

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

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## Curriculum Vitae

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recent  
Photograph

in the form of  
softcopy/hardcopy  
(Optional)

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

**Dr. S. Velmathi** received her PhD degree in Organic Chemistry from the University of Madras in the year 2001. After her Ph.D she received Post Doctoral Fellowship from AIST, Japan and worked for three years at National Institute of Advanced Industrial science and Technology, AIST, Tsukuba, Japan. Currently, she is an Associate Professor in Department of Chemistry (Organic and Polymer Synthesis Laboratory), National Institute of Technology, Trichy. She holds visiting professorship in institutes like National Institute of Materials Science, Japan, Dong A University, Busan, South Korea, National Chiao Tung University, Taiwan and University of Connecticut USA. Received the prestigious **Tamil Nadu Young Women Scientist Award-2012** for Chemical Sciences. Also selected to receive the **INSA Bilateral Exchange Fellowship-2015**. She is an elected **Fellow of Tamil Nadu Academy of Sciences, Chennai**. Her major research areas of interest are asymmetric synthesis, chemo sensors and catalysis. To her credit she has published 107 papers in highly reputed international journals. She has delivered invited lectures in many national and international conferences. She has received funding to the tune of 1 crore INR from various funding agencies like DST, DRDO, CSIR. So far 7 Ph.D and 33 Masters Students have graduated under her guidance and currently 8 scholars are doing their Ph.D degree under her supervision. She is a Life member in Chemical Research Society of India, Life member in Catalysis Society of India, Life member in Materials Research Society of India.

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1. Name Dr. S. Velmathi
2. Designation Associate Professor
3. Office Address: Department of Chemistry, National  
Institute of Technology(NIT,  
Trichy-620015.
4. Telephone (Direct) (Optional): 91-431-250 3640  
 Telephone : Extn (Optional): Mobile: 9486067404  
 Mobile (Optional):
5. Email (Primary): svelmathi@hotmail.com Email (Secondary) : velmathis@nitt.edu
6. Field(s) of Specialization: Synthetic Organic Chemistry
7. Employment Profile

Job Title	Employer	From	To
Associate Professor	Department of Chemistry, National Institute Technology (NIT), Trichy-620 015	Nov 2011	till date
Assistant Professor	Department of Chemistry, National Institute Technology (NIT), Trichy-620 015	Nov 2008	Oct 2011
Lecturer	Department of Chemistry, National Institute Technology (NIT), Trichy-620 015	Aug-2006	Nov. 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	Presidency College, University of Madras, Chennai.	1995	First Class	General Chemistry
B.Sc	Bharathi Women's College, University of Madras, Chennai	1993	First Class with Distinction	Chemistry

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H.S.C	M.D.G.H.S.School, Chennai-81	1990		Maths, Physics, Chemistry and Biology
SSLC	M.D.G.H.S.School, Chennai-81	1988		

**9. Academic/Administrative Responsibilities within the University**

Position	Faculty/Department/Centre/Institution	From	To
Associate Dean (Academic)	Institute-IIIT	July 2016	Till date
DPEC Member	Department	Jan 2015	May 2015
B.Tech Lab Coordinator	Department	July 2016	Till date
B.Tech Subject coordinator	Department	July 2011	June 2012
M.Sc admission Coordinator	Department	May2012	July 2012
Ph.D admission Coordinator	Department	May 2011	August 2011
SIF Instrument Purchase committee member	Institute	Jan 2014	Jan 2015
DPEC Member	Department	Jan 2013	May 2013
Ph.D DC member and Purchase committee member for many institute level purchases	Institute	All the years	

**10. Academic/Administrative Responsibilities outside the University**

Position	Institution	From	To
Served as DC member for other university Ph.D scholars, Ph.D viva voce examiner, QP setting for other institutes in many years			
Visiting scientist	Department of Applied Chemistry, National Chiao Tung University and Institute of Chemistry, Academia Sinica Taiwan.	May 01, 2015	May-15, 2015
Visiting scientist	Department of Organic material and polymer engineering, Dong-A University, Busan, Korea	January -2014	January -2014
Visiting scientist	Department of Organic material and polymer engineering, Dong-A University, Busan, Korea	January -2013	January -2013

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Visiting scientist	(WPI-MANA) World Premier Institute-Center for Materials Nano Architectonics, National Institute for Materials Science, Tsukuba, Japan.	June- 2008	July- 2008
Visiting scientist	Department of Chemistry, University of Connecticut, USA.	Dec-2008	Feb -2008
Visiting scientist	Fuel Cell Materials Center, National Institute for Materials Science, Tsukuba, Japan.	May-2007	July-2007

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2015	Fellow of Tamil Nadu academy of Sciences (FASCh)	Tamil Nadu State Govt.
2015	INSA International collaboration/exchange fellowship for visiting Taiwan	Indian National Science Academy
2015	Chaired a session in the International Conference on Advances in Materials, Manufacturing and Applications.	MME Dept, NITT
2013	Received International Travel grant from DST, to visit South Korea for presenting a paper in the 14th Tetrahedron symposium held at Seoul, South Korea.	DST
2012	Tamil Nadu Young Women Scientist Award	Tamil Nadu State Govt.
2012	Chaired a session in the International Conference on Key Engineering materials ICKEM.	ICKEM 2012, Singapore
2011	Biographer in the 28 <sup>th</sup> Edition of Marquis Who's Who in the World.	
2010	Selected as a member of the International Biographical centre, Cambridge, England and listed as Leading scientists of the world.	International Biographical centre, Cambridge, England.
2009	Received International Travel grant from DST, to visit Australia for presenting a paper International Conference of 11 <sup>th</sup> Pacific Polymer Conference held at Cairns, Australia.	DST
2007	Fast Track Young Scientist Award	DST-SERC
2012 onwards	Editorial Board member	The journal ISRN Analytical

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		Chemistry
2005	Received the best poster award.	The 5 <sup>th</sup> 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)
2015	INSA International collaboration/exchange fellowship for visiting Taiwan	INSA	May 01, 2015	May 15, 2015
2003	Post Doctorial Fellowship	AIST Tsukuba, Japan.	2003	2006
2001	Senior Research Fellowship	CSIR , India	April 2001	
1998	Senior Research Fellowship	CSIR, India	April 1998	
1996	Junior Research Fellow	SPIC– Biotech division	1996 October	1998 March

13. Details of Academic Work

- (i) Curriculum Development- B.Tech I year, M.Sc I and II year courses
- (ii) Courses taught at Postgraduate and Undergraduate levels
  - B.Tech-I year, Engineering Chemistry CH 101 and CH102 Theory and Practicals
  - B.Tech-Chemical engineering III semester, CL-201 Organic Chemistry
  - M.Sc CH 601-Organic Chemistry Reaction Mechanisms and their types
  - CH602-Photochemistry and pericyclic reactions
  - CH 603-Synthetic Organic Chemistry
  - Organic Qualitative and Quantitative analysis-Practicals
- (iii) Projects guided at Postgraduate level - 32
- (iv) Other contribution(s)
  - B. Tech -2 (Co-Guide) M. Tech Thesis -2 (Co-Guide)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
A MOU has been signed between Fuel cell Materials center, NIMS, Japan	NIMS-Japan	2007	2012	Completed

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Studies towards the development of reusable chiral catalysts for asymmetric synthesis	DST-SERC	2007	2010	Completed
Studies towards the application of new tridentate ligands for ring opening polymerization of lactides	CSIR	2008	2011	Completed
Development of new biodegradable polymers using microwaves	Dept. of Chemistry NITK	2007	2008	Completed
Synthesis and characterization of nanomaterials for engineering applications	DST Nano Mission project	2009	2012	Completed
Studies towards the development of colorimetric and fluorescent on-off receptors for cation/anion sensing.	DRDO	2011	2014	Completed
Chiral Hybrid Organic-Inorganic three dimensional Mesoporous Materials for Enantioselective synthesis	DST	2011	2014	Completed
Carbon-Carbon coupling reactions in water.	DST-NPDF	2016	2018	Ongoing

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role (Supervisor/ Co-Supervisor)	Year of Award
Dr. U. Balakrishnan	Studies towards the synthesis of reusable chiral catalysts for asymmetric synthesis	Supervisor	Jan 2011
Dr. N. Ananthi	Syntheses and applications of novel chiral catalysts in asymmetric synthesis	Supervisor	Sep 2011
Dr. V. Reena	Studies on the syntheses and applications of novel chromogenic receptors as chemosensors	Supervisor	July 2015
Dr. D. Udhayakumari	Anion and cation sensing by synthetic receptors: synthesis, characterization and binding studies	Supervisor	July 2015

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Dr. S. Suganya	Synthesis and characterization of molecular hosts for the sensing of anions and cations	Supervisor	Jan 2016
Dr. N.S. Sanjini	Studies on catalytic applications of mesoporous materials	Supervisor	April 2016
Dr. S. Saravanamoorthy	Syntheses and applications of novel catalysts in Ring Opening Polymerization reactions	Supervisor	July 2016

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

Date (s)	Title of Activity	Level of Event (International / National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
	Trends in Industrial Measurements and Automation (TIMA-2006)	International Level	Participant	NITT	NITT
	Instrumental methods of thermal analysis and data interpretation	National Level	Participant	CEESAT	NITT
	workshop on Advanced materials	National Level	Participant	INDIA-NIMS	JNCASR
	The Nano-2008 Workshop	National Level	Participant	Dept. of Metallurgical and Materials Engineering NITT	NITT
	Workshop on XRD and IPR conducted by the Dept. Of Physics, NITT on March 15-2008	National Level	Participant	Dept. Of Physics, NITT	NITT

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

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
MHRD-GIAN sponsored course on supramolecular	International Level	Jan 05-12, 2017.	Convener	NITT

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photochemistry.				
Indo-UK- RSC symposium on Heterogeneous catalysis and sustainable chemistry	International Level	Nov- 05 2016	Convener	NITT
Workshop on 1D and 2D NMR spectroscopic techniques	National Level	Jan 21-22, 2016	Convener	NITT
Short Term Course on Recent Trends in catalysis	National Level	Nov 7-8, 2014	Convener	NITT
Workshop on Characterization techniques in Chemical Sciences.	National Level	July 9-11, 2014	Convener	NITT
National Conference on Chemosensors (NCC-2013)	National Level	Sep 19-2013	Convener	NITT
Short Term Course on Chromatographic Techniques	National Level	Dec 5-6, 2012	Convener	NITT
symposium on Emerging trends in Organic Synthesis (in view of International year of Chemistry)	National Level	October 22, 2011	Convener	NITT
Workshop on Advanced materials for optoelectronic devices under TEQIP Networking.	National Level	April-11-2008	Convener	NITT
Workshop on Engineering Chemistry for B. Tech students under TEQIP tribal development plan.	National Level	Oct 27, 2007	Convener	NITT
International Conference on Nanomaterials and its applications	International Level	2007	Joint Treasurer	NITT

18. Invited Talks delivered

Topic	Date	Inviting Organization
Catalytic applications of mesoporous materials in the RSC-NITT symposium on Heterogeneous catalysis and sustainable Chemistry.	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	IIT Madras, Cardiff University, British council and RSC



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Synthesis, characterization of heterogeneous mesoporous materials for photocatalytic applications	Aug-31, 2016	TEQIP -II sponsored workshop Organised by department of Civil Engineering, NITT.
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	department of Chemistry, Saranathan College of Engineering on National Science Day celebrations, Trichy
Chemosensors	January 29, 2016	PG department of Chemistry, Seethalakshmi Ramaswamy College, Trichy
1D and 2D NMR Spectroscopic techniques	January 21-22, 2016	Department of Chemistry, NIT, Trichy
Chemosensors and imaging processes (Asian Chip-2015).	Nov 16-18, 2015	Ewha Women's University, held at Seoul, South Korea
Asymmetric Synthesis in the National Seminar on Frontiers in Chemistry.	October 30, 2015	PG department of Chemistry, St. Aloysius college, Thrissur, Kerala
Colorimetric and Fluorescent sensors for molecular recognition	May 12-2015.	Institute of Chemistry, Academia Sinica Taiwan
Fluorescent sensors for molecular recognition	May 08-2015	Department of Applied Chemistry, National Chiao Tung University, Hsinchu, Taiwan
Alternative energy resources in the Faculty Development Programme	Feb 28, 2015.	Mohd. Sathak college, Kilakarai
UGC Sponsored National Conference in Frontier Areas in Chemistry	Feb 27, 2015	Thyagarajar college of Arts and Science, Madurai
Mesoporous materials and Fluorescent chemosensors in the Refresher course	Jan 29, 2015	UGC Academic Staff College department of Chemistry,

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		Bharathidasan University, Trichy
Green Chemistry and Alternative energy resources in the Short term course on Recent Trends in Catalysis	Nov 07-08, 2014	Department of Chemistry, NIT, Trichy
Workshop on Characterization techniques in Chemical Sciences	July 09-11, 2014	Department of Chemistry, NITT.
Chemosensors in the Short term course on Innovative methods in chemical research	May 05-09, 2014	Department of Chemistry, NITT,
Chemosensors and Chromatographic techniques in the Refresher course for College teachers	Feb 13, 2014	UGC Academic Staff College department of Chemistry, Bharathidasan University, Trichy
Chemosensors and Chromatographic techniques in the Refresher course for College teachers	Nov 15, 2013	UGC Academic Staff College department of Chemistry, Madurai Kamaraj University, Madurai
Microwave chemistry	May 21-25, 2013	Department of Chemistry, NITT
Synthesis of chromogenic receptors for cation/anion recognition	January 8th 2013	Department of Organic and Polymer Materials, Dong-A University, Busan, Korea
Chromatographic techniques in the Short term course on chromatographic techniques	Dec 5-6, 2012	Department of Chemistry, NITT
Applications of Salicylaldimine based compounds as chiral catalysts and chemosensors	Dec 16-17, 2011	Chemical Research Society of India (CRSI) - Zonal meeting Organized by Department of Chemistry, Pondicherry University
National Conference on Materials Chemistry	Feb 9-11, 2011	Department of Chemistry, Guru Nanak College, Chennai.
Nano structured polymers for drug delivery applications in the training programme on Nanoscience and nanotechnology	Jan 20, 2010.	Department of chemical engineering, Government Engineering college, Thrissur, Kerala.
Indo-NIMS workshop on 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

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		Science and Technology, Virudhu Nagar.
“EPR and NMR Spectroscopy	March 13-14, 2008	Department of Chemistry, NITT (TEQIP)
Reagents in Organic Synthesis in the “Training for PG students for clearing CSIR-NET	Feb 23-27, 2008	NITT (TEQIP)
Organic Chemistry-An Overview	Oct- 27, 2007	NITT (TEQIP)
Symposium on “Recent Developments in Chemistry”	Jan-25,2007	Department of Chemistry, Manonmaniam Sundaranar University-Tirunelveli
Microwave Chemistry - A boon or ban	Nov 30 -2006	Department of Chemistry, St. Joseph’s College Trichy.
Pericyclic reactions in the “Training for PG students for clearing CSIR-NET	Nov-25-29, 2006	NITT (TEQIP)
Concepts of Organic Reaction Mechanism in the Orientation Course for school teachers	Sep-16-17, 2006	NITT (TEQIP)
Novel enantiomer switching catalysts for asymmetric Michael reaction	Dec 13-16, 2001	9 <sup>th</sup> NOST symposium held at Trivandrum, India

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Life member	Chemical Research Society of India	2007
Life member	Catalysis Society of India	2008
Life member	Materials Research Society of India	2009

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Seoul, Korea	Nov 16-18, 2015	1st Asian conference on chemosensors and imaging processes (Asian Chip-2015), held at Seoul, South Korea,
Taiwan	May 01-15, 2015	Collaborative Research
Busan, Korea.	January 2014	Collaborative Research
Busan, Korea	January 2013	Collaborative Research

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Brisbane, Australia	22-25, October 2012	International Conference on Emerging Advanced Nano-materials ICEAN2012, Australia
Tsukuba, Japan.	June-July, 2008	Collaborative Research
Tsukuba, Japan.	May-July-2007	Collaborative Research
Connecticut, USA.	Dec- Feb -2008	Collaborative Research
Singapore	Feb 26-28, 2012	International Conference on Key Engineering materials ICKEM 2012, Singapore
Cairns, Australia	Dec 06-10, 2009	International Conference of 11 <sup>th</sup> Pacific Polymer Conference held at Cairns, Australia,

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
R. Dhanabal, S.Velmathi, A. Chandra Bose.	High efficiency new visible light driven $Ag_2MoO_4$ - $Ag_3PO_4$ composite photocatalysts towards degradation of industrial dyes	Catalysis Science and Technology	Inpress		2016	5.2
T.M. Ebaston, G. Balamurugan, S. Velmathi,	Fluorogenic and chromogenic dual sensor for the detection of cyanide and copper (II) in water sample and living cells	Analytical Methods			2016	1.9
D. Udhayakumari and S. Velmathi	A Highly Sensitive Salophen Based Colorimetric Anion Sensor for Fluoride and Acetate in Aqueous Medium	Journal of Chemistry and Chemical Sciences	6(2)	88-97	2016	

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S. Velmathi	Realizing cost-effective ZnO:Sr nanoparticles@graphene nanospreads for improved photocatalytic and antibacterial activities	RSC Advances			2016	3.3
S. Saravanamoorthy <sup>a</sup> , A. Chandra Bose <sup>b</sup> , S. Velmathi <sup>a*</sup>	Trouble free solution casting fabrication of PCL-TiO <sub>2</sub> nano composites: characterization and enhancing the optical, electrical properties	Journal of Nano Science and Nanotechnology			2016	1.5
Palanisamy Kalpana, Sivalingam Suganya, Sivan Velmathi*	Structurally simple azo based chromogenic Receptor for the selective sensing of cyanide ion in aqueous medium	Spectrochim Acta Part A			2016	
N. S. Sanjini, S. Velmathi	CuO impregnated mesoporous KIT-6, a simple and efficient catalyst for benzene hydroxylation by C-H activation and styrene epoxidation reactions	J. of Porous materials			2016	1.5
S. Velmathi* and S. Suganya	C <sub>2</sub> Symmetric Tetrapodal Azo Salicyladimine as Colorimetric Sensor for F <sup>-</sup> and AcO <sup>-</sup> ions employing hydrogen bonding	J. of Chemistry Sec B			2016	1.0
N.S. Sanjini, B. Winston and S. Velmathi*	Effect of Precursors on the synthesis of CuO Nanoparticles under Microwave for Photocatalytic Activity towards	J. of Nano science and Nano technology			2016	1.5

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	Methylene Blue and Rhodamine B Dyes					
T. Selvalakshmi, A. Chandra Bose*, S. Velmathi, P. Venkatesan and S. P. Wu	Photoluminescence study on Gd <sub>2</sub> O <sub>3</sub> :RE <sup>3+</sup> and GdAlO <sub>3</sub> :RE <sup>3+</sup> (RE=Eu, Dy) for bio imaging application	J. of Nano science and Nano technology			2016	1.5
Gopal Balamurugan <sup>a</sup> , Parthiban Venkatesan <sup>b</sup> , Shu Pao Wu <sup>b</sup> , Sivan Velmathi <sup>a,*</sup>	Novel Ratiometric Turn-on Fluorescent Probe for Selective Sensing of Cyanide ions and its Bio-imaging Studies	RSC Advances 2016	6	24229–24235	2016	3.3
G. Balamurugan, S. Velmathi*	Novel Chromogenic Selective Sensors for aqueous Cyanide ions under High Water Content and Real Sample Analysis	Analytical Methods	8	1705–1710	2016	1.9
S. Saravanamoorthy, Sivan Velmathi*	Environment Friendly Ring-Opening Polymerization of ε-Caprolactone and d,l- lactide Using Zinc Complex derived from salicylaldehyde and 2-aminobenzoic acid	Ind. J. of Chem Sec B	55B	345-352	2016	1.0
S. Suganya, Jong S. Park, Sivan Velmathi*	Colorimetric and Red Emission Probe for the selective CN <sup>-</sup> ion detection and real sample application	J. of Fluorescence.	26	207–215	2016	2.2
S. Lingamoorthy, S. Velmathi,*	CuO-SBA-15, A mild and highly efficient heterogeneous catalyst for C-N Coupling reaction	Advanced Porous Materials	3 (1)	33-39	2015	

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R. Dhanabal, DK Meher S. Velmathi, A. Chandra Bose,	Synthesis, characterization and photocatalytic activity of Ruthenium doped h-MoO <sub>3</sub>	Advanced Porous Materials	3 (1)	12-20	2015	
N S Sanjini and S. 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	
S. Saravanamoorthy <sup>a</sup> , A. Chandra Bose <sup>b</sup> , S. Velmathi <sup>a*</sup> ,	Facile fabrication of polycaprolactone/h-MoO <sub>3</sub> nanocomposites and their structural, optical and electrical properties	RSc Advances,	5 (120)	99074-99083	2015	3.3
N S Sanjini and S Velmathi*	Photocatalytic degradation of Rhodamine B by Mesoporous Ti-KIT-6 under solar light irradiation	J. of Porous Materials	22	1549 – 1558	2015	1.5
S. Suganya <sup>a</sup> , S. Velmathi <sup>a*</sup> and M. S. Boobalan <sup>b</sup>		Sensors and Actuators B	221	1104-1113	2015	4.7
S. Suganya, S.Velmathi*, P.Venkatesan, Shu-Pao Wu and M. S. Boobalan,		Inorganic Chemistry Frontiers	2	649 – 656	2015	4.5
R. Dhanabal, A. Chandra Bose and S. Velmathi	Visible light driven degradation of methylene blue dye using Ag <sub>3</sub> PO <sub>4</sub>	Journal of Environmental Chemical Engineering,	3	1872-1881	2015	1.4
S.Saravanamoorthy, M.Muneeswaran, N.V. Giridharan, S. Velmathi*	Eco Friendly Ring-Opening Polymerization of ε-Caprolactone and PC: mixed BiFeO <sub>3</sub> nanocomposites characterization and applications	RSc Advances,	5 (54)	43897-43905	2015	3.3

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DUdhayakumari, M.S. Boobalan and Sivan Velmathi*, ,	An azo linked Schiff base for highly selective sensing of cyanide in aqueous	J. of Fluorine Chemistry,	175	180-184	2015	2.5
D. Udhayakumari and Sivan Velmathi*	Azo Linked Polycyclic Aromatic Hydrocarbons Based Dual Chemosensor for $\text{Cu}^{2+}$ and $\text{Hg}^{2+}$ ions	Industrial and Engineering Chemistry Research	54	3541– 3547	2015	2.5
Thangaraj Selvalakshmi, Arumugam Chandra Bose* and Sivan Velmathi.	Influence of $\text{Al}^{3+}$ on the cross relaxation process and electrical properties of $\text{Dy}^{3+}$ activated $\text{Gd}_2\text{O}_3$ phosphor for white LED application	Ceramics International	41 (7)	8801- 8808	2015	2.2
D.Udhayakumari, Sivan Velmathi	Naphthalene thiourea derivative a dual chemosensor for F- $\text{Hg}^{2+}$ / $\text{Cu}^{2+}$ ions	Supramolecular chemistry	27 (7- 8)	539-544	2015	2.9
D.Udhayakumari, Sivan Velmathi*, P.Venkatesan <sup>b</sup> and Shu-PaoWu <sup>b</sup>	Anthracene coupled thiourea as a colorimetric sensor for F-/ $\text{Cu}^{2+}$ and fluorescent sensor for $\text{Hg}^{2+}$ /picric acid	J. of Luminescence	161	411– 416	2015	2.2
D.Udhayakumari Sivan Velmathi*, P.Venkatesan <sup>b</sup> and Shu-Pao Wu <sup>b</sup>	Pyrene Linked Thiourea as a Dual Chemosensor for anion, cation and simple fluorescent sensor for picric acid	Analytical Methods	7	1161- 1166	2015	1.9
D.Udhayakumari and Sivan Velmathi*	Azo Linked Thiourea based Effective Dual Sensors and its Real samples Application in aqueous medium	Sensors and Actuators B	209	462-469	2015	4.7
Myung-Seok Choi, Ankush Gupta,	Characteristic Fluorescence	Bulletin of Korean	36	230-236	2015	



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Jung Hwa Seo, S Velmathi, James N Wilson, Jong S Park	Response of (6-Hydroxy-2-naphthyl) ethenyl Pyridinium Dyes with Bovine Serum Albumin,	Chemical Society,				
D. Udhayakumari and Sivan Velmathi*	Synthesis and cation binding studies of Schiff Bases derived from Heterocyclic aldehydes –selective and sensitive Colorimetric Chemo sensor for Cu <sup>2+</sup> ions.	J.of Luminescence,	158	484-492	2015	2.5
N.S. Sanjini, B. Winston and S. Velmathi	Photocatalytic degradation of Dyes over Cobalt incorporated mesoporous KIT-6,	J.of Nanoscience and nanotechnology	15	6487- 6494	2015	1.5
T. Selvalakshmi, A. Chandra Bose and S. Velmathi	Effect of Eu <sup>3+</sup> and Al <sup>3+</sup> concentrations on the emission profile of Eu <sup>3+</sup> activated Gd <sub>2</sub> O <sub>3</sub> phosphor	J.of Nanoscience and Nanotechnology	15 (8)	5760- 5767	2015	1.5
A. Chithambararaj, B. Winston, N.S.Sanjini, S. Velmathi and A. Chandra Bose,* ,	Band gap tuning of h-MoO <sub>3</sub> nanocrystals for efficient visible light photocatalytic activity against MB dye	Journal of Nanoscience and Nanotechnology	15 (7)	4913- 4919	2015	1.5
D.Udhayakumari <sup>a</sup> Sivan Velmathi <sup>a*</sup> Wei-Chieh Chen <sup>b</sup> and Shu-Pao Wu <sup>b</sup> ,	A Dual-mode Chemosensor: Highly Selective Colorimetric Fluorescent Probe for Cu <sup>2+</sup> and F- ions	Sensors and Actuators B	204	375– 381	2014	4.7
S. Suganya, Hye Jin Zo, Jong S. Park, Sivan Velmathi *	Simultaneous sensing of aqueous anions and toxic metal ions by simple dithiosemicarbazone s and their real time application.	Industrial and engineering Chemistry Research	53 (23),	9561– 9569	2014	2.5

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S. Suganya, Hye Jin Zo, Jong S. Park, Sivan Velmathi	Colorimetric Detection of In-situ Metal Acetates by a Bipyridyl-Linked Schiff Base	J. of Molecular Recognition,	27 (12)	689-695	2014	3.0
D. Udhayakumari and Sivan Velmathi*	Highly fluorescent Probe for Copper (II) Ion based on Commercially Available compounds and Live Cell Imaging	Sensors and actuators B	198	285-293	2014	4.7
N.S. Sanjini, S. Velmathi	Iron Impregnated SBA-15, Mild and Efficient Catalyst for Catalytic Hydride Transfer Reduction of Aromatic Nitro Compounds	RSc Advances	4	15381- 15388.	2014	3.3
N. Ananthi, Sivan Velmathi	Chiral amide from (1S,2R)-(+)- norephedrine and furoic acid: an efficient catalyst for asymmetric Reformatsky reaction	Journal of Chemical sciences	126(1)	151-158	2014	
V. Balachandran, M. Boobalan, M. Amaladasan, S. Velmathi,	Synthesis and Vibrational Spectroscopic investigation of Methyl L-Proline Hydrochloride – A Computational Insight	Spectroscopy letters	47	676– 689	2014	1.5
P.V. Nideesh, R. Gandhimathi, N.S. Sanjini, S. Velmathi,	Magnetite as a heterogeneous electro Fenton catalyst for the removal of Rhodamine B from aqueous solution	RSC Advances	4	5698- 5708	2014	3.3
D. Udhayakumari and Sivan Velmathi*	Colorimetric chemosensor for Multi-signaling	Spectrochimica Acta Part A	122	428-435	2014	1.9

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	detection of metal ions using pyrrole based Schiff bases					
D. Udhayakumari, S.Suganya and S. Velmathi*	Naked eye sensing of toxic metal ions in aqueous medium using thiophene based ligands and its application in living cells	J. of Molecular Recognition	27	151-159	2014	3.0
S.Suganya, Jong.S.Park and Sivan Velmathi *	Dihydrazone Based Colorimetric Chemosensor for Detecting Biologically Important Anions in Complete Aqueous Medium	Sensors and Actuators B	190	679–684	2014	4.7
N.S.Sanjini, R. Dhanalakshmi and S. Velmathi*	Structural, Optical and Photocatalytic Properties of Wide Band Gap CuO Nanoparticles Synthesized By Microwave-Assisted Quick Precipitation Method	Science of Advanced Materials	6	1399-1405	2014	3.3
S. Suganya, Sivan Velmathi*, D. Mubarak Ali	Highly Selective nano molar detection of Cu <sup>2+</sup> ion by Fluorescent Turn-on response and their application in Living Cells.	Dyes and Pigments	104	116-122	2014	3.5
G.Vinithra, S.Suganya and S. Velmathi*	Naked eye Sensing of Anions Using Thiourea Based Chemosensors with Real Time Application	Tetrahedron letters	54	5612-5615	2013	2.5
A.Chithambararaj, N.S. Sanjini, A. Chandra Bose, S. Velmathi	Study of h-MoO <sub>3</sub> nanocrystals on visible light photo degradation of methylene blue".	Physical Chemistry Chemical Physics	15 (35)	14761 - 14769	2013	4.4

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S.Saravanamurthy Sivan Velmathi*,	Chiral Schiff bases: New and effective inhibitors for corrosion of high carbon steel in acidic media	Progress in organic coatings	76	1527- 1535	2013	2.5
S.Suganya, D.Udhayakumari, Sivan Velmathi*	Heterocyclic thiosemicarbazones as fluorescent probe for the selective recognition of cations	Analytical methods	5 (16)	4179 - 4183	2013	1.9
Jeong Yeun Song, Hye Jin Zo, S. Velmathi, Jong S. Park	Highly Selective Response of Bipyridyl- Incorporated Acetyelene Dye for Zinc Acetate	Talanta	112	80-84	2013	3.5
V. Reena, S. Suganya and Sivan Velmathi *	Synthesis and Anion binding studies of Azo-Schiff Bases: Selective and sensitive colorimetric chemo sensor for Fluoride ions	J. of Fluorine chemistry	153	89-95	2013	2.5
D. Udhayakumari, S. Suganya and Sivan Velmathi*	Thiosemicabazone Based Fluorescent Chemosensor for Transition Metal ions in aqueous medium	J.of Luminescence	141	48-52	2013	2.5
A. Chithambararaj, N. S. Sanjini, A. Chandra Bose* S. Velmathi,	Flower like hierarchical h- MoO <sub>3</sub> : A novel photocatalyst for efficient visible light degradation of methylene blue	Catalysis Science and Technology	3	1405- 1414	2013	5.2
S. Suganya, Sivan Velmathi*	Simple azo based salicylaldimine colorimetric and fluorescent probe for detecting anions in semi aqueous medium	J. of Molecular recognition	26	259-267	2013	3.3
U. Balakrishnan and	Chirally	Journal of	13(4)	3079-	2013	1.5

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Sivan Velmathi* Volume, Number 4, April, pp.	functionalized SBA-15 as efficient heterogeneous catalyst for asymmetric ketone reduction	Nanoscience and Nanotechnology		3086(8)		
S.Naveenraj S. Anandan*, Sivan Velmathi, Abdullah M. Asiri M. Ashokkumar.,	Tuning of Chalcogenide Nanoparticles Fluorescence by Schiff bases	J.of Photochem, Photobio A Chemistry	254	12-19	2013	3.2
D. Udhayakumari and Sivan Velmathi*	A Simple, Colorimetric Turn Off and Fluorescent Turn-On Probe for Detecting Hg <sup>2+</sup> in Semi Aqueous Medium	J.of Luminescence.	136	117-121	2013	2.1.
N. Ananthi and Sivan Velmathi*,	Asymmetric Henry reaction catalysed by transition metal complexes-A short review	Indian Journal of Chemistry	52 B	87-108	2013	1.0
D.Renuga, D. Udhayakumari, S. Suganya and S. Velmathi*	Novel thiophene based colorimetric and fluorescent receptor for selective recognition of fluoride ions	Tetrahedron Letters	53	5068-5070	2012	2.6
D.Udhayakumari <sup>a</sup> , S.Saravanamoorthy Sivan Velmathi <sup>a</sup>	Colorimetric and Fluorescent sensing of Transition Metal ions in aqueous medium by Salicylaldimine Based chemosensors	Materials Science and Engineering C	32	1878-1882	2012	2.6
N.Ananthi and S.Velmathi*	Synthesis and Characterization of new salen type chiral ligands from L-Valine in asymmetric Henry reaction	Adv. Sci. Lett	17	233-237	2012	
Sivan Velmathi* and Reena. V	Synthesis, Characterization and Investigation on the Third Order	Adv. Mat. Res	488-489	377-382	2012	

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	Nonlinear Optical Properties of Pyrrole Schiff Bases					
U.Balakrishnan, Sivan Velmathi*, K.B. Manjunath and G. Umesh, ,	Synthesis, Characterization and Investigation on the Third Order Nonlinear Optical Properties of metalloorganic chromophores	Optics and photonics journal	2	40-45	2012	
Umesh Balakrishnan, Nallamuthu Ananthi, Sivan Velmathi*, Siddulu Naidu Salem S. Aldeyab, Katsuhiko Ariga, and Ajayan Vinu*	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	3.2
Saravanan Prabhu <sup>a</sup> , S. Saravanamoorthy <sup>a</sup> , M. Ashok <sup>b</sup> , Sivan Velmathi <sup>a*</sup> .	Colorimetric And Fluorescent Sensing of Multi Metal Ions and Anions by Salicylaldimine Based Receptors	J.of Luminescence	132	979-986	2012	2.1
Sivan Velmathi* Vijayaraghavan Reena and Sivalingam Suganya Sambandam Anandan	Pyrrole based Schiff bases as colorimetric and fluorescent chemosensors for fluoride and hydroxide anions	Journal of Fluorescence	22	155–162	2012	2.1
Sivan Velmathi*	Low cost and less toxic p-Toluene sulfonic acid catalysed Ecofriendly and extremely rapid synthesis of aliphatic poly esters	<i>Research and Reviews in Polymer</i>	2		2011	
U. Balakrishnan, N. Ananthi and S. Velmathi*	Influence of the substituent groups in chiral	<i>Indian Journal of Chemistry Sec B</i>	50B	1157-1164	2011	1.0

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	oxazaborolidine catalyst derived from L-Valine for the prochiral ketone reduction					
D. Udhayakumari <sup>1</sup> , S. Saravanamoorthy <sup>1</sup> , M. Ashok <sup>2</sup> , Sivan Velmathi <sup>1*</sup>	Simple Imine linked colorimetric and fluorescent receptor for sensing Zn <sup>2+</sup> ions in aqueous medium based on inhibition of ESIPT mechanism	<i>Tetrahedron Letters</i>	52	4631-4635	2011	2.5
Sivan Velmathi*, Umesh balakrishnan Nallamuthu ananthi, Katsuhiko Ariga, Siddulu Naidu and Ajayan Vinu	Immobilization of chiral oxazaborolidine catalyst over highly ordered 3D mesoporous silica with <i>Ia3d</i> symmetry for enantioselective reduction of prochiral ketone	<i>Physical Chemistry Chemical Physics</i>	13	4950 - 4956	2011	4.4
S. Suganya, S. Velmathi*, R. Sivakumar and S. Anandan	Selective binding of Cu <sup>2+</sup> ions by salicylaldimine based Schiff base chromogenic receptors	<i>Sensor Lett.</i>	9	570-576	2011	2.4
Nallamuthu Ananthi, Umesh Balakrishnan, Sivan Velmathi*	Salicylaldimine based copper (II) complex-potential catalyst for Asymmetric Henry reaction	ARKIVOC	11	370-379	2010	
Sivan Velmathi*, Reena Vijayaraghavan, Ch. Amarendar, Ravindra P. Pal and Ajayan Vinu	Ligand free Palladium catalyzed C-S coupling reactions promoted by Microwaves in aqueous medium	<i>Synlett</i>	18	2733-2736	2010	2.7
Nallamuthu Ananthi, Umesh Balakrishnan, , M. Babu, Sivan Velmathi *, Mubarak Ali and	A study on - Synthesis, characterization, electrochemical and antibacterial activity	<i>IUP journal of chemistry,</i>	3	28-41	2010	

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N. Thajuddin	studies of salen derived Cobalt Complexes					
Michael SL Shanthi P, Mangalaraja R.V, Uthirakumar A.P., Velmathi S., Balasubramanian T. Ashok, M.	Synthesis and characterization of porous shell-like nano hydroxyapatite using cetrimide as template	<i>Journal of Colloids and Interface Science</i>	350	39-43	2010	
Sivan Velmathi*, Reena Vijayaraghavan, Ravindra P. Pal, and Ajayan Vinu	Microwave Assisted Ligand Free Palladium Catalyzed synthesis of $\beta$ -arylalkenyl nitriles Using Water as Solvent	<i>Catalysis Letters</i>	135	148-151	2010	2.02
R. Sivakumar, V. Reena, N. Ananthi, M. Babu, S. Anandhan, S. Velmathi	Colorimetric and Fluorescence sensing of fluoride anions with potential salicylaldimine based Schiff base receptors,	<i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i>	75	1146-1151	2010	1.9
R. Anand, G. Kannan, S. Nagarajan, S. Velmathi.	The performance and emissions of a variable compression ratio diesel engine fuelled with biodiesel from waste cooking oil,	<i>SAE international</i>	01	0478	2010	
Umesh Balakrishnan, Nallamuthu Ananthi, Tamil selvan, Ravindra Pal, Katsuhiko Ariga, Sivan Velmathi* and Ajayan Vinu*	Immobilization of Chiral Oxazaborolidine complex in ordered mesoporous silicas and their application in the asymmetric reduction of prochiral ketones	<i>Chemistry An Asian Journal,</i>	5	897-903	2010	4.2
R. Anand, G. Kannan, K. Rajasekar reddy, S. Velmathi.	The performance and emissions of a variable compression ratio diesel engine	<i>ARPJ Journal of Engineering and Applied Sciences</i>	4	72-87	2009	



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	fuelled with biodiesel from cotton seed oil					
M. Ashok, A. Kandasamy, S. Velmathi	Synthesis and characterization of hydroxyapatite nanorods	<i>International journal of nanoscience nanoengineering and nanotechnology</i>	1	13-15	2009	
Nallamuthu Ananthi; Umesh Balakrishnan; Ajayan Vinu; Katsuhiko Ariga; Sivan Velmathi*	Chiral amide from (1S,2R)-(+)-norephedrine alkaloid in the enantioselective addition of diethylzinc to aryl and heteroaryl aldehydes	<i>Tetrahedron: Asymmetry</i>	20	1731-1735	2009	2.6
Nasani Narendar and Sivan Velmathi*	Copper Catalyzed C-N coupling reactions of alpha amino acids with aryl halides under focused microwave irradiation	<i>Tetrahedron Letters</i>	50	5159-5161	2009	2.6
Umesh Balakrishnan, Nallamuthu Ananthi, Sivan Velmathi *	Chiral ligand derived from (1S,2R)-norephedrine as a catalyst for enantioselective prochiral ketone reduction	<i>Tetrahedron: Asymmetry</i>	20	1150–1153	2009	2.6
Sivan Velmathi*, Ritsuko Nagahata, and Kazuhiko Takeuchi	Microwave Assisted Synthesis of Aliphatic Polyesters using Tin chloride and P-Toluene Sulfonic Acid as catalysts	<i>Advanced Science Letters</i>	2	45-49	2009	
Sivan Velmathi, Nicholas E. Leadbeater	Palladium-catalyzed cyanation of aryl halides using $K_4[Fe(CN)_6]$ as cyanide source, water as solvent, and microwave	<i>Tetrahedron Letters</i>	49	4693-4694	2008	2.6

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	heating					
Pavuluri Srinivasu, Sher Alam, Veerappan V. Balasubramanian, Sivan Velmathi, Dhanashri P. Sawant, Winfred Böhlmann, Subhash P. Mirajkar, Katsuhiko Ariga, Shivappa B. Halligudi, Ajayan Vinu	Novel Three Dimensional Cubic <i>Fm3m</i> Mesoporous Aluminosilicates with Tailored Cage Type Pore Structure and High Aluminum Content	<i>Advanced Functional Materials,</i>	18	640-651	2008	8.5
Dhanashri P. Sawant, Josena Justus, Veerappan V. Balasubramanian, Katsuhiko Ariga, Pavuluri Srinivasu, Sivan Velmathi, Shivappa B. Halligudi and Ajayan Vinu	Heteropoly acid encapsulated SBA-15/TiO <sub>2</sub> nanocomposites and its unusual performance in acid catalyzed organic transformations	<i>Chemistry: A European Journal</i>	14	3200-3212	2008	5.5
V.V. Balasubramanian, P. Srinivasu, C. Anand, R.R. Pal, K. Ariga, S. Velmathi, Sher Alam and A. Vinu	Highly active three-dimensional cage type mesoporous aluminosilicates and their catalytic performances in the acetylation of aromatics	Microporous and Mesoporous Materials	114	303-311	2008	3.2
Ajayan Vinu, Josena Justus, C. Anand, Dhanashri P. Sawant, Katsuhiko Ariga, Toshiyuki Mori, Pavuluri Srinivasu, Veerappan V. Balasubramanian, Sivan Velmathi, Sher Alam	Hexagonally Ordered Mesoporous Highly Acidic AISBA-15 with Different Morphology: An Efficient Catalyst for Acetylation of Aromatics	<i>Microporous and Mesoporous Materials</i>	116	108-115	2008	3.2
Sivan Velmathi, Ritsuko Nagahata and Kazuhiko Takeuchi	Extremely Rapid Synthesis of Aliphatic Polyesters by Direct Poly condensation of 1:1 Mixtures of Dicarboxylic acids	<i>Polymer Journal</i>	39	841-844	2007	0.92

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	and Diols using Microwaves					
Sivan Velmathi, R. Nagahata, J. Sugiyama, and K. Takeuchi	Rapid and eco-friendly synthesis of poly(butylene succinate) by direct polyesterification of dicarboxylic acid with diol catalyzed by distannoxane catalyst under microwave irradiation	<i>Macromoleculr Rapid Communicatios,</i>	26	1163-1167	2005	4.6
Ritsuko Nagahata, Jun-ichi Sugiyama, Sivan Velmathi, Y. Nakao, M. Goto, and K. Takeuchi	Synthesis of poly(ethylene terephthalate –co- isophthalate) by copolymerization of ethylene isophthalate cyclic dimer and Bis(2-hydroxyethyl) terephthalate	<i>Polymer Journal,</i>	36	1-6	2004	0.92
S. Velmathi, S. Swarnalakshmi and S. Narasimhan	Novel heterobimetallic catalysts for asymmetric Michael reactions	<i>Tetrahedron: Asymmetry</i>	14	113 – 118	2003	2.6
S. Narasimhan and S. Velmathi	Effect of Microwave in chiral switching asymmetric Michael reaction	<i>Molecules</i>	8	256 – 262	2003	0.3
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and S. Velmathi	Synthesis of novel chiral auxiliaries	<i>Ind. J. Chem Sec B</i>	41 B	1666-1669	2002	0.35
S. Narasimhan and S. Velmathi	Microwave assisted enantioselective Michael reaction using BINOL – Al – Li catalyst	<i>Synthetic Communicatios</i>	32	3791-3795	2002	1.02
M. N. Ponnuswamy. A. Jeya bharathy, S. Narasimhan and S. Velmathi	Diisopropyl-2-(2-benzyl-1-phenylethyl) malonate	<i>Acta Crystallographica Section E</i>	58	0334-0335	2002	0.5
S. Narasimhan, S.	Novel enantiomer –	<i>Tetrahedron</i>	42	719-721	2001	2.6

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Velmathi, R. Balakumar and V. Radhakrishnan	switching catalysts for asymmetric reductions and Michael reactions	<i>Letters</i>				
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and S. Velmathi	Novel chiral switching ligands for enantioselective asymmetric reduction of prochiral ketones	<i>Molecules</i>	6	988-995	2001	0.3
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and S. Velmathi	Tandem reduction of bromo compounds using tetra butylammonium borohydride	<i>Synthetic communications</i>	29	685 – 689	1999	1.02
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and S. Velmathi	Chemoselectivity of tetrabutyl ammonium borohydride towards bifunctional esters	<i>Synlett,</i>	12	1321- 1322	1998	2.7
K. Ramadas, N. Janarthanan and S. Velmathi	Lac sulfur assisted synthesis of symmetrical thoureas	<i>Synthetic communications</i>	27	2255- 2257	1997	1.02
K. Ramadas, S. Velmathi and S. Sukanya	Lac sulfur on alumina- Triethanolamine. An effective reagent for the synthesis of guanidines	<i>Tetrahedron letters.</i>	37	5161	1996	2.6

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
S. Vikneshwaran, Reshma Rajan. P. C and Sivan Velmathi*	Boehmite- An efficient and recyclable acid- base bifunctional catalyst for aldol	RSC-NITT symposium on Heterogeneous catalysis and sustainable			Trichy	2016

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	condensation reaction	Chemistry				
Sanay Naha, R. Minmini and Sivan Velmathi*	New Zinc functionalized metal organic Framework for selective sensing of chromate ion	RSC-NITT symposium on Heterogeneous catalysis and sustainable Chemistry			Trichy	2016
G. Balamurugan, T.Akash and Sivan Velmathi*	A green and efficient methodology for the synthesis of 1,3,5 triazines: Microwave assisted cyclization of Aldehydes with Amidines	RSC-NITT symposium on Heterogeneous catalysis and sustainable Chemistry			Trichy	2016
G. Balamurugan, and Sivan <b>Velmathi*</b>	Effect of substitution on the sensing behaviour of imidazo anthraquinone receptors under aqueous medium	10th Mid Year CRSI symposium			Trichy	<b>2015</b>
Sivalingam Suganya, and Sivan <b>Velmathi*</b>	Fluorogenic and chromogenic heterocyclic thiourea: selective recognition of cyanide ion via nucleophilic addition reaction and real sample analysis	10th Mid Year CRSI symposium			Trichy	<b>2015</b>
S. Vikneshwaran and Sivan <b>Velmathi*</b>	Binding properties of Cu(II) and Ru(III)	10th Mid Year CRSI symposium			Trichy	<b>2015</b>

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	complexes derived from L-Tryptophan based chiral Schiff base towards CT-DNA					
G.Balamurugan and Sivan Velmathi*	Novel exceptional chromogenic probes tuned for the recognition of aqueous cyanide ion and relay recognition of dihydrogenphosphate ion and H <sub>2</sub> O <sub>2</sub>	National Conference RACS-2015			Dindigul	2015
S. Vikneshwaran and S. Velmathi	L-Tryptophan based Novel Chiral Schiff Bases as Inhibitors for Corrosion of Steel	National Conference RACS-2015			Dindigul	2015
S. Suganya and S. <b>Velmathi</b>	Synthesis and Toxic Metal Ions Detection of Simple Dithiosemicarbazones and its Application in Bio Imaging of Living Cell	13th Eurasia Conference on Chemical Sciences			IISc Bangalore	2014
R. Dhanabal, S <b>Velmathi</b>	Visible Light Assisted Degradation of Organic Dye Using Ag <sub>3</sub> PO <sub>4</sub>	59 <sup>th</sup> DAE-Solid State Physics symposium				2014
G.Balamurugan and Sivan <b>Velmathi</b> *	Novel benzimidazole based highly selective chromogenic fluoride	Indian International Symposium on Fluorine Chemistry (IISFC-2014)			Hyderabad	2014

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	sensors					
Duraisamy Udhayakumari and <b>Sivan Velmathi*</b>	An azo linked Schiff base for highly selective sensing of cyanide in aqueous solution	15 <sup>th</sup> Tetrahedron Symposium-Asia Edition			Singapore	2014
Duraisamy Udhayakumari and <b>Sivan Velmathi*</b>	Salophen Based Highly Sensitive Fluorescent Sensor for Detecting Mn (II) ion at Nanomolar Level	International Conference for Advanced materials (ICAN-2014)			Chennai	2014
N S Sanjini and <b>S Velmathi*</b>	CuO Impregnated mesoporous silica KIT-6 an efficient catalyst for benzene hydroxylation	CRSI symposium			Bombay	2014
Duraisamy Udhayakumari, and <b>Sivan Velmathi*</b>	Dual Chemosensing Properties of Azo Linked Thiourea based Receptor in Nanomolar levels with Real Sample Applications	CRSI symposium			Bombay	<b>2014</b>
N.S.Sanjini and <b>S. Velmathi</b>	Photocatalytic activity of titanium doped mesoporous KIT-6 for the degradation of different dyes under UV light and sunlight	IUMRS-ICA conference			Bangalore	<b>2013</b>
Sivalingam Suganya, Sivan	Colorimetric Detection of	MTIC IX Conference			Roorkee	<b>2013</b>

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<b>Velmathi*</b>	Co, Ni, Cu Acetates By Bipyridyl Schiff Base					
<b>S. Velmathi</b> and S. Suganya	Simultaneous sensing of anions and cations by single molecule and its real time application in aqueous environment	Tetrahedron Symposium Asia Edition Challenges in Organic and Bioorganic Chemistry			Korea	<b>2013</b>
A. Chithambararaj, N. S. Sanjini, <b>S. Velmathi</b> , and A. Chandra Bose	Synthesis of flower-like hierarchical h-MoO <sub>3</sub> and layered $\alpha$ -MoO <sub>3</sub> nanocrystals: Photo degradation studies of methylene blue under visible light irradiation	International Symposia on Advancing the Chemical Sciences (ISACS)			UK	<b>2013</b>
Duraisamy Udhayakumari, Sivan <b>Velmathi*</b>	Azo Linked Thiourea as a Highly Selective 'Off-On' Fluorescent Chemosensor for Cd <sup>2+</sup>	National Conference			Madurai	<b>2013</b>
Sivalingam Suganya and Sivan <b>Velmathi*</b>	Visual Sensing of Aqueous Anions by C2-Symmetric Chemosensor and its Real time Application	National Conference			Madurai	<b>2013</b>
G. Vinithra, Sivan <b>Velmathi*</b>	Synthesis, characterization and anion	National Conference			Madurai	<b>2013</b>



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	binding studies of azo linked thiourea based chromogenic receptor					
<b>N.S.Sanjini and S.Velmathi*</b>	Synthesis of Gallium doped mesoporous KIT-6 for the photocatalytic degradation of dyes	International Conference of Nanomaterials and their applications			Chennai	<b>2013</b>
<b>G. Balamurugan and S. Velmathi*</b>	Axially chiral R-BINAM-salen based heterobimetallic catalysts for asymmetric Michael reaction	Chennai Chemistry Conference - 2013			Chennai	<b>2013</b>
<b>Sivalingam Suganya<sup>1</sup>, Sivan Velmathi<sup>1*</sup></b>	Anthraquinone Based Chromophores as Colorimetric and “turn-off” Fluorometric Sensor for Cations in Aqueous Medium	National Conference on Luminescence and its applications			Bangalore	<b>2013</b>
<b>Duraisamy Udhayakumari, and Sivan Velmathi*</b>	Simple Imine Based Highly Sensitive fluorescent Fe <sup>3+</sup> and Sn <sup>2+</sup> ions sensor	National Conference on Luminescence and its applications			Bangalore	<b>2013</b>
<b>Somasundaram Saravanamoorthy, Sivan Velmathi</b>	Environment Friendly Ring-Opening Polymerization of ε-Caprolactone Using Zinc Complex derived from salicylaldehyd	2nd International Indo-German symposium on Green chemistry and catalysis for sustainable development			Germany	<b>2012</b>

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	e and 2-aminobenzoic acid					
N.S.Sanjini, K. Dhanalakshmi and S. <b>Velmathi</b>	Structural, Optical and Photocatalytic Properties of Wide Band Gap CuO Nanoparticles Synthesized By Microwave-Assisted Quick Precipitation Method	International Conference on Emerging Advanced Nano-materials (ICEAN2012)			Australia	2012
Sivalingam Suganya, Duraisamy Udhayakumari, Sivan <b>Velmathi</b>	Azo linked salicylaldimine as a cation sensor towards transition metal ions	6th International conference on sensing technology	719-723		New Zealand	2012
N S <b>Sanjini</b> and S <b>Velmathi</b> *	Photocatalytic degradation of dyes over Cobalt incorporated mesoporous KIT-6	Advances in Materials and Processing Challenges and Opportunities (AMPCO 2012)			Roorkee	2012
<b>D. Udhayakumari</b> and S. <b>Velmathi</b> *	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 2012)			Erode	2012
<b>Sivalingam Suganya</b> , Duraisamy Renuga, Sivan <b>Velmathi</b>	Colorimetric and Fluorescent probe for the naked eye detection of	Recent Applications of nanomaterials in chemistry			Erode	2012

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	cations by pyrrole based thiosemicarbazone	and environmental research” (RANCER 2012)				
<b>Sivan Velmathi*</b> and Reena. V	Synthesis, Characterization and Investigation on the Third Order Nonlinear Optical Properties of Pyrrole Schiff Bases	International Conference on Key Engineering materials ICKEM 2012			Singapore	2012
<b>D. Udhayakumari, S.Velmathi*</b>	Salophenimine based colorimetric and fluorescent [probe for detecting Sn <sup>2+</sup> and Fe <sup>3+</sup> ions	4 <sup>th</sup> International Conference on Luminescence and its applications ICLA-2012			Hyderabad	2012
<b>Saravanan Prabhu<sup>a</sup> and S.Velmathi<sup>a*</sup></b>	Colorimetric Sensing Of Multi Metal Ions And Anions By Salicylaldimine Based Receptors	HORIZON-11, National level students symposium on Emerging Trends in Organic Synthesis			Trichy	<b>2011</b>
Udhayakumari, <b>S.Velmathi*</b>	Salicylaldehyde Based Colorimetric And Fluorescent Receptor For Sensing Mn <sup>2+</sup> , Pb <sup>2+</sup> Ions In Aqueous Medium	National Seminar on Recent Trends in Synthetic methods and Chemistry of Natural Products-2012			Chidambaram	<b>2011</b>
D. Udhayakumari, <b>S.Velmathi*</b>	Synthesis, characterization and cations binding studies of	National Conference on Recent Trends in Organic			Tiruchirappalli	<b>2011</b>

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		salicylaldimine based chromogenic receptors	Synthesis				
<u>S.Prabhu,</u> Suganya, <b>S.Velmathi*</b>	S.	Synthesis, characterization and anions binding studies of salicylaldimine based chromogenic receptors	National Conference on Materials Chemistry			Chennai	<b>2011</b>
<u>S.Prabhu,</u> Udhayakumari, <b>S.Velmathi*</b>	D. S.	Synthesis, characterization and cations binding studies of salicylaldimine based chromogenic receptors	National Symposium on Frontiers in Organic Synthesis and Medicinal Chemistry (FOSMC)			Salem	<b>2011</b>
S. Saravanamoorthy and <b>S. Velmathi*</b>		Ring opening polymerization of lactide using schiff base chiral metal complexes	International Conference on frontiers of polymers advanced materials MACRO 2010			Delhi	<b>2010</b>
N. Ananthi, U. Balakrishnan, K.B. Manjunath, Umesh G. and <b>Sivan Velmathi</b>		Synthesis and Third Order Non Linear Optical Properties of Schiff Bases and their Metal Complexes	International Conference of RETMAC 2010			Surathkal	<b>2010</b>
<b>S. Velmathi*</b> , U.P.D. Chandrahasan, S. Sudha	S.	Cyclic Ester Polymerization Using Chiral O, N, O Type Tridentate Titanium Complex	International Conference of MATCON 2010			Cochin	<b>2010</b>
N. Ananthi, U. Balakrishnan,	U.	Asymmetric Henry reaction	International Conference			Cochin	<b>2010</b>

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<b>Velmathi. S*</b>	catalyzed by a chiral copper schiff base complex	of MATCON 2010				
Reena V., Poornesh P., Umesh G. and <b>Sivan Velmathi *</b>	Synthesis And Third Order Non Linear Optical Properties Of Pyrrole Schiff Bases	International Conference of MATCON 2010			Cochin	<b>2010</b>
<b>Velmathi. S*</b> , U.P.D. Chandrasahsan, Sudha. S	Ring Opening Polymerization of D, L-Lactide by Chiral ONO type Tridentate Titanium Complexes	International Conference of 11 <sup>th</sup> Pacific Polymer Conference			Australia	<b>2009</b>
R.Anand, K.RajaSekar Reddy, V.Arul Mozhi Selvan, <b>S.Velmathi</b> , T.Senthil kumar	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			New Delhi	<b>2009</b>
Nallamuthu Ananthi , Umesh BalaKrishnan , Ajayan Vinu and <b>Sivan Velmathi*</b>	Catalytic application of the chiral ligand immobilized onto mesoporous material in asymmetric prochiral ketone reduction	International Conference of Functional Materials (FM-2008)			Madras	<b>2008</b>
U. Bala Krishnan, N.Ananthi, Ajayan Vinu, <b>S.Velmathi*</b>	Immobilisation of chiral ligands with mesoporous materials for the application	International Conference of Functional Materials (FM-2008)			Madras	<b>2008</b>

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	in asymmetric reactions					
1. T. Nakamura, R. Nagahata <b>S. Velmathi</b> , and K. Takeuchi	Microwave assisted Polycondensation-One step rapid synthesis of High Molecular weight aliphatic polyesters. Presented in 6th International Microwaves in Chemistry Conference	6th International Microwaves in Chemistry Conference			USA	2008
T. Nakamura, R. Nagahata <b>S. Velmathi</b> , and K. Takeuchi	Extremely Rapid Synthesis of Aliphatic Polyesters by Direct Poly condensation of 1:1 Mixtures of Dicarboxylic acids and Diols using Microwaves,	MACRO 2008			Taipei	2008
Takashi Nakamura, Ritsuko Nagahata, Sivan <b>Velmathi</b> , Kazuhiko Takeuchi	Microwave assisted Poly condensation for extremely rapid synthesis of aliphatic polyesters and scale up	Global Congress of Microwave Energy and Applications (GCMEA)			Japan	2008
<b>S. Velmathi</b> , U. Balakrishnan, N. Ananthi, P. Chandrasekhar, R. Ananthi	Rapid and eco friendly synthesis of Imides and Bis imides using microwaves	National Seminar on Recent developments in Green Chemistry				2007
K. Takeuchi, <b>S. Velmathi</b> , R.	Microwave Assisted Rapid	1 <sup>st</sup> European Chemistry			Hungary	2006

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Nagahata, Sugiyama	J.	Synthesis of Bio degradable Poly(alkylene succinates)	Congress held at Budapest				
<b>S. Velmathi,</b> Nagahata, Sugiyama, Takeuchi	<b>R.</b> J. K.	Eco-friendly Method of Synthesis of Chiral Trimellitimid es and Pyromellitimid es Using Microwaves	6 <sup>th</sup> Green and Sustainable Chemistry Network symposium			Japan	<b>2006</b>
<b>S. Velmathi,</b> Nagahata, Sugiyama, and Takeuchi	<b>R.</b> J. K.	Microwave assisted synthesis and characterization of novel adamantine containing poly ester-imides	8 <sup>th</sup> International Polymer Conference held in Fukuoka			Japan	<b>2005</b>
<b>S. Velmathi,</b> Nagahata, Sugiyama, Takeuchi	<b>R.</b> J. K.	Rapid and eco friendly synthesis of poly (butylene succinate) by distannoxane catalyst using Microwaves	5 <sup>th</sup> Green and Sustainable Chemistry Network symposium			Japan	<b>2005</b>
<b>S. Velmathi.</b> Nagahata, J. Sugiyama, K. Takeuchi	<b>R.</b>	Microwave assisted rapid and environmental ly friendly route for the synthesis of trimellitimid es and pyromellitimid es	5 <sup>th</sup> International symposium on microwave science and its application			Japan	<b>2005</b>
<b>S. Velmathi.</b> Nagahata, J. Sugiyama, K. Takeuchi	<b>R.</b>	Microwave assisted synthesis of Poly (butylene succinate) using	4 <sup>th</sup> International symposium on microwave science and			Japan	<b>2004</b>

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	distannoxane catalyst	its application				
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and <b>S. Velmathi</b>	Novel chiral oxazaborolidines in asymmetric synthesis	31 <sup>st</sup> Great lakes regional meeting of the American chemical society			Milwaukee	<b>1998</b>
S. Narasimhan, S. Swarnalakshmi, R. Balakumar and <b>S. Velmathi</b>	New bimetallic chiral reagents in asymmetric synthesis	31 <sup>st</sup> Great lakes regional meeting of the American chemical society			Milwaukee	<b>1998</b>
<b>S. Velmathi</b> , S. Swarnalakshmi, R. Balakumar and S. Narasimhan	Chemo selectivity of Tetra butyl ammonium Borohydride	<i>Chemists Meet</i>			Madras	<b>1997</b>

(C) Patents, Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
R. Nagahata, <b>S. Velmathi</b> , J. Sugiyama, and K. Takeuchi	Synthesis of aliphatic polyester using microwaves	Japanese Patent		
R. Nagahata, <b>S. Velmathi</b> , J. Sugiyama, and K. Takeuchi	Method for producing aromatic carboxylic acid imides	Japanese Patent		
R. Nagahata, <b>S. Velmathi</b> , J. Sugiyama, and K. Takeuchi	Synthesis of aliphatic polyester with SnCl <sub>2</sub> catalyst using MW under vacuum	Japanese Patent		
<i>S. Velmathi</i>	<b>A Special Issue on Synthesis and Applications of Porous Materials</b>	Adv. Porous Mater	2015	