



Name: **Dr. R. Santhi**

Designation: **Associate Professor**

Educational Qualification: **M.Sc., M.Phil., B.Ed., Ph.D.**

<b>Sl.no.</b>	<b>Degree</b>	<b>University/ College</b>	<b>Year of passing</b>
1.	B.Sc.	Bharathidasan University	1985
2.	M.Sc.	Bharathidasan University	1987
3.	M.Phil.	Bharathidasan University	1989
4.	B.Ed.	Bharathidasan University	1991
5.	Ph.D.	Bharathidasan University	2000

Experience:

UG: **20** years

PG: **16** years

M.Phil.:**16** years

Area of Specialization: **Physical organic Chemistry**

Guided: M. Phil.:**6**

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

Research Papers Presented: **28**

<b>Title of the seminar</b>	<b>Title of the Paper</b>	<b>Level</b>	<b>Sponsor</b>	<b>Date &amp; venue</b>
17 <sup>th</sup> national conferences of ICC	Kinetics and mechanism of oxidation of 5-aminouracil by peroxomonosulphate	National	ICC	26.11.1998 To 28.11.1998, Madras University, Chennai.
18 <sup>th</sup> national conferences of ICC	Kinetics and mechanism of oxidation of aromatic ketoximes by NBSA & NCSA-A comparative study	National	ICC	27.11.1999 To 29.11.1999, Jalgaon

International group for co-relation analysis in chemistry	Coorelation studies on PDC oxidation of semicarbazones of acetophenone and its p-substituted derivatives.	National	National symposium	12.03.2000, Bishop Heber College, Trichy
International group for co-relation analysis in chemistry	Kinetics and mechanism of oxidation of semicarbozones by PCC	National	National symposium	12.03.2000, Bishop Heber College, Trichy
19 <sup>th</sup> national conferences of ICC	Ring reactivity of alicyclic ketoximes by NBSA & NCSA-A kinetic and mechanistic approach	National	ICC	27.11.2001 To 29.11.2001, Shimogo.
Symposia-2001	Studies on oxidation of 3,3-dimethyl piperidone -4-oximes by PFC-A kinetic and mechanistic approach	National	--	14.02.2001 to 15.02.2001, Jamal Mohamed College, Trichy
National seminar on recent trends in applied chemistry	Kinetics and mechanism of Oxidation of aliphatic ketoximes by NCSA	National	--	10.1.2005, St. Joseph's College, Trichy
National seminar on chemistry education and research	Effect of e-learning on school children from standard I to VIII.	National	UGC	30.09.2004 to 2.10.2004, Erode arts college, Erode.
International Conference on 'Life through Chemistry'	Theoretical investigation on Diels-Alder reaction of the hetero aromatic dienes – Aromaticity as a probing tool by computational work molecular modeling	International	P.R. Engineering College Thanjavur	25.02.2006 & 26.02.2006 P.R. Engineering College Thanjavur
International Conference on 'Life through Chemistry'	Kinetics and mechanism of oxidation of acetophenoneoxime by Quinoliniumfluorochromate in aqueous acetic acid medium	International	P.R. Engineering College Thanjavur	25.02.2006 & 26.02.2006 P.R. Engineering College Thanjavur
International Conference on 'Life through	Studies on oxidation kinetics of aliphatic ketoximes by quinoliniumchlorochromate in	International	P.R. Engineering College	25.02.2006 & 26.02.2006 P.R.

Chemistry'	aqueous acetic acid medium		Thanjavur	Engineering College Thanjavur
International Conference on 'Life through Chemistry'	Kinetics and mechanism of oxidation of actophenoneoxime by QFC in aqueous acetic acid medium	International	P.R. Engineering College Thanjavur	25.02.2006 & 26.02.2006 Thanjavur
International Conference on 'Life through Chemistry'	A comparative study of kinetics of oxidation of DMG by QDC and QFC.	International	P.R. Engineering College Thanjavur	25.02.2006 & 26.02.2006 P.R. Engineering College Thanjavur
National conference on environment and sustainable development	Studies on combustion characteristics of solid fuels	National	--	16.02.2006 & 17.02.2006 BARD, Trichy.
National Seminar on "Recent Trends in Hetero atom chemistry"	Kinetics and mechanism of oxidation of dimethylglyoxime by Cr(VI) oxidizing agents – A comparative study.	National	UGC and CSIR	28.03.2007 & 29.03.2007 Annamalai University, Annamalai Nagar Chidambaram
National Seminar on "Recent Trends in Chemistry"	Studies on the quality of water from Pulivalam village near Tiruchirappalli	National	CSIR	9.8.2007 & 10.08.2007, JayarajAnnapackiam College for Women at Periakulam.
National Seminar on "Recent Trends in Chemistry"	Hydrochemical studies on water from Senthaneerpuram, Tiruchirappalli	National	CSIR	9.8.2007 & 10.08.2007, JayarajAnnapackiam College for Women at Periakulam.
National conference on "Recent advances in Chemistry"	Studies on combustion characteristic of solid fuel.	National	UGC	18.09.2009 Bishop Heber College Trichy.
National Symposium on	Characterization of polyaniline as an ion exchanger	National	DST & UGC	04.12.2009 & 05.12.2009

Acoustics				Alagappa University Karaikudi
National Symposium on Acoustics	A study of ion exchange characteristics of polyaniline salt	National	DST & UGC	04.12.2009 05.12.2009 Alagappa University Karaikudi
Nanomaterials and nanotechnology[ NANO-2010]	Polyaniline picrate- An anion exchanger	International	IUPAC	13-16.12.2010, KS Rengasamy College of Technology, Tiruchengode.
Recent trends in polymer and green chemistry	Paper presentation on ion exchange characteristics of PANI chloride & its composites	National	--	Rajah Serfoji Govt College, Thanjavur. 2.2.2012&3.2.2012
Chemistry in synergy with materials and biology	UV-Visible and conductivity studies of poly aniline salts.	International	DST & UGC	Bishop Heber College, Trichy 11.1.2012
Chemistry in synergy with materials and biology	Presented a paper on a study of Mercuric ion adsorption on polyaniline chloride – A conductometric method.	International	DST & UGC	10.1.2014 – 11.1.2014 Bishop Heber College, Trichy.
Chemistry in synergy with materials and biology	Polyaniline - a novel ion exchanger	National Level	DBT	30.01.2014-31.01.2014 Holy Cross College, Trichy-2
Materials and Drug Chemistry	In vivo determination of anticonvulsant/hypnotic activities of a new type of carbon-bonded anionic sigma complex synthesized from 1-chloro-2,4- dinitrobenzene, 1,3-dimethylbarbitone	International	Sarah Tucker College	27.08.2014 Sarah Tucker College, Tirunelveli-627007
Recent trends in X-ray crystallography	A Study of Mercuric Ion Adsorption on Polyaniline Chloride – Imidazole	National		08.10.2014 and 09.10.2014&

	Composite Through XRD Analysis		UGC	Seethalakshmi Ramaswami College, Tiruchirappalli-2.
International Conference on Chemical and Environmental Research (ICCER-2017)	<b>ICCER-2017</b> Presented a paper on "Adsorption of heavy metal ion on Pani salts and its composites with imidazoles"	International	PG and Research Department of chemistry, Jamal Mohamed College, Trichy.	07-01-17 PG and Research Department of chemistry, Jamal Mohamed College, Trichy

### 1. Research Papers Published: **13**

- S.LALITHA, D.KALAIVANI, R.SELVAMEENA, **R.SANTHI** & A.V. BARANI, Assay on water samples from medical college area in Thanjavur. Indian Journal of Environmental Protection, 24, (2002) 925. ISSN: 0253 7141.
- S.LALITHA, D.KALAIVANI, R.SELVAMEENA, **R.SANTHI** & S.BHUVENESHWARI, Study on quality of water samples from 9A Nathampannaipanchayat in Pudukottai District. Indian Journal of Environmental protection, 26, (2006) 144, ISSN: 0253 7141
- **R.SANTHI**, S.LALITHA, D.KALAIVANI, P. ANJUGAM & R. PADAM PRIYAL, Studies of quality of water form Pulivalam village near Tiruchirappalli. Indian Journal of Environmental protection, 28, (2008) 557, ISSN: 0253 7141
- S.LALITHA, D.KALAIVANI, **R.SANTHI**, R. PADAM PRIYAL & P. ANJUGAM, Hydrochemical studies on water form Senthaneepuram, Tiruchirappalli. Indian Journal of Environmental protection, 28, (2008) 518, ISSN: 0253 7141
- D. KALAIVANI, R.MALARVIZHI, **R.SANTHI**, S. SRIMATHI & R. PATTABIRAMAN, Anticorrosion studies on carbon steel for environmental protection. Indian Journal of Environmental protection, 28, (2008) 1939, ISSN: 0253 7141
- **R.SANTHI**, A. LAWARENCE, S.LALITHA, D.KALAIVANI & C.UMA, Studies on combustion characteristics of solid fuels. Journal of Environmental protection, 29, (2009) 592, ISSN: 0253 7141.

- C.DHIVYA, S. ANBU ANJUGAM VANDAR KUZHALI, **R.SANTHI**& N.RADHA, Synthesis and characterization of Polyaniline using Picric acid as an organic dopant, Indian Journal of Applied research, Vol 3, issue 6, June 2013, ISSN-2249-555X, I. F: 0.8215.
- N. RADHA &**R. SANTHI**, Extraterrestrial origins of proteins and nucleic acids, Cosmochemistry, 84-89, 2013, 978-81-909490-6-4.
- C.DHIVYA, S. ANBU ANJUGAM VANDAR KUZHALI, P. SAROJA, **R.SANTHI**& N.RADHA, Sorption studies of some biologically important univalent salts using Polyaniline picrate as sorbent, Eur. Chem.Bull., 2014,3(1), 32-39.
- N. A. DEEPA, C.DHIVYA, S. ANBU ANJUGAM VANDAR KUZHALI, **R.SANTHI**& N.RADHA, Pristine, chromogenic polyaniline – A novel sorbent for ion exchange of sodium salts in aqueous solution, Asian journal of chemistry, 26, 15, 2014, 4855-4864. ISSN: (Print).0970-7077, (Online).0975-427X, Impact factor-0.355.
- **R.SANTHI**, N. RADHA, B. RAJESWARI, S. ANBU ANJUGAM VANDARKUZHALI & C. DHIVYA, A study of mercuric ion adsorption on polyaniline chloride – imidazole composite through XRD analysis, “Recent trends in X-ray crystallography” with ISBN No.: 978-81-909490-0-2, pp. 18-27.
- G. SRIDEVI, G.SARASWATHI, **R.SANTHI**& D.KALAIVANI, The orthorhombic crystal structure and pharmacological activity of a new antiepileptic reagent with quinolinium moiety, Recent trends in X-ray crystallography” with ISBN No.: 978-81-909490-0-2, pp. 157-176.
- **R.SANTHI**, & N. RADHA, Chromogenic polyaniline picrate- A novel sorbent for selectivity of anions in potassium and sodium salts, Indian Journal of Chemical Technology, Vol,23, March 2016, 104-113.

Books published (if any):

**Lesson writer – Physical Chemistry (2015-2016)**

M.Sc. Chemistry, Bharathidasan University(For correspondence course)

Research Projects:2

Minor projects

P. investigator/ Co-investigator	Title	Sponsor	Duration	Amount
Co-investigator	Ultrasonic Synthesis and Characterisation of Optical Properties of Polyaniline Salts	UGC	2009 - 2011	Rs.90,000/-

Principal Investigator	Polyanilines – A novel nano ion exchanger	UGC	2010-2012	Rs.1,25,000/-
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**External experts:** (board members, chairman, research external examiners, selection committee members, Inspection committee member, etc )

1. External examiner for M.Sc. & M.Phil.
2. Resource person for the students of X<sup>th</sup> standard, Kamakoti Vidhyalaya, Trichy on 16.11.2016.
3. Judge for district level science exhibition at Bishop Heber higher secondary school, Puthur, Trichy on 17.10.2016
4. Judge for zonal level science exhibition at E. R. Higher secondary school, Trichy on 20.10.2017

#### **Other positions held in the college**

- Secretary of Staff-Club.
- Member in admission committee.
- Vice-President of Students' Union.
- Vice-President of Chemistry Club & Association.
- Member in research committee.