

FACULTY PROFILE

- 25 **Name & Designation** : Dr. RAJAJEYAGANTHAN R / LECTURER
- 26 **Date of Birth** : 20/06/1981
- 27 **Educational Qualification** : M.Sc., Ph.D. (TWAS fellowship)
- 28 **Date of Joining** : 15.11.2021
- 29 **Nature of Associative** : Regular
- 30 **Work Experience** :
- Teaching : 10 years
- Research : 10 years
- Industry : 5 years 9 months
- Others : Project Trainee: 5 months in ITC Ltd, PSPD
- 31 **Area of Specializations** : Physical Chemistry, Inorganic Chemistry and Industrial Chemistry
- 32 **Subjects teaching at Diploma Level** : 1. Engineering Chemistry I
2. Engineering Chemistry II
3. Engineering Chemistry Practical

9. Workshop Attended/ Organized :

Name of the Course	Status	University/Institution Place	Workshop Duration	Sponsoring Agency (UGC/ GoI/any other)
X-ray micro imaging workshop using synchrotron radiation and its application	Attended	RRCAT, Indore	14 -16, Sep 2017	BARC and MRSI, GoI

27. FDP attended / organized :

Name of the Course	FDP Attended	University/Institution Place	Course Duration	Sponsoring Agency (UGC/ GoI/any other)
International Faculty Development Program on Foremost Frontiers of Material Science	Attended	Sathyabama Institute of Science and Technology, Chennai	12-20 Sep, 2022	Sathyabama Institute of Science and Technology, Chennai
Bioinorganic Chemistry	Attended	IITM	Aug-Sep 2019	NPTEL, MHRD, GoI
Infrared Spectroscopy for Pollution Monitoring	Attended	IISc	Aug-Sep 2018	NPTEL, MHRD, GoI
Basic 3D Animation Using Blender	Attended	IITB	Mar-July 2018	IITBx, CDEEP, MHRD, GoI
FDP on Entrepreneurship	Attended	KARE	1-16, Dec 2017	NSTEDB, and EDII, GoI
Outcome based Pedagogic Principles for Effective Teaching	Attended	IITKGP	Jul-Aug 2017	NPTEL, MHRD, GoI
General Course on Intellectual Property	Attended	WIPO Academy	Jul-Aug 2017	WIPO

Name of the Course	FDP Organized	Course Duration	Sponsoring Agency (UGC/ GoI/any other)
FDP on Nuclear Power Technologies	Organized as NITTTR Nodal Officer	17/12/2018 – 21/12/2018	NITTTR, MoE, GoI

Year	Seminar	Title of the programme	Paper Presented/ Participated/ Resource Person/ Other	Level	Title of the Research paper	Date / Duration (From - To)	Organiser
2022	Attended	Emerging Trends in Industry 4.0	Participant	National	Series of Lectures	6/01/2022 to 12/01/2022	CIT Sandwich Polytechnic College, Coimbatore
2022	Attended	Advanced Materials for Armor Application	Participant	National	Ceramic Materials in Armor	1/10/2022	Indian Ceramic Society, Hyderabad Chapter
2021	Invited lecture	CHEMPARK Association webinar	Resource person	National	Corrosion Chemistry - Theories & Practice in the prevention	25/6/2021	Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur
2020	Invited lecture	Youtube live streaming webinar https://www.youtube.com/watch?v=iLfQbrZjju4	Resource person	National	Modern Analytical Techniques for Chemical Analysis	6/6/2020	Rajapalayam Rajus' College, Rajapalayam
2020	Invited lecture	National seminar in Emerging Frontiers in Modern Science	Resource person	National	Synchrotron Based Spectroscopy – NEXAFS and EXAFS	9/1/2020	Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur

28. Patents

: 2

S.No	Territorial Right	Title of the patent	Status
1	Brazil	Processo de obtenção de superfícies superhidrofóbicas utilizando nanopartículas funcionalizadas	Granted BR 102014005348-4 A2
2	India	Pyrotechnic formulation and method of preparing the same	Published (3.10.2022) and waiting for examination 202241056626

29. Technology Transfer

:Nil

30. Research Publications :21

31. No. of papers published in

National Journals : Nil

International Journals : 20

Conferences : 01

Selected Publication:

Year	Title Of Article /Research Paper	Name Of Journal	Journals published by	ISBN/ ISSN No.	Scopus/SCI/ Similar	Impact Factor
2022	Utilization of cashew nutshell biomass as eco-friendly sound-emitting pyrotechnic formulation to reduce sulfur usage in fireworks	Biomass Conversion and Biorefinery	Elsevier	2190-6815	SCI	4.103
2022	Three dimensional atomistic-scale electron density distribution analysis of ZnWO ₄ : Sm phosphors	Optik	Elsevier	0030-4026	SCI	2.84
2021	ZnWO ₄ :Eu ³⁺ phosphor with intense blue LED excitation: photoluminescence and electron density distribution analysis	Luminescence	Wiley	1522-7243	SCI	2.464
2021	Experimental analysis of tamarind seed powder-based flash powder composition for eco-friendly firecrackers	Journal of Thermal Analysis and Calorimetry	Springer	1388-6150	SCI	4.626
2020	Sm ³⁺ induced-SrWO ₄ Phosphor: analysis of photoluminescence and photocatalytic properties with electron density distribution Studies	Journal of Materials Science: Materials in Electronics	Springer	0957-4522	SCI	2.478
2020	Surfactants-assisted synthesis of ZnWO ₄ nanostructures: A view on photocatalysis, photoluminescence and electron density distribution analysis	Materials Characterization	Elsevier	1044-5803	SCI	4.342
2019	On the interfacial adhesion of fiber metal laminates using surface modified aluminum 7475 alloy for aviation industries – a study	Journal of Adhesion Science and Technology	Taylor & Francis	0169-4243	SCI	2.077
2019	Structural, optical and charge density analysis of Al doped ZnO Materials	Journal of Materials Science: Materials in Electronics	Springer	0957-4522	SCI	2.478
2018	Experimental and theoretical studies on the corrosion inhibition of vitamins – Thiamine hydrochloride or biotin in corrosion of mild steel	Egyptian Journal of Petroleum	Elsevier	1110-0621	SCOPUS	Yet to assign

	in aqueous chloride environment					
2017	Silver doped TiO ₂ nano crystallites for dye-sensitized solar cell (DSSC) applications	Materials Research Express	IOP Science	2053-1591	SCI	1.620
2013	NEXAFS and FTIR-ATR investigation of static and dynamic superhydrophobicity of functionalized titanium dioxide nanoparticle coating.	Journal of Brazilian Chemical Society	Brazilian Society of Chemistry	0103-5053	SCI	2.135
2012	Novel liquid-solid adhesion superhydrophobic surface fabricated using titanium dioxide and trimethoxypropylsilane.	Applied Surface Science	Elsevier	0169-4332	SCI	7.392
2011	Surface modification of synthetic polymers using UV photochemistry in the presence of reactive vapours	Macromolecule Symposia	Wiley	1022-1360	SCI	0.90

32. No. of Books published with details : Published 1 Book Chapter

S.No	Book Title	Chapter Title	Page	Publisher
1	Advances in Materials and Manufacturing Engineering	Study of emission analysis of tamarind-based ground-level pyrotechnics	629-635	Springer: Proceedings in Materials, 2021