

1. Name and full correspondence address: DR. E. VAISHNAVI
Assistant Professor in Chemistry
SRI G.V.G Visalakshi College for Women, Udumalpet
2. Email(s) and contact number(s) : vaisuchemist@gmail.com,9362478921
3. Institution : SRI G.V.G Visalakshi College for Women, Udumalpet
642128
4. Date of Birth : 27.06.1987
5. Gender (M/F/T) : F
6. Category Gen/SC/ST/OBC : OBC

7. Academic Qualification (Undergraduate Onwards)

	Degree	Year	Subject	University/Institution	% of marks
1.	Undergraduate	2007	Chemistry	Mother Teresa University, Kodaikanal	90.5
2.	Post Graduate	2009	Chemistry	Bharathiar University, Coimbatore	72
3.	P.G Diploma	2007-2009	INDUSTRIAL CHEMISTRY.	Bharathiar University, Coimbatore	75
4.	Ph.D	July 2014	CHEMISTRY	Bharathidasan University, Tiruchirappalli	

8. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Degrees	Title	Date and year of award	Guidance	University
Ph.D.	Binding interaction and fluorescence probing of certain biomolecules by surface functionalized CdTe quantum dots	18.7.2014	Dr.R.Renganathan	Bharathidasan University

9. Work experience (in chronological order).

Positions held	Department	Name of the Institute	Date		Grade pay
			From	To	
Assistant Professor	Chemistry	Sri G.V.G Visalakshi College for Women (Autonomous) Udumalpet-642128	04/04/2017	Till date	AGP:6000 (level 10)

10. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S.No	Name of Award	Awarding Agency	Year
1.	Summer Research Fellowship	JNCASR	2008

2.	UGC-BSR (JRF) meritorious fellowship in science	BSR (JRF) and SRF	2011-2013 and SRF position from 2013- 2014.
----	---	-------------------	---

11. Publications (*List of papers published in SCI Journals, in year wise descending order*).

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	E. Vaishnavi and R. Renganathan	"Photochemical events during the photosensitization of colloidal ZnO nanoparticles by Riboflavin",	Bull. Mater. Sci.	35	1173-1179.	(2012)
2.	E.Vaishnavi and R. Renganathan	CdTe quantum dots as a fluorescence probe for vitamin B12 in dosage form "	Spectrochimica Acta A	115	603-609	(2013)
3.	E.Vaishnavi and R. Renganathan	"Turn-on-off-on" Fluorescence switching of Quantum dots-Porphyrin nanohybrid: A sensor for DNA	Analyst	139	225-234.	(2014)
4.	M. Asha Jhonsi, E. Vaishnavi, R. Suganya, A. Kathiravan, R. Renganathan,	"Photoinduced Interactions of TGA capped CdTe QDs with Certain Antioxidants"	Adv. Sci. Lett. 4		1-6.	(2011)
5.	P. Kalaivani, R. Prabhakaran, F. Dallemer, P. Poornima, E.Vaishnavi, E. Ramachandran, V. Vijaya Padma, R. Renganathan and K. Natarajan	DNA, protein binding, cytotoxicity, cellular uptake and antibacterial activities of new palladium(II) complexes of thiosemicarbazone ligands: effects of substitution on biological activity"	"Metallomics	4	101-113.	(2012)
6.	P. Kalaivani, R. Prabhakaran, E. Vaishnavi, T. Rueffer, H. Lang, P. Poornima, R. Renganathan, V. Vijaya Padma, and K. Natarajan "	Synthesis, structure, DNA/protein binding and in vitro cytotoxicity of new ruthenium metallates "	Inorg.Frontiers	1,	311-324	2014,
7.	P. Kalaivani, R. Prabhakaran, E. Vaishnavi, T. Rueffer, H. Lang, P. Poornima, R. Renganathan, V. Vijaya Padma, and K. Natarajan,	DNA/Protein binding and in vitro cytotoxicity of new isomeric organoruthenium complexes: Synthesis structural characterization	Journal of organometallic chemistry	762	67- 80	(2014)
8.	E.Vaishnavi and R. Renganathan	"Interaction of digestive enzymes with Tunable light emitting quantum dots: A thorough Spectroscopic investigation"	Luminescence	30	978-989.	(2015)
9.	R Vijayaraghavan, V Ellappan, P Dharmar, U	Preferential adsorption of uranium by functional groups	3 Biotech 8	3	1-9	2018

	Lakshmanan	of the marine unicellular cyanobacterium <i>Synechococcus elongatus</i> BDU130911				
10.	E Nandhakumar, P Priya, P Selvakumar, E Vaishnavi, A Sasikumar, ...	One step hydrothermal green approach of CuO/Ag nanocomposites: analysis of structural, biological activities	Materials Research Express 6	9	095036	2019

PAPERS IN PROCEEDING

1. **E. Vaishnavi** and R. Renganathan, Photoinduced interaction of CdTe quantum dots with azo dyes: A spectroscopic approach. "International Conference on Nanoscience and nanotechnology-2013" (ISBN-978-93- 82880-55-4)
2. K. Meenakshi priya, R. Selvakiruthika, S. Poorana chandra, S. Indhu, **E. Vaishnavi** and B. Nirmala. Graphene a Versatile Nanoplatfrom for Biological and Sensor Application: A Review National Level Conference on ADVANCED MATERIALS-2015 (ISBN 978-93-84743-38-3)
3. Advanced Materials for Next Generation Solar Cell. V.S. Vaanathi, P. Gnanamani, K. Gomathi, G. Asha and **E. Vaishnavi** National Level Conference on ADVANCED MATERIALS-2015 (ISBN 978-93-84743-38- 3)

12. Books Chapters

S.No	Title	Author's Name	Publisher	Year of Publication
1.	Quantum Dots Application in Biomolecules Interaction and Bioimaging	E Vaishnavi , R Renganathan	Integrative Nanomedicine for New Therapies, 247 Springer	2020
2.	Carbonaceous Nanostructures based Photocatalysts for Sustainable H2 Production	E. Nandhakumar E. Vivek, E. Vaishnavi , M. Prem Kumar, Perumal Devaraji, P. Selavakumar, N. Senthil Kumar	Springer Under review	2021

13. Any other Information

- ✓ Worked as Project Assistant for eight months in the Project Entitled "Photoinduced Reactions between Nanosized quantum dots of CdTe and Porphyrins/Metallo-Porphyrins"
- ✓ Four years of research experience in the field of Nanochemistry, Photochemistry, Solar energy conversion, CdTe Quantum dots to probe certain biomolecules and binding interaction with proteins and DNA.
- ✓ Guide UG Project in the field of green synthesis of nanoparticles
- ✓ **ABILITY TO HANDLE INSTRUMENTS**
 - o UV-VISIBLE Spectrophotometer
 - o Spectrofluorimeter
 - o IR Spectroscopy
 - o Cyclic Voltammeter

- o Spin coating
- o Chromatography ,TLC

SOFTWARE PROFICIENCY

- Operating System : Windows 95/ 98/ 2000/ XP
- Tools : Microsoft (Access, Word, Power point, Excel)
- Graphical Softwares : Chem Office, Origin, ACD labs and Chem Draw.
- Endnote X7 Reference Manager
- ICT TOOLS

IMPORTANT TOPICS KNOWN

- Nano chemistry
- Industrial Chemistry
- Physical Chemistry
- Inorganic chemistry

PROJECT

- Project Title : Nanocluster synthesis
- Team Size : One
- Role : Synthesis, Characterization
- Project Duration : May 2008 to July 2008
- **Guide : Prof. T. Pradeep**
- **Institution : Indian institute of Technology Madras**

- Project Title : Coordination behavior of thiosemicarbazone
- Team Size : one
- Role : Synthesis, Characterization
- Project Duration : December 2008 to April 2009
- **Guide : Prof. K. Natarajan**
- **Institution : Bharathiar University**

Presented :

ORAL PRESENTATION	:	5	
POSTER PRESENTATION	:	8	

Participated:

Orientation Course	:	1
Refresher Course	:	1
FDP	:	4
Short term Course	:	7

Acted as resource person:

- **Guest lecture in APA college for Women, Palani**
- **Guest lecture for Summer Internship students in BS Abdul Rehman Deemed University, Chennai.**

National /International conferences /Workshops organized:

- Organized a Hands on training under DBT Activities 10.01.2019
- Organized a Workshop under DBT Activities 17.9.2021