Arumugam, A. Basiri, Y. Kia, **R. Ranjith Kumar** *Aust. J. Chem.* **2015**, *68*, 863–871, **IF: 1.0**
<https://doi.org/10.1071/CH14370>
29. Microwave-assisted chemoselective synthesis of novel pyrazolo[3,4-*b*]thieno[3,4-*e*] pyridines: substitution induced axial chirality, M. Anusha Rani, V. Jeyachandran, M. Muthu, S. Sivakolunthu, **R. Ranjith Kumar*** *Tetrahedron Lett.* **2014**, *55*, 5805–5807, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2014.08.112>
28. Ultrasound-assisted sequential multi-component strategy for the combinatorial synthesis of novel coumarin hybrids, S. Kanchithalaivan, R. V. Sumesh, **R. Ranjith Kumar*** *ACS Comb. Sci.* **2014**, *16*, 566–572, **IF: 3.9**
<https://doi.org/10.1021/co500092b>
27. Stereoselective synthesis of novel dispiro oxindole-pyrrolothiazole-androsterone hybrids, S. Kanchithalaivan, M. Anusha Rani, **R. Ranjith Kumar*** *Synth. Commun.* **2014**, *44*, 3122–3129, **IF: 1.8**
<https://doi.org/10.1080/00397911.2014.928729>
26. Synthesis of novel 16-spiro steroids: 7-(aryl)tetrahydro-1*H*-pyrrolo[1,2-*c*][1,3]thiazolo estrone hybrid heterocycles, V. Jeyachandran, S. Vivek Kumar, **R. Ranjith Kumar*** *Steroids*, **2014**, *82*, 29–37, **IF: 2.1** <https://doi.org/10.1016/j.steroids.2014.01.003>
25. Antimycobacterial evaluation of novel hybrid arylidene thiazolidine-2,4-diones, S. Ponnuchamy, S. Kanchithalaivan, **R. Ranjith Kumar***, M. Ashraf Ali, T. S. Choon *Bioorg. Med. Chem. Lett.* **2014**, *24*, 1089–1093, **IF: 2.5**
<https://doi.org/10.1016/j.bmcl.2014.01.007>
24. Domino Knoevenagel condensation/Aza-ene addition/*N*-cyclization route to functionalized imidazo[1,2-*a*]pyridines and pyrido[1,2-*a*]pyrimidines, S. Sivakumar, **R. Ranjith Kumar*** *Asian J. Org. Chem.* **2014**, *3*, 974–983, **IF: 2.8**
<https://doi.org/10.1002/ajoc.201402100>
23. C-H...O and C-H...N interactions in three hexahydrocycloocta[*b*]pyridine-3-carbonitriles, R. Vishnupriya, J. Suresh, S. Maharani, **R. Ranjith Kumar**, *Acta Cryst.* **2014**, *C70*, 236–240, **IF: 0.7**
<https://doi.org/10.1107/S2053229614000291>
22. Four-component domino strategy for the combinatorial synthesis of novel 1,4-dihydropyrano[2,3-*c*]pyrazol-6-amines, S. Kanchithalaivan, S. Sivakumar, **R. Ranjith Kumar***, P. Elumalai, Q. N. Ahmed, A. K. Padala *ACS Comb. Sci.* **2013**, *15*, 631–638, **IF: 3.9**
<https://doi.org/10.1021/co4000997>

21. A one-pot three-component domino protocol for the synthesis of penta-substituted 4*H*-pyrans, S. Sivakumar, S. Kanchithalaivan, **R. Ranjith Kumar*** *RSC Adv.* **2013**, 3, 13357–13364, **IF: 3.9**
<https://doi.org/10.1039/C3RA41510D>
20. "On-water" one-pot pseudo four-component domino protocol for the synthesis of novel benzo [*a*]cyclooctenes, S. Maharani, **R. Ranjith Kumar*** *Tetrahedron Lett.* **2013**, 54, 4800–4802, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2013.06.139>
19. An atom economic synthesis and AChE inhibitory activity of novel dispiro 7-aryltetrahydro-1*H*-pyrrolo[1,2-*c*][1,3]thiazole and 4-aryloctahydroindolizine *N*-methyl-piperidin-4-one hybrid heterocycles, S. Sivakumar, **R. Ranjith Kumar***, M. Ashraf. Ali, T. S. Choon, *Eur. J. Med. Chem.* **2013**, 65, 240–248, **IF: 6.0**
<https://doi.org/10.1016/j.ejmech.2013.04.050>
18. A one-pot domino synthesis and discovery of highly functionalized dihydrobenzo[*b*]thiophenes as AChE inhibitors, V. Jeyachandran, **R. Ranjith Kumar***, M. Ashraf Ali, T. S. Choon *Bioorg. Med. Chem. Lett.* **2013**, 23, 2101–2105, **IF: 2.5**
<https://doi.org/10.1016/j.bmcl.2013.01.122>
17. Synthesis of novel 16-spiro steroids: spiro-7'-(aryl)tetrahydro-1*H*-pyrrolo[1,2-*c*][1,3]thiazolo-*trans*-androsterone hybrid heterocycles, S. Kanchithalaivan, **R. Ranjith Kumar***, S. Perumal *Steroids*, **2013**, 78, 409–417, **IF: 2.1**
<https://doi.org/10.1016/j.steroids.2012.12.017>
16. N—H···O and N—H···N interactions in three pyran derivatives, J. Suresh, R. Vishnupriya, S. Sivakumar, **R. Ranjith Kumar**, *Acta Cryst. Sect. C*, **2013**, C69, 642–646, **IF: 0.7**
<https://doi.org/10.1107/S0108270113010676>
15. Intermolecular C—H···O and C—H···X interactions in substituted spiroacenaphthylene structures, J. Suresh, R. Vishnupriya, S. Sivakumar, **R. Ranjith Kumar**, A. Athimoolam, *Acta Cryst. Sect. C*, **2012**, C68, 257, **IF: 0.7**
<https://doi.org/10.1107/S0108270112024584>
14. A mild one-pot method for conversion of various steroidal secondary alcohols into the corresponding olefins, **R. Ranjith Kumar**, S. D. Haveli, Henri B. Kagan *Synlett* **2011**, 1709–1712, **IF: 1.7**
<https://www.thieme-connect.com/products/ejournals/abstract/10.1055/s-0030-1260803>
13. Antimycobacterial activity of novel 1,2,4-oxadiazole-pyranopyridine/chromene hybrids generated by chemoselective 1,3-dipolar cycloadditions of nitrile oxides, **R. Ranjith Kumar**, S. Perumal, J.C. Menendez, P.Yogeeswari, D. Sriram *Bioorg. Med. Chem.* **2011**, 19, 3444–3450, **IF: 3.3**
<https://doi.org/10.1016/j.bmc.2011.04.033>
12. Regioselective reactions on a chiral substrate controlled by the configuration of a chiral catalyst, **R. Ranjith Kumar**, Henri B. Kagan *Adv. Synth. Catal.* **2010**, 352, 231–242, **IF: 4.4**
<https://doi.org/10.1002/adsc.200900822>
11. A facile synthesis and antimycobacterial evaluation of novel spiro-pyrido-pyrrolizines and pyrrolidines, **R. Ranjith Kumar**, S. Perumal, P. Senthilkumar, P. Yogeeswari, D. Sriram *Eur. J. Med. Chem.* **2009**, 44, 3821–3829, **IF: 6.0**
<https://doi.org/10.1016/j.ejmech.2009.05.010>
10. An atom economic synthesis and antitubercular evaluation of novel spiro-cyclohexanones, **R. Ranjith Kumar**, S. Perumal, S. C. Manju, P. Bhatt, P. Yogeeswari, D. Sriram *Bioorg. Med. Chem. Lett.* **2009**, 19, 3461–3465, **IF: 2.5**
<https://doi.org/10.1016/j.bmcl.2009.05.018>
9. Sequential 1,3-dipolar cycloadditions in the synthesis of novel tri-spiro cyclohexanones and piperidin-4-ones, **R. Ranjith Kumar**, B. Loganayaki, S. Perumal *Synth. Commun.* **2009**, 39, 3197–3216, **IF: 1.8**
<https://doi.org/10.1080/00397910902735373>

8. Discovery of antimycobacterial spiro-piperidin-4-ones: An atom economic, stereoselective synthesis and biological intervention, **R. Ranjith Kumar**, S. Perumal, P. Senthilkumar, P. Yogeeswari, D. Sriram *J. Med. Chem.* **2008**, 51, 5731–5735, **IF: 6.9**
<https://doi.org/10.1021/jm800545k>
7. A highly atom economic, chemo-, regio- and stereoselective synthesis and discovery of spiro pyrido- pyrrolizines and pyrrolidines as antimycobacterial agents, **R. Ranjith Kumar**, S. Perumal, P. Senthilkumar, P. Yogeeswari, D. Sriram *Tetrahedron* **2008**, 64, 2962–2971, **IF: 2.1**
<https://doi.org/10.1016/j.tet.2008.01.072>
6. Sacrificial azomethine ylide cycloaddition controlled chemoselective nitrile oxide cyclo-addition to 1-methyl-3,5-bis[(*E*)-arylmethylidene]tetrahydro-4(1*H*)-pyridinones: formation of mono spiro isoxazolines, **R. Ranjith Kumar**, S. Perumal *Tetrahedron* **2007**, 63, 12220–12231, **IF: 2.1**
<https://doi.org/10.1016/j.tet.2007.09.033>
5. An atom efficient, solvent-free, green synthesis and antimycobacterial evaluation of 2-amino-6-methyl-4-aryl-8-[(*E*)-arylmethylidene]-5,6,7,8-tetrahydro-4*H*-pyrano[3,2-*c*]pyridine-3-carbonitriles, **R. Ranjith Kumar**, S. Perumal, P. Senthilkumar, P. Yogeeswari, D. Sriram *Bioorg. Med. Chem. Lett.* **2007**, 17, 6459–6462, **IF: 2.5**
<https://doi.org/10.1016/j.bmcl.2007.09.095>
4. A facile synthesis and highly atom economic 1,3-dipolar cycloaddition of hexa-hydropyrido[3,4-*c*][1,5]benzothiazepines with nitrile oxide: stereoselective formation of hexahydro[1,2,4]oxadiazolo[5,4-*d*] pyrido[3,4-*c*][1,5]benzothiazepines, **R. Ranjith Kumar**, S. Perumal *Tetrahedron*, **2007**, 63, 7850–7857, **IF: 2.1**
<https://doi.org/10.1016/j.tet.2007.05.097>
3. Four-component tandem protocol for the stereoselective synthesis of highly functionalized[1,4]thiazines, S. Indumathi, **R. Ranjith Kumar**, S. Perumal *Tetrahedron* **2007**, 63, 1411–1416, **IF: 2.1**
<https://doi.org/10.1016/j.tet.2006.11.093>
2. Three-component tandem reactions of (2-arylsulfanyl-3-aryl-2-oxiranyl)(aryl)methanones and *o*-phenylenediamine: formation of quinoxalines, M. Kamal Nasar, **R. Ranjith Kumar**, S. Perumal *Tetrahedron Lett.* **2007**, 48, 2155–2158, **IF: 1.5**
<https://doi.org/10.1016/j.tetlet.2007.01.106>
1. Chemo-, regio- and stereoselective 1,3-dipolar cycloaddition of *C*-aryl-*N*-phenylnitrones over 3,5-bis(arylidene)-1-methylpiperidin-4-ones: synthesis of highly substituted novel spiro-isoxazolidines, **R. Ranjith Kumar**, S. Perumal, Henri B. Kagan, R. Guillot *Tetrahedron* **2006**, 62, 12380–12391, **IF: 2.1**
<https://doi.org/10.1016/j.tet.2006.09.106>

64. (*E*)-5-(4-Chlorobenzylidene)-1-phenyl-4,5,6,7-tetrahydro-1*H*-indazol-4-one: crystal structure and Hirshfeld surface analysis, C. S. Meenatchi, S. Athimoolam, J. Suresh, S. R. Rubina, **R. Ranjith Kumar**, S. R. Bhandari *IUCrData* **2021**, 6, x211195.
<https://doi.org/10.1107/S2414314621011950>
63. Azaphenanthrene derivatives as inhibitor of SARS CoV-2 Mpro: Synthesis, physicochemical, quantum chemical and molecular docking analysis, M. Venkateshan, J. Suresh, M. Muthu, **R. Ranjith Kumar**, *Chem. Data Coll.* **2020**, 28, 100470.
<https://doi.org/10.1016/j.cdc.2020.100470>
62. Crystal structure, Hirshfeld surface analysis, DFT calculations and molecular docking studies on pyridine derivatives as potential inhibitors of NAMPT, M. Venkateshan, R. Vishnu Priya, M. Muthu, J. Suresh, **R. Ranjith Kumar**, *Chem. Data Coll.* **2019**, 23, 100262.
<https://doi.org/10.1016/j.cdc.2019.100262>
61. Crystal structures of 6a,6b,7,11a-tetrahydro-6*H*,9*H*-spiro[chromeno[3',4':3,4]pyrrolo[1,2-*c*]thiazole-11,3'-indoline]-2',6-dione and 5'-methyl-6a,6b,7,11a-tetrahydro-6*H*,9*H*-spiro[chromeno[3',4':3,4]pyrrolo[1,2-*c*]thiazole-11,3'-indoline]-2',6-dione, S. Pangajavalli, **R. Ranjith Kumar**, N. Srinivasan, S. Ramaswamy, S. Selvanayagam, *Acta Cryst.* **2019**, E75, 246–250.
<https://doi.org/10.1107/S2056989019000045>
60. Crystal structure of 7'-(4-chlorophenyl)-2''-(4-methoxyphenyl)-7',7a',7'',8''-tetrahydro-1'*H*,3'*H*,5''*H*-dispiro[indoline-3,5'-pyrrolo[1,2-*c*]thiazole-6',6''-quinoline]-2,5''-dione and an unknown solvent, R. Vishnupriya, M. Venkateshan, J. Suresh, R. V. Sumesh, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2019**, E75, 189–193
<https://doi.org/10.1107/S2056989019000112>
59. Crystal structure and Hirshfeld surface analysis of 4'-(2-chlorophenyl)-1'-methyl-3''-phenyl-7'',8''-dihydro-5''*H*-dispiro[indoline-3,2'-pyrrolidine-3',6''-isoquinoline]-2,5''-dione, R. Vishnu Priya, C. Selva Meenatchi, J. Suresh, R. V. Sumesh, **R. Ranjith Kumar**, P. L. Nilantha Lakshman *Acta Cryst.* **2018**, E74, 660–663.
<https://doi.org/10.1107/S2056989018005455>
58. Crystal structure and molecular docking studies of benzo[8]annulenes as potential inhibitors against *Mycobacterium tuberculosis*, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, *J. Mol. Biochem.* **2016**, 5, 33–39.
<https://www.jmolbiochem.com/index.php/JmolBiochem/article/view/175>
57. Crystal structure of 2-benzylamino-4-*p*-tolyl-6,7-dihydro-5*H*-cyclopenta[*b*]pyridine-3-carbonitrile, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2015**, E71, 192–194.
<https://doi.org/10.1107/S2056989015000572>
56. Crystal structures of 2-benzylamino-4-(4-bromophenyl)-6,7,8,9-tetrahydro-5*H*-cyclohepta[*b*]pyridine-3-carbonitrile and 2-benzylamino-4-(4-chlorophenyl)-6,7,8,9-tetrahydro-5*H*-cyclohepta[*b*]pyridine-3-carbonitrile, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2015**, E71, 12–15.
<https://doi.org/10.1107/S2056989014025936>
55. Crystal structure of 5-benzoyl-2,4-diphenyl-4,5-dihydrofuran-3-carbonitrile, V. Rajni Swamy, R. V. Krishnakumar, S. Sivakumar, N. Srinivasan, **R. Ranjith Kumar**, *Acta Cryst.* **2015**, E71, 663–664.
<https://doi.org/10.1107/S2056989015014887>
54. Crystal structure of 2-benzylamino-4-(4-bromophenyl)-6,7-dihydro-5*H*-cyclopenta[*b*]pyridine-3-carbonitrile, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2015**, E71, 296.
<https://doi.org/10.1107/S2056989015002820>

53. Crystal structure of 2-hydroxy-2-(2-oxocycloheptyl)-2,3-dihydro-1*H*-indene-1,3-dione, P. K. Ahamed, N. Srinivasan, **R. Ranjith Kumar**, R. V. Krishnakumar, *Acta Cryst.* **2015**, *E71*, 715.
<https://doi.org/10.1107/S2056989015016126>
52. Crystal structure of 1',1''-dimethyl-4'-(4-chlorophenyl)dispiro-[11*H*-indeno[1,2-*b*]quinoxaline-11,2'-pyrrolidine-3',3''-piperidin]-4''-one, R. A. Nagalakshmi, J. Suresh, K. Malathi, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2015**, *E71*, 68.
<https://doi.org/10.1107/S2056989014027698>
51. 3a,8b-Dihydroxy-1-(4-methylphenyl)-2-methylsulfanyl-3-nitro-1,8b-dihydroindeno[1,2-*b*]pyrrol-4(3a*H*)-one, R. A. Nagalakshmi, J. Suresh, **R. Ranjith Kumar**, V. Jeyachandran, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 279.
<https://doi.org/10.1107/S1600536814002712>
50. Crystal structure of 2-benzylamino-4-(4-methoxyphenyl)-6,7,8,9-tetrahydro-5*H*-cyclohepta-*[b]*pyridine-3-carbonitrile, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 525.
<https://doi.org/10.1107/S1600536814024878>
49. 2-Methoxy-4-(2-methoxyphenyl)-5,6,7,8,9,10-hexahydrocycloocta-*[b]*pyridine-3-carbonitrile R.Vishnupriya, J.Suresh, S.Maharani, **R. Ranjith Kumar**, P.L.N. Lakshman, *Acta Cryst.* **2014**, *E70*, 656.
<https://doi.org/10.1107/S1600536814016365>
48. Crystal structure of 5-amino-5'-chloro-6-(4-chlorobenzoyl)-8-nitro-2,3-dihydro-1*H*-spiro-[imidazo[1,2-*a*]pyridine-7,3'-indolin]-2'-one including an unknown solvent molecule, R. A. Nagalakshmi, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, P.L.N.Lakshman, *Acta Cryst.* **2014**, *E70*, 971.
<https://doi.org/10.1107/S1600536814017486>
47. 5-Amino-5'-bromo-6-(4-methylbenzoyl)-8-nitro-2,3-dihydro-1*H*-spiro[imidazo[1,2-*a*]pyridine-7,3'-indolin]-2'-one including an unknown solvate, R. A. Nagalakshmi, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 816.
<https://doi.org/10.1107/S1600536814014391>
46. 5-Amino-6-benzoyl-8-nitro-2,3-dihydro-1*H*-spiro[imidazo[1,2-*a*]pyridine-7,3'-indolin]-2'-one dimethyl sulfoxide monosolvate, R. A. Nagalakshmi, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 604.
<https://doi.org/10.1107/S1600536814008800>
45. Crystal structure of 1-benzyl-4-(4-chlorophenyl)-2-imino-1,2,5,6,7,8,9,10-octahydrocycloocta-*[b]*pyridine-3-carbonitrile, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 167.
<https://doi.org/10.1107/S160053681401962X>
44. 4-(2-Fluorophenyl)-2-methoxy-5,6,7,8,9,10-hexahydrocycloocta-*[b]*pyridine-3-carbonitrile R.Vishnupriya, J.Suresh, S.Maharani, **R. Ranjith Kumar**, P.L.N. Lakshman, *Acta Cryst.* **2014**, *E70*, 872.
<https://doi.org/10.1107/S1600536814016365>
43. Crystal structure of 1-benzyl-4-(2,4-dichlorophenyl)-2-imino-1,2,5,6,7,8,9,10-octahydrocycloocta-*[b]*pyridine-3-carbonitrile, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 441.
<https://doi.org/10.1107/S1600536814023071>
42. 10-(4-Chlorophenyl)-14a-hydroxy-12-methyl-8,9,9a,10,12,13,14,14a-octahydro-5*H*-10a,14-methanoindeno-[2',1':4,5]azepino[3,4-*b*]pyrrolizine-5,15(7*H*,11*H*)-dione, R. A. Nagalakshmi, J. Suresh, K. Malathi, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 97.
<https://doi.org/10.1107/S1600536813034107>
41. Isotypic crystal structures of 1-benzyl-4-(4-bromophenyl)-2-imino-1,2,5,6,7,8,9,10-octahydrocycloocta-*[b]*pyridine-3-carbonitrile and 1-benzyl-4-(4-fluorophenyl)-2-imino-1,2,5,6,7,8,9, 10-octahydrocycloocta-*[b]*pyridine-3-carbonitrile, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2014**, *E70*, 344.
<https://doi.org/10.1107/S1600536814022016>

40. Crystal structure and docking studies of hexahydrocycloocta[*b*]pyridine-3-carbonitriles, R. Vishnupriya, A.V.K.M. Kowsalyadevi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, *J. Mol. Biochem.* **2014**, 3, 50.
<https://www.jmolbiochem.com/index.php/JmolBiochem/article/view/116>
39. Crystal structure and molecular docking studies of octahydrocycloocta[*b*]pyridine-3-carbonitriles as potential inhibitors against *Mycobacterium tuberculosis*, R. A. Nagalakshmi, J. Suresh, S. Maharani, **R. Ranjith Kumar**, *J. Mol. Biochem.* **2014**, 3, 77.
<https://www.jmolbiochem.com/index.php/JmolBiochem/article/view/127>
38. 3a,8b-Dihydroxy-2-methylsulfanyl-3-nitro-1-phenyl-1,8b-dihydroindeno[1,2-*b*]pyrrol-4(3a*H*) one, R. A. Nagalakshmi, J. Suresh, V. Jeyachandran, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 1770.
<https://doi.org/10.1107/S1600536813029577>
37. 3a,8b-Dihydroxy-1-(4-methoxyphenyl)-2-methylsulfanyl-3-nitro-1,8b-dihydroindeno[1,2-*b*]pyrrol-4(3a*H*)-one, R. A. Nagalakshmi, J. Suresh, V. Jeyachandran, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 1849.
<https://doi.org/10.1107/S1600536813031279>
36. 14a-Hydroxy-12-methyl-10-(4-methylphenyl)-8,9,9a,10,12,13,14,14a-octahydro-10a,14-methano-5*H*-indeno[2',1':4,5]azepino[3,4-*b*]pyrrolizine-5,15(7*H*,11*H*)-dione, R. A. Nagalakshmi, J. Suresh, K. Malathi, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 1581.
<https://doi.org/10.1107/S1600536813025592>
35. 1',1''-Dimethyl-4'-(4-methylphenyl)dispiro[11*H*-indeno[1,2-*b*]quinoxaline-11,2'-pyrrolidine-3',3''-piperidin]-4''-one, R. A. Nagalakshmi, J. Suresh, K. Malathi, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 1466.
<https://doi.org/10.1107/S1600536813022964>
34. 1',1''-Dimethyl-4'-phenyldispiro[11*H*-indeno[1,2-*b*]quinoxaline-11,2'-pyrrolidine-3',3''-piperidin]-4''-one, J. Suresh, R. A. Nagalakshmi, K. Malathi, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 1433.
<https://doi.org/10.1107/S160053681302223X>
33. 5''-(2-Fluorobenzylidene)-1'-(2-fluorophenyl)-1''-methyl-1',2',3',5',6',7',8',8a'-octahydrodispiro[acenaphthylene-1,3'-indolizine-2',3''-piperidine]-2,4''(1*H*)-dione, R. Vishnu Priya, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 1291.
<https://doi.org/10.1107/S1600536813019594>
32. 5''-(4-Nitrobenzylidene)-1'-(4-nitrophenyl)-1''-methyl-1',2',3',5',7',7a'-hexahydrodispiro[acenaphthylene-1,3'-pyrrolo-[1,2-*c*][1,3]thiazole-2',3''-piperidine]-2,4''(1*H*)-dione including an unknown solvate, R. Vishnu Priya, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 1208.
<https://doi.org/10.1107/S1600536813017704>
31. 4-(4-Fluorophenyl)-6-methylamino-5-nitro-2-phenyl-4*H*-pyran-3-carbonitrile, R. Vishnu Priya, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 687.
<https://doi.org/10.1107/S1600536813009008>
30. 4-(4-Methoxyphenyl)-6-methylamino-5-nitro-2-phenyl-4*H*-pyran-3-carbonitrile, R. Vishnu Priya, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 451.
<https://doi.org/10.1107/S1600536813004923>
29. 3-[2-Cyclopropyl-1-(2-fluorophenyl)-2-oxoethyl]-5-(4-methylsulfanylbenzylidene)-1,3-thiazolidine-2,4-dione, J. Suresh, M. Venkateshan, S. Ponnuchamy, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, E69, 188.
<https://doi.org/10.1107/S1600536812051987>

28. 5''-(4-Methoxybenzylidene)-1'-(4-methoxyphenyl)-1''-methyl-1',2',3',5',6',7',8',8a'-octahydrodispiro[acenaphthylene-1,3'-indolizine-2',3''-piperidine]-2,4''(1*H*)-dione, J. Suresh, R. A. Nagalakshmi, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, *E69*, 256.
<https://doi.org/10.1107/S1600536813001177>
27. (*E*)-16-(4-Chlorobenzylidene)estrone, J. Suresh, H. Thenmozhi, V. Jeyachandran, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, *E69*, 111.
<https://doi.org/10.1107/S1600536812050349>
26. *rac*-5''-(4-Fluorobenzylidene)-1'-(4-fluorophenyl)-1''-methyl-1',2',3',5',6',7',8',8a'-octahydrodispiro[acenaphthylene-1,3'-indolizine-2',3''-piperidine]-2,4''(1*H*)-dione, J. Suresh, R. A. Nagalakshmi, S. Sivakumar, **R. Ranjith Kumar**, P. L. N. Lakshman, *Acta Cryst.* **2013**, *E69*, 140.
<https://doi.org/10.1107/S1600536812051094>
25. Synthesis, Spectroscopic and Docking Studies of Naphthyl Substituted Di-Spiro Octahydroindolizine, R. Vishnu Priya, J. Suresh¹, S. Sivakumar, **R. Ranjith Kumar**, R. Sankaranarayanan, *Physical Review & Research International*, **2013**, 3, 479.
<https://journalpsij.com/index.php/PSIJ/article/view/23101>
24. 5''-(4-Chlorobenzylidene)-1'-(4-chlorophenyl)-1''-methyl-1',2',3',5',6',7',8',8a'-octahydrodispiro[acenaphthylene-1,3'-indolizine-2',3''-piperidine]-2,4''(1*H*)-dione, J. Suresh, R. A. Nagalakshmi, **R. Ranjith Kumar**, S. Sivakumar, P. L. N. Lakshman, *Acta Cryst.* **2012**, *E68*, 3315.
<https://doi.org/10.1107/S160053681204545X>
23. 5''-(2,4-Dichlorobenzylidene)-1'-(2,4-dichlorophenyl)-1''-methyl-1',2',3',5',6',7',8',8a'-octahydrodispiro[acenaphthylene-1,3'-indolizine-2',3''-piperidine]-2,4''(1*H*)-dione, J. Suresh, R. Vishnupriya, **R. Ranjith Kumar**, S. Sivakumar, P. L. N. Lakshman, *Acta Cryst.* **2012**, *E68*, 2906.
<https://doi.org/10.1107/S1600536812037956>
22. 5''-Benzylidene-1''-methyl-1'-phenyl-1',2',3',5',6',7',8',8a'-octahydrodispiro[acenaphthylene-1,3'-indolizine-2',3''-piperidine]-2,4''(1*H*)-dione, J. Suresh, R. A. Nagalakshmi, **R. Ranjith Kumar**, S. Sivakumar, P. L. N. Lakshman, *Acta Cryst.* **2012**, *E68*, 2981.
<https://doi.org/10.1107/S1600536812039591>
21. 5-(4-Fluorobenzylidene)-4'-(4-fluorophenyl)-1,1'-dimethyldispiro[piperidine-3,3'-pyrrolidine-2',3''-indoline]-4,2''-dione, V. Rajni Swamy, S. Ramaswamy, N. Srinivasan, **R. Ranjith Kumar**, R.V. Krishnakumar, *Acta Cryst.* **2012**, *E68*, 2839.
<https://doi.org/10.1107/S1600536812037245>
20. 1-Methyl-1'-(4-methylphenyl)-2',3',5',6',7',7a'-hexahydro-1'*H*-dispiro[piperidine-3,2'-pyrrolizine-3',3''-indoline]-4,2''-dione, S. Ramaswamy, R. Sribala, N. Srinivasan, R.V. Krishnakumar, **R. Ranjith Kumar**, *Acta Cryst.* **2012**, *E68*, 2772.
<https://doi.org/10.1107/S1600536812036240>
19. 2-Amino-4-(4-chlorophenyl)-5,6,7,8,9,10-hexahydrobenzo[8]annulene-1,3-dicarbonitrile, V. Rajni Swamy, N. Srinivasan, **R. Ranjith Kumar**, R.V. Krishnakumar, *Acta Cryst.* **2012**, *E68*, 2692.
<https://doi.org/10.1107/S1600536812034861>
18. 7'-(Naphthalen-1-yl)-5''-[(naphthalen-2-yl)methylidene]-1',3',5',6',7',7a'-hexahydrodispiro[acenaphthene-1,5'-pyrrolo[1,2-*c*]thiazole-6',3''-piperidine]-2(1*H*),4''-dione, J. Suresh, R. Vishnupriya, **R. Ranjith Kumar**, S. Sivakumar, P. L. N. Lakshman, *Acta Cryst.* **2012**, *E68*, 858.
<https://doi.org/10.1107/S1600536812007271>
17. Spectral analysis and crystal structure of two substituted spiro acenaphthene structures, J. Suresh, R. Vishnupriya, S. Sivakumar, **R. Ranjith Kumar**, *J. Mol. Biochem.* **2012**, 1, 183.
<https://www.jmolbiochem.com/index.php/JmolBiochem/article/view/75>
16. Spectral analysis and crystal structure of spiro[2.2]acenaphthene-1''-one-spiro[3.3']-5'-(2,3-dichlorophenylmethylidene)-1'-methylpiperidin-4'-one-4-(2,3-dichlorophenyl)octahydroindolizine, R. Vishnu Priya, J. Suresh, S. Sivakumar, **R. Ranjith Kumar**, *Crystal Structure Theory and Applications*, **2012**, 1, 74.
<https://www.scirp.org/journal/paperinformation.aspx?paperid=26222>

15. 5''-(4-Methoxybenzylidene)-7'-(4-methoxyphenyl)-1''-methyl-5',6',7',7a'-tetrahydrodispiro[acenaphthene-1,5'-pyrrolo[1,2-c][1,3]thiazole-6',3''-piperidine]-2,4''-dione, J. Suresh, R. Vishnupriya, **R. Ranjith Kumar**, S. Sivakumar, P. L. N. Lakshman, *Acta Cryst.* **2011**, E67, 3210. <https://doi.org/10.1107/S1600536811045934>
14. *rac*-2-Hydroxy-2-(2-oxocyclopentyl)-1*H*-indene-1,3(2*H*)-dione, J. K. Sundar, S. Maharani, **R. Ranjith Kumar**, S. Natarajan, J. Suresh, P. L. N. Lakshmanan, *Acta Cryst.* **2010**, E66, 2967. <https://doi.org/10.1107/S1600536810042856>
13. 4'-(2,4-Dichlorophenyl)-1,1'-dimethylpiperidine-3-spiro-3'-pyrrolidine-2'-spiro-3''-indoline-4,2''-dione, S. Nagamuthu, R. Sribala, **R. Ranjith Kumar**, R. V. Krishnakumar, N. Srinivasan, *Acta Cryst.* **2010**, E66, 717. <https://doi.org/10.1107/S160053681000704X>
12. 3-[(*E*)-(4-Methoxyphenyl)methylidene]-1-methyltetrahydro-4(1*H*)-pyridinone, D. Gayathri, D. Velmurugan, **R. Ranjith Kumar**, S. Perumal, K. Ravikumar, *Acta Cryst.* **2008**, E64, 552. <https://doi.org/10.1107/S1600536808003280>
11. 3-(4-Chlorophenyl)-7-methyl-4-(4-methylphenyl)-1-oxa-2,7-diazaspiro[4.5]dec-2-en-10-one, D. Gayathri, D. Velmurugan, **R. Ranjith Kumar**, S. Perumal, K. Ravikumar, *Acta Cryst.* **2008**, E64, 398. <https://doi.org/10.1107/S1600536807068717>
10. 3-[(*E*)-(2,4-Dichlorophenyl)methylidene]-1-methyltetrahydro-4(1*H*)-pyridinone, D. Gayathri, D. Velmurugan, **R. Ranjith Kumar**, S. Perumal, K. Ravikumar, *Acta Cryst.* **2008**, E64, 520. <https://doi.org/10.1107/S1600536808002286>
9. 1'-Methyl-4'-(1-naphthyl)-3''-(1-naphthylmethylene)acenaphthene-1-spiro-2'-pyrrolidine-3'-spiro-1''-cyclohexane-2,2''-dione, S. Athimoolam, **R. Ranjith Kumar**, S. Perumal, *Acta Cryst.* **2008**, E64, 95. <https://doi.org/10.1107/S1600536807061387>
8. 5''-(4-Chlorobenzylidene)-1',1''-dimethyl-3'-phenylacenaphthene-1-spiro-2'-pyrrolidine-3'-spiro-3''-pyridine-2,4''-dione, S. Pandiarajan, N. Saravanamoorthy, B. Ravi Kumar, **R. Ranjith Kumar**, S. Athimoolam, *Acta Cryst.* **2008**, E64, 99. <https://doi.org/10.1107/S1600536807059582>
7. 5''-(4-Chlorobenzylidene)-4'-(4-chlorophenyl)-1''-methyl-5'-phenylacenaphthene-1-spiro-2'-pyrrolidine-3'-spiro-3''-piperidine-2,4''-dione, S. Athimoolam, **R. Ranjith Kumar**, K. Vijaya, R. Sayee Kannan, S. Perumal, *Acta Cryst.* **2007**, E63, 4635. <https://doi.org/10.1107/S1600536807055109>
6. 4-Benzylidene-2-methyl-11-phenyl-1,2,3,4,11,11a-hexahydropyrido[3,4-*c*][1,5]benzothiazepine, S. Athimoolam, **R. Ranjith Kumar**, R. S. Kannan, B. Sridhar, S. A. Bahadur, *Acta Cryst.* **2007**, E63, 4359. <https://doi.org/10.1107/S1600536807049598>
5. 1-(4-Chlorophenyl)-8-(4-fluorophenyl)-4-[(*E*)-(4-fluorophenyl)methylidene]-6-methyl-4,5,6,7,7a,8-hexahydro-1,2,4-oxadiazolo[5,4-*d*]pyrido[3,4-*c*][1,5]benzothiazepines, N. Srinivasan, R. Sribala, **R. Ranjith Kumar**, S. Perumal, R. V. Krishnakumar, *Acta Cryst.* **2007**, E63, 4268. <https://doi.org/10.1107/S1600536807048465>
4. 8-[(*E*)-4-Methoxybenzylidene]-4-(4-methoxyphenyl)-3-(3-phenyl-1,2,4-oxadiazol-5-yl)-5,6,7,8-tetrahydro-4*H*-chromen-2-ylamine, N. Srinivasan, M. Subha Nandhini, **R. Ranjith Kumar**, S. Perumal, R. V. Krishnakumar, *Acta Cryst.* **2007**, E63, 3750. <https://doi.org/10.1107/S1600536807038093>
3. 3,5-Bis[(*E*)-4-methylbenzylidene]-4-oxopiperidine-1-carbonitrile, M. S. Nandhini, N. Srinivasan, **R. Ranjith Kumar**, S. Perumal, R. V. Krishnakumar, *Acta Cryst.* **2007**, E63, 3749. <https://doi.org/10.1107/S1600536807037956>
2. 5''-Benzylidene-1''-methyl-4',5'-diphenyl-1*H*-indole-3-spiro-2'-pyrrolidine-3'-spiro-3''-piperidine-2,4''-dione, B. R. Kumar, S. Pandiarajan, **R. Ranjith Kumar**, S. Perumal, *Acta Cryst.* **2007**, E63, 3221. <https://doi.org/10.1107/S1600536807025822>
1. 7-Methyl-9-(4-methylbenzylidene)-1-(4-methylphenyl)-3,4-diphenyl-2-oxa-3,7-diazaspiro[4.5]decan-10-one, J. Suresh, **R. Ranjith Kumar**, S. Perumal, S. Natarajan, *Acta Cryst.* **2006**, E62, 5356. <https://doi.org/10.1107/S1600536806044709>

DETAILS OF SINGLE CRYSTAL X-RAY DATA DEPOSITED IN CCDC

No	Compound	CCDC No	Date
39	4-(4-Chlorophenyl)-9-[(4-chlorophenyl)methylidene]-3,11-dimethyl-1-phenyl-1,5,6,7,8,9-hexahydro-5,8-epiminocyclohepta[b]pyrazolo[4,3-e]pyridine	2160194	19-03-2022
38	2-Amino-4-(4- <i>t</i> -butylphenyl)-6-(2,5-dimethylfuran-3-yl)pyridine-3-carbonitrile	1923165	15-06-2019
37	2-(5-Bromo-1 <i>H</i> -indol-3-yl)-4-(4-fluorophenyl)-5,6,7,8,9,10-hexahydro-cycloocta[b]pyridine-3-carbonitrile	1859053	30-07-2018
36	4-(2,6-Difluorophenyl)-2-(1 <i>H</i> -indol-3-yl)-1,4,5,6,7,8,9,10,11,12,13,14-dodecahydrocyclooctadeca[b]pyridine-3-carbonitrile	1859052	30-07-2018
35	2-Amino-4-phenyl-5,6,7,8,9,10,11,12,13,14-decahydrocyclooctadeca[b]pyridine-3-carbonitrile	1840402	30-04-2018
34	2-Amino-4-(4-chlorophenyl)-5,6,7,8,9,10,11,12,13,14-decahydrobenzo[12]annulene-1,3,3(4 <i>H</i>)-tricarbonitrile	1840401	30-04-2018
33	2-Amino-4-(4-chlorophenyl)-7-phenyl-6,7-dihydro-5 <i>H</i> -pyrazolo[3,4- <i>h</i>]quinoline-3-carbonitrile	1837442	16-04-2018
32	4'-(2,4-Dichlorophenyl)-1'-methyl-2''-phenyl-7'',8''-dihydro-5'' <i>H</i> -dispiro[indole-3,2'-pyrrolidine-3',6''-quinoline]-2,5''(1 <i>H</i>)-dione	1557215	20-06-2017
31	7'-(2-Chlorophenyl)-2''-phenyl-7'',7'',7a'',8''-tetrahydro-1' <i>H</i> ,2 <i>H</i> ,3' <i>H</i> ,5'' <i>H</i> -dispiro[acenaphthylene-1,5'-pyrrolo[1,2- <i>c</i>][1,3]thiazole-6',6''-quinoline]-2,5''-dione	1537101	20-06-2017
30	5a,10a-Dihydroxy-3-methyl-2,3,4,5,5a,10a-hexahydro-1,5-methanoindeno[1,2- <i>d</i>]azepine-10,11(1 <i>H</i>)-dione	1532101	10-02-2017
29	5-Benzyl-7a-hydroxy-1-methyl-2,3,5,6,7,7a-hexahydro-1 <i>H</i> -3a,7-methanoindeno[2,1- <i>d</i>]pyrrolo[3,2- <i>c</i>]azepine-12,13(4 <i>H</i>)-dione	1532100	10-02-2017
28	1'-Methyl-2 <i>H</i> -dispiro[cyclooctane-1,3'-pyrrolidine-2',2''-indene]-1'',2,3''-trione	1532099	10-02-2017
27	6a-Hydroxy-1-methyl-4-phenyl-2,3,6,6a-tetrahydro-1 <i>H</i> ,4 <i>H</i> ,11 <i>H</i> -3a,6-methanoindeno[2',1':4,5]thiopyrano[4,3- <i>b</i>]pyrrole-11,12-dione	1532098	10-02-2017
26	(<i>Z</i>)-5''-(2-Chlorobenzylidene)-7'-(2-chlorophenyl)-7',7a'-dihydro-1' <i>H</i> ,2'' <i>H</i> ,3' <i>H</i> -dispiro[indoline-3,5'-pyrrolo[1,2- <i>c</i>]thiazole-6',3''-thiophene]-2,4''(5'' <i>H</i>)-dione	1469239	17-03-2016
25	(<i>Z</i>)-6-Amino-3-(2-bromobenzylidene)-10-(2-bromophenyl)-4-oxo-8-(<i>p</i> -tolyl)-2-thiaspiro[4.5]deca-6,8-diene-7-carbonitrile	1456372	27-02-2016
24	4-(3,7,7-Trimethyl-5-oxo-5,6,7,8-tetrahydro-1 <i>H</i> -pyrazolo[3,4- <i>b</i>]quinolin-1-yl)benzonitrile	1445690	06-01-2016
23	3-Methyl-1-phenyl-1,6,7,8-tetrahydro-5 <i>H</i> -pyrazolo[3,4- <i>b</i>]quinolin-5-one	1445689	06-01-2016
22	4'-(2,4-Dichlorophenyl)-1',3''-dimethyl-1''-phenyl-7'',8''-dihydrodispiro[indole-3,2'-pyrrolidine-3',6''-pyrazolo[3,4- <i>b</i>]quinoline]-2,5''(1 <i>H</i> ,1'' <i>H</i>)-dione	1445688	06-01-2016
21	2-Amino-4-(4-chlorophenyl)-3,4,5,6,7,8,9,10-octahydrobenzo[<i>a</i>]cyclooctene-1,3,3-tricarbonitrile	1435196	05-11-2015
20	1-Benzyl-2-imino-4-(3,4,5-trimethoxyphenyl)-1,2,5,6,7,8,9,10-octahydro-cycloocta[b]pyridine-3-carbonitrile	1419200	15-08-2015
19	2-(Benzylamino)-4-(4-chlorophenyl)-6,7-dihydro-5 <i>H</i> -cyclopenta[b]pyridine-3-carbonitrile	1419199	15-08-2015
18	7'-(4-Chlorophenyl)-1''-methyl-7',7a'-dihydro-1' <i>H</i> ,4'' <i>H</i> -dispiro[indeno[1,2- <i>b</i>]quinoxaline-11,5'-pyrrolo[1,2- <i>c</i>][1,3]thiazole-6',3''-piperidin]-4''-one	1418617	13-08-2015
17	3''-(2-Cyclopropyl-1-(2-fluorophenyl)-2-oxoethyl)-2'-(2-thienyl)-5',6',7',7a'-tetrahydro-2'' <i>H</i> ,4'' <i>H</i> -dispiro[indole-3,3'-pyrrolizine-1',5''-[1,3]thiazolidine]-2,2'',4''(1 <i>H</i>)-trione	1035191	20-11-2014
16	Ethyl 2,3''-dioxo-3'',4'',7',7a'-tetrahydro-1' <i>H</i> ,2 <i>H</i> -dispiro[acenaphthylene-1,5'-pyrrolo[1,2- <i>c</i>][1,3]thiazole-6',2''-[1,4]benzothiazine]-7'-carboxylate	1021459	27-08-2014
15	(<i>Z</i>)-3-Methyl-7-(2-chlorobenzylidene)-1-phenyl-4-(2-chlorophenyl)-6,7-dihydro-1 <i>H</i> -pyrazolo[3,4- <i>b</i>]thieno[2,3- <i>e</i>]pyridine	1011898	02-07-2014
14	(6-Amino-8-(3-fluorophenyl)-9-nitro-1,3,4,8-tetrahydro-2 <i>H</i> -pyrido[1,2- <i>a</i>]pyrimidin-7-yl)(4-chlorophenyl)methanone	1000387	30-04-2014
13	5-Hydroxy-7-(4-methoxyphenyl)-8-nitro-5-phenyl-1,2,3,5,6,7-hexahydroimidazo[1,2- <i>a</i>]pyridine-6-carbonitrile	1000386	30-04-2014

12	5'-Chloro-5-imino-6-(1 <i>H</i> -indol-3-ylcarbonyl)-8-nitro-2,3,5,6-tetrahydro-1 <i>H</i> -spiro[imidazo[1,2- <i>a</i>]pyridine-7,3'-indol]-2'(1' <i>H</i>)-one	1000385	30-04-2014
11	5-Amino-6-benzoyl-5'-chloro-8-nitro-2,3-dihydro-1 <i>H</i> -spiro[imidazo[1,2- <i>a</i>]pyridine-7,3'-indol]-2'(1' <i>H</i>)-one	1000384	30-04-2014
10	2,4-Dichloro-5'-methyl-6a,6b,7,8,9,11a-hexahydro-6 <i>H</i> -spiro[chromeno[3,4- <i>a</i>]pyrrolizine-11,3'-indole]-2',6(1' <i>H</i>)-dione	985757	07-02-2014
9	3-Hydroxy-10,13-dimethyl-7'-(4-methylphenyl)-1,3,4,5,6,7,7',7a',8,9,10,11,12,13,14,15-hexadecahydro-1' <i>H</i> -dispiro[cyclopenta[<i>a</i>]phenanthrene-16,6'-pyrrolo[1,2- <i>c</i>][1,3]thiazole-5',3''-indole]-2'',17(1'' <i>H</i> ,2 <i>H</i>)-dione	959195	04-09-2013
8	Ethyl 4-(2-methoxyphenyl)-6-(methylamino)-5-nitro-1-phenyl-1,4-dihydro- <i>pyrano</i> [2,3- <i>c</i>]pyrazole-3-carboxylate	952473	25-07-2013
7	4-(2-Chlorophenyl)-2-ethoxy-5,6,7,8,9,10-hexahydrocycloocta[<i>b</i>]pyridine-3-carbonitrile	942545	03-06-2013
6	4-(4-Methoxyphenyl)- <i>N</i> ,3-dimethyl-5-nitro-1-phenyl-1,4-dihydro- <i>pyrano</i> [2,3- <i>c</i>]pyrazol-6-amine	938837	13-05-2013
5	2-Amino-4-(2-chlorophenyl)-5,6,7,8,9,10-hexahydrobenzo[8]annulene-1,3-dicarbonitrile	931925	31-03-2013
4	5-Amino-7-(4-isopropylphenyl)-2-phenyl-2,3-dihydro-1-benzothiophene-4,6-dicarbonitrile	911687	20-11-2012
3	4-(4-Bromophenyl)-6-(methylamino)-5-nitro-2-phenyl-4 <i>H</i> -pyran-3-carbonitrile	911400	18-11-2012
2	3-Hydroxy-16-(1-naphthylmethylene)androstan-17-one	907216	23-10-2012
1	(16 <i>R</i> ,5' <i>R</i> ,7' <i>R</i> ,7a' <i>R</i>)-Spiro[5'.2'']acenaphthylene-1''-one-spiro[16.6']-7'-(2-methoxyphenyl)-tetrahydro-1 <i>H</i> -pyrrolo[1,2- <i>c</i>][1,3]thiazolo- <i>trans</i> -androsterone	907215	23-10-2012

PAPERS PRESENTED IN NATIONAL/INTERNATIONAL CONFERENCE/SEMINAR

(I) INTERNATIONAL HELD IN INDIA

24. Microwave assisted synthesis of benzimidazole tethered spiro indeno[1,2-*b*]quinoxaline: A fluorescent “turn off” chemosensor for Ag⁺ Ions, P. R. Stalin, **R. Ranjith Kumar**, S. Murugesan, International Conference on Materials for Green and Sustainable Chemistry (ICMGS 2025), The Gandhigram Rural Institute, Dindigul, 6-7 Mar 2025

23. Novel pyrazolo[3,4-*j*][1,7]phenanthroline-3-carbonitriles: A four-component domino synthesis and fluorescence-based sensor applications, N. Mathivanan, **R. Ranjith Kumar**, International Conference on Innovations in Chemical Sciences, Dr. NGP College of Arts and Science, Coimbatore, 8-9 Jan 2025

22. A one-pot three-component domino synthesis of dihydro-4H-pyrano-quinoline hybrid heterocycles, K. Arthy, **R. Ranjith Kumar**, International Conference on Innovations in Chemical Sciences, Dr. NGP College of Arts and Science, Coimbatore, 8-9 Jan 2025

21. An Efficient Synthesis and Antioxidant Activity of Novel Pyrano[2,3-*f*]quinazolines, P. Stalin, **R. Ranjith Kumar**, S. Murugesan, International Conference on Consortium of Universal Research Erudition – iCURE-2023, Madurai Kamaraj University, Madurai, 3–6 Feb 2023.

20. Synthesis of benzothiazole/pyrimidine fused 1,3-cyclohexanediones in aqueous medium at ambient temperature, K. Abirami Sundari, **R. Ranjith Kumar**, S. Murugesan, International Conference on Consortium of Universal Research Erudition – iCURE-2023, Madurai Kamaraj University, Madurai, 3–6 Feb 2023.

19. 3-Amino-biaryl-2,4-dicarbonitrile tethered phenothiazines: fluorescence turn-off chemosensors for the detection of picric acid and 4-nitrophenol, S. S. Roja, **R. Ranjith Kumar**, International Virtual Conference on Frontiers in Chemical Research - ICFCR 21 Bishop Heber College (Autonomous), Tiruchirappalli, 3-4 Feb 2021.

18. A convenient approach for the construction of spiro-linked pyrrolo[1,2-*c*]thiazole-oxindole/indeno[1,2-*b*]quinoxaline–tropane hybrids via [3+2] cycloaddition, S. Raja Rubina, **R. Ranjith Kumar**, S. Murugesan, International Virtual Conference on Frontiers in Chemical Research - ICFCR 21 Bishop Heber College (Autonomous), Tiruchirappalli, 3-4 Feb 2021.

17. One-pot Three-Component 1,3-Dipolar Cycloaddition Mediated Synthesis of Dispiro Indazole–Pyrrolo[1,2-*c*]thiazole/Pyrrolidine–Oxindole Hybrids, S. Raja Rubina, S. Murugesan, **R. Ranjith Kumar**, International Conference on Frontiers in Chemical and Material Sciences (ICFCMS-2020), Gandhigram Rural Institute, Gandhigram, Dindigul, 24-25 Feb, 2020.

16. One Pot Domino Synthesis of furan tethered pyridine-3-Carbonitriles: A Dual Responsive “Turn off” Fluorescent Chemosensor for the Detection of Fe 3+ and Picric acid, A. Shylaja, **R. Ranjith Kumar**, International Conference on Research Initiatives in Chemistry for Sustainable Chemistry RICS-2019, Gandhigram Rural Institute, Dindigul, Tamil Nadu, 18-19 March, 2019.

15. One-pot multi-component 1,3-cycloaddition strategy: synthesis of novel spiro indenoquinoxaline–pyrrolidine/pyrrolothiazole–indole hybrids, M. Muthu, **R. Ranjith Kumar**, International Conference on Advancements and Challenges on Chemical Sciences, Pachaiyappa College, Chennai, 3 Feb 2018.

14. A facile synthesis of thiazole–indole hybrid heterocycles through a one-pot four-component domino protocol, B. Mariammal, M. Muthu, **R. Ranjith Kumar**, International Conference on Functional Materials, Thiagarajar College, Madurai, 7-8 Sep 2017.

13. A facile one-component four-component domino protocol for the synthesis of novel cycloocta/cyclododeca-pyridine-3-carbonitrile-indole hybrids, M. Muthu, **R. Ranjith Kumar**, International Conference on Frontier Areas in Chemical Technologies (FACTs)-2017, Alagappa University, Karaikudi on 6-8 July, 2017.
12. Discovery of novel pyrazole[3,4-*h*]quinolone-3-carbonitriles as efficient 'turn-off' fluorescence sensors for Fe³⁺ ions, A. Shylaja, **R. Ranjith Kumar**, International Conference on Frontier Areas in Chemical Technologies-2017, Alagappa University, Karaikudi on 6-8 July, 2017.
11. One pot synthesis of 2-amino-4-arylpyridine-3-carbonitrile tethered phenothiazines, S.S. Roja, **R. Ranjith Kumar**, International Conference on Frontier Areas in Chemical Technologies (FACTs)-2017, Alagappa University, Karaikudi on 6-8 July, 2017.
10. A facile synthesis of thiazolo-pyridine hybrid heterocycles through one- pot four-component domino protocol, B. Mariammal, M. Muthu, **R. Ranjith Kumar**, International Conference on Frontier Areas in Chemical Technologies-2017, Alagappa University, Karaikudi on 6-8 July, 2017.
9. Vibrational Analysis of 5'-methyl-6b,7,9,11a-tetrahydrospiro[chromeno[3',4':3,4]pyrrolo[1,2]thiazole1-1,3'-indoline]-2',6(6aH)-dione, S. Pangajavalli, **R. Ranjith Kumar**, S. Ramaswamy, International Conference on Recent Trends in Engineering Science, Humanities and Management, Sri S Ramasamy Naidu Memorial College, Sattur, 2-3, Feb 2017.
8. A facile three-component tandem protocol for the synthesis of novel dihydro 1*H*-pyrazolo[3,4-*b*]pyridines, M. Muthu, **R. Ranjith Kumar**, International conference on Chemical and Environmental Research, Jamal Mohamed College, Tiruchirapalli, 7 January 2017.
7. A facile entry to novel spiro tethered pyrazolo[3,4-*b*]quinoline-pyrrolidine/pyrrolothiazole/indolizine-indenoquinoxaline hybrids, R. V. Sumesh, **R. Ranjith Kumar**, International Conference on Recent Advances in Materials and Chemical Sciences, Gandhigram Rural Institute, Dindigul, Tamil Nadu, 14-15, December 2015.
6. Synthesis and NMR studies of novel dispiro indeno[1,2-*b*]quinoxaline-benzo[*b*] [1,4]thiazine-pyrrolidine/pyrrolo[1,2-*c*]thiazole/pyrrolizine hybrid heterocycles, K. Malathi, M. Muthu, **R. Ranjith Kumar**, International Conference on Recent Advances in Materials and Chemical Sciences, Gandhigram Rural Institute, Dindigul, Tamil Nadu, 14-15, December 2015.
5. Synthesis of novel oxindole thiophene hybrids tethered with pyrrolidine, pyrrolothiazole or indolizine rings, M. Anusha Rani, M. Muthu, **R. Ranjith Kumar**, 2nd International Symposium on Emerging Trends in Chemical and Pharmaceutical Sciences and Pharma Chem Expo-2014, IICT, Hyderabad, October 15-17, 2014.
4. Antimycobacterial activity: One-pot three-component domino "on water" protocol for the synthesis of functionalized benzo[*a*]cyclooctenes, S. Maharani and **R. Ranjith Kumar**, International Conference Multidisciplinary Frontiers of Medicinal Chemistry: Synthesis, Molecular Biology & Technology, Sastra University, 18, 19 January 2013.
3. Synthesis of novel 16-spiro steroids: Spiro[5'.3"]oxindole-spiro[6'.16]spiro-7'-(aryl) tetrahydro-1*H*-pyrrolo[1,2-*c*][1,3]thiazolo-estrones, V. Jeyachandran, S. Vivek Kumar, **R. Ranjith Kumar**, International conference on multidisciplinary frontiers of medicinal chemistry: Synthesis, Molecular Biology & Technology, Sastra University, Thanjavur, January 18-19, 2013.
2. Discovery of spiro-piperidin-4-ones as antimycobacterial agents, **R. Ranjith Kumar**, S. Perumal, D. Sriram, P. Yogeewari, International Conference on the Interface of Chemistry-Biology in Biomedical Research (12th ISCBC-2008), Birla Institute of Technology and Science, Pilani, Rajasthan, India, February 2008

1. An investigation of the 1,3-dipolar cycloaddition of α,N -diarylnitrones over 3,5-bis-(arylidene)-1-methylpiperidin-4-ones: Synthesis of highly substituted novel spiro-isoxazolidines, **R. Ranjith Kumar**, S. Perumal, Joint International Conference on Building Bridges, Forging Bonds for 21st Century Organic Chemistry and Chemical Biology (ACS-CSIR), National Chemical Laboratory, Pune, India, January 2006

(II) NATIONAL

26. Multicomponent synthesis of novel benzo[f]quinazoline derivatives as fluorescent chemosensor for the detection of Fe³⁺ and Cu²⁺ ions, P. R. Stalin, **R. Ranjith Kumar**, S. Murugesan, National Conference on Biomaterials (NCB-2023), Scott Christian College, Nagercoil, 21 Apr 2023.

25. Microwave Assisted Synthesis of Epiminocyclohepta-Pyrazolo-Pyridines, National Conference on Frontiers in Chemical Sciences, Department of Chemistry, Central University of Tamil Nadu, Thiruvarur, S. Raja Rubina, S. Murugesan, **R. Ranjith Kumar**, 29-30 March 2021

24. One Pot Domino Protocol for the Synthesis of Novel Pyrazolo Phenanthroline heterocycles, National Conference on Frontiers in Chemical Sciences, Department of Chemistry, Central University of Tamil Nadu, Thiruvarur, B. Mariammal, **R. Ranjith Kumar**, 29-30 March 2021

23. Synthesis of 3-amino-4'-biaryl-2,4-dicarbonitrile-phenothiazine hybrids for the detection of Cu²⁺ and Fe³⁺ ions, National Conference on Frontiers in Chemical Sciences, Department of Chemistry, Central Univ. of Tamil Nadu, Thiruvarur, S.S. Roja, **R. Ranjith Kumar**, 29-30 March 2021

22. Phenothiazine Tethered Spiro Pyrrolidine-Oxindole Hybrids: A Highly Selective On-Off Switchable Fluorogenic Chemosensor for Detecting Fe (III) and Hg (II) Ion, A. Shylaja, **R. Ranjith Kumar**, 21st CRSI National Symposium in Chemistry, IICT, Hyderabad on 14-16 July 2017.

21. Combinatorial synthesis of spiro-linked quinolinone-pyrrolidine/pyrrolo[1,2-c]thiazole-oxindole/acenaphthalene hybrid heterocycles, R. V. Sumesh, A. Shylaja, **R. Ranjith Kumar**, Three-day CRSI National Seminar on Emerging Trends in Chemistry, Madurai Kamaraj University, Madurai, 18-20, February 2016.

20. Design, synthesis and anti-mycobacterial activity of novel hybrid thiazolidine-2,4-diones, S. Ponnuchamy, **R. Ranjith Kumar**, M. A. Ali, 10th Mid-Year Chemical Research Society of India (CRSI) Symposium in Chemistry, NIT, Trichy, July 23-25, 2015.

19. Domino Knoevenagel Condensation/Aza-ene Addition/N-Cyclization Route to Functionalized Imidazo[1,2-a]pyridines and Pyrido[1,2-a]pyrimidines, S. Sivakumar, **R. Ranjith Kumar**, National Symposium on Transcending Frontiers in Organic Chemistry - National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram, October 09-11, 2014.

18. Synthesis and AChE inhibition studies of novel dispirooxindolo-pyrrolizine-thiazolidine-2,4-dione hybrids, S. Ponnuchamy, **R. Ranjith Kumar**, National Symposium on Transcending Frontiers in Organic Chemistry - National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram, October 09-11, 2014.

17. A facile atom economic synthesis of novel chromenopyridines, R. V. Sumesh, A. Malathi, **R. Ranjith Kumar** - 16th CRSI National Symposium in Chemistry (NSC-16) 8th CRSI-RSC Joint Symposium in Chemistry, IIT Mumbai, 6-9 February 2014.

16. An expedient domino [3+2] cycloaddition/intramolecular annulation reaction for the synthesis of novel hexacyclic fused systems, A. Malathi, **R. Ranjith Kumar**, 16th CRSI National Symposium in Chemistry (NSC-16) 8th CRSI-RSC Joint Symposium in Chemistry, IIT Mumbai, 6–9 February 2014.
15. 1,3-Dipolar cycloaddition: Synthesis and NMR studies of novel dispiro tetralone derivatives, V. Jeyachandran, N. Muniraj, **R. Ranjith Kumar**, National Seminar on Current Trends in Organic Synthesis, Madurai Kamaraj University, Madurai, 19 June 2013.
14. An easy access to novel dispiro thiazolo[3,2-*a*]pyridines via 1,3-dipolar cycloaddition, M. Anusha Rani, **R. Ranjith Kumar**, National Seminar on Current Trends in Organic Synthesis, Madurai Kamaraj University, Madurai, 19 June 2013.
13. An atom economic facile three-component domino synthesis of highly functionalized pyridine-3-carbonitriles and benzo[*a*]cyclooctene-1,3-dicarbonitriles S. Maharani, **R. Ranjith Kumar**, National Seminar on Current Trends in Organic Synthesis, Madurai Kamaraj University, Madurai, 19 June 2013.
12. A facile stereospecific synthesis of novel 16-spiro *trans*-androsterone hybrid heterocycles through 1,3-dipolar cycloaddition, S. Kanchithalaivan, **R. Ranjith Kumar**, National Seminar on Current Trends in Organic Synthesis, Madurai Kamaraj University, Madurai, 19 June 2013.
11. A Facile Synthesis of Novel dispiro acenaphthylene-oxindolo-pyrrolothiazolidine hybrid heterocycles via 1,3-dipolar cycloaddition, A.Malathi, G.Kalaiyarasan, **R.Ranjith Kumar** National Seminar on current Trends in Organic Synthesis, Madurai Kamaraj University, Madurai, June 19 2013.
10. Discovery of novel dispiro oxindolo-pyrrazoline-1,5-thiazolidine-2,4-dione hybrid heterocycles as AChE inhibitors, S. Ponnuchamy, **R. Ranjith Kumar**, National Seminar on Current Trends in Organic Synthesis, Madurai Kamaraj University, Madurai, 19 June 2013.
9. Synthesis of novel 16-spiro steroids: spiro-7'-(aryl)tetrahydro-1*H*-pyrrolo[1,2-*c*][1,3] thiazolo *trans*-androsterone hybrid heterocycles, S Kanchithalaivan, **R. Ranjith Kumar**, 15th CRSI National Symposium in Chemistry, Banaras Hindu University, Varanasi, February 1-3, 2013.
8. One-pot domino synthesis of highly substituted novel 4*H*-3-pyrancarbonitriles, S. Sivakumar, **R. Ranjith Kumar**, 15th CRSI National Symposium in Chemistry (NSC-15) Feb 1-3, 2013 & 7th CRSI-RSC Symposium in Chemistry Jan 31, 2013 Banaras Hindu University, Varanasi.
7. A facile domino protocol for the regioselective synthesis of novel 5-amino-2,7-diaryl-2,3-dihydrobenzo[*b*]thiophenes, V. Jeyachandran, **R. Ranjith Kumar**, S. Perumal “UGC sponsored National Seminar on Recent Trends in Chemistry” HKRH College, Uthamapalayam, March 2012
6. Atom economic synthesis of novel di-spiro piperidin-4-ones, S. Kanchithalaivan, **R. Ranjith Kumar**, S. Perumal “UGC sponsored National Seminar on Recent Trends in Chemistry” Hajee Karutha Rowther Howdia College, Uthamapalayam, March 2012
5. A one-pot four component domino protocol for the synthesis of 2,6-di(indolyl)-4-arylpyridines in ionic liquid, V. Jeyachandran, K. Balamurugan, **R. Ranjith Kumar**, S. Perumal “National Conference on Recent Trends in Green Synthesis”, Alagappa University, Karaikudi, August 2011.
4. An atom economic synthesis of novel spiro-pyridino-pyrrolo[1,2-*c*]thiazoles *via* 1,3-dipolar cycloaddition of azomethine ylide to arylidene-*N*-methyl-4-piperidones, S. Sivakumar, **R. Ranjith Kumar**, S. Perumal, “National Conference on Recent Trends in Green Synthesis”, Alagappa University, Karaikudi, August 2011.

3. 1,3-Dipolar cycloaddition of nitrile oxide over 3,5-bis(arylidene)-1-methylpiperidin-4-ones: synthesis of novel spiro-dioxazoles and isoxazolines, **R. Ranjith Kumar**, S. Perumal, National Seminar on Frontiers in Chemistry, CUSAT, Cochin, Kerala, India, March 2006

2. Stereoselective synthesis and NMR study of novel 2,6-diaryl-3,5-bis(arylsulfanyl)tetrahydro-4(1*H*)-pyridinones, **R. Ranjith Kumar**, S. Perumal, National Seminar on Emerging Trends and New Vistas in Chemistry, University of Calicut, Kerala, India, Nov 2005 – *Selected as best oral presentation*

1. A microwave assisted synthesis of novel 2-methyl-11-aryl-4-[(*E*)-arylmethylidene]-1,2,3,4,11,11a-hexahydropyrido[3,4-*c*][1,5]benzothiazepines, **R. Ranjith Kumar**, S. Perumal, National Level Conference on Recent Trends in Chemistry of Biologically Interesting Compounds, VHNSN College, Virudhunagar, Tamil Nadu, India, July 2005

(III) PARTICIPATION IN SEMINAR/WORKSHOP

3. National Workshop on One- and Two- Dimensional NMR Spectroscopy: Theory and Applications, School of Chemistry, Madurai Kamaraj University, Madurai, India, February 2007 Handled practical sessions and demonstrated high resolution NMR spectrometer for the participants of the workshop

2. National Workshop on NMR Spectroscopy-Theory and Applications, School of Chemistry, Madurai Kamaraj University, Madurai, India, March 2008, Handled practical sessions and demonstrated high resolution NMR spectrometer for the participants of the workshop

1. National Workshop on Green Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai, India, July 2005, demonstrated green chemistry experiments for the participants of the workshop.

Ph.D. GUIDANCE

Awarded: Guide-12; Co-Guide-1; Submitted:-; Working: 4

S No	Name of the Research Scholar	Reg. No. & Date	Fellowship Details	Title of the thesis; Status; Submission Date; Viva-voce exam Date
Central University of Tamil Nadu Affiliation				
17	Mr. M. Mohanavelan	R240519 17-02-2025	Full time University	Working
16	Mr. Jijo T George	RP240501 25-01-2025	Part-time	Working
15	Mr. N. Mathivanan	R230508 10-11-2023	Full time University	Working
14	Ms. K. Arthy	R230505 15-11-2023	Full time University	Working
Madurai Kamaraj University Affiliation				
--	Dr. (Mrs) S. Raja Rubina	F10112 06-10-2018	Full time <i>Co-Guide</i>	Synthesis, characterization and applications of novel hybrid heterocycles, Awarded; 23-12-2022; 24-05-2024
13	Dr. (Mrs) S. S. Roja	F9755 31-08-2016	Full time, INSPIRE JRF/SRF	Synthesis, characterization and biological evaluation of novel hybrid heterocycles; Awarded; 25-11-2022; 15-03-2024
12	Dr. M.B. Harisha	P4102 28-09-2015	Part time Non-stipend <i>Co-Guide</i>	Synthetic Protocols for Novel Organic Compounds Awarded; 22-05-2019; 22-01-2020
11	Dr. (Mrs) B. Mariammal	P8897 30-04-2010	Part-time	Synthesis of Novel Biologically Important Heterocycles and their Derivatives Awarded; 31-12-2020; 20-01-2022
10	Dr. (Mrs) A. Shylaja	F9717 18-05-2016	Full time, INSPIRE JRF/SRF	Synthesis of novel heterocycles employing green protocols Awarded; 08-11-2019; 09-09-2020
9	Dr. M. Muthu	F9724 18-05-2016	Full time Non-stipend	Studies on the synthesis of spiro and fused hybrid heterocycles Awarded; 10-06-2019; 22-01-2020
8	Dr. R. V. Sumesh	F9170 05-10-2013	Full time UGC-Project Fellow	Synthesis and Biological Properties of Novel Organic Compounds Awarded; 17-08-2016; 29-06-2017
7	Dr. S. Ponnuchamy	P9536 03-10-2011	Part time Non-stipend	Synthesis and Characterization of Novel Hybrid 1,3-Thiazolidine-2,4-diones Comprising Active Pharmacophores; Awarded; 01-04-2016; 07-07-2017
6	Dr. (Mrs) M. Anusha Rani	F8866 03-04-2012	Full time UGC-BSR Meritorious	Synthesis, and Studies of Novel Heterocycles Awarded; 18-03-2016; 24-02-2017
5	Dr. (Mrs) S. Maharani	F8868 03-04-2012	Full time UGC-BSR Meritorious	Synthesis, Structural Elucidation and Biological Screening of Heterocycles Awarded; 18-12-2015; 03-10-2016
4	Dr. (Mrs) K. Malathi	F8869 03-04-2012	Full time Non-stipend	Synthesis of Novel Dispiro Hybrid Heterocycles Through 1,3-Dipolar Cycloaddition of Azomethine Ylides Awarded; 30-12-2015; 02-09-2016
3	Dr. V. Jeyachandran	F8676 01-06-2011	Full time UGC-BSR Meritorious	Synthesis and Characterization of Novel Heterocycles Awarded; 03-02-2014; 09-10-2015
2	Dr. S. Sivakumar	F8677 01-06-2011	Full time UGC-BSR Meritorious	Studies on the Synthesis of Novel Biologically Important Heterocycles Awarded; 07-10-2014; 07-09-2015
1	Dr. S. Kanchithalaivan	F8729 26-08-2011	Full time UGC-JRF/SRF	Studies on the Synthesis of Novel Heterocycles of Biological Importance Awarded; 26-08-2014; 03-07-2015

M.Phil. Research Project Guidance: Awarded-13

S No	Name of the Student	Title of the dissertation	Batch
Madurai Kamaraj University Affiliation			
13	Ms. K. Danisha Maria	One-pot Four-component Domino Synthesis of Pyrazolo[3,4- <i>h</i>]quinoline-3-carbonitriles	2021-22
12	Ms. R. Poongodi	One pot green synthesis of 2-amino-diaryl-6,7- dihydro-5 <i>H</i> -pyrazolo [3,4- <i>h</i>]quinolone-3-carbonitriles	2016-17
11	Ms. M. Jethkin	Synthesis of novel (7'-aryl-1',6',7',7 <i>a</i> '-tetrahydro-3' <i>H</i> -spiro[indeno [1,2- <i>b</i>]quinoxaline-11-5'-pyrrolo[1,2- <i>c</i>]thiazol]-6'-yl)(thiophen-2-yl) methanone via 1,3-dipolar cycloaddition	2016-17
10	Mrs. B. Subbulakshmi	Synthesis and characterization of dispiro furanyl-indeno[1,2- <i>b</i>]quinoxaline-pyrrolidine hybrid heterocycles	2015-16, MKU Eve Coll, Periyakulam
9	Mrs. A. Arockia Angel Jenifer	Synthesis and structural elucidation of spiro tethered oxindole-pyrrolidine-thiazolo[3,2- <i>a</i>]pyridine hybrids	2015-16, MKU Eve Coll, Periyakulam
8	Ms. K. Santhiya Esther	A facile four-component domino reaction for the synthesis of novel cyclododeca[<i>b</i>]pyridines	2015-16
7	Mr. P. Vairachamy	Synthesis and characterization of novel dispiro-oxindolo-pyrazolo[3,4- <i>b</i>]quinolines	2014-15
6	Mr. M. Muthu	Synthesis of novel pyrazolo[4,3- <i>e</i>]thieno[3,2- <i>b</i>]pyridines: presence of atropisomerism	2013-14
5	Mr. K. Kalaiselvan	Synthesis and characterization of novel dispiro benzo[<i>b</i>][1,4]thiazine-2,3'-pyrrolidines	2013-14
4	Ms. K. Jeyanthi	A facile one-pot four-component domino protocol for the synthesis of highly functionalized cycloocta[<i>b</i>]pyridine-3-carbonitriles	2012-13
3	Mr. G. Kalaiarasan	Synthesis and NMR studies of novel dispiro pyrrolothiazole-oxindoles	2012-13
2	Mr. S. Vivek Kumar	Synthesis and structural elucidation of novel dispiro-pyrrolo[1',2'- <i>c</i>] [1',2']thiazolo estrones	2011-12
1	Ms. S. Maharani	Solvent-free, microwave assisted tandem three component reactions of cyclic ketones, ninhydrin and sarcosine	2010-11

PG Project Guidance: Awarded-36; Currently Working-06

S No	Name of the Student	Dissertation Title	Batch
Central University of Tamil Nadu Affiliation			
42	Ms. Ramya R	Synthesis and characterization of (<i>E</i>)-benzylidene-5 <i>H</i> -pyrazolo [3,4- <i>b</i>]quinoline-5-one	2023-25
41	Mr. Ratla Tharun	Synthesis and characterization of 2-((pyrimidin-2-ylamino) methylene)cyclohexane-1,3-dione	2023-25
40	Ms. Sri Ranganayaki T	One-Pot Four-Component Domino Synthesis of Spiro[indoline-pyrazolo[3,4- <i>h</i>]quinoline]-carbonitrile Hybrid	2020-25
39	Ms. Harinni Shree R	Synthesis and characterization of 2-amino-4-(2,4-dichlorophenyl)-8-(4-methoxyphenyl)-5,6-dihydro-4 <i>H</i> -pyrano[2,3- <i>f</i>]quinoline-3-carbonitrile	2020-25
38	Mr. Abhiram Vinod	Synthesis and characterization of 7-(4-chlorophenyl)-3-(4-methoxyphenyl)-8-methyl-10-phenyl-6,10-dihydro-5 <i>H</i> -pyrazolo-[3,4- <i>b</i>][1,7]phenanthroline	2020-25
37	Mr. Shahansha Zakir C	One pot pseudo four-component synthesis of 9-amino-7-(4-(tert-butyl)phenyl)-3-(4-methoxyphenyl)-5,6-dihydrobenzo[<i>f</i>]quinoline-8,10-dicarbonitrile	2020-25
36	Ms. Neha Jayan	Synthesis of Diastereomeric Dispiro-Pyrrolothiazole-Indoline-Cyclohexane Hybrid Via Three-Component 1,3-Dipolar Cycloaddition	2019-24
35	Mr. Madavi Sai Prasad	Synthesis and Characterization of Benzo[<i>f</i>]pyrazolo[3,4- <i>b</i>]quinoline-1,3-dicarbonitriles	2019-24

34	Ms. Sneha EK	One-Pot Three-Component Domino Synthesis of Isoxazolo-Pyrano-Quinoline Hybrid	2019-24
33	Mr. Mudavath Walya	Synthesis and characterization of 2-((pyridin-2-ylamino)methylene)cyclohexane-1,3-dione	2022-24
32	Ms. Kandula Yamuna	Synthesis and Characterization of (E)-2-amino-8-(4-bromobenzylidene)-4-(4-bromophenyl)-6-(tert-butyl)-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile	2022-24
31	Ms. Mitali Rai	Synthesis and characterization of 2-((5-imino-3-methyl-1-phenyl-4,5-dihydro-1H-pyrazol-4-yl)methylene)cyclohexane-1,3-dione	2022-24
30	Mr. Muhammed Shinas EM	Synthesis and Characterization of dispiro-oxindole-pyrrolidine-4-(tert-butyl)cyclohexan-1-one hybrids	2018-23
Madurai Kamaraj University Affiliation			
29	Ms. M. Velsuba	One-pot Three Component Reaction for the Synthesis of Fused Pyrazolopyrido[2,3- <i>h</i>]quinazolines	2021-23
28	Ms. T. Kavitha	Three-component Domino Synthesis of Isoxazole tethered Pyrano[2,3- <i>f</i>]quinolines	2021-23
27	Ms. S. Amutha	Pseudo Four-component Synthesis and Characterization of Novel Benzo[<i>f</i>]quinazolines	2021-23
26	Ms. S. Anjali Devi	One-pot Three-component Synthesis of Fused Pyran Quinazoline Derivatives	2020-22
25	Ms. K. S. Indhu Leka	One-pot Three-component Domino Synthesis of Novel Spiro oxindole-isoxazolo-pyrano-quinolines	2020-22
24	Ms. K. Sathya Priya	Synthesis and Solvatochromic Studies of 3,4-Dihydrobenzo[4,5]imidazo[2,1- <i>b</i>]quinazolin-1(2H)-one	2020-22
23	Mr. M. Vijay	Synthesis of E-6-(4-chlorobenzylidene)-11-(4-chlorophenyl)-12-methyl-3,4,6,7,8,9,10,11-octahydro-7,10-epiminocyclohepta[<i>b</i>]chromen-1(2H)-one	2019-21
22	Mr. R. Karthik	Synthesis and solvatochromic studies of 8,9-dihydro-pyrimido[4,5- <i>b</i>]quinoline-2,4,6(1H,3H,7H)-trione	2019-21
21	Mr. S. Harikaran	Synthesis and solvatochromic studies of 8,8-dimethyl-8,9-dihydropyrimido[4,5- <i>b</i>]quinoline-2,4,6(1H,3H,7H)-trione	2019-21
20	Mr. S. Vivek	One-pot pseudo four-component synthesis of 3-amino-4'-biaryl-2,4-dicarbonitrile-phenothiazine hybrids	2018-20
19	Mr. P. Stalin	Microwave Assisted Synthesis of Epiminocyclohepta[<i>b</i>]pyrazolo[3,4- <i>e</i>]pyridine Hybrids	2018-20
18	Ms. S. Muthu Selvi	Synthesis of spiro-linked dimethylfuranpyrrolo[1,2- <i>c</i>]thiazolo-oxindole hybrids	2018-20
17	Ms. K. Arthy	Three component dipolar cycloaddition strategy for the synthesis of regioisomeric dispiro-acridine-pyrrolidine-indoline hybrid	2018-20
16	Mr. R. Zubair Rahman	Synthesis and characterization of spiro-indenoquinoxaline-pyrrolo[1,2- <i>c</i>]thiazole-carbonitrile-indole hybrids	2017-19
15	Ms. M. Mageswari	Green Synthesis and Characterization of Pyrido[2,3- <i>f</i>]quinazoline-3-carbonitriles	2017-19
14	Ms. N. Indumathi	Three component dipolar cycloaddition strategy for the synthesis of dispirooxindolyl[acridine-2,3'-pyrrolidine]-1-ones	2017-19
13	Ms. J. Antolin Jesila	1,3-Dipolar cycloaddition mediated synthesis of phenothiazine tethered spiro acenaphthylene-pyrrolo[1,2- <i>c</i>]thiazole hybrids	2016-18
12	Ms. S. Raja Rubina	Microwave Assisted One-pot Four-component Domino Synthesis of 2-Amino-4-aryl-6-(2,5-dimethylfuran-3-yl)-pyridine-3-carbonitriles	2016-18
11	Mr. K. Sujith	Synthesis and picric acid sensor studies of thiazole linked push-pull biphenyls	2015-17
10	Mr. R. Nehru	A one pot sequential double 1,3-dipolar cycloaddition for the synthesis of triazole tethered piperidone-spirooxindole hybrids	2015-17
9	Ms. M. Jethkin	A facile three-component tandem protocol for the synthesis of novel dihydro-1H-pyrazolo[3,4- <i>b</i>]pyridines	2014-16
8	Ms. K. Aparna	Synthesis and characterization of novel dispiro-oxindolo-tetrahydroindazolones	2014-16

7	Mr. N. Anbu	Multi-component domino protocol for the synthesis of novel benzo[a]cyclooctene-1,3,3-tricarbonitriles	2013-15
6	Mr. R. Kumaresan	Synthesis and NMR studies of novel dispiro indeno[1,2- <i>b</i>]quinoxali-nebenzo[<i>b</i>][1,4]thiazinepyrrolidine/pyrrolizine hybrid heterocycles	2013-15
5	Ms. S. Mariya Densly	Four-component domino strategy for the synthesis of novel cyclopenta[<i>b</i>] pyridine-3-carbonitriles: existence of axial chirality	2012-14
4	Mr. N. Muniraj	Synthesis and NMR studies of novel dispiro tetralone derivatives	2011-13
3	Mr. G. Ravikumar	An atom economic stereoselective synthesis of novel dispiro heterocycles	2010-12
2	Mr. S. Harish Babu	Stereoselective synthesis and NMR study of novel 2,6-diaryl-3,5-bis(arylsulfanyl) tetrahydro-4(1 <i>H</i>)-pyridinones	2009-11
1	Ms. S. Kavitha	An atom economic one-pot three-component domino protocol for the synthesis of fused pyridine carbonitriles	2009-11

Summer/Winter Project/Internships (UG/PG)

S No	Name of the Student	Dissertation Title	Year
Central University of Tamil Nadu Affiliation			
25	Ms. Anjali D	Working	2024-25
24	Mr. Aravindh D	Working	
23	Mr Gowthaman B	Working	
22	Mr. J. J. Ajesh Ram	Training on basic organic chemistry laboratory experiments	2024-25
21	Mr. Samin Antony		
20	Ms. R. Priyanka		
19	Ms. J. Reshma		
18	Ms. S. Abi		
17	Ms. M. Sree Bala		
16	Ms. S. Santhiya		
15	Mr. A. Balamurugan		
14	Ms. V. Nanthini Gayathri		
13	Ms. A. Pani Poucia		
Madurai Kamaraj University Affiliation			
12	Ms. M. Sakthi Priya	Synthesis of indole tethered spiro pyrrolidine indenoquinoxaline hybrid heterocycles (Combined Project Work)	2018
11	Ms.N.SharmilaBanu		
10	Ms. M. Sivasangari	Synthesis and characterization of thiophene tethered spiro-indenoquinoxaline hybrids via 1,3-dipolar cycloaddition	2018
9	Ms. M. H. Fathimithujohara	One pot four component domino synthesis of novel cyclododeca[b]pyridines	2018
8	Ms. A. Nivetha Lakshmi	Synthesis and characterization of E-5-(2-arylidene)-9-(aryl)-2,3,4,5,6,7,8,9-octahydro-1 <i>H</i> -xanthene-1-ones	2018
7	Ms. G. Vennila	Synthesis and characterization of phenothiazine tethered spiro oxindole hybrids via 1,3-dipolar cycloaddition	2018
6	Ms. M.R. Bhamuni	Synthesis and characterization of phenothiazine derived 2-amino-4-arylpyridine-3-carbonitrile	2018
5	Ms. A. Chandra Poorani	Training on basic organic chemistry laboratory experiments	2017
4	Ms. P. Pavithra		
3	Ms. N. Shamli	Synthesis and characterization of €-1-(10 <i>H</i> -phenothiazin-3-yl)-3-arylprop-2-en-ones	2017
2	Ms. V. Pramila	Synthesis and characterization of 2,3-diarylthiazolidin-4-ones	2017
1	Ms. K. Surya	One-pot pseudo five-component domino reactions for the synthesis of novel thieno[3,4- <i>b</i>]pyridines	2015

PG Diploma/B.Sc. Project Guidance (CUTN): Awarded-1; Currently Working-NA

S No	Name of the Student	Dissertation Title	Batch
2	Smriti Kumari Nandy (B.Sc.)	A Review on Pyrazole-Based Fluorescent Chemosensors	2024-25
1	Mr. Muhammad Maqsood D (PG Dip)	Synthesis and Characterization of Benzo[4,5]imidazo[2,1-b]quinazolin-1(2H)-one and Isoxazolo[5,4-b]quinolin-5(6H)-one	2022-23

DETAILS OF LECTURES DELIVERED AS RESOURCE PERSON

S No	Date	Institute/Organiser	Name of the Conference/Seminar
Central University of Tamil Nadu Affiliation			
54	08-01-2025	Department of Chemistry, Dr. NGP College of Arts and Science, Coimbatore	International Conference on Innovations in Chemical Sciences Title: High-Component Reactions: A Versatile Tool in Organic Synthesis
53	21-02-2024 22-02-2024	ICAR-Central Marine Fisheries Research Institute, Kochi, Kerala	Winter School on "Harnessing Recent Advances in High-Value Compound Development and Seaweed Biomass Utilization for Human Well-being: Propelling Atmanirbhar Swastha Bharat and Empowering Farmers" Title: Spectroscopic techniques with reference to NMR-based identification of natural products and recent advances and new strategies in the NMR-based identification of natural products Title: Practical class for "Structural elucidation of natural products: Spectroscopic methods to characterize bioactive compounds"
52	21-06-2023 24-06-2023	Department of Chemistry, Central University of Tamil Nadu	Hands-on training on Sophisticated Instrumentation Techniques (DST-STUTI & NIT Warangal) Title: NMR Spectroscopy (two lectures)
51	25-05-2023 26-05-2023	Department of Chemistry, Mangalore University, Karnataka	Invited Lecture Title: Retrosynthetic Analysis (two lectures)
50	09-02-2023 13-02-2023	Department of Chemistry, Central University of Tamil Nadu	Hands-on training on Sophisticated Instrumentation Techniques (DST-STUTI & NIT Warangal) Title: NMR Spectroscopy (two lectures)
Madurai Kamaraj University Affiliation			
49	13-10-2022	UGC-HRDC, Bharathiar University, Coimbatore	Online Refresher Course Title: Structural Elucidation with One- and Two-Dimensional NMR Spectroscopy
48	26-07-2022 27-07-2022	Department of Chemistry, Mangalore University, Mangaluru, Karnataka	National Level Workshop on "Skill Based Techniques (SBT-2022)" Title: Solving Problems with NMR Spectroscopy
47	15-07-2022	Department of Chemistry, Vivekananda College, Madurai	Summer Training Programme on "Chromatographic Techniques and Spectrophotometer Analysis" Title 1: NMR Spectroscopy: Principles and Concepts Title 2: NMR Spectroscopy: Interpretation of Spectra
46	18-05-2022 06-05-2022	Madurai Kamaraj University, Madurai	In-Service Teacher Training Program, Organized by Tamil Nadu State Council for Higher Education Title: Institutional Accreditations and Rankings
45	22-03-2022	Department of Chemistry, Madurai College, Madurai	Resource Person in the State Level Seminar on "Frontiers in Chemistry" Title: Solving Problems with One- and Two-Dimensional NMR Spectroscopy
44	11-03-2022 14-03-2022	Department of Chemistry, Lady Doak College, Madurai	Resource Person for the IIT-JAM/CUCET/GATE/CSIR/ SET Coaching Programme Title: NMR Spectroscopy
43	28-02-2022	Department of Chemistry,	One Day Seminar on Frontiers in NMR and

		VHNSN College, Virudhunagar	Biomaterial Science Title: Solving Problems with One- and Two-Dimensional NMR Spectroscopy
42	19-11-2021	UGC-HRDC, Bharathiar University, Coimbatore	Online Refresher Course Title: Principles and Applications of NMR Spectroscopy
41	23-04-2021	Department of Chemistry, Ayya Nadar Janaki Ammal College, Sivakasi	Chemistry Association Webinar Title: Structural Characterization using NMR Spectroscopy
40	31-03-2021	Department of Chemistry Nanjil Catholic College of Arts and Science, Kanyakumari	Webinar Title: Interpretation of One- and Two- Dimensional NMR Spectra
39	07-01-2021	Department of Chemistry, Bharathiar University, Coimbatore	DST-PURSE Sponsored Webinar on Recent Trends in Chemistry Title: Multi-component Domino Reactions Triggered by Knoevenagel Condensation
38	22-12-2020	UGC-HRDC, Bharathiar University, Coimbatore	Webinar; Title: Principles and Applications of NMR Spectroscopy
37	06-10-2020	Central University of Tamil Nadu, Thiruvavur	Webinar Title: Applications of NMR Spectroscopy
36	03-08-2020	Jamal Mohammed College, Tiruchirapalli	National Level Faculty Development Programme on Materials Characterization Techniques under DBT Star College Scheme Title: Structural characterization using one- and two-dimensional NMR spectroscopy
35	21-07-2020	The Madura College, Madurai	Webinar, Title: Structural Characterization using NMR Spectroscopy
34	17-06-2020	Cardamom Planters Association, Bodinayakanur	Webinar Title: NMR Spectroscopy – Structure Determination
33	10-06-2020	Hajee Karutha Rowther Howdia College, Uthamapalayam	Webinar Title: Solving Problems with NMR Spectroscopy
32	24-11-2019	Government Arts College, Ooty	DST-INSPIRE, Internship Science Camp Title: Retrosynthetic Analysis: The art of Organic Synthesis
31	01-11-2019	Department of Chemistry, Govt. Victoria College, Palakkad, Kerala	Two Day seminar on “Molecules to Supramolecules: A Synthetic Perspective” Title: Multi-component Domino Reactions Triggered by Knoevenagel Condensation
30	11-10-2019	Department of Chemistry, Karpagam University, Coimbatore	10 th National Workshop on “Interpretation of Spectral Data and Identification of Phytoconstituents” Title: NMR Spectroscopy (2 Lectures)
29	03-10-2019	Department of Chemistry, VIT University, Vellore	One Day Faculty Development Programme on 'Analysis and advances in organic synthesis; Title: Retrosynthesis
28	15-02-2019	Postgraduate and Research Department of Chemistry, Mar Athanasius College, Kothamangalam, Kerala	Two-day UGC sponsored Diamond Jubilee National Seminar on Retrosynthetic Analysis and Organic Spectroscopy Title: NMR Spectroscopy
27	12-02-2019	Department of Chemistry, VPMM Arts and Science College for Women, Krishnankovil,	National Conference on Recent Trends in Chemistry Title: Retrosynthetic Analysis: The Art of Synthesis
26	21-01-2019	Department of Chemistry, VVV College, Virudhunagar	Invited lecture Title: Basics of NMR spectroscopy
25	14-11-2018	Department of Chemistry, Govt. College, Kattappana, Kerala	National Seminar on Recent Trends in Chemistry Title: Solving Problems with NMR Spectroscopy
24	28-09-2018	Department of Chemistry, Maharaja's College, Ernakulam, Kerala	National Seminar in Chemistry "RAISE 2018" Titles: 1. Retrosynthesis 2. 2D NMR Spectroscopy
23	05-08-2017	Department of Chemistry,	Inauguration of Chemistry Association:

		VPMM Arts and Science College for Women, Krishnankovil,	Chem Festiva-17 Title: NMR spectroscopy
22	07-05-2017	The Srinivasa Ramanujan Institute of Basic Sciences, Kottayam, Kerala MG University, Kottayam Kerala State Council for Science Technology and Environment	Colloquium on Spectroscopy: Theory and Applications Title: NMR spectroscopy
21	22-03-2017	PG & Research Department of Chemistry, SVN College, Nagamalai, Madurai	State Level Seminar on “Modern Trends in Chemistry-2017” Title: Structural Elucidation by One- and Two-Dimensional NMR Spectroscopy
20	17-03-2017	Department of Chemistry, Kongunadu Arts and Science College, Coimbatore	National Level Seminar on “Advanced Developments in Spectroscopic Techniques and its Applications” Title: NMR spectroscopy
19	04-03-2017	School of Advances Sciences, VIT University, Vellore	Special Lecture Title: Structural Elucidation by One- and Two-Dimensional NMR Spectroscopy
18	18-02-2017	Department of Chemistry, VHNSN College, Virudhunagar	Guest-Lecture Title: Basic Concepts of Retrosynthetic Analysis
17	22-12-2016	TM Jacob Memorial Govt. College, Koothattukulam, Ernakulam, Kerala	National Seminar on “Advanced Concepts in Chemistry” (Two lectures) Title I: Stereochemical Aspects in Organic Chemistry Title II: Retrosynthetic Analysis
16	02-02-2016	Fatima College, Madurai	Invited lecture in the Chemistry Association Function Title: Basic Concepts of Retrosynthesis
15	17-12-2015	VVV College for Women, Virudhunagar	Invited lecture in Chemistry Association Title: Basics of NMR Spectroscopy
14	27-11-2015	Government Arts and Science College, Kozhikode, Kerala	Two Day National Seminar on “Recent Advances in Chemistry” Title: Significance of Chirality: The Need for Asymmetric Synthesis
13	31-10-2015	Hajee Karutha Rowther Howdia College, Uthamapalayam	Invited lecture Topic: Retrosynthetic Analysis
12	28-09-2015	Mother Theresa University, Kodaikanal,	National Seminar on “Managing Risks of Hazardous Chemicals at Work” Title: Managing Risks of Hazardous Chemicals at Work
11	19-09-2015	T. K. Madhava Memorial College, Nangiarkulangara, Kerala	UGC Sponsored National Seminar on “Spectroscopic Techniques-Present Scenario” Title: One- and Two-Dimensional NMR Spectroscopy in the Elucidation of Heterocycles
10	12-03-2015	Kandaswamy Kandar’s College, Namakkal, Tamil Nadu	DST sponsored National Seminar on “Advanced Nanomaterials for Functional Applications” Title: Domino Reactions Triggered by Knoevenagel Condensation: Synthesis of Drug-like Materials
9	13-02-2015	Sree Narayana College, Punalur, Kerala	UGC sponsored National seminar on “Chemical applications of spectroscopic techniques” Title: Structural Elucidation by One- and Two-Dimensional NMR Spectroscopy
8	05-02-2015	APC Mahalakshmi College for Women, Thoothukudi	UGC sponsored National seminar on “Current Trends in Chemistry” Title: Structural Elucidation by One- and Two-Dimensional NMR Spectroscopy
7	20-07-2014	The Srinivasa Ramanujan Institute of Basic Sciences, Kottayam, Kerala MG University, Kottayam Kerala State Council for Science,	Colloquium on “Recent Trends in Organic and Bioorganic Chemistry” Title: Multi-component Domino Reactions Triggered by Knoevenagel Condensation

		Technology, and Environment	
6	27-12-2014	Academic Staff College, Madurai Kamaraj University, Madurai	Refresher Course in Chemistry Title: NMR Spectroscopy: Structural Elucidation of Organic Molecules
5	25-11-2013	Academic Staff College, Madurai Kamaraj University, Madurai	Delivered a lecture on a Refresher Course in Chemistry
4	25-07-2011	Academic Staff College, Madurai Kamaraj University, Madurai	Refresher Course in Chemistry Title: NMR Spectroscopy: Structural Elucidation of Organic Molecules
3	26-08-2011	Fatima College, Madurai	UGC sponsored National Seminar on “Recent Advances in the Applications of Spectroscopy” Chaired a session to evaluate oral paper presentation
2	01-05-2011	Fatima College, Madurai	Chemistry Association Function, Valedictory Address Title: Green Chemistry
1	11-11-2010	Academic Staff College, Madurai Kamaraj University, Madurai	Delivered a lecture on a Refresher Course in Chemistry