

Dr. T. S. MANIKANDAN, M. Sc., Ph. D.,

1/152P, Sourashtra 1st colony,
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Google Scholar: <https://scholar.google.co.in/citations?user=-5Q0sScAAAAJ&hl=en>



OBJECTIVES

As an accomplished educator deeply committed to academic excellence, my objective is to contribute comprehensive knowledge in chemistry to an Assistant Professor position. I aim to inspire intellectual curiosity, facilitate critical thinking, and lead impactful research initiatives while fostering an inclusive and engaging learning environment.

ACADEMIC EXPERIENCE IN INSTITUTIONS

Name of Institution	Designation	Teaching Experience			
		Programme	Regular/ Self-finance	From	To
Sourashtra College, Madurai	Assistant Professor	UG	Regular	04-11-2022	Till date
Sourashtra College, Madurai	Assistant Professor	UG	Self-Finance	22-09-2021	03-11-2022

POST-DOCTORAL RESEARCH EXPERIENCE

Position	Institute	Mentor	Title	Period
POST-DOCTORAL FELLOW	INDIAN INSTITUTE OF TECHNOLOGY-GUWAHATI, ASSAM	DR. DIPANKER SRIMANI, ASSOCCATE PROFESSOR, DEPARTMENT OF CHEMISTRY, INDIAN INSTITUTE OF TECHNOLOGY-GUWAHATI, ASSAM	A GREEN AND SUSTAINABLE APPROACH FOR THE SYNTHESIS OF HETEROCYCLI COMPOUNDS USING TRANSITION METAL CATALYSTS	2019-2021

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ACADEMIC PROFILE

Position	Institute	Mentor	Title	Period
DOCTORAL FELLOW IN CHEMISTRY	Bharathidasan University, School of Chemistry	Dr. R. Ramesh Professor and Coordinator Centre for Organometallic Chemistry School of Chemistry Bharathidasan University, Tiruchirappalli	Ruthenium(II) and Palladium(II) complexes Featuring Aroylhydrazone and Thiourea Ligands: Synthesis, Structural Characterization and Catalytic Application	2014-2019

Course : **Master of Science in Chemistry (JUNE 2011 – APRIL 2013)**
 University : Madurai Kamaraj University, Tamil Nadu, India
 Institute : Thiagarajar College, Madurai.
 Percentage : **76.54 %**
 Grade : **FIRST CLASS WITH DISTINCTION**
 Dissertation : ***Synthesis of metal Complexes with pyridine Carboxamide ligands***

Course : **Bachelor of Science in Chemistry (JUNE 2008 – APRIL 2011)**
 University : Madurai Kamaraj University, TamilNadu
 Institute : Thiagarajar College, Madurai.
 Percentage : **76.40 %**
 Grade : **GOLD MEDAL, FIRST CLASS WITH DISTINCTION**
 Dissertation : ***Assessment and water quality of Karumathur in Madurai District***

Course : **Higher Secondary (JUNE 2006 – MARCH 2008)**
 Institution : Thiagarajar Model Hr. Sec. School, Madurai, Tamilnadu,
 Percentage : **81.75 %**
 Grade : **FIRST CLASS WITH DISTINCTION**

Course : **S.S.L.C (JUNE 2005-MARCH 2006)**
 Institution : Sri Visalakshi Kalasalai Hr. Sec. School, Sivagangai, Tamilnadu
 Percentage : **87.00 %**
 Grade : **FIRST CLASS WITH DISTINCTION, SCHOOL FIRST RANK**

ACADEMIC DISTINCTIONS AND AWARDS

S. No	Name of the award/Distinctions	Institution/Agency	Year/Period
1	University Research Fellow (URF)	Centre for Organometallic Chemistry, School of Chemistry, Bharathidasan University, Tiruchirappalli	Nov.2017 to Dec.2018
2	Junior Research Fellow (DST-SERB-JRF)	Centre for Organometallic Chemistry, School of Chemistry, Bharathidasan University, Tiruchirappalli	Dec. 2013 to July 2016
3	Best student award (M. Sc Chemistry)	Thiagarajar College, Madurai.	2012 to 2013
4	Summer Research Fellow (INSA-NASI-IISc)	Indian Institute of science Education and Research (IISER), Mohali.	May 2012 to July 2012
5	Gold Medalist (B. Sc Chemistry)	Thiagarajar College, Madurai.	2011
6	Best student award (B. Sc Chemistry)	Thiagarajar College, Madurai.	2011

RESEARCH GUIDANCE

❖ Guided **FOUR M. Sc** Students

ACADEMIC GUIDANCE

- **B.Sc. Chemistry** – Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Chemistry of Biomolecules, Chemistry of service mankind, Pharmaceutical chemistry and Practicals
- **B. Sc. Physics** – Allied Chemistry
- **B. Sc. Mathematics** – Chemistry for human welfare - I
- **B. Sc. Microbiology** – Allied Chemistry for Life Sciences – I and II and Practicals
- **M. Sc. Inorganic Chemistry Practical** for First and Second Semester
- **B. Tech. Organic Chemistry** for first semester

PUBLICATIONS

Number of papers published in international journals : 5

Citations: 64

h-index: 4	i10 index: 4	Orchid ID: 0000-0002-7251-9691	Researcher ID: M-4693-2017
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Title of the Paper	Name of the Publishing Journal	National/ International	Year	Page No	Impact factor
Synthesis and catalytic evaluation of ruthenium(II) benzhydrazone complex in transfer hydrogenation of ketones	Tetrahedron Letters	International	2016	3764-3769.	2.415
Synthesis and characterisation of cycloruthenated benzhydrazone complexes: Catalytic application to selective oxidative cleavage of olefins to aldehydes	RSC Advances	International	2016	97107-97115	4.036
Direct aerobic strategy for synthesis of imines via alcohols and amines promoted by ruthenium(II) (η^6 - <i>p</i> -cymene) complexes	Chemistry Select	International	2018	1561-1568	2.307
The Tandem C-H/N-H Activation of N-methyl Arylamide Catalysed by Dinuclear Pd(II) Benzhydrazone Complex: A Concise Access to Phenanthridinone	Organometallics	International	2019	319-328	3.837
Efficient construction of C-C bonds from aryl halides/aryl esters with arylboronic acids catalysed by palladium(II) thiourea complexes	Applied Organometallic Chemistry	International	2019	5131-5142	4.072

RESEARCH INTEREST

- Design new ligands with desired features/functionality.
- Synthesis of novel air and moisture stable organometallic catalysts for the activation, functionalization and synthetically challenging reactions.
- Development of new green and sustainable synthetic approaches for the synthesis of pharmaceutically important targets with the imperatives of cost savings, time reduction, less amount of waste, and responsible sourcing.
- Investigation on catalytic efficiency of organometallic catalysts for industrial important reactions.
- Understand the role of stereo selective reactions in catalysis.
- Propose mechanistic pathways, rate of the reaction and dynamics for metal mediated organic synthesis and catalytic reaction.

INSTRUMENTS HANDLING

- ✓ Gas Chromatography and Mass spectrometer (GC-MS)
- ✓ FT-NMR
- ✓ FT-IR spectrometer
- ✓ UV-vis Spectroscopy
- ✓ Cyclic voltammetry

ADDITIONAL RESPONSIBILITIES

- **Organizing Committee Member in A ONE DAY INTERNATIONAL SEMINAR on “Recent Trends in Frontier Areas of Materials and Macromolecules”** on 24-03-2023
- **Organizing Committee Member in POOJA FEST – 2023**, Sourashtra College, Madurai.
- **Member in Finance and Infrastructure of Research and Development Cell-** Sourashtra College, Madurai, 2023-2024
- **Member in Research, Innovations and Extension of IQAC**, Sourashtra College, Madurai – 2023-2024
- **Member in Website Maintenance Team**, Sourashtra College, Madurai – 2023-2024
- **Member in UGC Online Course Swayam**, Sourashtra College, Madurai - 2023-2024

Conferences/ Seminars/ Workshops (2010- Till date)

S. No	TITLE	PLACE	DATE
1	Webinar on 'Latest Research on Catalytic & Structural study of Organometallic Compounds and Nanomaterials'.	EduCare Taiwan with Kaohsiung Medial University, Taiwan	3 rd July 2022
2	One week International workshop on "Application of Nanoscience in Multidisciplinary Fields (IWANS-2022)	Periyar Maniammai Institute of Science and Technology, Tanjavur.	7 th to 11 th March 2022
3	National one week Faculty Development Programme on "Carbon Capture and Storage"	Central University of Tamilnadu, Thiruvarur	21 st to 25 th February 2022
4	Faculty Development Programme on "E-Content Development"	Sourashtra College	10 th February 2022
5	International conference on "Sustainable Energy Technologies, i-SET-2018"	Bharathidasan University, Trichy	27 and 28th
6	The 10 th Mid-Year Chemical Research Society of India (CRSI)	Department of Chemistry, NIT-Tiruchirappalli	23-25 July, 2015.
7	National Seminar on "Expanding Frontiers in Chemistry"-A paper presented entitled synthesis and characterization pyridine of metal complexes with Carboxamide ligands	Arul Anandar College, Karumathur, Madurai, Tamilnadu, India	14 & 15 Feb 2013.
8	National Science Academics lecture Workshop on Bioinorganic Chemistry and its Applications	Madurai Kamaraj University, Madurai.	28 - 30 Sep 2013
9	"National Conference on Emerging Trends in Chemistry"-DST-FIST sponsored	Bishop Heber College, Tiruchirappalli.	11 th Jan 2012
10	State Level Students Seminar - A paper presented titled "Greener Reactions"	Thiagarajar College, Madurai.	25 th Sep 2012
11	State Level Students Seminar - A paper presented titled "Safety Measures of Nuclear Powerplant".	Thiagarajar College, Madurai	20 th Feb 2012
12	"Hands on Training on Chromatography" under STAR COLLEGE scheme	Thiagarajar College, Madurai	9 th and 10 th Jan 2012
13	State Level Students Seminar - A paper presented titled "Applications of intercalation Compounds"	Thiagarajar College, Madurai	21 st Sep 2011

Curriculum Vitae – Dr. T. S. Manikandan

14	State Level Students Seminar -A paper presented titled “Chemistry of Cosmetics”	Thiagarajar College, Madurai	24 th Feb 2011
15	UGC sponsored State Level Seminar on Expanding Frontiers in Chemistry- A paper presented titled “ On Greener Pesticides”	Arul Anandar College, Madurai.	15 th Feb 2011
16	State Level Workshop on “Recent Advances in Nano Sciences”	M. S. S. Wakf Board College, Madurai	10 th March 2011
17	National Seminar on Modern Trends in Chemistry, “Green Chemistry And Catalysis For Sustainability”	Vivekananda College, Madurai	25 th Jan 2011
18	State Level Students Seminar -A paper presented entitled “ Alternatives To Plastics”	Thiagarajar College, Madurai	29 th Sep 2010
19	FIST Sponsored one day workshop on “The Analysis of Oil and Fats”	VHNSN College, Virudhunagar	21 st July 2010
20	National Seminar on Renewable Energy Resources – A paper presented entitled “Renewable Energy Resources”	Yadava College, Madurai.	4 th & 5 th March 2010
21	Workshop on Removal Dyes From Textile Effluent Using Low Cost Adsorbents”	ANJA College, Sivakasi.	23 rd July 2010
22	The Special Two day Workshop Programme on Spectroscopic methods	National Centre for Catalysis Research, IIT- Madras	23 rd and 24 th Oct 2010

GUEST LECTURE / INVITED LECTURE

Delivered a Guest Lecture on the topic “**Liquid state**” at **E.M.G.Yadava Women’s College, Madurai** on 20-02-2023.

COMPUTER KNOWLEDGE

Scientific Packages : Origin Lab, Chem Bio-Office, Mest Re novo

Visualization Packages : Mercury, MestReNova and ORTEP

PERSONAL INFORMATIONS

Father's Name : Mr. T. R. Sambamoorthy
Mother's Name : Mrs. T. S. Viji
Gender : Male
Date of Birth : 30th July 1991
Marital Status : Married
Nationality : Indian
Languages Known : Tamil, English and Sourashtra
Employee Id : 20021209484
Permanent Address : 1/152, Sourashtra 1st Colony, Meenakshi Nagar,
Sakkimangalam (PO), Madurai (Dt.) Pin Code:
625 201, Tamil Nadu, INDIA
Mobile No : +91-9095967511 and 9360669979

DECLARATION

I hereby solemnly affirm that all the above details provided are true to the best of my knowledge. I shall carry myself in a manner that lends dignity to the organization and worthy enough of the person.

Yours sincerely,

(T. S. Manikandan)

Place:

Date