



Name: **Dr. S. Santhi**

Designation: **Associate Professor**

Educational Qualification: M.Sc., M.Phil., Ph.D.

Sl.no.	Degree	University/ College	Year of passing
1.	B.Sc.	Bharathidasan University	1985
2.	M.Sc.	Annamalai University	1987
3.	M.Phil.	Annamalai University	1990
4.	Ph.D.	Bharathidasan University	2008

**Others:** 1) October 2007 Passed the Certificate course in spoken Sanskrit conducted by Centre for Spoken Sanskrit, Padmabhushan Sri.N.RamaswamiAyyar Educational Complex, Trichy - 2

2) Underwent a Basic Training Programme in Devotional Music, organized by the Department of Music, Seethalakshmi Ramaswami College, Trichy-2

Experience:

UG: **17** years

PG: **13** years

M.Phil.: **10** years

Area of Specialization: Physical organic chemistry , coordination chemistry and supramolecular chemistry

Guided: M. Phil.: **3**

Ph.D. : **1** (ongoing)

Research Papers Published: **15**

- T.S. JANI BAI & **S. SANTHI**, Kinetics and oxidation of 2,6-diphenyl piperidin-4-one semicarbazones and its 3-alkyl substituted derivatives by PCC, Indian Journal of Science, Arts and commerce, 1, 2, 2005,8-16.
- T.S. JANI BAI & **S. SANTHI**, Kinetics and mechanism of PyridiniumChlorochromate oxidation of some N-Methyl-2,6-diphenylpiperidin-4-one oximes, Asian Journal of Chemistry, 22,3, 2010, 2290-2294.
- T.S. JANI BAI & **S. SANTHI**, Oxidation of Oximes of Heterocyclic Ketones by PyridiniumChlorochromate: A Kinetic and Mechanistic Study, Asian Journal of Chemistry, 22,3, 2010, 2285-2289.
- **S. SANTHI** & T.S. JANI BAI, Kinetics and oxidation of 3,5-dimethyl-2,6-diaryl piperidin-4-one oximes by pyridiniumChlorochromate, Asian Journal of Chemistry, 23,10, 2011, 4473-4476.
- V. USHA, D. KALAIVANI & **S. SANTHI**, Potassium Supply power of Acid, Alkaline and Neutral Soils in Different Places of Perambalur District, Tamil Nadu, Indian Journal of Environmental Protection, 31,5, 2011, 428-432.
- D. KALAIVANI, M. VASUKI & **S. SANTHI**, Mechanism and linear free energy relationships in the kinetics of formation of bicycle[3.3.1]nonane derivatives from 1,3,5-trinitrobenzene, phenyl-substituted 1-benzyl-1-(ethoxycarbonyl)-2-propanones and triethylamine, International Journal of Chemical Kinetics, 43, 9,2011, 467-473.
- **S. SANTHI**, Kinetics and oxidation of N-methyl-2,6-diphenyl piperidin-4-one oximes and its 3-substituted derivatives by acid dichromate, Asian Journal of Chemistry 24,6,2012, 2529-2532.
- **S. SANTHI**, Meteorites- A potential source Life on Earth, Cosmochemistry, pp.78-83, 2013, ISBN: 9788190949064.
- **S. SANTHI**, D. KALAIVANI, A. MAHALAKSHMI & S. AMALA, Physico – Chemical Studies On Water Quality in Thirukattupalli Near Thanjavur, Indian Journal of Environmental Protection 34, 9,2014, 765-768, ISSN No. 0253 – 7141.
- **S. SANTHI**, S. SANDHIYA, R. RAMYA & S. AMALA, Synthesis Characterization and Biological Studies on N,N'-Ethylenebis-(2,4-Dihydroxyacetophenylideneimine) and its Complexes with Mn(II), Co(II), Ni(II) and Cu(II), The International Journal Of Science and Technoledge, 2, 10, 2014, 102-106, ISSN No. 2321- 919X, Impact Factor : 0.615

- R.SELVAMEENA , **S. SANTHI**, D.ANUSHA & S.AMALA, Synthesis, Characterization and Biological Studies of N,N'-Bis(2-Hydroxy naphthalidene)-4-Ethylphenyl Methanedia mine and its Complexes with Co(II),Ni(II) and Cu(II), The International Journal Of Science and Technoledge, 2, 10, 2014, 107-112, ISSN No. 2321- 919X, Impact Factor : 0.615.
- D.KALAIVANI, **S. SANTHI**& K. RAJAMANI, 4-methyl pyridinium1,3-dimethyl-2,6-dioxo-5-(2,4,6-trinitrophenyl)-1,2,3,6-tetra hydropyrimidin-4-olate: Synthesis, Characterization, Single Crystal analysis and thermal testings, The International Journal of Science and Technoledge, Vol.2, Issue (10), October 2014, 144-148, ISSN 2321 919X.
- **S. SANTHI**, R.SELVAMEENA , S.AMALA & D.ANUSHA,Synthesis, Characterisation and Biological Studies of 2,3-Dimethyl-2,4-bis (2-hydroxynaphthaldimino) naphthopyran and its Mn (II) Complex, Recent trends in X-ray crystallography, 2014,Pp.. 28 – 36, ISBN:978 -81-909490-0-2 .
- G. MANGAIYARKARASI, S.AMALA, **S.SANTHI**&D.KALAIVANI, Asymmetric unit of a new thiobarbiturate molecular salt with two cations and two anions ofdifferent distorted geometry, Recent trends in X-ray crystallography” with ISBN No.: 978-81-909490-0-2, pp. 218-229.
- **S. SANTHI** &S. AMALA, Synthesis, Characterisation and Biological studies on N,N'- Bis(Salicylidene)-2-hydroxyphenylmethanedia mine and its complexes with Mn(II)& Cu(II), Chemistry in synergy with materials and biology,2014, ISBN:9789380767369.

Books published (if any): 1

<b>Author (Compiled by)</b>	<b>Title</b>	<b>Publisher</b>	<b>ISBN no.</b>	<b>Year</b>
Dr. N. Radha Dr. D. Kalaivani Dr. S. Santhi	Cosmochemistry	PG and Research Department of Chemistry, SeethalakshmiRamaswami College, Tiruchirappalli, Tamilnadu, India	978-81-909490-6-4	2013

PAPERS PRESENTED IN RECENT YEARS			
Synthesis, Characterisation and Pharmacological studies of metal complexes with benzopyran based Ligand	Emerging trends in chemistry	National	11/01/2012 & Bishop Heber College Tiruchirappalli
Synthesis, Characterisation and Biological studies on N,N'-Bis(Salicylidene)-2-hydroxyphenyl methanediamine and its complexes with Mn(II)& Cu(II)	Chemistry in synergy with materials and biology.	International	10.01.14 & 11.01.14 & Bishop Heber College, Tiruchirappalli
Synthesis, Characterisation and Biological studies on N,N'-Ethylenebis(2,4-dihydroxy acetophenylideneimine) and its complexes with Mn(II), Co(II), Ni(II) & Cu(II)	"Materials And Drug Chemistry" (MDC - 14)	International	27.08.2014 & Sarah Tucker College, Tirunelveli-627007
Synthesis, Characterisation and Biological studies of N,N'-Bis(2-hydroxy naphthalidene)-4-Ethyl phenylmethane diamine and its complexes with Co(II), Ni(II) & Cu(II)	"Materials And Drug Chemistry" (MDC - 14)	International	27.08.2014 & Sarah Tucker College, Tirunelveli-627007
Synthesis, Characterisation and Biological Studies of 2,3-Dimethyl-2,4-bis (2-hydroxynaphthaldimino) naphthopyran and its Mn (II) Complex.	Recent Trends in X- ray Crystallography	National	08.10.2014 & 09.10.2014 & Seetahlakshmi Ramaswami College, Tiruchirappalli-620 002.
Dual-Channel schiff base chemosensor for selective sensing of Fe <sup>3+</sup> and Cu <sup>2+</sup> ions	International Conference on Chemical and Environmental Research (ICCER-2017)	International	07.01.17 Jamal Mohamed College, Tiruchirappalli-620 020.

Synthesis, Characterization, Fluorescence, Electrochemical and Biological studies of N,N'-bis(2-hydroxynaphthylidene)-4-chlorophenylmethanediamine and its Co(II), Ni(II) and Cu(II) complexes	International Conference on Chemical and Environmental Research (ICCER-2017)	International	07.01.17 Jamal Mohamed College, Tiruchirappalli-620 020.
Synthesis, characterization and solvent effect studies on UV-Vis and fluorescence spectra of Schiff bases derived from 2,4-dihydroxy acetophenone	International Conference on Chemical and Environmental Research (ICCER-2017)	International	07.01.17 Jamal Mohamed College, Tiruchirappalli-620 020.

## ABROAD VISIT

### Paper presented in 5<sup>th</sup> Annual international conference on Chemistry at ATHENS, GREECE

- Title of the paper : Highly selective and sensitive dual channel Schiff base chemosensors
- Duration of conference : 17<sup>th</sup> July 2017 – 20<sup>th</sup> July 2017
- Organisers : ATINER, Athens, Greece

**Chaired a session** in the International Conference on Chemistry organized by **ATINER** at Athens, Greece on 18<sup>th</sup> July 2017

**Acted as resource person in the symposium on *The Future Developments and Prospects of Engineering and Science Education & Research in a Global World* – Organised by ATINER at Athens, Greece on 18<sup>th</sup> July 2017**

Letter received from UGC sanctioning a **Travel Grant** to an extent of **100%** for the expenditure incurred for my visit to Athens, Greece.

## Research Projects:2

<b>P. investigator/ Co-investigator</b>	<b>Title</b>	<b>Sponsor</b>	<b>Duration</b>	<b>Amount</b>
Co-investigator	Investigation of Pharmacological activity of oximes and semicarbazones of biologically important carbonyl compounds	UGC	2007 - 2009	Rs.40,000/-
Principal investigator	Synthesis, Characterisation and Pharmacological Study of Metal complexes with Benzopyran based ligands	UGC	August 2013 – February 2014	Rs.1,40,000/-

**External experts:** (board members, chairman, research external examiners, selection committee members, Inspection committee member, etc.)

- Board of studies member in Govt. Arts College for Women, Pudukottai during the period **2005 – 2007 and 2009 - 2011.**
- May 2005 - Acted as resource person in the practical training classes conducted for higher secondary school teachers.
- November 2015 – Acted as resource person in the orientation classes conducted for the teachers of KamakotiVidyalaya, Trichy -2.

### **REVIEWER**

**Spectrochimica Acta Part A : Molecular and Biomolecular Spectroscopy under ELSIEVER publication -- for two papers (March 2017 & July 2017)**

**Other positions held in the college:**

- Planning the syllabi for B.Sc., M.Sc., and M.Phil., Chemistry
- Vice-President of Chemistry Club & Association
- Vice-President of Students' Union, Seethalakshmi Ramaswami College
- Secretary of Staff-Club , Seethalakshmi Ramaswami College
- Member in admission committee ( for Two terms)
- Organised and conducted Orientation Course for High School Teachers & Refresher Course for College TeachersAtpresent AUT – SRC Unit Treasurer.