

1. Name and Address**: Dr. P. SHANMUGAVELAN***M.Sc (Chem), M.Sc (Psy), M.Phil., Ph.D. [Post-Doctorate]*

School of Sciences

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E.mail: drpshanmugavelan@tnou.ac.in (Official)shanchemmku@gmail.com (Personal)**2. Designation/Department**

: Assistant Professor

Department of Chemistry

3. Subject Specialization

: Organic Chemistry

4. Educational Qualification:

S.No.	Examination Passed	Name of the Board/ University	Year of Passing	Subject
1	B.Sc.	Bharathidasan University	2003	Chemistry
2	M.Sc.	Bharathidasan University	2005	Chemistry
3	M.Phil.	Madurai Kamaraj University	2006	Chemistry
4	Ph.D.	Madurai Kamaraj University	2012	Organic Chemistry
5	M.Sc.	Tamil Nadu Open University	2022	Psychology

5. Fellowships Awarded:

S.No.	Name	Institution	Purpose	Year
1	Post Doctoral Fellow (PDF)	National Academy of Agricultural Science - RDA, South Korea	Post Doctoral Research	2012-13
2	Senior Research Fellow (SRF)	UGC-BSR, India	Ph.D. Research	2010-12
3	Junior Research Fellow (JRF)	UGC-BSR, India	Ph.D. Research	2008-10

6. Research Achievements:

(a) Research Articles published in International/National Journals:

Year	No. of Research Articles Published	h-index	i ₁₀ -index	Citations (Cumulative)	Impact Factor (Cumulative)
		Upto December, 2024			
2024	8	14	18	673	80.0
2023	2				
2021	1				
2020	3				
2016	1				
2015	3				
2014	7				
2013	5				
2012	5				
2011	7				
Total: 42 [International: 40 + National: 2]					

In 2024	
1.	Visible-Light Photocatalytic Activity of a Novel TiO ₂ /g-C ₃ N ₄ /CuFe ₂ O ₄ Nanocomposite in Degradation Amoxicillin, Chlorpyrifos and Methylene Blue. <i>ChemistrySelect. 9 (38), (2024).</i>
2.	Enhanced photocatalytic activity of V ₂ O ₅ /g-C ₃ N ₄ /ZnO nanocomposite for efficient degradation of amoxicillin, chlorpyrifos and methylene blue. <i>Ionics. 1-29 (2024).</i>
3.	Enhanced visible-light Z-scheme photocatalytic degradation of amoxicillin, chlorpyrifos, and methylene blue by Bi ₂ O ₃ /g-C ₃ N ₄ /ZnO nanocomposite. <i>Journal of Materials Research. 1-23, (2024).</i>
4.	Synthesis and anticancer screening of substituted (phenyl)-1-((naphthalen-5-yl) methylene) thiosemicarbazide against PC3 prostate cancer cells. <i>Journal of the Indian Chemical Society. 101 (9), (2024) 101229.</i>

5.	Synthesis, characterization and anticancer screening of novel phenylbenzylidene thiosemicarbazone derivatives. <i>Phosphorus, Sulfur, and Silicon and the Related Elements.</i> 1-10 (2024).
6.	Facile Synthesis of Novel Cyclopenta[b]indoles and Their Biological Assessments. <i>Organic Preparations and Procedures International.</i> 56 (1), (2024) 28-37.
7.	Synthesis of Novel ZrO ₂ /g-C ₃ N ₄ /CuFe ₂ O ₄ Nanocomposite and Its Efficient Photocatalytic Degradation of Amoxicillin, Chlorpyrifos and Methylene Blue. <i>Asian Journal of Chemistry.</i> 36 (3), (2024) 697-709.
8.	Vitamin C induced DNA cleavage using curcumin loaded Fe ₃ O ₄ -silane magnetic nanoparticles. <i>Current Physical Chemistry.</i> (Accepted).
In 2023	
1.	Photophysical Properties of Linear, Net-structured and Branched Polybenzimidazoles. <i>Journal of Fluorescence.</i> 33, (2023) 125-134.
2.	DNA cleavage using magnetic iron oxide-silica/curcumin core-shell nanocomposite <i>Materials Letters</i> 331. (2023) 133556
In 2021	
1.	An expeditious and efficient method for the oxidation of benzyl alcohols by homogeneous electrolysis. <i>Synthetic Communications.</i> 15(19), (2021) 3013-3022.
In 2020	
1.	Inclusion induced water solubility and binding investigation of acenaphthene-1,2-dione with p-sulfonatocalix[4]arene. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry.</i> 98, (2020) 105-115.
2.	Experimental and theoretical investigations on the host-guest interaction of diphenylamine with p-sulfonatocalix[4]arene. <i>Indian Journal of Chemistry.</i> 59A, (2020) 929-938.
3.	Electrochemical aspects of Cyclodextrin, Calixarene and Cucurbituril Inclusion Complexes. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry.</i> 98, (2020) 149-170.
In 2016	
1.	A green synthesis of 1, 2, 3-triazolyl - pyridine hybrids and evaluation of their antibacterial activity

	<i>Research on Chemical Intermediates</i> . 42(12), (2016) 8005-8021.
In 2015	
1.	An efficient and facile synthesis of divergent C-3/C-5 bis-functionalized 2-Oxindoles from 5-Formyl-Morita-Baylis-Hillman adducts of Oxindoles. <i>Journal of Chemical Sciences</i> . 127(8), (2015) 1417-1426.
2.	Synthesis of N-Acyl Triazolyl-Pyrazolines via. Acylation Initiated by the Hydrazone moiety with Carboxylic acids. <i>Synthetic Communications</i> . 45, (2015) 2748-2763.
3.	Phytochemical and GC-MS Studies on Therapeutically Active <i>Gloriosa superba</i> Flowers. <i>Journal of Natural Products and Resources</i> . 1(1), (2015) 23-24.
In 2014	
1.	The first solvent-free, microwave-accelerated, three-component synthesis of thiazolidin-4-ones <i>via</i> one-pot tandem Staudinger/aza-Wittig reaction. <i>Journal of Heterocyclic Chemistry</i> . 51 (4), (2014) 1004-1011.
2.	An efficient and facile synthesis of novel 1,2,3-triazolyl-N-acylpyrazoline hybrids. <i>Chinese Chemical Letters</i> . 25, (2014) 146-148.
3.	An Efficient and Environmentally Benign Access Towards Synthesis of Novel 1,2,3-Triazolyl-pyrazoline Hybrids. <i>Letters in Organic Chemistry</i> . 11, (2014) No. 6. 446-456.
4.	An eco-friendly water mediated synthesis of 1,2,3-triazolyl-2-aminopyrimidine hybrids as highly potent anti-bacterial agents. <i>Chinese Chemical Letters</i> . 25, (2014) 419-422.
5.	An eco-friendly and water mediated product selective synthesis of 2-aminopyrimidines and their in-vitro anti-bacterial evaluation. <i>Bioorganic & Medicinal Chemistry Letters</i> 24, (2014) 4999-5007.
6.	Effect of processing conditions on the content of cis/trans carotene isomers as provitamin A carotenoids in Korean sweet potato varieties. <i>International Journal of Food Sciences & Nutrition</i> . (2014) 1-6.
7.	Effect of Steaming, Blanching and High Temperature/High Pressure on the Content of Amino acids in Commonly Consumed Korean Vegetables and Pulses. <i>Preventive Nutrition and Food Science</i> . 19, (2014) 220-226.

In 2013

1.	Evaluation of sugar content and composition in commonly consumed Korean vegetables, fruits, cereals, seed plants, and leaves by HPLC-ELSD. <i>Carbohydrate Research. 380, (2013) 112-117.</i>
2.	Chemoselectivity in coupling of azides with thioacids in solution phase and solvent-free conditions. <i>Synthetic Communications. 43, (2013) 668-680.</i>
3.	Water promoted one pot three-component synthesis of Tetrazoles. <i>New Journal of Chemistry. 37, (2013) 488-493.</i>
4.	A facile, rapid, one-pot regio/stereoselective synthesis of 2-iminothiazolidin-4-ones under solvent/scavenger-free conditions. <i>Beilstein Journal of Organic Chemistry. 9, (2013) 689-697.</i>
5.	Evaluation of γ -Oryzanol Content and Composition from the Grains of Pigmented Rice-Germplasms by LC-DAD-ESI/MS. <i>BMC Research Notes. 6:149 (2013).</i>

In 2012

1.	Facile synthesis of 1,2,3-triazolyl indole hybrids via SbCl_3 catalyzed Michael addition of indoles to 1,2,3-triazolyl chalcones. <i>Journal of Chemical Sciences. 124, (2012) 941-950.</i>
2.	The first One-pot, Solvent-free, Microwave-accelerated, Three-Component Synthesis of Spiro-thiazolidin-4-ones <i>via</i> Staudinger/aza-Wittig Coupling/Cyclization. <i>Helvetica Chimica Acta. 95, (2012) 922-928.</i>
3.	Facile water promoted synthesis of 1,2,3-triazolyl dihydropyrimidine-2-thione hybrids -High antibacterial agents. <i>European Journal of Medicinal Chemistry. 58, (2012) 464-469.</i>
4.	The catalytic activity of titania nanostructures in the synthesis of amides under solvent-free conditions. <i>New Journal of Chemistry. 36, (2012) 1312-1319.</i>
5.	4-Benzyl-8-phenyl-1-thia-4-azaspiro[4,5]decan-3-one. <i>Acta Crystallographica. (2012) E68 o1438.</i>

In 2011

1.	Efficient synthesis and <i>in vitro</i> anti-tubercular activity of 1,2,3-triazoles as inhibitors of mycobacterium tuberculosis.
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	<i>Bioorganic & Medicinal Chemistry Letters</i> . 21 , (2011) 7273-7276.
2.	Solvent-free protocol for amide bond formation via trapping of nascent phosphazenes with carboxylic acids. <i>Tetrahedron Letters</i> . 52 , (2011) 2830-2833.
3.	First report on microwave-assisted clean synthesis of amides via Aza-wittig reaction under solvent-free condition. <i>Journal of Brazilian Chemical Society</i> . 22 , (2011) 2065-2069.
4.	3-Benzyl-2-phenyl-1,3-thiazolidin-4-one. <i>Acta Crystallographica</i> . (2011) E67 o2706.
5.	3-Benzyl-2-(furan-2-yl)-1,3-thiazolidin-4-one. <i>Acta Crystallographica</i> . (2011) E67 o2807.
6.	(E)-1-(1-Benzyl-5-methyl-1H-1,2,3-triazol-4-yl)-3-phenylprop-2-en-1-one. <i>Acta Crystallographica</i> . (2011) E67 o2707.
7.	(E)-1-(1-Benzyl-5-methyl-1H-1,2,3-triazol-4-yl)-3-(4-fluorophenyl)prop-2-en-1-one. <i>Acta Crystallographica</i> . (2011) E67 o2776.

(b) Books/Book Chapters Published/Edited:

Book chapter published in international publisher	:	1
Book published in national publisher	:	1
Books – SLM (TNOU’s course materials) published	:	9 (UG : 6 + PG : 3)
Books – SLM (TNOU’s course materials) edited	:	31 (UG : 19 + PG : 12)

(c) Research Supervision:

Degree	Pursuing	Thesis Submitted	Degree Awarded
Ph.D.	2	1	1
M.Phil.	1	-	-

(d) Area of Research Interests:

- Organic synthesis
- Catalysis
- Nanoscience

- Bioorganic & Medicinal chemistry
- Natural Products Chemistry

(e) Reviewer/Editorial member for Journals:

- Journal of Heterocyclic Chemistry
- Indian Journal of Heterocyclic Chemistry
- Journal of Biological and Chemical Luminescence
- Journal of Medicinal Food
- Journal of Natural Products and Resources [JACS Directory]
- International Journal of Transdisciplinary Research and Development (SIJTRD)

(f) Papers presented in National/International - Conferences/Seminars/ Workshops/Symposia : 20

(g) Full paper published in Conference/Seminar Proceedings : 6

7. Attended the International/National level Conferences/Seminars/ Symposia/Workshops : 28

8. Attended Online - Faculty Development Programmes/Orientation Programmes/ Webinars/E-Quizes/Workshops : 85

9. Special Lecture/Talk Delivered : 7

10. Academic Responsibility:

- Programme Coordinator of B.Sc. Chemistry in TNOU
- Programme Coordinator of M.Sc. Chemistry in TNOU

11. Administrative Responsibility:

S.No.	Position	Name of the Institution	Duration		Year of Experience
			From	To	
1.	Coordinator Regional Centre, Sivagangai	TNOU	July, 2024	Till Date	04 Months
2.	Director i/c, Curriculum Development Cell (CDC)	TNOU	November, 2022	April, 2024	1 Year 05 Months

3.	Member, Planning Board	TNOU	March, 2022	Till Date	2 Year 9 Months
4.	Member, Naan Mudhalvan Operational Cell	TNOU	December, 2022	Till Date	2 Years
5.	Member, Task Force Committee for Climate Action	TNOU	December, 2022	Till Date	2 Years
6.	Member, University Grievance Redressal Committee (USGRC)	TNOU	June, 2022	Till date	02 Years 6 Months
7.	Nodal Officer, Sustainable Development Goals	TNOU	January, 2020	Till date	04 Years 10 Months
8.	Nodal Officer, (Access the Canara Bank Web portal of UGC to approve the Fellowships of the Ph.D. Scholars)	TNOU	June, 2018	November, 2023	4 Years 05 Months
9.	Director i/c, Admission Division	TNOU	September, 2021	October, 2022	01 Year 01 Month
10.	Assistant Research Coordinator, Research Division	TNOU	August, 2016	March, 2021	4 years 04 Months
11.	Coordinator, Research Council	TNOU	March, 2020	March, 2021	01 Year
12.	Member Secretary/Coordinator, Ethic Committee	TNOU	March, 2020	March, 2021	01 Year
13.	Coordinator, Publication Guidelines Committee	TNOU	February, 2020	March, 2021	01 Year

12. Member in Professional Bodies/Committees:

- Member, UG/PG Chemistry Board - Integrated Board of Studies, Tamilnadu State Council for Higher Education (TANSICHE), Tamilnadu, India.
- Member, Board of Studies of Chemistry, Dept. of Chemistry, School of Science, Tamilnadu Open University, Chennai, Tamilnadu, India.
- Member, Adhoc Board of Studies of Chemistry, Dept. of Chemistry, School of Science, Tamilnadu Open University, Chennai, Tamilnadu, India.
- Member, Board of Studies of Physics, Dept. of Chemistry, School of Science, Tamilnadu Open University, Chennai, Tamilnadu, India.
- Coordinator, Adhoc Board of Studies, School of Science, Tamilnadu Open University, Chennai, Tamilnadu, India.
- Member/Facilitator, TNOU - M.Phil./Ph.D. Regulations Revising Committee, Tamilnadu Open University, Chennai, Tamilnadu, India.
- Member, Passing Board of CCE, UG/PG-Chemistry and VDAT Programmes in TNOU.
- Member, Doctoral Committee, Dept. of Chemistry, Sri Paramakalyani College, Alwarkuruchi.
- Member, National Advisory Committee for "International Conference on Chemical and Environmental Research-ICCER 2015" held at Jamal Mohamed College, Trichy, Tamilnadu, India on December 17th, 2015.
