

Dr. T. STALIN ASSOCIATE PROFESSOR

## Contact

Address : Department of Industrial Chemistry

Alagappa University Karaikudi-630003 Tamil Nadu

India.

Employee Number : 12409

Contact Phone (Mobile) : +91-6381044538

Contact e-mail(s) : stalin.t@alagappauniversity.ac.in & drstalin76@gmail.com

## **Academic Qualifications**

Degree	Institution	Year	Branch	Class
Ph.D.	Annamalai University, Tamilnadu, India.	2008	Chemistry	Awarded
M.Phil.	Annamalai University, Tamilnadu, India.	2003	Applied Chemistry	First class
M.Sc.	Annamalai University, Tamilnadu, India.	2000	Chemistry	First class
B.Sc.	Bharathidasan University, Tamilnadu, India	1996	Chemistry	First class

## **Teaching & Research Experiences**

**Total Teaching Experience:** 15 Years

Position	Institution	Duration
Associate Professor	Department of Industrial Chemistry Alagappa University, Karaikudi Tamilnadu, India.	2021 – Till date
Assistant Professor	Department of Industrial Chemistry Alagappa University, Karaikudi Tamilnadu, India.	2009 - 2021.

## PDF/ Visiting Professor: Abroad

Position	Institution	Duration
Post-doctoral Researcher (Raman Fellow)	University of Miami, Florida, USA.	2017-2018

## **Academic and Additional Responsibilities**

S. No.	Position	Position University Bodies		od
			From	To
1	Chief Superintendent	Alagappa University	May-2023	June-2023
	for Regular PG	Karaikudi -630003 Tamil Nadu, India.		
	Examinations			
2	Chief Superintendent	Alagappa University	June-2023	July-2023
	for DDE	Karaikudi -630003 Tamil Nadu, India.		
	Examinations			
3	Chief Superintendent	Alagappa University	November -	December
	for Regular PG	Karaikudi -630003 Tamil Nadu, India.	2022	- 2022
	Examinations			
4	Chief Superintendent	Alagappa University	December -	January-
	for DDE	Karaikudi -630003 Tamil Nadu, India.	2022	2023
	Examinations			

## **Areas of Research**

- ❖ Develop the Organic solar cell materials and their fabrications.
- Preparation and characterizations of newer cathode, anode, and electrolyte materials for different solar cells.
- ❖ Develop the Carbon Quantum Dots, Fluorescence, and electrochemical sensor probes.

### **Research Supervision / Guidance**

Program	of Study	Completed	Ongoing
Research	Ph.D.,	10	7
	M.Phil.,	9	-
PG Projects	PG	60	7

#### Ph.D., Students/Thesis Guided at Alagappa University, Tamilnadu, India.

- 1. K. Srinivasan, Register No.: 0087 & 08-09-2009, Full Time Ph.D., Scholar (May 2014). Thesis Title: Preparation and characterization of inclusion complexes of aromatic dinitro compounds with β-cyclodextrin and their application as uv absorber in ball point pen ink. Present position: Assistant Professor, Dept. of Chemistry, Sree Sevugan Annamalai College, Devakottai- 630303, Tamil Nadu, INDIA.
- 2. R. Kavitha, Register No.: 0138 & 10-12-2009, Part Time Ph.D., Scholar (October 2014). Thesis Title: Study on photophysical behavior of inclusion complexes between naphthalene derivatives and β-cyclodextrin and their application for chemosensor. Present position: Assistant Professor, Dept. of Chemistry, Sri Sarada College for Women, Salem-636016, Tamil Nadu, INDIA.
- 3. C. Menaka, Register No.: 0150 & 20-02-2010, Full Time Ph.D., Scholar (July 2015). Thesis Title: Development of electrode and electrolyte materials for solar cell applications. Present position: PG Teacher, Govt Girls Higher Secondary School, Gobi, ERODE -638476, Tamil Nadu, INDIA.
- 4. S. Mohandoss, Register No.: 0190 & 07-05-2010, Full Time Ph.D., Scholar (May 2016). Thesis Title: Study on host-guest inclusion complexes and their colorimetric and fluorescent chemosensors applications.

**Present position:** Research Professor, School of Chemical Engineering, Yeungnam University, Gyeongsan, SOUTH KOREA.

5. A. Shanmugapriya, Register No.: 0230 & 15-09-2010, Full Time Ph.D., Scholar (July 2016).

Thesis Title: Preparation and characterization of inclusion complexes of poorly water soluble drugs with  $\beta$ -cyclodextrin and their pharmaceutical applications

**Present position:** Assistant Professor, Department of Chemistry, PSR Arts and Science College, Sivakasi-626140, Tamil Nadu, INDIA.

6. K. Paramasivaganesh, Register No.: 0106 & 09-10-2009, Part Time Ph.D., Scholar (March 2017).

Thesis Title: Study of host-guest inclusion complexes between different biphenyl compounds and  $\beta$ -cyclodextrin and their antibacterial activity.

**Present position:** Assistant Professor, Department of Chemistry, Arumugam Pillai Seethai Ammal College, Tirupattur – 630211, Tamil Nadu, INDIA.

## 7. M. Maniyazagan, Register No.: 0679 & 07-05-2013, Full Time Ph.D., Scholar (April 2017).

**Thesis Title:** Preparation and characterization of new fluorescent probes for chemosensor applications: photophysical, *in-silico* and *in-vitro studies* 

**Present position:** Research Professor, Nanotechnology & Advanced Materials Engineering, Sejong University, Seoul, SOUTH KOREA.

# 8. B. Suganya Bharathi, Register No.: 0946 & 30-07-2014, Full Time Ph.D., Scholar – (October 2020).

**Thesis Title:** Development of functional nanofibrous scaffold materials and theirwound healing studies

**Present position:** Assistant Professor, Department of Chemistry, Dayananda Sagar University, Bengaluru, Karnataka - 560078, INDIA.

#### 9. K. Sakthivelu, Register No.: 0570 & 07-12-2012, Full Time Ph.D., Scholar – (June 2021).

**Thesis Title:** Preparation and Characterizations of Polymeric materials for Solar Cell Application

**Present position:** Post-Doctoral Researcher, School of Chemical Engineering, Yeungnam University, Gyeongsan, SOUTH KOREA.

# 10. G. Vigneshkumar, Reg. No.: 1756 & 27-10-2017, Full Time Ph.D., Scholar – (24.01.2024 Viva-Voce Examination completed).

**Thesis Title:** Studies on cyclodextrins based host-guest complexes for electrochemical and fluorescent sensor applications

**Present position:** Searching Post-doctoral position in abroad.

# 11. N. Vimalasruthi, Reg. No.: 1954 & 04-08-2018, Full Time Ph.D., Scholar – (Thesis submitted; March - 2024)

**Thesis Title:** Spectral studies on cyclodextrins with select phenolic compounds and their electrospun nanofibers for biological and sensor applications

## 12. S. Esakkimuthu, Reg. No.: 2232 & 04-09-2019, Full Time Ph.D., Scholar – (Ongoing)

**Thesis Title:** Synthesis of red-to-blue upconversion system based on triplet—triplet annihilation and copolymeric electrospun fiber for the solar cell device

#### 13. V. Kannan, Reg. No.: 2464 & 23-12-2020, Full Time Ph.D., Scholar – (Ongoing)

**Thesis Title:** Synthesis of Cinnamic acid derivatives and their binding properties to Cyclodextrins and Cucurbiturils host molecules

# 14. P. Sowmiapratha, Reg. No.: R20162802 & 24-12-2021, Full Time Ph.D., Scholar – (Ongoing)

**Thesis Title:** Synthesis and characterization of the trans–cinnamic acid methyl esters and inclusion complex studies with  $\beta$ -Cyclodextrin and Cucurbit (7) uril

#### 15. V. Ayerathal, Reg. No.: R20223085 & Full Time Ph.D., Scholar – (Ongoing)

**Thesis Title:** Synthesis and characterizations of select drug derivatives and their inclusion complexes with cyclodextrins for pharmaceutical applications

### 16. M. Sujitha, Reg. No.: R20223086 & Full Time Ph.D., Scholar – (Ongoing)

**Thesis Title:** Synthesis and characterizations of aromatic heterocyclic compounds and their inclusion complexes with cyclodextrins for biological applications

# 17. V V. Ravikumar, Reg. No.: R20223123 & 08.11.2023, Part - Time Ph.D., Scholar - (Ongoing)

**Thesis Title:** Preparation and characterizations of medicinal properties compounds from plants and their inclusion complexes with Cyclodextrins for pharmaceutical and biological applications

## M.Phil., Dissertation / Guided at Alagappa University, Tamilnadu, India.

### 1. K. Kayalvizhi, Reg. No.: 2009596007, 2009 – 2010 batch (Awarded)

Thesis Title: Study of inclusion complex of Diphenylamine and  $\beta$ -Cyclodextrin; Photopysical and electrochemical behaviors

#### 2. J. Vaheethabanu, Reg. No.: 2009596014, 2009 – 2010 batch (Awarded)

Thesis Title: Spetroscopic and electrochemical studies of ortho-anisidine in different solvents, pH and  $\beta$ -Cyclodextrin

#### 3. D. Krishna veni, Reg. No.: 2010596004, 2010 – 2011 batch (Awarded)

Thesis Title: Spetroscopic and electrochemical studies of ortho-anisidine in different solvents, pH and  $\beta$ -Cyclodextrin

#### 4. K. Sathya, Reg. No.: 2011596007, 2011 – 2012 batch (Awarded)

**Thesis Title:** Investigation of polyaniline counter electrode and polymer gel electrolyte for dye-sensitised solar cell applications

#### 5. P. Malathi, Reg. No.: 2013596003, 2013-2014 Batch, (Awarded)

**Thesis Title:** Preparation and characterization of Rhodamine derivative and their chemosensor applications

#### 6. M. Mohana, Reg. No.: 2014596006, 2014- 2015 Batch, (Awarded)

Thesis Title: Spectral study an inclusion complexation between aromatic carboxylic acid and  $\beta$ -Cyclodextrin

#### 7. A. Saranyadevi, Reg. No.: 2015596006, 2015- 2016 Batch, (Awarded)

**Thesis Title:** Electrochemical preparation and characterization of poly(aniline)-graphene oxide binary composite counter electrode for Dye sensitized solar cell

## 8. M. Manojkumar, Reg. No.: 2017596004, 2017- 2018 Batch, (Awarded)

**Thesis Title:** Graphene oxide decorated Methylammonium lead iodide Nanocrystalline materials for Perovskite Solar Cell

## 9. P. Muthuselvi, Reg. No.: 2018596006, 2018- 2019 Batch, (Awarded)

**Thesis Title:** Fabrication of Bromelain-Modified Poly (Vinyl Alcohol)/Hydroxy Ethyl Cellulose Electrospun Mats and their Applications as Antibacterial and Antioxidant Studies

## **Publications**

Inte	rnational	N	ational	Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
84	2	1	58	3

**Cumulative Impact Factor (as per JCR)** : 351.30

**h-index** : 29

**i10 index** : 59

**Total Citations** : 2154

## **Funded Research Projects**

## **Completed Projects:**

C N.	A	Per	riod	D 4 T'41.	D J 4
S.No.	Agency	From	To	Project Title	<b>Budget</b> (Rs. In lakhs)
1	RUSA 2.0 Phase II	2022	2024	Preparation, Charaterizations, and fabrication of Organic solar cell	4, 00,000
2	DST Govt. of India.	2019	2022	Preparation and characterization of electrically conducting organic polymer photoactive film for organic photovoltaic cells: by electrochemical doping and electrospinning approaches	32,82,500
3	RUSA 2.0 Phase I	2018	2019	Preparation and Charaterizations of Solar cell materials for DSSC	3, 35,000
4	UGC Govt. of India.	2017	2018	Improvements of Drug Propertiesby Cyclodextrin Complexation –Raman fellowships for postdoctoral research for Indian scholars in USA.	25,13,752
5	DST Govt. of India.	2011	2014	Enhanced Host-guest electrochemical recognition of various organic pollutants using cyclodextrin in the presence of carbon nanotubes	21,20,000
6	UGC Govt. of India.	2011	2014	Development of newer modified electrodes using conducting polymer nano composites for dye Sensitized solar cells	7,23,800

				Fluorescence biosensor based on	nsoluble	
7	AURF	2009	2010	β-cyclodextrin polymer for	direct	64,000
				determination of cholesterol and	2, 4- and	
				2, 6-dinitrophenols		

#### **Distinctive Achievements / Awards**

- Alagappa University, Karaikudi, Tamil Nadu, India Outstanding Academic and
   Research Excellence Appreciation Certificate award 2023.
- Alagappa University, Karaikudi, Tamil Nadu, India Promising Researcher Award 2022; Certificate with cash prize Rs. 3000/-.
- Alagappa University, Karaikudi, Tamil Nadu, India Vallal Alagappar Research
   Recognition Award 2020.
- University grants commission, New Delhi, India— Raman fellowships for postdoctoral research for Indian scholars in USA, 2017.
- Department of Science & Technology (INDIA) SERC Fast Track YOUNG
   SCIENTIST AWARD, 2011.

## **Events organized in leading roles**

Number of Seminars / Conferences / Workshops / Events organized:

Position	Programme	Duration	Institution
Organizing	International Conference on	22 <sup>nd</sup> & 23 <sup>rd</sup> , March	Alagappa University
Secretary	Frontier Areas in Chemical	2024	Karaikudi - 630003
	Technologies – 2024		Tamil Nadu, India.
	(FACTs-2024)		
Organizing	Nobel Excellence Talks - ACT	13 <sup>th</sup> March, 2020	Alagappa University
Secretary	NExT: Nobel Prize in Chemistry		Karaikudi - 630003
			Tamil Nadu, India.
Organizing	International Seminar on	25 <sup>th</sup> & 26 <sup>th</sup> July, 2019	Alagappa University
secretary	Frontier Areas in Chemical		Karaikudi - 630003
	Technologies – 2019		Tamil Nadu, India.
	(FACTs-2019)		
Co-	National Seminar on Frontier	21 <sup>st</sup> & 22 <sup>nd</sup> March,	Alagappa University
Organizing	Areas in Chemical Technologies	2018	Karaikudi - 630003
Secretary	– 2018 (FACTs-2018),		Tamil Nadu, India.
Joint	International Seminar on	21 <sup>st</sup> - 23 <sup>rd</sup> March,	Alagappa University
Secretary	Frontier Areas in Chemical	2016	Karaikudi - 630003
	Technologies – 2016		Tamil Nadu, India.

	(FACTs-2016)		
Organizing	National Seminar on Frontier	6 <sup>th</sup> & 7 <sup>th</sup> March, 2015	Alagappa University
Secretary	Areas in Chemical Technologies		Karaikudi - 630003
	- 2015 (FACTs-2015)		Tamil Nadu, India.
Convener	National Seminar on Recent	21 <sup>st</sup> & 23 <sup>rd</sup> , March,	Alagappa University
	Advances in Textile and	2012	Karaikudi - 630003
	Electrochemical Sciences,		Tamil Nadu, India.
	Alagappa University		
	(RATES-2012)		
Со-	National seminar on Recent	4 <sup>th</sup> & 5 <sup>th</sup> , December,	Alagappa University
convener	Advances in Textile and	2009	Karaikudi - 630003
	Electrochemical Sciences,		Tamil Nadu, India.
	Alagappa University		
	(RATES-2009)		

## **Events Participated**

Number of Seminars / Conferences / Workshops / Events organized:

National Conferences: 43
International Conferences: 20

### Overseas Exposure / Visits

- ❖ Poster presentation at International Conference on Solid State Devices and Materials (SSDM-2019) during 2<sup>nd</sup> to 5<sup>th</sup> September 2019 at Nagoya University, JAPAN.
- ❖ Poster presentation at Gordon Research Conference-Photochemistry, July 23-28, 2017, Bates college, Lewiston, Maine 04240, USA.
- ❖ Post-doctoral Researcher (Raman fellowship funded by UGC, New Delhi), 2017-2018. University of Miami, Florida, USA.

#### **Membership**

#### **Professional Bodies**

- 1. Indian Science Congress Association, Kolkata, India (L14707).
- 2. Solid State Chemistry, Jammu and Kashmir, India.
- 3. Indian society for Radiation and Photochemical sciences, Bombay, India.

## **Advisory Board**

Year / Period	Name of the BoS / AdministrativeCommittee / Academic Committee	Role
On going	Department of Industrial Chemistry, Alagappa University, Karaikudi- 630 003, Tamilnadu, India.	Member

## **Academic Bodies in Other Institutes/ Universities**

Year / Period	Name of the BoS / AdministrativeCommittee / Academic Committee	Role
2023 - 2024	Department of Chemistry, JJ College of Arts and Science,	Board of
2022 – 2023	Pudukkottai, Tamilnadu, India.	Studies (BoS) Member
	Department of Chemistry, Sengamalathayaar educational	Board of
2021	trust women's college, Mannargudi- 614016, Tamil Nadu.	Studies (BoS) Member
	Department of Chemistry of Dhanalakshmi Srinivasan	Board of
2020	College of Arts & Science for Women, Perambalur,	Studies (BoS)
	Tamilnadu, India.	Member
	Department of Chemistry, Periyar E.V.R College,	Board of
2019	Tiruchirapalli- 620023.	Studies (BoS)
		Member
2019	"National Science day" Oral and poster presentation Competation, Council of Scientific and Industrial Research—Central Electro Chemical Research Institute (CSIR—CECRI), Karaikudi-630003, Tamil Nadu.	Judge
2019	Department of Chemistry, Periyar E.V.R College,	Academic Audit
2019	Tiruchirapalli- 620023.	Member
2018	CSIR-Senior Research Fellow for extension of fellowship	
	for 5 <sup>th</sup> year, Council of Scientific and Industrial Research—	Member of
	Central Electro Chemical Research Institute	Assessment
	(CSIR–CECRI), Karaikudi- 630003, Tamil Nadu.	

## **List of Research Articles / Recent Publications (2023 – 2024 only)**

S. No.	Authors/Title of the paper/Journal	Impact Factor
1	Esakkimuthu Shanmugasundaram, Kannan Vellaisamy, Vigneshkumar Ganesan, Vimalasruthi Narayanan, Na'il Saleh, <b>Stalin Thambusamy</b> *, (2024) Dual applications of cobalt oxide grafted carbon quantum dots nanocomposite	4.1

	for two electrode asymmetric supercapacitor and photocatalytic behavior, ACS OMEGA 9, 12, (2024) 14101–14117.	
2	Esakkimuthu Shanmugasundaram, Vigneshkumar Ganesan, Vimalasruthi Narayanan, Kannan Vellaisamy, Na'il Saleh, <b>Stalin Thambusamy*</b> , ( <b>2024</b> ) Construction of binder-free PANI-CQD-Cu electrode by electrochemical method for flexible supercapacitor applications, Nanoscale Advances 6 (2024) 1765 – 1780. [Royal Society of Chemistry]	5.5
3	S. Gokul Eswaran, T. Stalin, D. Thiruppathi, Manivannan Madhu, S. Santhoshkumar, Jolanta Warchol, A. Santhana Krishna Kumar, Wei-Lung Tseng, and N. Vasimalai, (2024) One-pot synthesis of carbon dots from neem resin and the selective detection of Fe(II) ions and photocatalytic degradation of toxic dyes, RSC Sustainability 2 (2024) 635-645.	n/a
4	Kannan Vellaisamy, Chandramohan Govindasamy, Muhammad Ibrar Khan Vigneshkumar Ganesan, Vimalasruthi Narayanan, Esakkimuthu shanmugasundram, Ayerathal Velmurugan, Rajaram Rajamohan, <b>Stalin Thambusamy*</b> , (2023) Eco-Friendly Production of Palladium-Modified γ-Cyclodextrin and Its Methyl Cinnamate Inclusion Complex: Catalyst for Reduction and Antibacterial Properties, Materials Today Communications 37 (2023) 107367. [Elsevier]	3.6
5	Vimalasruthi Narayanan, Chandramohan Govindasamy, Esakkimuthu Shanmugasundram, Vigneshkumar Ganesan, Rajaram Rajamohan, and <b>Stalin Thambusamy</b> *, ( <b>2023</b> ) Preparation of Gallic acid functionalized Polyvinyl alcohol/β-cyclodextrin-Silver nanoparticles cast film as an antimicrobial and antioxidant agent, Journal of Applied Polymer Science, (2023) e54652. [Wiley]	3.0
6	Vimalasruthi Narayanan, Vigneshkumar Ganesan, Esakkimuthu Shanmugasundram, S. Durganandini, Kannan Vellaisamy, Hariharan Amirthalingam, Rajaram Rajamohan, <b>Stalin Thambusamy*</b> , (2023) Spectral studies of synthetic symmetric syringaldehyde di-Schiff azine with β-cyclodextrin inclusion complexes as a fluorescent probe for the detection of metal ions, Journal of Photochemistry and Photobiology A: Chemistry 445, (2023) 115069. [Elsevier].	5.1
7	Maniyazagan Munisamy, Balamurugan Rathinam, Esakkimuthu Shanmugasundaram, Vigneshkumar Ganesan, Vimalasruthi Narayanan, Suganya Bharathi Balakrishnan, Selvam Kaliyamoorthy, and <b>Stalin Thambusamy*</b> , (2023) β-Cyclodextrin-Encapsulated Rhodamine derivatives Core–Shell Microspheres – Based Fluorescent Sensor for Au <sup>3+</sup> and Template for Generating Microplates of Gold, Micromachines 14(7) (2023) 1443, [MDPI].	3.5
8	Esakkimuthu Shanmugasundaram, Chandramohan Govindasamy, Muhammad Ibrar Khan, Vigneshkumar Ganesan, Vimalasruthi Narayanan, Kannan Vellaisamy, Rajaram Rajamohan, <b>Stalin Thambusamy*</b> , (2023) Electrospun and electropolymerized carbon nanofiber-polyaniline-Cu material as a hole transport material for organic solar cells, Carbon Letters, DOI https://doi.org/10.1007/s42823-023-00578-0, (2023). [Springer].	3.1
9	Esakkimuthu Shanmugasundaram, Vigneshkumar Ganesan, Vimalasruthi Narayanan, Kannan Vellaisamy, Rajaram Rajamohan*, Yong Rok Lee*, Selvam Kaliyamoorthy, <b>Stalin Thambusamy</b> *, (2023) Hetero atom (boron,	3.5

	nitrogen, and fluorine) quantum dot doped polyaniline-photoactive film preparation and characterization for organic solar cell applications, New Journal of Chemistry, DOI https://doi.org/10.1039/D3NJ02435K (2023). [Royal Society of Chemistry].	
10	Jeyavani Jeyaraj, Vaseeharan Baskaralingam*, <b>Thambusamy Stalin</b> , Inbasekaran Muthuvel, <b>(2023)</b> Mechanistic vision on polypropylene microplastics degradation by solar irradiation using TiO <sub>2</sub> nanoparticle as photocatalyst, Environmental Research 233 (2023) 116366. <b>[Elsevier]</b>	8.4
11	K. Paramasivaganesh, Vimalasruthi Narayanan, Vigneshkumar Ganesan, Esakkimuthu shanmugasundram, Rajaram Rajamohan, Yong RokLee, <b>Stalin Thambusamy*</b> , ( <b>2023</b> ) Inclusion complexation of biphenyl-3,3',4,4'-tetraamine and 4,4'-diaminobiphenyl-3,3'-diol withβ-cyclodextrin for antibacterial activity, Journal of Molecular Structure 1289 (2023) 135866. [Elsevier].	3.8
12	Vigneshkumar Ganesan, Murali Krishnan Mani, Vimalasruthi Narayanan, Esakkimuthu Shanmugasundram, Kannan Vellaisamy,Vaseeharan Baskaralingam, Jeyavani Jeyaraj, GiriBabu Veerakanellore, Rajaram Rajamohan, <b>Stalin Thambusamy*</b> , (2023) Synthesis, characterization of 4,4'-((1E,1'E)-hydrazine-1,2-diylidenebis(methanylylidene)) diphenol and the inclusion complex with γ-cyclodextrin as a fluorescent probe for detection of Al <sup>3+</sup> , Journal of Photochemistry and Photobiology A: Chemistry. 442 (2023) 114814. [Elsevier].	5.1
13	Arumugam Shanmuga Priya, Jeyachandran Sivakamavalli, Baskaralingam Vaseeharan, Rajaram Rajamohan, Yong Rok Lee, <b>Stalin Thambusamy*</b> , (2023) Interaction of torsemide with native cyclodextrin through inclusion complexation: In-vitro drug release, antibacterial and antibiofilm activities, Journal of Molecular Structure 1286 (2023) 135624. [Elsevier]	3.8
14	Jeyaraj Jeyavani, Ashokkumar Sibiya, <b>Thambusamy Stalin</b> , Ganesan Vigneshkumar, Khalid A. Al-Ghanim, Mian Nadeem Riaz, Marimuthu Govindarajan and Baskaralingam Vaseeharan*, ( <b>2023</b> ) Biochemical, Genotoxic and Histological Implications of Polypropylene Microplastics on Freshwater Fish Oreochromis mossambicus: An Aquatic Eco-Toxicological Assessment, Toxics 11 (2023) 282. [MDPI].	4.4
15	Sonaimuthu Mohandoss, Kuppu Sakthi Velu, <b>Thambusamy Stalin</b> , Naushad Ahmad, Suliman Yousef Alomar, Yong Rok Lee, ( <b>2023</b> ) Tenofovir antiviral drug solubility enhancement with β-cyclodextrin inclusion complex and in silico study of potential inhibitor against SARS-CoV-2 main protease (M <sup>pro</sup> ), 377(1) (2023) 121544. <b>[Elsevier].</b>	6.6
16	Vimalasruthi Narayanan, Ayerathal Velmurugan, Vigneshkumar Ganesan, Esakkimuthu Shanmugasundram, Sowmiapratha Pandikannan, Rajaram Rajamohan, Giri Babu Veerakanellore, <b>Stalin Thambusamy*, (2023)</b> Polyvinyl alcohol-mediated electrospun nanofibers of synthetic 4-(benzyloxy)-3,5-dimethoxybenzaldehyde and β-Cyclodextrin and its biological applications, Materials Today Communications 35 (2023) 105548. <b>[Elsevier].</b>	3.6
17	Sakthi Velu Kuppu, Mohandoss Sonaimuthu, Senthilkumaran Marimuthu, Sethuraman Venkatesan, Balaji Murugesan, Nafis Ahmed, Aravindan Karuppanan, Prakash Sengodu, Anandharaj Jeyaraman, <b>Stalin Thambusamy*</b> ,	3.8

	Yong Rok Lee, (2023) NiO @ ZnO composite bimetallic nanocrystalline decorated TiO <sub>2</sub> -CsPbI <sub>3</sub> photo-anode surface modifications for perovskite-sensitized solar cell applications, Journal of Molecular Structure 1276 (2023)134763. [Elsevier].	
18	Sakthi Velu Kuppu, Marimuthu Senthilkumaran, Venkatesan Sethuraman, Murugesan Balaji, Chokalingam Saravanan, Nafis Ahmed, Sonaimuthu Mohandoss, Yong Rok Lee, Jeyaraman Anandharaj, <b>Stalin Thambusamy*</b> , (2023) The surfactants mediated electropolymerized poly(aniline) (PANI)-reduced graphene oxide (rGO) composite counter electrode for dye-sensitized solar cell, Journal of Physics and Chemistry of Solids 173 (2023) 111121 [Elsevier].	4.3
19	Sakthi Velu Kuppu, Sonaimuthu Mohandoss, Balaji Murugesan, Sethuraman Venkatesan, Senthil Kumaran Marimuthu, Saravanan Chokalingam, Anandharaj Jeyaraman, Nafish Ahmed, <b>Stalin Thambusamy*</b> , Yong Rok Lee, (2023) Developments of photo-anode materials for dye-sensitized solar cell using natural sensitizer of Portulaca grandiflora flower soaked Titania nanocrystalline and nanofiber, Chemical Physics Letters 812 (2023) 140271. [Elsevier].	2.7

### Paper presented in National and International Conferences (Selectively):

#### **National Conferences:**

- 1. B. Suganyabharathi, M. Mohana and **T. Stalin\***, Preparation and characterizations of the solid inclusion complexes of 3-aminopyrazine-2-carboxylic acid and 6-phenylpyridine-2-carboxylic acid with β-Cyclodextrin and their Antimicrobial activity, *National Seminar on Recent Trends in Organic Synthesis and Chemical Biology (RTSB-2015)*, held at Department of Chemistry, Annamalai University, Chidambaram, Tamilnad. On 9-10 October, 2015.
- 2. M. Maniyazagan and **T. Stalin\***, Studies of the Inclusion complex between 8-Hydroxyquinoline and Cyclodextrins and its Chemosensor application, *National Symposium on Radiation and Photochemistry (NSRP)*, held at Department of Chemistry, IIT Kanpur, Kanpur-208 016, on March 9-11, 2015.
- 3. M. Maniyazagan and **T. Stalin**\*, A Study on Photophysical behavior of Triclosan/Hydroxypropyl–β–Cyclodextrin Supramolecular Inclusion complexes and their Antibacterial activity, National Symposium on Radiation and Photochemistry (NSRP), held at Department of Chemistry, IIT Kanpur, Kanpur-208 016, on March 9-11, 2015.

#### **International Conferences:**

1. G. Vigneshkumar, **T. Stalin\***, Synthesis, characterization of 4,4'-((1E,1'E)-hydrazine-1,2-diylidenebis(methanylylidene)) diphenol and the inclusion complex with γ-cyclodextrin as a fluorescent probe for detection of Al<sup>3+</sup>, National Conference on "Newer materials for energy and environmental applications" (NCNM-2022) held on 22<sup>nd</sup> & 23<sup>rd</sup> of September, 2022 at Dept. of Chemistry, Annamalai

University, Chidambaram, Tamilnadu.

- 2. G. Vigneshkumar, **T. Stalin\***, Silver nanoparticle decorated γ-cyclodextrin with 1,5-dihydroxy naphthalene inclusion complex; as a sensitive fluorescence probe for dual metal ion sensing employing spectrum techniques, International Conference on "Materials Science for Sustainable Environment" (ICMSSE-2022) held on 23<sup>rd</sup> & 24<sup>th</sup> August 2022 at School of Physical Sciences, PG and Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli, Tamilnadu.
- 3. N. Vimalasruthi and **T. Stalin\***, Synthesis and characterization of rhodamine derivatives for dual metal ion sensing, International Conference on "2<sup>nd</sup> ICACSEM held on 28<sup>rd</sup> & 29<sup>th</sup> March 2022 at School of Physical Sciences, University of Madras, Guindy campus, Chennai 600 025.
- 4. S. Esakkimuthu and **T. Stalin\***, Preparation and Characterization PANI-CQD-Cu as a electrode material for supercapacitor applications" (ICMSSE-2022) held on 23<sup>rd</sup> & 24<sup>th</sup> August, 2022 at school of physical sciences, PG and research department of chemistry, Holy cross college (autonomous), Tiruchirappali, Tamilnadu.
- 5. S. Esakkimuthu and **T. Stalin\***, Preparation and characterization of up conversion carbon quantum dot doped polyaniline photoactive film for organic solar cell applications" International Conference on "2<sup>nd</sup> ICACSEM held on 28<sup>rd</sup> & 29<sup>th</sup> March 2022 at school of physical sciences, university of madras, Guindy campus, Chennai 600025.

#### **Invited Lectures: (Selectively):**

- National webinar on "Nanomaterials role in the chemical, physical and biological sciences" February 28<sup>th</sup> 2022, Department of Chemistry, M.R.Government Arts College, Mannargudi, Tamil Nadu.
- 2. International webinar on "Innovative Technology in Chemistry", March 2<sup>nd</sup> 2021, Department of Chemistry, Sengamalathayaar educational trust women's college, Mannargudi 614016, Tamil Nadu.
- 3. National webinar on "Photochemistry and its applications towards the development of solar cells" July 24<sup>th</sup> 2020, Department of Chemistry, Nehru Memorial College, Puthanampatti, Trichy, Tamil Nadu.
- 4. Felicitation Address TNSCST, DOTE, Chennai Sponseredprogramme on "Application of Science and Technology for rural areas for Farmers and Self-help group Women", Febraury 11<sup>th</sup> 2019, Sree Sevugan Annamalai College, Devakottai- 630303, Tamil Nadu, INDIA.
- 5. State level Seminar on "Recent Trends in Chemistry", September 28<sup>th</sup> 2018, Fatima College, Madurai 625001, Tamil Nadu.
- 6. National seminar on "Periodic Table of Chemical Elements (NSPTCE), November 8<sup>th</sup> 2019, Department of Chemistry, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya University

(SCSVMV), Kanchipuram, Tamil Nadu.

- 7. National seminar on "Contemporary applications in nuclear science & technology" (CANST-16), February 4<sup>th</sup> 2016, Department of Chemistry of Dhanalakshmi Srinivasan College of Arts & Science for Women, Perambalur, Tamilnadu, India.
- 8. Department of Chemistry, JJ College of Arts and Science, Pudukkottai, Tamilnadu, India. Title: Photochemistry and their uses, on February -2016.
- 9. Chemstar club activity- Department of Chemistry, Cauvery College for Women, Tiruchirappalli, Tamilnadu, India, on 10.09.2015.
- 10. One day Seminar on "Current research scenario on supramolecular chemistry" organized by Department of Chemistry, Ananda college, Devakottai, Tamilnadu, India, on 25.02.2015.

--- X ---