National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

Curriculum Vitae

Brief Profile: 1-2 paragraphs (not exceeding 500 words)

1. Name Dr. S. Velmathi
2. Designation: Professor
3. Office Address: Professor and Head
   Department of Chemistry
   National Institute Technology (NIT)
   Trichy-620 015
4. Telephone (Direct) (Optional): 91-431-2503640
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5. Email (Primary): velmathis@nitt.edu
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6. Field(s) of Specialization: Organic Chemistry

7. Employment Profile

Job Title	Employer	From	To
Professor	Department of Chemistry, NIT, Trichy	2018	
Associate Professor	Department of Chemistry, NIT, Trichy	2011	2018
Assistant Professor	Department of Chemistry, NIT, Trichy Department of Chemistry, NIT, Trichy	2008	2011
Lecturer	Department of Chemistry, NIT, Trichy	2006	2008

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph. D	University of Madras	2001	Highly Commended	Organic Chemistry
M. Sc	University of Madras	1995	First Class	General Chemistry

B.Sc.	University of Madras	1993	First Class with distinction	General Chemistry

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Head of the Department	Chemistry -NITT	Jan 2020	Till date
Associate Dean Academic	Indian Institute of Information Technology Tiruchirappalli- IIITT	July 2016	November 2018
Library Advisory Committee member	Indian Institute of Information Technology Tiruchirappalli- IIITT	July 2017	Nov 2020

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Editorial Board member	Bentham's Current Catalysis Journal		
Academic Council Member	Govt. College of Technology, Coimbatore	2022	Till date
Member Senate	NITT	2018	Till date
Member Senate	IIIT, Trichy	2016	2018
Member Senate	IIIT, Trichy	2020	till date
NAAC Accessor	NAAC	2022	Till date
BoS member	Thyagarajar College of Engineering, Madurai	2021	2024
BoS member	Dhanalakshmi Srinivasan University Perambalur, Tamilnadu	2021	2023
BoS member	Central University of Tamilnadu, Tiruvarur	2019	2021
BoS member	Bannari Amman Institute of Science and Technology	2015	2018
BoS member	PSR Engineering College	2015	2017
Doctoral Committee member for Ph. D students	Bharathidasan University		
Doctoral Committee member for Ph. D students	Central University of Tamilnadu		
Doctoral Committee member for Ph. D students	SRM University		
Doctoral Committee member for Ph. D students	VIT		
Purchase committee member	NITT		

Purchase committee member	CUTN		
Temporary Faculty selection committee member	CUTN		
Temporary Faculty selection committee member	Thyagarajar College of Engineering - Madurai		
PhD Viva Voce examiner	Anna university		
PhD Viva Voce examiner	SRM university		
PhD Viva Voce examiner	VIT -Vellore		
Question paper setter	Anna University, BDU		
Question paper setter	JEE		

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2022	CRSI-Bronze medal	Chemical Research Society of India (CRSI)
2021	Mother Teresa Woman Researcher-2021 award	Mother Teresa Women's University- Kodaikanal
2020	Tamil Nadu Scientist award (TANSA)-2020	Tamilnadu State Council of Science and Technology (TNSCST)
2019	Faculty achiever award	NITT
2019	FRSC - Fellow of Royal Society of Chemistry	Royal Society of Chemistry-UK
2019	MNASc - Member of National Academy of Sciences, Allahabad	National Academy of Sciences, Allahabad
2018	Faculty achiever award	NITT
2017	MRSC- Member of Royal Society of Chemistry from 2017	Royal Society of Chemistry-UK
2016	The Faculty achiever award	NITT
2015	Fellow of Tamil Nadu academy of Sciences (FASCh)	Tamil Nadu academy of sciences
2012	Tamil Nadu Young Women Scientist Award-2012 for Chemical Sciences	Science City Chennai
2007	DST-SERC Fast Track Young Scientist Award	DST-SERC
2005	Received the best poster award in the 5th Green and Sustainable Chemistry Network symposium held at Tokyo, Japan	

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
April 2001	Senior Research Fellowship (Extended)	CSIR	April 2001	
April 1998	Senior Research Fellowship of CSIR, India	CSIR	April 1998	
2003	Post-Doctoral Fellowship	Advanced Polymer Group, AIST, JAPAN	2003	2006
2015	INSA International collaboration/exchange fellowship	INSA	2015	
2013	International Travel grant from DST	DST	2013	
2009	International Travel grant from DST	DST	2009	

13. Details of Academic Work

(i) Curriculum Development

Conducted BoS meetings as BoS Chairman for M.Sc Courses 2020-2023, revised the syllabus and included many new electives in the advanced topics in Chemistry

(ii) Courses taught at Postgraduate and Undergraduate levels

- ✓ B.Tech (CHIR I and II) Engineering Chemistry I and II Semesters (Theory and Lab)
- ✓ B.Tech (CL 201) Organic Chemistry for Chemical Engineering (III Semester)
- ✓ M.Sc (CH 601) Organic Chemistry Reaction mechanism and their Types
- ✓ M.Sc (CH 602) Stereochemistry, Photochemistry, Pericyclic and rearrangement reactions
- ✓ M.Sc (CH 609) Organic Preparations and Separations Laboratory
- ✓ M.Sc (CH 613) Synthetic Organic Chemistry
- ✓ M.Sc (CH 621) Organic and Inorganic Quantitative Analysis Laboratory
- ✓ M.Sc (CH 618) Natural Products chemistry
- ✓ Ph.D Advanced Research Topics for Chemistry

(iii) Projects guided at Postgraduate level-50

PG dissertations Title	Student Name	Year
Design, synthesis and characterization of Novel spirooxindole pyrrolidines Tethered vanillin chalcones	Jevid Don Hamid	2022
A Pyrene based fluorescent probe for the detection of Hydrogen sulfide (H2S) in Water	Sukhvant Singh	2022
A Novel Coumarin-Chalcone based Fluorescent probe for the detection of Hydrazine in Water	Renny Louis Anto	2021
Cascade recognition of Fe+3 using 2-(benzo[d]thiazol-2-yl)-5-(diethylamino) phenol based excited-state intramolecular proton transfer (ESIPT) sensor	Sumit Gupta	2021
Molecular Docking study on the anti cancer activity Of potential spiro molecules derived Via Michael Addition from Chalcones : Anaplastic Lymphoma Kinase inhibition	Pali Mehta	2020
Molecular Docking Of (E)-1-(Subsititudephenyl-5,6-Dihydropyrimidin-2(1h)-Ylidene)Thiourea And Its Derivatives Against The Hiv-1 Reverse Transcriptase	Nitu Kumari	2020
Highly sensitive and selective naked eye detection of Cu2+ based on Ninhydrin-Quinoxaline Derivative	Arun	2019
Synthesis and characterization of E-3-Methyl-4-(2-(methylamino)-3-Nitro-6-(phenyldiazenyl)-4H-Chromen-4-yl)-1-Phenyl-1H-Pyrazok-5-ol derivatives	K. Jijina	2019
Development of NIR dyes for sensing applications	Arshad	2018
Claisen Vs. Chapmann Rearrangement-Optimising Conditions	Yohalakshmi	2018
Total Synthesis of Clonidine via green chemistry Protocols	Ankita	2018
Development of New MOF's as catalysts for Mc Murray Coupling reactions	Shravan R. Kousik	2018
An Efficient and Convenient Protocol for the Synthesis of Benzimidazoles From Diethyl Arylidene Malonates and O-Phenylene Diamine Using Water	Lalitha	2017
Analogues of Piperine Synthesis and Characterization	Anjali Krishna	2017
Indium (III) Triflate Catalysed Hydrodeamina_on of Various Beta-Amino Carbonylcompounds	Stella Mary	2017
Selective Sensing of Hypochlorite in Fully Aqueous Medium by Commercially Available Dyes	Varalakshmi	2017
Isatin Diaza Synthesis of N-Benzyl and Pyrano Thiazol-2-One Derivative	Fathima Rahiman	2017
Synthesis of Various Diaza Compounds Using Tosyl Azide as Azo Transferring Agent and Their Synthetic Utility	Ayana Surendiran	2017
Aluminum Oxy Hydroxide as an Acid Base Bifunctional Catalyst for Aldol Condensation Reaction	P C Reshma Rajan	2016
A Green and Efficient Methodology for the Synthesis of	T Akash	2016

1 3 5-Triazenes MW Assisted Cyclization With Amidines		
A Rhodamine -B Based Chromogenic and Fluorogenic Receptor for Dual Sensing of Cu2 and Cr3 Ions	N Vijay	2016
Synthesis Characterization and Applications of Metal Organic Frameworks With Imide Based Linker	R Minmini	2016
Studies on Applications of Azo Linked Salicylaldehyde as an Efficient Colorimetric Anion Sensor	J Nandhini	2016
Synthesis and Characterization of Zr-KIT-6 and Application to Degradation of Dye	Vinay Bharatwaj	2015
A Simple Fluorescent Probe to Detect Cyanide Ion in Aqueous Media	T M Ebaston	2015
Syntheses and Characterization of Thiourea Derivatives for Chemosensor Applica_ons	P Kalpana	2015
Isolation and Semisynthetic Modification of Piperine	S Arthi	2014
Preparation of ZnO Nano Particles and Their Application in Photocatalytic Degradation of Dyes Under Solar Irradiation and UV Light	A Prasannambigai	2014
Synthesis, Characterization and Application of ZnO Nanoparticles in Catalytic Hydride Transfer Reduction of Aromatic Nitrocompounds	S Marutharaj	2014
Synthesis, Characterization and Application of Copper-SBA-15 in C-N Coupling Reaction	Lingamoorthy	2014
Synthesis Characterisation and Application of CuO Nanoparticles	Sarah Mathews	2013
Naked Eye Sensing of Anions Using Thiourea Based Chemosensors With Real Time Application	Vinithra	2013
Synthesis of Salicylaldehyde Based Chiral Ligands for Application in Asymmetric Michael Reaction	Lanka Suneel	2012
Synthesis and Characterization of Thiosemicarbazide Ligand and Their Metal Complexes	D Renuga	2012
Studies on the Effect of Substitution on Enantioselectivity in Asymmetric Michael Reac_on	Pushparaj	2012
Synthesis, Characterization of Schiff Bases and Electro Chemistry of Their Metal Complexes	Nagenthi	2011
CuO Nanoparticles Synthesis and Application in C-N Coupling Reac_on	Dhanalakshmi	2011
Cation Binding Studies of Salicylaldimine Based Chromogenic Receptors	D Udhayakumari	2011
Anion Recognition by Salicylaldimine Based Chromogenic Receptors	R Prabhu	2011
Attempted study to utilize amino propylated SBA-15 as catalyst for Aza –Michael reaction	Ch. Amarendar	2010
Selective Binding Of Cu (Ii) Ion By Salicylaldimine Based Chromogenic Receptors	S. Suganya	2010
Synthesis of Chiral N-Aryl-α-Amino acids using Copper Catalysts under Microwave Irradiation	N. Narendar	2009

Asymmetric Ketone Reduction Using Oxazaborolidine catalyst derived from L-Valine	Sharada.K	2009
Studies on the Synthesis and Characterization of Poly(Butylene Succinate) by Heterogenous Catalyst	T. Kavitha	2008
Synthesis and Characterization of Bio-Degradable Poly(Ethylene succinate)using Mesoporus Al-SBA-15 Catalyst	G. Sakthivel	2008
Studies on the Synthesis and Characterization of Novel Chiral ligand derived from L-Proline Amino acid	Boobalan. M	2008
Synthesis, Characterization of Schiff Bases and Electro chemistry of their Cobalt Complexes	M. Babu	2008
Solid Phase Synthesis of Pyromellitic Diimides using Microwaves	R. Anandhi	2007
Microwave assisted Solid Phase Synthesis of Norbornene Imides	P. Chandra Sekar	2007
Studies on the Synthesis and Characterization of New Amino acid derived Chiral Ligands	Sunil. A. R.	2007

(iv)Other contribution(s)

S.No	Agency	Period	Title	Budget
1	VMRF-Salem	2022-2027	A MOU has been signed between Vinayaka Missions Research Foundation, Salem, and NITT (Student Exchange/Faculty visits/ Materials characterization Agreement)	
2	Various Agencies	2015-till date	Revenue Generated by extending the Instrument Facilities / Consultation/-	Rs. 10,00,000/-
3	NIMS-Japan	2007-2012	A MOU has been signed between Fuel cell Materials center NIMS Japan, and NITT (Student Exchange/Faculty visits/ Materials characterization Agreement)	10,00,000 JPY

14. Details of Major R&D Projects

Agency	Period		Project Title	Status
	From	To		Ongoing/ Completed
DST	2007	2010	Studies towards the development of reusable chiral catalysts for asymmetric synthesis	completed
TEQIP	2007	2008	Development of new biodegradable polymers using microwaves	completed
CSIR	2008	2011	Studies towards the application of new tridentate ligands for ring opening polymerization of lactides	completed
DST-nano mission	2009	2012	Synthesis and characterization of nanomaterials for engineering applications (Co-PI)	completed
DRDO	2011	2014	Studies towards the development of colorimetric	completed

			and fluorescent on-off receptors for cation/anion sensing	
SERB	2011	2014	Chiral Hybrid Organic-Inorganic three dimensional Mesoporous Materials for Enantioselective synthesis	completed
DST-NPDF	2016	2018	Carbon-Carbon coupling reactions in water	completed
DST-NPDF	2017	2019	Rhodium Catalyzed C-H activation: Alkylative/Arylative Cyclization of 1,6-Enyne for the synthesis of biologically important fused cyclic frameworks	completed
CSIR	2018	2021	"Sense and Separate" strategy for the detection of toxic analytes using Organic-Inorganic Hybrid Mesoporous Materials	on going
DST-FIST	2019	2024	SR/FST/CS-II/2018/64	on going

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
Dr. N. Vijay	Development of Near Infra-Red Emitting fluorescent probes for sensing studies and their applications	Supervisor	2022
Dr. Sanay Naha	Development Of Novel Chemosensors For Sensing Reactive Oxygen/Sulphur Species And Ions And Their Application In Live Cell Imaging	Supervisor	2021
Dr. G. Punithakumari	Development of Sensors for Detecting Biologically and Environmentally Toxic ions and their Logic gate Applications	Supervisor	2021
Dr. S. Vikneshwaran	Studies on synthesis and application of Schiff bases as Corrosion Inhibitors: Experimental and theoretical studies	Supervisor	2018
Dr. G. Balamurugan	Synthesis and Characterization of New Benzimidazole and Quinoxaline Based Chemosensors for Sensing Highly Toxic Transition Metal Ions and Anions	Supervisor	2018
Dr. S. Saravanamoorthy	Syntheses and Applications of Novel Catalysts in Ring Opening	Supervisor	2016

	Polymerization Reactions		
Dr. N.S. Sanjini	Studies on Catalytic Applications of Mesoporous Materials	Supervisor	2016
Dr. S. Suganya	Synthesis and Characterization of Molecular Hosts for the Sensing of Anions and Cations	Supervisor	2016
Dr. D. Udhayakumari	Anion and Cation Sensing by Synthetic Receptors: Synthesis, Characterization and Binding Studies	Supervisor	2015
Dr. V. Reena	Studies on the Syntheses and Applications of Novel Chromogenic Receptors as Chemosensors	Supervisor	2015
Dr. N. Ananthi	Syntheses and Applications of Novel Chiral Catalysts in Asymmetric Synthesis	Supervisor	2011
Dr. U. Balakrishnan	Studies Towards the Synthesis of Reusable Chiral Catalysts for Asymmetric Synthesis	Supervisor	2011

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
11th - 16th May 2020	Workshop on E-Content Development, Organized by NIT, Trichy	Participant	NIT, Trichy	NIT, Trichy
04th - 09th December. 2017	Workshop on capacity building for women mangers in higher education	Participant	NIT, Trichy,	NIT, Trichy,
28th - 29th Apr. 2015	Conclave on Academic Reforms Organized	Participant	NIT, Trichy,	NIT, Trichy,
9-11 April, 2015	Conference on Advances in Materials, Manufacturing and Applications,	Chaired a session	NIT, Trichy,	NIT, Trichy,

Oct 21-24, 2013	to visit South Korea a paper in the 14th Tetrahedron symposium	presenting a paper	Seoul, South Korea,	Seoul, South Korea,
Dec 06-10, 2009	for presenting a paper in the International Conference of 11th Pacific Polymer Conference	presenting a paper	Australia,	Australia,
on March 15-2008	Workshop on XRD and IPR	Participant	Dept. Of Physics NIT, Trichy,	NIT, Trichy,
on March 5-6, 2008	Nano-2008 Workshop	Participant	NIT, Trichy,	NIT, Trichy,
Dec 17-18, 2007	INDIA-NIMS joint workshop on Advanced materials	Participant	JNCASR, Bangalore,	, JNCASR, Bangalore
4-6, January 2007	5th International conference on Trends in Industrial Measurements and Automation (TIMA-2006)	Participant	NIT, Trichy,	NIT, Trichy,
Nov 2006	one day training program on Instrumental methods of thermal analysis and data interpretation,	Participant	NIT, Trichy,	NIT, Trichy,

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
National Conference on Organic Chemistry (NITTOCC-2021)	National	December 16-18, 2021	Convener	Dept. of Chemistry, NITT
National level student's symposium on Smart Sensors	National	October 27-28, 2017	Convener	Dept. of Chemistry, NITT
Organized a One week short term course on Training program for CSIR/UGC -JRF exam in chemical sciences	Local	September 01-05, 2017	Coordinator	Dept. of Chemistry, NITT
MHRD-GIAN sponsored course on supramolecular photochemistry	National	January 05-12, 2017	Convener	Dept. of Chemistry, NITT

One Day RSC-Satellite event in collaboration with IITM, University of Cardiff, UK and Royal Society of Chemistry - RSC-NITT	International	November, 05, 2016	Convener	Dept. of Chemistry, NITT
Two Days Workshop on 1D and 2D NMR spectroscopic techniques	Local	January 21-22, 2016	Convener	Dept. of Chemistry, NITT
Member in the CRSI-Midyear symposium held at NIT Trichy, 23rd – 25th July 2015	National	23rd – 25th July 2015	Convener	NIT Trichy
Organized a short-term course on Recent Trends in catalysis on November 7-8, 2014 in the Dept. of Chemistry, NITT (Convener	Local	on July 9-11, 2014	Convener	Dept. of Chemistry, NITT
Three Days Workshop on Characterization techniques in Chemical Sciences	National	July 9-11, 2014	Convener	Dept. of Chemistry, NITT
Organized a National Conference on Chemosensors	National	September 19-20, 2013	Convener	Dept. of Chemistry, NITT
Organized a short-term course on Chromatographic Techniques	Local	December 5-6, 2012	Convener	Dept. of Chemistry, NITT
National level student's symposium on Emerging trends in Organic Synthesis	National	October 22, 2011	Convener	Dept. of Chemistry, NITT
Workshop on Advanced materials for optoelectronic devices	Local	April-11-2008	Convener	Dept. of Chemistry, NITT
Workshop on Engineering Chemistry for B. Tech students under TEQIP tribal development plan,	Local	October 27, 2007	Convener	Dept. of Chemistry, NITT
Nanomaterials and its applications, February 04-06, 2007 (ICNA-2007) in the Dept. of Chemistry, NITT (Joint Treasurer)	International	04-06, 2007	Joint Treasurer	Dept. of Chemistry, NITT

18. Invited Talks delivered

Topic	Date	Inviting Organization
Environment and Health Effects of Heavy metal and cyanide ions	12-03.2022	Department of Chemistry, Avinashilingam Home science university, Coimbatore
Capacity building for Women Leaders in Higher Education in the IUPAC Global Women Breakfast Program	16.02.2022	Department of Chemistry, A. N. College Patna in coordination with Association of Chemistry Teachers, Mumba
Selecting appropriate research designs. Observational designs, Cross- Sectional studies	25.11.2021	organized by Aarupadai Veedu Institute of Technology
Spectroscopic characterization techniques Focusing on FT IR and NMR	09.11.2021	Organised by Department of Botany, St. Marys College, Thoothukudi
Selecting appropriate research designs. Observational designs, Cross- Sectional studies	14.06.2021	Aarupadai Veedu Institute of Technology
Heteronuclear NMR as tool for mechanistic investigation	January 30, 2021	Academic Staff College, department of Organic Chemistry, University of Madras, Chennai
Development of small molecules as chemosensors for analyte detection	January 30, 2021	UGC Academic Staff College, department of Organic Chemistry, University of Madras, Chennai
Heteronuclear NMR	December 19, 2020	Bharathiar University, Coimbatore
chemosensors for heavy metal ion detection	December 19, 2020	Bharathiar University, Coimbatore
Development of Sensors for endogenous detection of Reactive Oxygen, Sulphur Species and Hydrazine,	17-18, 2020	by Department of Applied Chemistry, SV NIT Surat
Spectroscopic characterization techniques, in The National webinar series organized by Department of physical sciences, Bannari Amman Institute of Science and Technology, Sathyamangalam, July, 26, 2020	July, 26, 2020	Department of physical sciences, Bannari Amman Institute of Science and Technology, Sathyamangalam,
Chemosensors for heavy metal ion detection in the webinar Organised by, on June 17, 2020	June 17, 2020	Department of Chemistry, Saranathan College of Engineering, Trichy
Fluorescent sensors for molecular recognition on Dec 30-2019	Dec 30-2019	Department of Medicinal Chemistry, Kaoshiung Medical University, Kaoshiung, Taiwan
Fluorescent sensors for molecular recognition on	Dec 26-2019	Department of Applied Chemistry, National Chiao Tung

		University, Hsinchu, Taiwan
Fluorescent chemosensors	September, 2019	Academic Staff College, department of Chemistry, Bharathidasan University
Transition metal doped heterogeneous catalysts, in The National Seminar on Recent Trends in Chemical Sciences	March, 01, 2019	Department of Chemistry, EVR Periyar College, Trichy
Protecting groups in Organic synthesis	February 13-14, 2019	Department of Chemistry, Ethiraj College, Chennai
Sensors	February 16, 2018	Department of Chemistry, RVS Kumaran Arts and Science College, Dindigul
Chemosensors as Molecular Organic devices	March 27, 2017	department of Chemistry, Thiagarajar College of Engineering, Madurai
Heterogeneous photocatalysts for degradation of pollutants	February 16, 2017	department of Civil Engineering, Govt. College of Technology, Coimbatore
Fluorescent chemosensors in the MHRD-GIAN sponsored course on Supramolecular Photochemistry	Jan 05-12, 2017	Department of Chemistry, NITT
Catalytic applications of mesoporous materials	Nov. 05, 2016	Royal Society of Chemistry in association with NITT
Transition metal doped mesoporous materials as efficient catalysts for various organic transformations	Nov 01-04, 2016	Organised by IIT Madras, Cardiff University, British council and RSC
Synthesis, characterization of heterogeneous mesoporous materials	August 31, 2016	department of Civil Engineering, NIT, Trichy
Transition metal doped mesoporous materials for photocatalysis	March 12, 2016	department of Physics, AVVM Poondi Pushpam college, Thanjavur
Chemosensors for water analysis	February 27, 2016	Organised by department of Chemistry, Saranathan College of Engineering
Chemosensors	January 29, 2016	PG department of Chemistry, Seethalakshmi Ramaswamy College, Trichy
NMR Spectroscopy in the Two Days Workshop on 1D and 2D NMR Spectroscopic techniques 21-22, 2016	January 21-22, 2016	department of Chemistry, NIT, Trichy
chemosensors and imaging processes	Nov 16-18, 2015	Ewha Women's University, held at Seoul, South Korea
Asymmetric Synthesis	October 30, 2015	PG department of Chemistry, St. Aloysius college, Thrissur, Kerala
Colorimetric and Fluorescent sensors for	May 12-	Institute of Chemistry, Academia

molecular recognition on.	2015	Sinica Taiwan
Fluorescent sensors for molecular recognition on	May 08-2015	Department of Applied Chemistry, National Chiao Tung University, Hsinchu, Taiwan
Alternative energy resources	Feb 28, 2015.	Mohd. Sathak college, Kilakarai
Frontier Areas in Chemistry	Feb 27, 2015	Thyagarajar college of Arts and Science, Madurai
Mesoporous materials chemosensors	Jan 29, 2015	Academic Staff College, department of Chemistry, Bharathidasan University, Trichy
Fluorescent chemosensors	Jan 29, 2015	Academic Staff College, department of Chemistry, Bharathidasan University, Trichy
Green Chemistry and Alternative energy resources	Nov 07-08, 2014	department of Chemistry, NIT, Trichy
NMR Spectroscopy	July 09-11, 2014	department of Chemistry, NIT, Trichy
Chemosensors in the Short-term course on Innovative methods in chemical research	May 05-09, 2014	department of Chemistry, NIT, Trichy
Chemosensors	Feb 13, 2014	department of Chemistry, Bharathidasan University, Trichy
Chromatographic techniques	Feb 13, 2014	department of Chemistry, Bharathidasan University
Chemosensors	Nov 15, 2013	department of Chemistry, Madurai Kamaraj University, Madura
Chromatographic techniques	Nov 15, 2013	department of Chemistry, Madurai Kamaraj University
Microwave chemistry in the Short- term course on New Avenues in Chemical research	on May 21-25, 2013	department of Chemistry, national Institute of Technology, Trichy
Synthesis of chromogenic receptors for cation/anion recognition	January 8th 2013	Department of Organic and Polymer Materials, Dong-A University, Busan, Korea
Chromatographic techniques	Dec 5, 2012	department of Chemistry, national Institute of Technology, Trichy
HPLC techniques	Dec 6, 2012	department of Chemistry, national Institute of Technology, Trichy
Applications of Salicylaldimine based compounds as chiral catalysts and chemosensors	Dec 16-17, 2011	Department of Chemistry, Pondicherry University, Pondicherry
Nano structured polymers for drug	Jan 20, 2010	department of chemical

delivery applications		engineering, Government Engineering college, Thrissur, Kerala
Advanced Materials	Dec 22-23, 2009	IICT, Hyderabad and NIMS, Japan at IICT Hyderabad
Recent Trend in Polymer technology	March 21, 2008	Kamarajar College of Science and Technology, Virudhu Nagar
"EPR and NMR Spectroscopy" March 13-14, 2008 Organized by the Department of Chemistry, NITT (TEQIP	March 13-14, 2008	Department of Chemistry, NITT (TEQIP
Reagents in Organic Synthesis in the "Training for PG students	Feb 23-27, 2008	NITT (TEQIP)
"Organic Chemistry-An Overview" in the one -day workshop on Engineering Chemistry, on October 27, 2007	October 27, 2007	NITT (TEQIP)
"Recent Developments in Chemistry"	25-01-2007	Department of Chemistry, Manonmaniam Sundaranar University-Tirunelveli
"Microwave Chemistry - A boon or ban"	Nov 30 - 2006	Department of Chemistry, St. Joseph's College Trichy
"Training for PG students for clearing CSIR-NET,	Nov 25-29, 2006	NITT (TEQIP)
Concepts of Organic Reaction Mechanism, Sep 16-17, 2006, NITT (TEQIP)	Sep 16-17, 2006	, NITT (TEQIP)

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life time Member)	Organization	Membership No. with date
Member	Royal Society of Chemistry UK	2017 on words
Member	National Academy of Sciences, Allahabad,	
Member	American Chemical Society	2018 onwards-ACS member id 30044720.
Life member	Chemical Research Society of India,	
Life member	Catalysis Society of India	
Life member	Materials Research Society of India	

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Taiwan	Dec 23-Jan 06, 2020	Visiting Scientist at National ChiaoTung University and Institute of Chemistry, Kaoshiung Medical University
Dubai	Nov 2017	for presenting a paper in the International Conference
South Korea, Seoul	Nov 2015	Invited lecture in 1st Asian ChIP Conference
Taiwan	May 01-15, 2015	Visiting Scientist at Department of Applied Chemistry, National ChiaoTung University and Institute of Chemistry, Academia Sinica
Busan, South Korea	January 2014	Visiting Scientist at Pusan National University, Busan
South Korea	Oct 21-24, 2013	Paper presentation on 14th Tetrahedron symposium
Busan, South Korea	January 2013	Visiting Scientist at Department of Organic material and polymer engineering, Dong-A University, and, ,
Australia	Oct 2012	Paper presentation in International Conference on Emerging Advanced Nanomaterials ICEAN 2012
Singapore	Feb 26-28, 2012	Oral Presentation in the International Conference on Key Engineering materials ICKEM 2012
Australia	Dec 06-10, 2009	for presenting a paper in the International Conference of 11th Pacific Polymer Conference
Tsukuba, Japan	June-July, 2008	Visiting scientist at (WPI-MANA) World Premier Institute-Center for Materials Nano Architectonics, National Institute for Materials Science
USA	Dec-Feb 2008	TEQIP visiting scientist at Department of Chemistry, University of Connecticut
Tsukuba, Japan	May-July-2007	Visiting Researcher at Fuel Cell Materials Center, National Institute for Materials Science
Tsukuba, Japan	2003-2006	Post doctoral Fellowship at Research Institute for Innovations in Sustainable Chemistry, AIST

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Vol. (No.)	Page number	Year
Srinivasan Prabhakarana, Narayanasamy Nivethaa, Reshma	One-pot three-component Synthesis of novel Phenyl-Pyrano-Thiazol-2-one derivatives and their	Results in Chemistry			2022

Mary Martizb, Shashank M Patilb, Ramith Ramub, Swamy Sreenivasa and Sivan Velmathi	antidiabetic activity studies.				
Kathiresan Anusuyadevi and Sivan Velmathi	Aggregation Induced Bathochromic shift of Emission for detection of Moisture in Organic Solvents and Food stuffs	J. of Molecular Liquids,			2022
R. Balamurugan, S. Siva Shalini, Sivan Velmathi, Arumugam Chandra Bose	One-Pot Synthesis of Porous Crystal Structured Nanosponge-Like Pristine Copper Metal-Organic Framework for Hybrid Supercapacitor Application	New J. Chemistry			2022
S. Siva Shalini, R. Balamurugan, Sivan Velmathi, Arumugam Chandra Bose	Systematic Investigation on the Electrochemical Performance of Pristine Silver Metal-Organic Framework as the Efficient Electrode Material for Supercapacitor Application	ACS Energy and Fuels			2022
Arthi Sivashanmugam, Sivan Velmathi	Synthesis and Characterization of Pipeline Amide analogues: Their In-silico and invitro analysis as Potential antibacterial agents	Results in Chemistry			2022
Narayanasamy Nivethaa, Arumugam Thangamani	Sulfated titania (TiO2-SO42-) as an efficient catalyst for organic synthesis: Overarching review from 2000 to 2020	Chemistry Select			2022
Shu Pao Wu, Wan-Yu Yang; Anusuyadevi Kathiresan; Ping-Hsuan Lu; Natesan Thirumalaivasan; Sivan Velmathi	Two photon fluorescent probe for highly Selective detection and endogenous imaging of hydrogen sulfide	Spectro Chim Acta	Part A 273		2022
Natarajan Vijay, Kuppan Magesh, Renny Louis M and Sivan Velmathi	Recent advancement in the design and development of near infrared (NIR) emitting fluorescent probes for sensing and their bio imaging applications	Current Organic Synthesis			2022
Ramakrishnan	A review on Fluorimetric	Coordinati	459		2022

Abhijna Krishna and Sivan Velmathi	and Colorimetric detection of metal ions by chemodosimetric approach 2013-2021.	on Chemistry Reviews			
Srinivasan Prabhakaran and Sivan Velmathi	Synthesis and Molecular Docking Studies of N, N-Dimethyl Aryl pyranopyrimidinedione Derivatives, Srinivasan Prabhakaran and Sivan Velmathi	SynOpen,	6 (01)	1-6	2022
Shu-Pao Wu, Yu-Xu Tu; Vijay Natarajan; Han-Xiang Ko; Sarala Chandran Sivan Velmathi	Specific Two-Photon Fluorescent Probe for Cysteine Detection in vivo.	Spectrochimica Acta	Part A. 267		2022
Shivaraja Govindaiah, Sanaya Naha, Tadimety Madhu Chakrapani Rao, B.C. Revan Siddappa, Sudhanva M. Srinivasa, Parashuram L, Sivan Velmathi	Sulfated Magnesium Zirconate catalyzed Synthesis, Antimicrobial, Antioxidant, Anti-inflammatory, and Anticancer activity of Benzo[d]thiazole-Hydrazone Analogues and its Molecular Docking	Results in Chemistry			
Vijay, Natarajan; Sivan Velmathi	Ratiometric probe for rapid naked eye detection and deactivation of toxic hydrazine: real time application in strip test, spray test and soil analysis,	J. Fluorescence	31(6),	1917-1925	2021
Natarajan Vijay Shu Pao Wu and Sivan Velmathi	"Covalent-Assembly"-triggered striking near-infrared emitting fluorescent probe for abrupt detection of Nerve-Agent Mimic (DCP)	ACS Applied Bio Materials	4 (9)	7007-7015	2021
Anusuyadevi Kathiresana, Shu Pao Wub, Sivan Velmathi	Reversible enhancement of fluorescence in acidic pH driven by tryptophan stabilized copper nanoclusters and its application in bioimaging	J Photo Chem Photo Bio	A, 421		2021
Srinivasan Prabhakaran and Sivan Velmathi	Domino synthesis of bis phenyl pyrazolone piperidinium salt derivatives	Chemistry Select	6 (33)	8696-8699,	2021
Arthi	Synthesis, In Vitro and In	Chem. Bio	98 (1)	19-29	2021

Sivashanmugam, Sivan Velmathi	Silico Antimicrobial Analysis of Piperine and Piperic Ester Analogues	and Drug Design,			
K. Anusuya Devi and Sivan Velmathi	In situ Integration of Copper Microspheres and Carbon Nanodots for the Catalytic Reduction of p-Nitrophenol	Emergent Materials	4 (3),	781-789	2021
, G. Punithakumari and Sivan Velmathi	Triple action sensing behavior of a single receptor for the detection of multiple analytes via different approaches	J. Fluorescence	31 (3),	733-745	2021
Lekshmi V Prakasha, Ashitha Gopinathb, R. Gandhimathia, S. Velmathi, S. T. Ramesha, P. V. Nidheesh	Ultrasonic aided heterogeneous Fenton degradation of Acid Blue 15 over green synthesized magnetite nanoparticles	Separation and Purification Technology	266		
S Naha, S Govindaiah, S Sreenivasa, JK Prakash, Sivan Velmathi	Invitro, molecular docking, and Insilico binding mode analysis of organic compounds for antimicrobial and anticancer activity against Jurkat, HCT116, and A549 Cell lines	Chemistry Select	5 (41)	12807-12818	2020
K. Anusuya Devi, Shu Pao Wu and Sivan Velmathi	ESIPT triggered swift determination of cysteine and it's in vivo imaging in HeLa cell line during redox imbalance	J. Photochem. Photobio	403		2020
Sanay Naha, Natesan Thirumalaivasan, Somenath Garai, Shu-Pao Wu*and Sivan Velmathi	Nano Molar Detection of H_2S in Aqueous Medium: Application in Endogenous and Exogenous Imaging of HeLa cells and Zebrafish,	ACS Omega	5 (31),	19896-19904	2020
Vijay Natarajan; Sivan Velmathi	Near infrared emitting probe for nanomolar detection of hydrazine in complete aqueous medium with real time application in bioimaging and vapour phase hydrazine detection"	ACS Sustainable Chemistry and Engineering	8	4457–4463	2020
Sanay Nahaa, N.Thirumalai vasan, Shu Pao Wub and Sivan Velmathi	Novel Triple Action Smart Sensor: Optical Relay Recognition of CN-/Fe3+ and Colorimetric Detection	RSC Advances	10	8751-8759	2020

	of H2S. Application in Real Time, RAW264.7 cell and Zebrafish Imaging				
G. Punithakumari and Sivan Velmathi	Dual mode detection of CN− & Cu2+ using fluorene moiety with logic gate, DFT studies and real sample analysis applications	Spectrochimica Acta	Part A: 229		2020
S Naha, Sivan Velmathi	"ESIPT-AIE" based sequential fluorescence 'on-off'marker for endogenous detection of hypochlorite and cobalt (II)	Microchemical Journal	153		2020
R. Dhanabal, D. Naveena, Sivan Velmathi, A. Chandra Bose	Reduced Graphene Oxide Supported Molybdenum Oxide Hybrid Nanocomposites: High Performance Electrode Material for Supercapacitor and Photocatalytic Applications	J. Nanosci. Nanotech	20 (7)	4035-4046	2020
Sanay Naha, K. Arshad and Sivan Velmathi	A Simple Red Emitting "Turn-On" Optical Relay Detector for Al 3+ and CN−. Application in the Real Sample and RAW264. 7 Cell Imaging	J. Fluorescence	29 (6)	201914 01-1410	2019
Natarajan Vijay, Shu Pao Wu, Sivan Velmathi	Turn on fluorescent chemosensor containing rhodamine B fluorophore for selective sensing and in-vivo fluorescent imaging of Fe3+ ions in HeLa cell line and zebrafish.	J. Photochem. Photobio,	384		2019
Shravan Koushik and Sivan.Velmath	Engineering Metal–Organic Framework Catalysts for C−C and C− X Coupling Reactions: Advances in Reticular Approaches from 2014–2018	Chemistry -A European Journal	25 (72),	16451-16505	2019
Chong-Guang Chena, Natarajan Vijay , N.Thirumalaivasan, Sivan Velmathi, Shu-Pao Wua	Coumarin-based Hg^{2+} fluorescent probe: Fluorescence turn-on detection for Hg2+ bioimaging in living cells and zebrafish	Spectro Chim Acta,	219	135-140	2019
Sanay Naha, A.	Nanomolar Colorimetric	SpectroCh	220	117-	2019

Varalaksmi and Sivan Velmathi	Hypochlorite Sensor in Water,	im Acta		123	
N. Vijay, N. Thirumalaivasan, Shu-Pao Wu, Sivan Velmathi	Far-red to NIR emitting ultra-sensitive probe to detect the endogenous HOCl and fluorescence imaging in zebrafish and Raw 264.7 cell line	Org.Biomol. Chem,	17	3538-3544	2019
S. Vikneshvaran and Sivan Velmathi	Impact of halide-substituted chiral Schiff bases on corrosion behavior of carbon steel in acidic environment	J. Nano Science Nanotech	19 (8)	4458-4464	2019
Sanay Naha, Sivan Velmathi* and Shu-Pao Wu	Ratiometric, rapid “turn off” fluorescent chemodosimeter selectively for fluoride in semi aqueous medium based on phenazine fluorophore. Application on real sample, HeLa Cells and Zebrafish	Chemistry Select,	4 (10)	2912-2917	2019
G Punithakumari, Sivan Velmathi	Smart sensing of cyanide and iron (III) by anthracene-based probe through relay recognition approach.	J. Photochem. and Photobio	373	94-104	2019
Studies S Vikneshvaran, Sivan Velmathi	Schiff Bases of 2, 5-Thiophenedicarboxaldehyde as Corrosion Inhibitor for Stainless Steel under Acidic Medium: Experimental, Quantum Chemical and Surface	Chemistry Select	4 (1)	387-392	2019
SP Wu YY Liu, S Naha, N Thirumalaivasan, Sivan Velmathi	A novel nanomolar highly selective fluorescent probe for imaging mercury (II) in living cells and zebrafish	Sensors and Actuators	277	673-678	2018
catalyst R Dhanabal, PM Shafi, T Arun, Sivan Velmathi, S Hussain, AC Bose	Investigations of Interfacial Electric Field on Reduced-Graphene-Oxide-Supported Molybdenum Oxide@ Silver Phosphate Ternary Hybrid Composite: Highly Efficient Visible-Light	Chemistry Select	3 (34)	9920-9932	2018
S Vikneshvaran, Sivan Velmathi	Reinforcement of low-carbon steel against corrosion in acidic condition by some Schiff bases:	Materials and Corrosion	69 (8)	1084-1094	2018

	Experimental and theoretical studies				
S Suganya, S Naha, Sivan Velmathi	A Critical Review on Colorimetric and Fluorescent Probes for the Sensing of Analytes via Relay Recognition from the year 2012–17	J Chemistry Select	3 (25)	7231-7268	2018
R Jinisha, R Gandhimathi, ST Ramesh, PV Nidheesh, Sivan Velmathi	Removal of rhodamine B dye from aqueous solution by electro-Fenton process using iron-doped mesoporous silica as a heterogeneous catalyst	Chemosphere	200	446-454	2018
PC Reshma, S Vikneshvaran, Sivan Velmathi	Boehmite—An Efficient and Recyclable Acid-Base Bifunctional Catalyst for Aldol Condensation Reaction	J. Nanoscience and Nanotechnology	18 (6)	, 4270-4275	2018
T Selvi, Sivan Velmathi	Indium (III) Triflate-Catalyzed Reactions of Aza-Michael Adducts of Chalcones with Aromatic Amines: Retro-Michael Addition versus Quinoline Formation	J Org. Chem	83 (7)	4087-4091	2018
G Punithakumari, SP Wu, Sivan Velmathi	Highly Selective Detection of Cr3 + Ion with Colorimetric & Fluorescent Response Via Chemodosimetric Approach in Aqueous Medium	J. Fluorescence	28 (2)	663-670	
B Gopal, Sivan Velmathi	Quinoxaline based redox relay receptor for iodide ions and its application towards real sample analysis and logic gate function	Sensors and Actuators	256	126-134	2018
R Dhanabal, Sivan Velmathi, AC Bose	Fabrication of RuO2-Ag3PO4 heterostructure nanocomposites: Investigations of band alignment on the enhanced visible light photocatalytic activity	J. Hazardous Materials	344,	865-874	2018
G Balamurugan, Sivan Velmathi	Coplanarity driven fluorescence turn-on sensor for chromium (III) and its	Photochemical & Photobiolo	17 (2)	239-244	2018

	application for bio-imaging	gical Sciences			
Solution G Balamurugan, Sivan Velmathi	Ninhydrin-Based Chemosensor for the Selective Detection and Scavenging of Mercury (II) Ions in Aqueous	Chemistry Select	2 (33)	10946-10950	2017
R Minmini, S Naha, Sivan Velmathi	New Zinc functionalized metal organic Framework for selective sensing of chromate ion	Sensors and Actuators	251	644-649	2017
S Suganya, JW Namgoong, AK Mutyala, Sivan Velmathi, JP Kim, JS Park	A new perylenediimide with NH functionality as a colorimetric and fluorescent probe for the selective detection of trivalent Fe^{3+} and Al^{3+} ions.	J. Photochem. Photobio. A: Chem	344	36-41	2017
S Saravana Moorthy, AC Bose, Sivan Velmathi	Enhanced Optical and Electrical Properties of P25 Titanium Dioxide Incorporated Polycaprolactone Nanocomposites,	J. Nanoscience and Nanotechnology	17 (7),	4677-4686	2017
S Vikneshvaran, Sivan Velmathi	Interfacial properties of electron-donating and electron-withdrawing group-substituted chiral Schiff bases on mild steel corrosion in 1M hydrochloric acid solution,	J. Bio-and Tribo-Corrosion	3 (2)		2017
PM Shafi, R Dhanabal, A Chithambararaj, Sivan Velmathi, AC Bose	α-MnO_2/h-MoO_3 Hybrid Material for High Performance Supercapacitor Electrode and Photocatalyst and,	ACS Sustainable Chemistry & Engineering	5 (6),	4757-4770	2017
S Vikneshvaran, Sivan Velmathi	Adsorption of L-Tryptophan-derived chiral Schiff bases on stainless steel surface for the prevention of corrosion in acidic environment: Experimental, theoretical and surface studies	Surfaces and Interfaces	6	134-142	2017
T Selvalakshmi, P Venkatesan, SP Wu,	Gd_2O_3: RE^{3+} and $GdAlO_3$: RE^{3+} (RE= Eu, Dy)	J. Nanoscien	17 (2)	1178-1184	2017

Sivan Velmathi, AC Bose	Phosphor: Synthesis, Characterization and Bioimaging Application	ce and Nanotechnology			
P Kalpana, S Suganya, Sivan Velmathi	Structurally simple azo based chromogenic R1 for the selective sensing of cyanide ion in aqueous medium,	Spectrochimica Acta	171	162-167	2017
G Balamurugan, Sivan Velmathi, N Thirumalaivasan, SP Wu	New phenazine based AIE probes for selective detection of aluminium (III) ions in presence of other trivalent metal ions in living cells	Analyst	142 (24)	4721-4726	2017
cells N Vijay, G Balamurugan, P Venkatesan, SP Wu, Sivan Velmathi	A triple action chemosensor for Cu2+ by chromogenic, Cr3+ by fluorogenic and CN− by relay recognition methods with bio-imaging of HeLa,	Photochemical & Photobiological Sciences	16 (9),	1441-1448	2017
Udhayakumari, S Naha, Sivan Velmathi	Colorimetric and fluorescent chemosensors for Cu2+. A comprehensive review from the years 2013-2017.	Analytical Methods	9 (4),	552-578	2017
NS Sanjini, B Winston, Sivan Velmathi	Effect of Precursors on the Synthesis of CuO Nanoparticles Under Microwave for Photocatalytic Activity Towards Methylene Blue and Rhodamine B Dyes.	J. Nanoscience and Nanotechnology	17 (1)	495-501	2017
NS Sanjini, Sivan Velmathi	CuO Impregnated mesoporous silica KIT-6: a simple and efficient catalyst for benzene hydroxylation by C–H activation and styrene epoxidation reactions,	J. Porous Materials	23 (6)	1527-1535	2016
Sivan Velmathi, S Suganya	Structurally simple dipodalazo linked salicylaldimine as colorimetric sensor for F− and AcO− ion recognition	Ind. J. of Chem	.55	1541-1547	2016
R Dhanabal, Sivan Velmathi, AC Bose	High-efficiency new visible light-driven Ag2MoO4–Ag3PO4 composite photocatalyst towards	Catalysis Science & Technology	6 (24),	8449-8463	2016

	degradation of industrial dyes				
TM Ebaston, G Balamurugan, Sivan Velmathi	A fluorogenic and chromogenic dual sensor for the detection of cyanide and copper (II) in water samples and living cells	Analytical Methods	8 (38)	6909-6915	2016
K Ravichandran, N Chidhambaram, T Arun, Sivan Velmathi	Realizing cost-effective ZnO: Sr nanoparticles@ graphene nanospreads for improved photocatalytic and antibacterial activities	RSC Advances	6 (72)	67575-67585	2016
G Balamurugan, Sivan Velmathi	Novel chromogenic selective sensors for aqueous cyanide ions under high water content and real sample analysis,	Analytical Methods	8 (7)	1705-1710	2016
S Saravanamoorthy, Sivan Velmathi	Transition metal complexes of tridentate Schiff base ligand as efficient reusable catalyst for the synthesis of polycaprolactone and polylactide	Ind. J. of Chem Sec B	55B	344-352	2016
G Balamurugan, P Venkatesan, SP Wu, Sivan Velmathi	Novel ratiometric turn-on fluorescent probe for selective sensing of cyanide ions, effect of substitution and bio-imaging studies	RSC Advances	6 (29)	24229-24235	2016
S Suganya, JS Park, Sivan Velmathi	Highly fluorescent imidazole probes for the pico molar detection of CN^- ion and application in living cells	J. Fluorescence	26 (1)	207-215,	2016
S Suganya, Sivan Velmathi	Fluorogenic and chromogenic heterocyclic thiourea: Selective recognition of cyanide ion via nucleophilic addition reaction and real sample analysis	Sensors and Actuators	221	1104-1113	2015
NS Sanjini, Sivan Velmathi	Photocatalytic degradation of Rhodamine B by mesoporous Ti-KIT-6 under UV light and solar light irradiation	J. Porous Materials	22 (6)	1549-1558	2015
NS Sanjini, B Winston, Sivan	Synthesis, Characterization and Application of Cobalt	J. Nanoscien	15 (9)	6487-6494	2015

Velmathi	Incorporated Mesoporous KIT-6 for the Visible Light Assisted Degradation of Methylene Blue,	ce and Nanotechnology			
R Dhanabal, A Chithambararaj, Sivan Velmathi, AC Bose	Visible light driven degradation of methylene blue dye using Ag3PO4	J Environmental Chemical Engineering	3 (3)	1872-1881,	2015
D Udhayakumari, Sivan Velmathi	Naphthalene thiourea derivative based colorimetric and fluorescent dual chemosensor for F− and Cu2+/Hg2+ ions,	Supramolecular Chemistry	27 (7-8),	539-544	2015
T Selvalakshmi, AC Bose, Sivan Velmathi	Influence of Al3+ on the cross relaxation process and electrical properties of Dy3+ activated Gd2O3 phosphor for white LED application	Ceramics International	41 (7),	8801-8808	2015
T Selvalakshmi, AC Bose, Sivan Velmathi	Effect of Eu3+ and Al3+ Concentrations on Photoluminescence of Gd2O3: Eu3+, ,.	J. Nanoscience and Nanotechnology	15 (8)	5760-5767	2015
D Udhayakumari, Sivan Velmathi, MS Boobalan	Novel chemosensor for multiple target anions: the detection of F− and CN− ion via different approach	J. Fluorine Chemistry	175	180-184	2015
A Chithambararaj, B Winston, NS Sanjini, Sivan Velmathi, AC Bose	Band Gap Tuning of h-MoO_3 Nanocrystals for Efficient Visible Light Photocatalytic Activity Against Methylene Blue dye,	J. Nanoscience and Nanotechnology	15 (7),	4913-4919	2015
D Udhayakumari, Sivan Velmathi, P Venkatesan, SP Wu	Anthracene coupled thiourea as a colorimetric sensor for F−/Cu2+ and fluorescent sensor for Hg2+/picric acid.	J Luminescence	161,	411-416	2015
Ions D Udhayakumari, Sivan Velmathi	Azo Linked Polycyclic Aromatic Hydrocarbons-Based Dual Chemosensor for Cu2+ and Hg2+	Industrial & Engineering Chemistry Research	54 (14)	3541-3547	2015

D Udhayakumari, Sivan Velmathi	Azo linked thiourea based effective dual sensor and its real samples application in aqueous medium D Udhayakumari, Sivan Velmathi	Sensors and Actuators	209	462-469	2015
S Lingamoorthy, Sivan Velmathi	CuO-SBA-15, A Mild and Highly Efficient Heterogeneous Catalyst for C–N Coupling Reaction of α-Amino Acids Under Microwave Irradiation	Advanced Porous Materials	3 (1)	33-39	2015
NS Sanjini, Sivan Velmathi	Comparative Studies of Mesoporous Ti-SBA-15 and Ti-KIT-6 for the Degradation of Cationic Dyes Under Sunlight.	Advanced Porous Materials	3 (1)	2-11	2015
R Dhanabal, DK Meher, Sivan Velmathi, A Chandra Bose	Synthesis, Characterization and Photocatalytic Activity of Ruthenium Doped h-MoO_3,	Advanced Porous Materials	3 (1)	12-20	2015
D Udhayakumari, Sivan Velmathi, M Susai Boobalan, P Venkatesan, SP Wu	Heterocyclic ring based colorimetric and fluorescent chemosensor for transition metal ions in an aqueous medium,	J. Luminescence	158	484-492	2015
S Saravanamoorthy, AC Bose, Sivan Velmathi	Facile fabrication of polycaprolactone/h-MoO3 nanocomposites and their structural, optical and electrical properties,	RSC Advances	5 (120)	99074-99083	2015
S Suganya, Sivan Velmathi, P Venkatesan, SP Wu, MS Boobalan	A highly fluorescent zinc complex of a dipodal N-acyl hydrazone as a selective sensor for $H2PO4^-$ ions and application in living cells	Inorganic Chemistry Frontiers	2 (7)	649-656	2015
S Saravanamoorthy, M Muneeswaran, NV Giridharan, Sivan Velmathi	Solvent-free ring opening polymerization of ε-caprolactone and electrical properties of polycaprolactone blended $BiFeO_3$ nanocomposites.	RSC Advances	5 (54),	43897-43905	2015
MS Choi, A Gupta, JH Seo, Sivan Velmathi, JN Wilson, JS Park	Characteristic Fluorescence Response of (6-Hydroxy-2-naphthyl) ethenyl Pyridinium Dyes with Bovine Serum	Bulletin of the Korean Chemical Society	36 (1)	230-236	2015

	Albumin				
D Udhayakumari, Sivan Velmathi, P Venkatesan, SP Wu	A pyrene-linked thiourea as a chemosensor for cations and simple fluorescent sensor for picric acid	Analytical Methods	7 (3),	1161-1166	2015
S Suganya, HJ Zo, JS Park, Sivan Velmathi	Colorimetric detection of in situ metal acetates and fluorides by a bipyridyl-linked Schiff base	J. Molecular Recognition	27 (12)	, 689-695	2014
D Udhayakumari, Sivan Velmathi, WC Chen, SP Wu	A dual-mode chemosensor: highly selective colorimetric fluorescent probe for Cu2+ and F− ions	Sensors and Actuators	204	375-381	2014
V Balachandran, M Boobalan, M Amaladasan, Sivan Velmathi	Synthesis and Vibrational Spectroscopic Investigation of Methyl L-Prolinate Hydrochloride: A Computational Insight,	Spectroscopy Letters	47 (9)	676-689	2014
D Udhayakumari, Sivan Velmathi, YM Sung, SP Wu	Highly fluorescent probe for copper (II) ion based on commercially available compounds and live cell	imaging Sensors and Actuators	198	285-293	2014
NS Sanjini, R Dhanalakshmi, Sivan Velmathi	Photocatalytic Application of Wide Band Gap CuO Nanoparticles Synthesized by Microwave Assisted Quick Precipitation,	Science of Advanced Materials	6 (7),	1399-1405	2014
S Suganya, Sivan Velmathi, D MubarakAli	Highly selective chemosensor for nano molar detection of Cu2+ ion by fluorescent turn-on response and its application in living cells	Dyes and Pigments	104	116-122	2014
cells S Suganya, HJ Zo, JS Park, Sivan Velmathi,	Simultaneous sensing of aqueous anions and toxic metal ions by simple dithiosemicarbazones and bioimaging of living cells	Industrial & Engineering Chemistry Research	53 (23)	9561-9569	2014
D Udhayakumari, Sivan Velmathi	Colorimetric chemosensor for multi-signaling detection of metal ions using pyrrole-based Schiff bases	Spectrochimica Acta Part A	122	428-435	2014
D Udhayakumari, S Suganya, Sivan Velmathi, D MubarakAli	Naked eye sensing of toxic metal ions in aqueous medium using thiophene-based ligands and	J. Molecular Recognition	27 (3)	151-159	2014

	its application in living cells,				
N Ananthi, Sivan Velmathi	Chiral amide from (1S, 2R)-(+)-norephedrine and furoic acid: An efficient catalyst for asymmetric Reformatsky reaction,	J. Chemical Sciences	126 (1)	151-158,	2014
S Suganya, JS Park, Sivan Velmathi	Visual sensing of aqueous anions by C2-symmetric chemosensor and its application in real sample analysis.	Sensors and Actuators	190	679-684	2014
NS Sanjini, Sivan Velmathi	Iron impregnated SBA-15, a mild and efficient catalyst for the catalytic hydride transfer reduction of aromatic nitro compounds	RSC Advances	4 (30)	15381-15388	2014
PV Nidheesh, R Gandhimathi, Sivan Velmathi, NS Sanjini	Magnetite as a heterogeneous electro Fenton catalyst for the removal of Rhodamine B from aqueous solution	RSC Advances	4 (11)	5698-5708	2014
S Saravanamoorthy, Sivan Velmathi	Physiochemical interactions of chiral Schiff bases on high carbon steel surface: Corrosion inhibition in acidic media	Progress in Organic Coatings	76 (11)	1527-1535	2013
G Vinithra, S Suganya, Sivan Velmathi	Naked eye sensing of anions using thiourea based chemosensors with real time application.	Tetrahedron Letters	54 (41)	5612-5615	2013
D Udhayakumari, S Suganya, Sivan Velmathi	Thiosemicabazone based fluorescent chemosensor for transition metal ions in aqueous medium	J. Luminescence	141	48-52	2013
V Reena, S Suganya, Sivan Velmathi	Synthesis and anion binding studies of azo-Schiff bases: selective colorimetric fluoride and acetate ion sensors	J. Fluorine Chemistry	153	89-95	2013
HJ Zo, JY Song, JJ Lee, Sivan Velmathi, JS Park	Highly selective response of bipyridyl-incorporated acetyelene dye for zinc acetate	Talanta	112	80-84,	2013
S Suganya, Sivan Velmathi J.	Simple azo-based salicylaldimine as colorimetric and fluorescent	Molecular Recognition	26 (6)	259-267	2013

	probe for detecting anions in semi-aqueous medium				
U Balakrishnan, Sivan Velmathi	Chirally Functionalized SBA-15 as Efficient Heterogeneous Catalyst for Asymmetric Ketone Reduction	J. Nanoscience and Nanotechnology	13 (4)	3079-3086	2013
D Udhayakumari, Sivan Velmathi	Colorimetric and fluorescent sensor for selective sensing of Hg2+ ions in semi aqueous medium	J. Luminescence	136	117-121	2013
S Naveenraj, S Anandan, Sivan Velmathi, AM Asiri, M Ashokkumar	Tuning of chalcogenide nanoparticles fluorescence by Schiff bases.	J. Photochem. and Photobio	254	12-19	2013
S Suganya, D Udhayakumari, Sivan Velmathi	Heterocyclic thiosemicarbazones as fluorescent sensors for the selective recognition of cations in the aqueous phase	Analytical Methods	5 (16)	4179-4183	2013
N Ananthi, Sivan Velmathi	Asymmetric Henry reaction catalyzed by transition metal complexes: A short review	Ind. J. Chemistry	52 B	87-108	2013
A Chithambararaj, NS Sanjini, Sivan Velmathi, AC Bose	Preparation of h-MoO3 and α-MoO3 nanocrystals: comparative study on photocatalytic degradation of methylene blue under visible light irradiation	Physical Chemistry Chemical Physics	15 (35)	14761-14769	2013
A Chithambararaj, NS Sanjini, AC Bose, Sivan Velmathi	Flower-like hierarchical h-MoO3: new findings of efficient visible light driven nano photocatalyst for methylene blue degradation.	Catalysis Science & Technology	3 (5)	1405-1414	2013
N Ananthi, Sivan Velmathi	Synthesis and Application of New Salen Type Chiral Ligands from L-Valine in Asymmetric Henry Reaction.	Advanced Science Letters	17 (1)	233-237	2012
D Udhayakumari, S Saravanamoorthy, Sivan Velmathi	Colorimetric and fluorescent sensing of transition metal ions in aqueous medium by salicylaldimine based chemosensor	Materials Science and Engineering	32 (7),	1878-1882	2012
D Renuga, D Udhayakumari, S	Novel thiophene based colorimetric and fluorescent	Tetrahedron Letters	53 (38)	5068-5070	2012

Suganya, Sivan Velmathi	receptor for selective recognition of fluoride ions				
U Balakrishnan, N Ananthi, Sivan Velmathi, MR Benzigar, SN Talapaneni, et al	Immobilization of chiral amide derived from (1R, 2S)-(−)-norephedrine over 3D nanoporous silica for the enantioselective addition of diethylzinc to aldehydes	Microporous and Mesoporous Materials	155	40-46,	2012
S Prabhu, S Saravanamoorthy, M Ashok, Sivan Velmathi	Colorimetric and fluorescent sensing of multi metal ions and anions by salicylaldimine based receptors	J. Luminescence	132 (4)	979-986	2012
Sivan Velmathi, V Reena	Synthesis, Characterization and Investigation of the Third Order Nonlinear Optical Properties of Pyrrole Schiff Bases,	Advanced Materials Research	488	377-382	2012
Sivan Velmathi, V Reena, S Suganya, S Anandan	Pyrrole based Schiff bases as colorimetric and fluorescent chemosensors for fluoride and hydroxide anions	J. Fluorescence	22 (1)	155-162	2012
D Udhayakumari, S Saravanamoorthy, M Ashok, Sivan Velmathi	Simple imine linked colorimetric and fluorescent receptor for sensing Zn2+ ions in aqueous medium based on inhibition of ESIPT mechanism	Tetrahedron Letters	52 (36)	4631-4635	2011
S Suganya, Sivan Velmathi, R Sivakumar, S Anandan	Selective binding of copper ion by salicylaldimine based schiff base chromogenic receptors	Sensor Letters	9 (2)	570-576	2011
U Balakrishnan, N Ananthi, Sivan Velmathi	Effect of substituents on enantioselectivity in chiral oxazaborolidine mediated asymmetric ketone reduction reaction	Ind. J. Chemistry	50B	1157-1164	2011
Sivan Velmathi, U Balakrishnan, N Ananthi, SS Aldeyab, K Ariga, TS Naidu	Immobilization of chiral oxazaborolidine catalyst over highly ordered 3D mesoporous silica with Ia3d symmetry for enantioselective reduction of prochiral ketone.	Physical Chemistry Chemical Physics	13 (11)	4950-4956	2011
Sivan Velmathi, R Vijayaraghavan, C	Ligand-free palladium-catalyzed C-S coupling	Synlett	18	2733-2736	2010

Amarendar, RP Pal, A Vinu	reactions using water as solvent and microwaves				
PMSL Shanthi, RV Mangalaraja, AP Uthirakumar, Sivan Velmathi, M. Ashok	Synthesis and characterization of porous shell-like nano hydroxyapatite using Cetrimide as template	J. Colloid and Interface Science	350 (1)	39-43	2010
U Balakrishnan, N Ananthi, ST Selvan, R Pal, K Ariga, Sivan Velmathi, A Vinu	Asymmetric Reduction by SBA-15-Supported Chiral Oxazaborolidine	Synfacts	07	0841-0841	2010
R Anand, GR Kannan, S Nagarajan, Sivan Velmathi	Performance emission and combustion characteristics of a diesel engine fuelled with biodiesel produced from waste cooking oil,	SAE Technical Paper			2010
U Balakrishnan, N Ananthi, ST Selvan, R Pal, K Ariga, Sivan Velmathi, A Vinu	Preparation and Characterization of Chiral Oxazaborolidine Complex Immobilized SBA-15 and Its Application in the Asymmetric Reduction of Prochiral Ketones,	Chemistry –An Asian Journal	5 (4)	897-903	2010
Sivan Velmathi, R Vijayaraghavan, RP Pal, A Vinu	Microwave assisted ligand free palladium catalyzed synthesis of β-arylalkenyl nitriles using water as solvent.	Catalysis Letters	135 (1-2),	148-151	2010
R Sivakumar, V Reena, N Ananthi, M Babu, S Anandan, Sivan Velmathi	Colorimetric and fluorescence sensing of fluoride anions with potential salicylaldimine based schiff base receptors.	Spectrochim. Acta	75 (3)		2010
. N Ananthi, U Balakrishnan, Sivan Velmathi	Salicylaldimine based copper (II) complex: a potential catalyst for the asymmetric Henry reaction.	J. Organic Chemistry	11	370-379	2010
N Narendar, Sivan Velmathi	Copper-catalyzed C–N coupling reactions of aryl halides with α-amino acids under focused microwave irradiation,)	Tetrahedron Letters	50 (36	5159-5161	2009
N Ananthi, U Balakrishnan, A Vinu, K Ariga, Sivan Velmathi	Chiral amide from (1S, 2R)-(+)-norephedrine alkaloid in the enantioselective addition of diethylzinc to aryl and heteroaryl aldehydes	Tetrahedron: Asymmetry	20 (15)	1731-1735	2009

U Balakrishnan, N Ananthi, Sivan Velmathi	Chiral ligand derived from (1S, 2R)-norephedrine as a catalyst for enantioselective prochiral ketone reduction	Tetrahedron: Asymmetry	20 (10),	1150-1153	2009
Sivan Velmathi, R Nagahata, K Takeuchi	Microwave assisted synthesis of aliphatic polyesters using tin chloride and p-toluene sulfonic acid as catalysts	Advanced Science Letters	2 (1),	45-49	2009
A Vinu, J Justus, C Anand, DP Sawant, K Ariga, T Mori, P Srinivasu	Hexagonally ordered mesoporous highly acidic AlSBA-15 with different morphology: an efficient catalyst for acetylation of aromatics.	Microporous and Mesoporous Materials	116 (1-3)	108-115	2008
VV Balasubramanian, P Srinivasu, C Anand, RR Pal, K Ariga, Sivan Velmathi	Highly active three-dimensional cage type mesoporous aluminosilicates and their catalytic performances in the acetylation of aromatics.	Microporous and Mesoporous Material	114 (1-3	303-311	2008
Sivan Velmathi, NE Leadbeater	Palladium-catalyzed cyanation of aryl halides using K4[Fe (CN)6] as cyanide source, water as solvent, and microwave heating	Tetrahedron Letters	49 (32)	4693-4694	2008
DP Sawant, J Justus, VV Balasubramanian, K Ariga, P Srinivasu,	Heteropoly Acid Encapsulated SBA-15/TiO2 Nanocomposites and Their Unusual Performance in Acid-Catalysed Organic Transformations.	Chemistry –A European Journal	14 (10)	3200-3212	2008
P Srinivasu, S Alam, VV Balasubramanian, Sivan Velmathi, DP Sawant, K. Ariga, A. Vinu	Novel three dimensional cubic Fm3m mesoporous aluminosilicates with tailored cage type pore structure and high aluminum content.	Advanced Functional Materials	18 (4),	640-651	2008
Sivan Velmathi, R Nagahata, K Takeuchi	Extremely rapid synthesis of aliphatic polyesters by direct polycondensation of 1: 1mixtures of dicarboxylic acids and diols using microwaves	Polymer Journal	39 (8)	841-844	2007
Sivan Velmathi, R Nagahata, J	A Rapid Eco-Friendly Synthesis of Poly (butylene	Macromolecular	26 (14)	1163-1167	2005

Sugiyama, K Takeuchi	succinate) by a Direct Polyesterification under Microwave Irradiation	Rapid Communi cations			
R Nagahata, J Sugiyama, Sivan Velmathi, Y Nakao, M Goto, K Takeuchi	Synthesis of Poly (ethylene terephthalate-co-isophthalate) by Copolymerization of Ethylene Isophthalate Cyclic Dimer and Bis(2-hydroxyethyl) Terephthalate	Polymer Journal	36 (6)		2004
S Narasimhan, Sivan Velmathi	Effect of microwaves in the chiral switching asymmetric Michael reaction	Molecules	8 (2)	256-262	2003
Sivan Velmathi, S Swarnalakshmi, S Narasimhan	Novel heterobimetallic catalysts for asymmetric Michael reactions,	Tetrahedro n: Asymmetr y	14 (1)	113-117	2003
A Jeyabharathi, MN Ponnuswamy, S Narasimhan, Sivan Velmathi	Diisopropyl 2-(2-benzoyl-1-phenylethyl) malonate, 2002.	Acta Crystallog raphica Sec E: Structure Reports Online	58 (3),	o334-o335	2002
auxiliaries S Narasimhan, S Swarnalakshmi, R Balakumar, Sivan Velmathi	Synthesis of novel chiral *Sec B*, B,2002.	*Ind. J. Chem*	41	1666-1669	2002
S Narasimhan, Sivan Velmathi	Microwave assisted enantioselective Michael addition reaction using BINOL–Al–Li catalyst	Synthetic Communi cations	32 (24)	3791-3795	2002
S Narasimhan, S Swarnalakshmi, R Balakumar, Sivan Velmathi	Novel chiral switching ligands for enantioselective asymmetric reductions of prochiral ketones	Molecules	6 (12),	988-995	2001
S Narasimhan, Sivan Velmathi, R Balakumar, V Radhakrishnan	Novel enantiomer-switching catalysts for asymmetric reductions and Michael reactions.	Tetrahedro n Letters	42 (4)	719-721,	2001
Borohydride S Narasimhan, S Swamalakshmi, R Balakumar, Sivan Velmathi	Tandem Reduction Studies of Bromo Compounds Using Tetrabutylammonium,	Synthetic Communi cations	29 (4),	685-689	1999
S Narasimhan, S	Chemoselectivity of	Synlett	12	1321-	1998

Swarnalakshmi, R Balakumar, Sivan Velmathi	tetrabutylammonium borohydride towards bifunctional esters			1322	
K Ramadas, N Janarthanan, Sivan Velmathi	LAC sulfur assisted synthesis of symmetrical thioureas	Synthetic Communications	27 (13)	2255-2260	1987
K. Ramadas, S. Velmathi and S. Sukanya.	Lac sulfur on alumina-Triethanolamine. An effective reagent for the synthesis of guanidines,	Tetrahedron Letters	37		1996

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Page No.	Conference Theme	Venue	Year
N. Vijay and S. Velmathi	Presented an Oral lecture on ESIPT triggered turn-on fluorescent probe for rapid detection of highly toxic warfare agent (Phosgene): Strip based real time monitoring of phosgene vapour, in Virtual organized by, India		International Conference on Molecules to Materials 2020	Department of Applied Chemistry, SV NIT Surat	Dec 17-18, 2020
Sanay Naha & S. Velmathi	Presented a poster Lysosome-Targeted Reversible In Vivo Imaging of Nanomolar ClO-/H2S Redox Dynamics in Cancer Cell		National Conference on Mastering in Chemical Technologies	Mysuru University, India	Feb. 2020
Sanay Naha & S. Velmathi	Nanomolar Sequential Imaging of CN-/Fe3+ in RAW264.7 cell and Zebrafish	14	3rd Asian Conference on Chemosensor and Imaging Probs	Guru Nanak Dev University, Amritsar, India	Nov. 2019.
N. Vijay & S. Velmathi	Development of reaction based novel colorimetric for rapid detection of hydrazine in complete aqueous solvent medium	111	25th CRSI-NSC/CRSI-ACS symposium	IIT Kanpur	July 2019
K. Anusuya Devi & S. Velmathi	Green Hydrothermal Synthesis of Copper Nanospheres and Study of its Catalytic Activity in Reduction of Nitroaromatics and	92	25 th CRSI-NSC/CRSI-ACS symposium	IIT Kanpur	July 2019

	Hexavalent Cr(VI)				
G. Punithakumari & S. Velmathi	Novel & Smart sensing of Acetate & Hypochlorite ions with fluorescence Turn-on: Application in real sample analysis	147	International conference on Frontier areas in Chemical Technologies	Alagappa University. Karaikudi	25th and 26th July 2019
Sanay Naha & S. Velmathi	Fluorometric and Colorimetric "Off-On-Off" Relay Sensor for CN-/Cr3+ in RAW264.7 Cells,	58	International Conference on Recent Trends in Chemistry (FACTs-2019),	Alagappa University, Karaikudi	July 2019
S. Prabhakaran & S. Velmathi	One-pot multicomponent synthesis of Spiro bis phenyl pyrazolone piperidinium salt derivatives"	68	International conference on Frontier Areas in Chemical Technologies" – 2019	Alagappa University, Karaikudi	25th and 26th, JULY 2019
Sanay Naha & S. Velmathi	Presented a poster in the meeting DST-SERB-INSPIRE organized by Govt. of India.		Title: Smart Sensors: Optical Sensors for Noxious Analytes.	Chennai	2018
Sanay Naha and S. Velmathi	Novel Phenazine Based Fluorescent "Turn Off" Bio-Marker for Fluoride Ion in Semi-Aqueous Medium		23rd CRSI-2018 National Conference	IISER, Bhopal	on 14th June, 2018.
S. Periyaraja and S.Velmathi	Rhodium catalyzed transformation of diaza compounds for the synthesis of 3-Spirofurano-2-Oxindole derivatives,		oral presentation presented in the Symposium on Contemporary facets in Organic Synthesis	Indian Institute of Technology, Roorkee	24 December 2017
S. Vikneshvaran and S. Velmathi	Reinforcement of low-carbon steel against corrosion in acidic condition by Schiff bases-Experimental and theoretical studies		Invited talk presented in the International Conference on Recent Advances in Materials & Manufacturing Technologies	Dubai, UAE	November 28-29, 2017

			(IMMT 2017		
S. Velmathi	Rapid Naked eye detection of hypochlorite in nano molar scale in usable water by commercial dyes through chemodosimetric approach		Poster presented in 22nd annual meeting in CRSI-2017	at Indian Institute of Chemical Technology-Hyderabad, India	16th June 2017
G. Balamurugan, S. Velmathi	Sensing studies of heteroaromatic imidazole and thiazole derivatives and bio-imaging applications		Oral presentation in the international conference on Advances in Biological, Chemical and Physical Sciences	Departments of Biotechnology, Chemistry and Physics of Anna University, Trichy	13-15, March 2017
Vikneshvaran, S. Velmathi	Experimental and theoretical studies on reinforcement of low-carbon steel against corrosion in acidic condition by some Schiff bases		Oral presentation in the International conference on membrane technology and its applications	by Dept. of Chemical Engineering, NIT, Trichy	21-23 February, 2017
Sanay Naha and S. Velmathi	Selective Detection of Biologically Toxic Cyanide (CN-) Ion by Chromone and o-Substituted Aniline Schiff bases		Oral presentation in the National Conference on Recent Trends in Chemistry (RTC-2017)	Department of Chemistry, Sikkim Manipal Institute of Technology	Feb 17-18, 2017
Arthi S, Velmathi S	Synthesis and Characterisation of Piperine analogues as potent Bio-availability enhancer Arthi S, Velmathi S Presented Poster at International Conference on Organic Synthesis- 21, organised by IUPAC, IICT and IIT Bombay. December 11-16, 2016		Presented Poster at International Conference on Organic Synthesis- 21, organised by IUPAC	IICT and IIT Bombay.	December 11-16, 2016
G. Punithakumari, S. Velmathi,	Ratiometric chemosensor for the selective detection of Cr3+ ion		Poster presented in the RSC-NITT symposium	Royal Society of Chemistry in association with NITT	Nov. 05, 2016
Vikneshwaran,	Boehmite- An efficient and recylable acid-base		Poster presented in	Royal Society of Chemistry	Nov. 05, 2016

Reshma Rajan. P. C and S. Velmathi	bifunctional catalyst for aldol condensation reaction		the RSC-NITT symposium on Heterogeneous catalysis and sustainable Chemistry	in association with NITT	
Sanay Naha R. Minmini and S. Velmathi	New Zinc functionalized metal organic Framework for selective sensing of chromate ion		Poster presented in the RSC-NITT symposium on Heterogeneous catalysis and sustainable Chemistry	Royal Society of Chemistry in association with NITT	Nov. 05, 2016
G. Balamurugan, T. Akash and S. Velmathi	A green and efficient methodology for the synthesis of 1,3,5 triazines: Microwave assisted cyclization of Aldehydes with Amidines		Poster presented in the RSC-NITT symposium on Heterogeneous catalysis and sustainable Chemistry	Royal Society of Chemistry in association with NITT	Nov. 05, 2016
G . Balamurugan, S.Velmathi	Highly Selective Fluorogenic Receptor for the Detection of Cyanide ion and its real sample analysis		Oral presentation in the National conference on Innovations in Chemical Sciences (NCIC-2016)	dept. of Chemistry, Gurunanak College, Chennai	28th-30th January 2016
Vikneshvaran, S. velmathi	Inhibitive Properties of Chiral Schiff Bases from Substituted Salicylaldehyde on Corrosion of Mild Steel in HCl		Oral presentation in the National conference on Innovations in Chemical Sciences (NCIC-2016)	dept. of Chemistry, Gurunanak College, Chennai	28th-30th January 2016
G. Balamurugan, and Sivan Velmathi	Effect of substitution on the sensing behaviour of imidazolo anthraquinone receptors under aqueous medium		Poster Presented in the 10th Mid-Year CRSI symposium	NIT Trichy	July 23-25, 2015
S. Vikneshwaran and Sivan	Binding properties of Cu(II) and Ru(III) complexes derived from L-Tryptophan based chiral Schiff base towards CT-		Poster Presented in the 10th Mid-Year CRSI	NIT Trichy	July 23-25, 2015

Velmathi	DNA.		symposium		
Sivalingam Suganya, and Sivan Velmathi	Fluorogenic and chromogenic heterocyclic thiourea: selective recognition of cyanide ion via nucleophilic addition reaction and real sample analysis.		Poster Presented in the 10th Mid-Year CRSI symposium	NIT Trichy	July 23-25, 2015
G Balamurugan and Sivan Velmathi	Novel exceptional chromogenic probes tuned for the recognition of aqueous cyanide ion and relay recognition of dihydrogenphosphate ion and H2O2		Poster presented in the National Conference RACS-2015	Department of Chemistry, Gandhigram Rural University, Dindigul, Tamil Nadu	March 6-7, 2015
S. Vikneshwaran and S. Velmathi	L-Tryptophan based Novel Chiral Schiff Bases as Inhibitors for Corrosion of Steel,		Poster presented in the National Conference RACS-2015	Department of Chemistry, Gandhigram Rural University, Dindigul, Tamil Nadu	March 6-7, 2015
S. Suganya and S. Velmathi	Synthesis and Toxic Metal Ions Detection of Simple Dithiosemicarbazones and its Application in Bio Imaging of Living Cell S. Suganya and S. Velmathi		Paper presented in the 13th Eurasia Conference on Chemical Sciences	IISc Bangalore,	Dec 2014
R Dhanabal, S Velmathi, A Chandra Bose	Visible Light Assisted Degradation of Organic Dye Using Ag3PO4		59th DAE-Solid State Physics Symposium	VIT University, Vellore, Tamilnadu	16-20, 2014
G Balamurugan and Sivan Velmathi	Novel benzimidazole based highly selective chromogenic fluoride sensors,		Paper presented in the Indian International Symposium on Fluorine Chemistry (IISFC-2014)	Indian Institute of Chemical Technology, Tarnaka, Hyderabad.	Nov 3-7, 2014
Duraisamy Udhayakumari and Sivan	An azo linked Schiff base for highly selective sensing of cyanide in aqueous solution		Poster presented in the 15th Tetrahedron	Singapore	28-31 October 2014

Velmathi			Symposium-Asia Edition		
ligand S. Saravana moorthy and S. Velmathi	Eco-friendly synthesis of biodegradable polymers catalyzed by transition metal complexes based on ONO donor ligand		International conference of green technologies for environmental pollution control and prevention	NIT	– 29th Septemb er 2014
D. Udhayaku mari and S Velmathi	Salophen Based Highly Sensitive Fluorescent Sensor for Detecting Mn (II) ion at Nanomolar Level		Poster presented in the International Conference on Advances in New materials (ICAN-2014)	Department of Inorganic Chemistry, University of Madras, Chennai – 600 025	June 2 0-21, 2014
N S Sanjini and S Velmathi	CuO Impregnated mesoporous silica KIT-6 an efficient catalyst for benzene hydroxylation		Poster Presented in the CRSI symposium	IIT Bombay	Feb 5-9, 2014
Duraisamy Udhayaku mari, and Sivan Velmathi	Dual Chemosensing Properties of Azo Linked Thiourea based Receptor in Nanomolar levels		Poster Presented in the CRSI symposium	IIT Bombay	Feb 5-9, 2014
N.S Sanjin and S. Velmathi	Photocatalytic activity of titanium doped mesoporous KIT-6 for the degradation of different dyes under UV light and sunlight		Oral Presentation in the IUMRS-ICA conference	IISc Bangalore,	Dec 10-13, 2013
Chithamba raraj, N. S. Sanjini, S. Velmathi, and A. Chandra Bose	Synthesis of flower-like hierarchical h-MoO3 and layered α-MoO3 nanocrystals: Photo degradation studies of methylene blue under visible light irradiation.		A, International Symposia on Advancing the Chemical Sciences (ISACS	Cambridge University, United Kingdom	Sep. 3-6, 2013.
Duraisamy Udhayaku mari, Sivan Velmathi	Azo Linked Thiourea as a Highly Selective 'Off-On' Fluorescent Chemosensor for Cd2+		Poster presented in the national Conference Organised by	Department of Chemistry, Madurai Kamaraj University	June 19, 2013.

Sivalingam Suganya and Sivan Velmathi	Visual Sensing of Aqueous Anions by C2-Symmetric Chemosensor and its Real time Application		Poster presented in the national Conference Organised by	Department of Chemistry, Madurai Kamaraj University	June 19, 2013.
G. Vinithra, Sivan Velmathi	Synthesis, characterization and anion binding studies of azo linked thiourea based chromogenic receptor		Poster presented in the national Conference	Department of Chemistry, Madurai Kamaraj University	June 19, 2013.
N.S Sanjini and S. Velmathi	Synthesis of Gallium doped mesoporous KIT-6 for the photocatalytic degradation of dyes *		Poster presented in the International Conference of Nanomaterials and their applications	Department of Physics, SRM University, Chennai	March 18-20, 2013.
G. Balamurugan and S. Velmathi	Axially chiral R-BINAM-salen based heterobimetallic catalysts for asymmetric Michael reaction		Poster presented in the Chennai Chemistry Conference	CLRI, Chennai	Feb 8-10, 2013
Sivalingam Suganya1, Sivan Velmathi1	Anthraquinone Based Chromophores as Colorimetric and “turn-off” Fluorometric Sensor for Cations in Aqueous Medium		Paper presented in the National Conference on Luminescence and its applications	PES institute of Technology, Bangalore	Jan 8-10, 2013
Duraisamy Udhayakumari, and Sivan Velmathi	Simple Imine Based Highly Sensitive fluorescent Fe3+ and Sn2+ ions sensor		Paper presented in the National Conference on Luminescence and its applications	PES institute of Technology, Banglore	Jan 8-10, 2013
Somasundaram Saravanamoorthy, Sivan Velmathi	Environment Friendly Ring-Opening Polymerization of -Caprolactone Using Zinc Complex derived from salicylaldehyde and 2-aminobenzoic acid,		2nd International Indo-German symosium on Green chemistry and catalysis for sustainable developemnet	Institute of Chemical Technology, Mumbai and Leibniz Institute for catalysis Germany	October 29-31, 2012

N.S.Sanjini, K. Dhanalakshmi and S. Velmathi	Structural, Optical and Photocatalytic Properties of Wide Band Gap CuO Nanoparticles Synthesized By Microwave- Assisted Quick Precipitation Method		oral presentation in International Conference on Emerging Advanced Nano-materials (ICEAN2012	University of Queensland, Australia	22-25 October 2012
Sivalingam Suganya, Sivan Velmathi	Azo linked salicylaldimine as a cation sensor towards transition metal ions		Presented in 12th International Conference on sensing technology, International	CDAC, Kolkata, India and Massey University, New Zealand.	Dec18-21, 2012
S Sanjini and S Velmathi	Photocatalytic degradation of dyes over Cobalt incorporated mesoporous KIT-6 N		Poster Presentation in Advances in Materials and Processing Challenges and Opportunities (AMPCO)	Department of Metallurgical and Material Engineering, Indian Institute of Technology, Roorkee	2-4 November 2012.
D. Udhayakumari and S Velmathi	A Highly Sensitive Salophen Based Colorimetric Anion Sensor for Fluoride and Acetate in Aqueous Medium		Recent Applications of nanomaterials in chemistry and environmental research" (RANCER)	Kongu Engineering College, Perundurai, Erode – 638 052.	July 20 & 21, 2012
Sivalingam Suganya, Duraisamy Renuga, Sivan Velmathi	Colorimetric and Fluorescent probe for the naked eye detection of cations by pyrrole based thiosemicarbazone		Recent Applications of nanomaterials in chemistry and environmental research (RANCER)	Kongu Engineering College, Perundurai, Erode – 638 052.	July 20 & 21, 2012
Sivan Velmathi and Reena. V,	Synthesis, Characterization and Investigation on the Third Order Nonlinear Optical Properties of Pyrrole Schiff Bases.		Presented in the International Conference on Key Engineering	Singapore	Feb 26-28, 2012

			materials ICKEM 2012		
Saravanan Prabhua and S. Velmathi	Colorimetric Sensing of Multi Metal Ions And Anions By Salicylaldimine Based Receptors Saravanan		Presented in the HORIZON-11, National level students symposium on Emerging Trends in Organic Synthesis	Department of Chemistry, NIT, Trichy	on Oct 22, 2011
D. Udhayakumari, S Velmathi	Salicylaldehyde Based Colorimetric And Fluorescent Receptor For Sensing Mn2+, Pb2+ Ions In Aqueous Medium		Presented in the National Seminar on Recent Trends in Synthetic methods and Chemistry of Natural Products-2012, (SMNP)	Annamalai University, Chidambaram	Oct 14-15, 2011
D. Udhayakumari, S Velmathi	Synthesis, characterization and cations binding studies of salicylaldimine based chromogenic receptors		Presented in the National Conference on Recent Trends in Organic Synthesis	Department of Chemistry, Bharathidasan University, Tiruchirappalli	Feb 24-26, 2011
S. Prabhu, S. Suganya, S. Velmathi	Synthesis, characterization and anions binding studies of salicylaldimine based chromogenic receptors		Presented in the National Conference on Materials Chemistry	Department of Chemistry, Guru Nanak College, Chennai	Feb 9-11, 2011
S. Prabhu, D. Udhayakumari, S. Velmathi	Synthesis, characterization and cations binding studies of salicylaldimine based chromogenic receptors		Presented in the National Symposium on Frontiers in Organic Synthesis and Medicinal Chemistry (FOSMC)	Department of Chemistry, Periyar University, Salem	Feb 17-18, 2011
S. Saravanamoorthy and S. Velmathi	Ring opening polymerization of lactide using schiff base chiral metal complexes		International Conference on frontiers of polymers advanced	IIT Delhi, Centre for Polymer Science and Engineering	Dec 15-17, 2010

			materials MACRO-2010		
N Ananthi, U. Balakrishnan, K.B. Manjunath, Umesh G. and Sivan Velmathi	Synthesis and Third Order Non-Linear Optical Properties of Schiff Bases and their Metal Complexes		International Conference of RETMAC 2010	NIT Surathkal, Department of Physics	Feb 14-15, 2010
S. Velmathi U.P.D. Chandrahasan	Cyclic Ester Polymerization Using Chiral O, N, O Type Tridentate Titanium Complex		Presented in the International Conference of MATCON 2010	Cochin, CUSAT	Jan 10-13, 2010.
N. Ananthi, U. Balakrishnan, Velmathi. S	symmetric Henry reaction catalyzed by a chiral copper schiff base complex		Presented in the International Conference of MATCON 2010	Cochin, CUSAT	Jan 10-13, 2010.
Reena V., Poornesh P., Umesh G. and Sivan Velmathi	Synthesis And Third Order Non- Linear Optical Properties of Pyrrole Schiff Bases		Presented in the International Conference of MATCON 2010	Cochin, CUSAT	Jan 10-13, 2010.
	Ring Opening Polymerization of D, L- Lactide by Chiral ONO type Tridentate Titanium Complexes.		Presented in the International Conference of 11th Pacific Polymer Conference	Australia	Dec 06-10, 2009.
R Anand, K RajaSekar Reddy, V Arul Mozhi Selvan, S Velmathi, T Senthil	'Study of Performance, Emission and Combustion Characteristics of a Diesel engine using Methyl Ester of Cottonseed oil,.		8th International oil and gas conference and Exhibition, Indian Oil Corporation of India	New Delhi, India,	January 11-15, 2009.

kumar					
Nallamuthu Ananthi, Umesh BalaKrishnan, Ajayan Vinu and Sivan Velmathi	Catalytic application of the chiral ligand immobilized onto mesoporous material in asymmetric prochiral ketone reduction		Presented in the International Conference of Functional Materials (FM-2008)	the department of Chemistry, IIT, Madras,	Nov 27-29, 2008
U. Bala Krishnan, N. Ananthi, Ajayan Vinu, S. Velmathi	Immobilisation of chiral ligands with mesoporous materials for the application in asymmetric reactions.		Presented in the International Conference of Functional Materials (FM-2008)	the department of Chemistry, IIT, Madras,	Nov 27-29, 2008
T. Nakamura, R. Nagahata S. Velmathi, and K. Takeuchi	Microwave assisted Polycondensation-One step rapid synthesis of High Molecular weight aliphatic polyesters.		Presented in 6th International Microwaves in Chemistry Conference	Cambridge, USA	May 13-16, 2008,
Takeuchi, S. Velmathi, R. Nagahata, J. Sugiyama,	Microwave Assisted Rapid Synthesis of Bio degradable Poly (alkylene succinates)		Presented in 1st European Chemistry Congress	Budapest, Hungary	27-31, August, 2006
S. Velmathi, R. Nagahata, J. Sugiyama, K.	Eco-friendly Method of Synthesis of Chiral Trimellitimides and Pyromellitimides Using Microwaves		6th Green and Sustainable Chemistry Network symposium	Tokyo, Japan	March 7-8, 2006
S. Velmathi, R. Nagahata, J. Sugiyama, and K. Takeuchi.	Microwave assisted synthesis and characterization of novel adamantine containing poly ester-imides		Presented in 8th International Polymer Conference	Fukuoka, Japan	July 26-29, 2005.

S. Velmathi, R. Nagahata, J. Sugiyama, K.	Rapid and ecofriendly synthesis of poly (butylene succinate) by distannoxane catalyst using Microwaves.		Presented in 5th Green and Sustainable Chemistry Network symposium	Tokyo, Japan	March 7-8, 2005
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and S. Velmathi	Novel chiral oxazaborolidines in asymmetric synthesis,		Presented in 31st Great lakes regionalmeeting of the American chemical society	University of Wisconsin, Milwaukee	June 1-3, 1998.
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and S. Velmathi	New bimetallic chiral reagents in asymmetric synthesis.		Presented in 31st Great lakes regional meeting of the American chemical society	University of Wisconsin, Milwaukee	. June 1-3, 1998.
S. Velmathi, S. Swarnalakshmi, R. Balakumar and S. Narasimhan	Chemo selectivity of Tetra butyl ammonium Borohydride		Presented in Chemists Meet	IIT Madras	Decembe r 1997

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Sivan Velmathi And Gopal Balamurugan	Benzimidazoles: Smart Chemosensors for toxic metal ions and anions	Lambert Academic Publishing	2018	(978-613-8-33401-9)
Arthi Sivashanmugam and Sivan Velmathi	Bio active component of Black pepper-Piperine: Structure Activity Relationships and its broad spectrum activity-an Overview	John Wiley	2021	
Anusuyadevi Kathiresan,	AIEgen-Nano Particles: Modern Advancements in	Elsevier	2022	

Sanay Naha and Sivan Velmathi	Sensing of nitro aromatics, warfare agents and Real-Time Application			
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