

PROFILE OF THE FACULTY

1. Name, Address &email : Dr. E. Kumar
Assistant Professor of Physics
Department of Physics
School of Science
Tamil Nadu Open University,
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2. Designation & School : Assistant Professor & Assistant Director, CIQA
Department of Physics,
School of Science

3. Subject Specialization : Physics (Nanoscience)

4. Educational Qualification

S.No.	Examination Passed	Name of the Board/ University	Year of Passing	Subject
1	M.Sc.,	M.S University, Tirunelveli	2000	Physics
2	M.Phil.	M.S University, Tirunelveli	2005	Physics
3	B.Ed.,	IGNOU, New Delhi	2007	Physics
4	P.h.D.	PRIST University, Thanjavur	2011	Physics

5. Fellowship/Award

S.No.	Name	Institution	Purpose of Award	Year
1	Best Teacher	TNOU	Teacher Day Celebration	2018

6. Teaching Experience: 22 Years 8 Months

S.No	Name of Employer	Designation	Period of Employment	
			From	To
1	Infant Jesus College of Engineering, Thoothukudi	Lecturer in Physics	June 2000	June 2008
2	Infant Jesus College of Engineering & Technology, Thoothukudi	Assistant Professor in Physics	July 2008	Dec 2011
3	Infant Jesus College of Engineering & Technology, Thoothukudi	Professor	Jan 2012	Jan 2015
4	Tamil Nadu Open University, Chennai	Assistant Professor (SG)	Feb 2015	Till date

7. Administrative Experience

S.No.	Positions held	Name of the Institutions	Duration		Year of Experience
			From	To	
1	Head of the Department and I year Coordinator	Infant Jesus College of Engineering & Technology, Thoothukudi	Jun 2009	Jan 2015	6 Years

2	Coordinator, MPDD	Tamil Nadu Open University, Chennai	April 2016	Dec 2017	1 year 8 months
3	Asst Controller of Examination	Tamil Nadu Open University, Chennai	Jan 2018	Feb 2019	1 year 2 months
4	Estate Officer	Tamil Nadu Open University, Chennai	Jan 2020	July 2020	6 Months
5	Deputy Director, MPDD	Tamil Nadu Open University, Chennai	Sep 2020	March 2022	1 year 7 months
6	Assistant Director, CIQA	Tamil Nadu Open University, Chennai	July 2022	Till date	8 months

8. Research Supervision

Degree	Number Enrolled	Thesis Submitted	Degree Awarded
M.Phil.			4
Ph.D.	3	0	4

9. Patents, Articles and Research Publications and Presentations

Sl.No	Title of the Patent	Patent Given by Agency	The Patent office Journal Number	Date of Publication
1	WASTEWATER TREATMENT AND RECYCLING USING NANO-CATALYTIC ELECTROLYSIS TECHNOLOGY	IPR, INDIA	202241066889, 47/2022	25/11/2022

2	A NOVEL ORGANIC FERTILIZER BASED ON LEAVES AND NANO FORMULATIONS PROCESS	IPR, INDIA	202241056437, 42/2022	21/10/2022
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No. of Publications	No. of Citations	H index	i-10 index
39	411	11	11

a) Research Papers in Journals (National & International)

S. No.	Title of the Paper	Journal	Month & Year	Vol. (Issue), Pages
1.	Characterization of TriGlycine Sulphate(TGS) crystals grown in Water-soluble CdS nanoparticles dispersed in water	Indian Journal of Science and Technology	2010	3(1), 41-43
2.	Preparation and Studies of Cerium dioxide (CeO ₂) nanoparticles by Microwave-assisted Solution Method,	International Journal of Recent Research in science and Technology	2010	2(4),37-41
3.	Synthesis and Characterisation of PANI/Ceria (CeO ₂) nanocomposites	International Journal of Experimental Sciences,	2010	1(11),11-14
4.	Preparation and characterization of polyaniline/cerium dioxide (CeO ₂) nanocomposite via in situ polymerization	Journal of Materials Science	2012	47 (20), 7148-7156

5.	Synthesis and characterization of CeO ₂ nanocrystals by solvothermal route	Materials Research	2013	16 (2), 269-276
6	Enhancement of ionic conductivity in the semi crystalline nanocomposites Polymer electrolytes for storage applications,	International Journal of Current Research,	2013	5 (3), 684-688
7.	Preparation and Characterization of Polyaniline/Cadmium Sulfide (PANI/CdS) nanocomposite via in-situ polymerization,	International Journal of Recent Scientific Research	2014	5 (8), 1491-1494
8	Preparation and Characterization Of Mn ₃ O ₄ nanoparticles by Solvo-Thermal Method,	International Journal of Current Research	2014	6 (3), 5477-5480
9	Synthesis and Characterization of SnO ₂ And PANI doped SnO ₂ nanoparticles by Microwave-assisted solution Method,	International Research Journal of Engineering and Technology,	2015	2 (9), 2634-2640,
10	Synthesis and characterization of SnO ₂ nanoparticles by microwave - assisted solution method	International Journal of Current Research	2015	7 (Issue, 11), pp.23162-23166
11	Synthesis and Structural Investigation of Mn ₃ O ₄ nanoparticles by Microwaveassisted solution method,	International Journal of Recent Scientific Research	2015	6 (11), 7266-7270
12	Synthesis and Structural Investigations of Titanium Dioxide (TiO ₂) Nanoparticles by Microwave Assisted Method,	International Research Journal of Engineering and Technology,	2015	2 (9), 458-461
13	Synthesis and Characterization of NiO Nanoparticles by Thermal Decomposition Method,	International Journal for Scientific Research & Development	2016	3 (11), 99-101

14	Structural and frequency dependent dielectric properties of zno nanoparticles and pani / zno nanocomposite by microwave-assisted solution method.	International journal of advanced research	2016	4 (10), 572-578
15	Synthesis and Structural Investigations of ZnO-SnO ₂ Nanocomposite by Sol-Gel Method	Journal of Nanoscience and Technology	2017	3 (1), 242-244
16	Preparation and Investigation on Structural, Spectral and Electrical Properties of Polyaniline/Manganese Dioxide Nanocomposites	Journal of Materials and Environmental Sciences	2017	8 (10), 3490-3495
17	Structural, Optical, and AC Conductivity Properties of Polyaniline/Manganese dioxide nanocomposites via In Situ Polymerization,	International Journal of Research in Advent Technology	2018	6 (5) 460-464
18	Preparation and Investigation on Electric Impedance, Modulus, and Dielectric Properties of Polyaniline/Manganese Dioxide Nanocomposites'	International Journal of Creative Research Thoughts	2018	vol. 6, no. 2, pp. 543-549
19	Investigation on Structural and Optical Properties of Manganese Dioxide Nanoparticles by Microwave-Assisted Solution Method,	International Journal of Research in Advent Technology	2018	6(7) 1531-1535,
20	Preparation and characterization of TiO ₂ nano particles via Microwave assisted Solvothermal method	International Journal of Management, Technology And Engineering	2018	8 (12) 4392-4399
21	Synthesis and Investigations on structural, optical, thermal and	Journal of Applied Science and Computations,	2019	6 (2)

	electrical conductivity of α -MnO ₂ nanoparticles,			
22	Synthesis and Investigations of Structural, Optical and AC Conductivity Properties of PANI/CeO ₂ Nanocomposites	Asian Journal of Chemistry	2019	31 (5), 1158-1162
23	Synthesis and Investigation of Antimicrobial Activity of Tin Oxide Nanoparticles by Microwave Assisted Solution Method	Journal of Nanoscience and Technology,	2019	5(1), 637-639
24	Microwave Assisted Synthesis of Zinc Oxide Nanoparticles and Its Antimicrobial Efficiency	Journal of Nanoscience and Technology,	2019	5(1), 640-641
25	Synthesis and Characterization of ZrO ₂ Nanoparticles using Microwave Assisted Method and Its Antimicrobial Activity	Journal of Nanoscience and Technology,	2019	5(1), 642-644
26	Investigations of Structural, Optical, and Stability Analysis of ZrO ₂ Nanoparticles	International Journal of Research in Advent Technology,	2019	7(4), 290-293
27	Structural, Optical, And Frequency Dependent Conductivity Properties Of PANI/CeO ₂ Nanocomposites By In Situ Polymerization Method	International Journal of Research in Advent Technology,	2019	7 (4), 98-102
28	Structural, Biological and Photocatalytic Properties of Zirconium Oxide Nanoparticles Synthesized by Microwave Assisted Solution Method	Asian Journal of Chemistry	2019	31 (8), 1729-1732
29	Investigations on structural, optical, and AC conductivity of Polyaniline/Manganese Dioxide nanocomposites	International Journal of Nano Dimension	2019	10 (4): 454-460, Autumn 2019

30	Investigation on polyaniline with manganese dioxide nanostructure by using an in situ oxidative polymerization method	IONICS: (Springer) International Journal of Ionics The Science and Technology of Ionic Motion	2019	2020, Volume 26, Number 2, Page 839-848
31	Structural, Optical Morphological and Thermal Properties of CuO Nanoparticles prepared by Sol-Gel method	Journal of Nano and Electronic Physics	2019	11(5)05011(4pp)
32	Preparation of zirconium oxide with polyaniline Nanocatalyst for the decomposition of pharmaceutical industrial wastewater	IONICS: (Springer) International Journal of Ionics The Science and Technology of Ionic Motion	2019	2020, Volume 26, Number 3, Page 1507-1513
33	Frequency-Dependent Impedance, Modulus and Dielectric Studies of Polyaniline/Manganese Dioxide Nanocomposites	Journal of Ovonic Research	2020	Vol. 16, No. 3, May - June 2020, p. 173 - 180
34	Investigation on Electrical and Structural Properties of Manganese Dioxide Nanoparticles	Journal of Nano and Electronic Physics	2020	Vol. 12 No 3, 03011(5pp) (2020)
35	Preparation and Investigations of Structural, Optical and Conductivity Properties of Polyaniline/Titanium Dioxide Nanocomposites	Journal of Ovonic Research	2020	Vol. 16, No. 8, Nov - Dec 2020, p. 345 - 353
36	Investigations on structural, optical, and impedance spectroscopy studies of titanium dioxide nanoparticles	Bulletin of the Chemical Society of Ethiopia	2021	Vol. 35, No. 1, p. 151-160

37	Structural, electrical, and photocatalytic investigations of PANI/ ZnO nanocomposites	IONICS: (Springer) International Journal of Ionics The Science and Technology of Ionic Motion	2021	2021, Volume 27, Number 7, Page 2967-2977
38	Synthesis, Structural, Morphological, Optical and Electrical Studies of PANI/SnO ₂ Nanocomposites	Journal of Ovonic Research	2021	Vol. 17, No. 2, March-April 2021, p. 99-106
39	Synthesis, Structural, Morphological, Optical and Electrical Investigation of Tin Oxide (SnO ₂) Nanoparticles"	Journal of Optoelectronics and Advance Materials	2021	Vol. 23, Iss. 11-12, pp. 598-604

Invited lectures / Resource Person/ in Seminars/ Conferences

Sl.No.	Academic Session Title of Lecture/	Title of Conference/ Seminar etc	Organised by	Whether International/ National/ State
1	Preparation of Nanomaterials	Guest Lecture-I	Sadakathullah Appa College, Tirunelveli, July 2017	State
2	Polymer Nanocomposites	Resource Person in UGC Sponsored National Seminar on Recent Trends in Materials Science	Rajah Serfoji Government College (Autonomous), Thanjavur, October 2017,	National
3	Presidential Address	Resource Person FLAIR-17	JP college of Engineering, Tenkasi, November, 2017	State

4	Solar Cells and its application	Guest Lecture TNSCST sponsored workshop, about solar Energy and applications.	GVN College, Kovilpatti, Thoothukudi Dist, December 2017	State
5	Software Tools & Data Interpretation For Nanomaterials Characterization	Resource Person in Two Day online workshop on Research Tools and Techniques for Materials Characterization	The MDT Hindu College, Tirunelveli, August 2020	International
6	Software Tools & Data Interpretation For Nanomaterials Characterization	Resource Person in One Day online workshop on Research Tools and Techniques for Materials Characterization	Arulmigu Palaniandavar Arts College for women, palani, September 2020	International
7	The Strange new world of Nanoscience	Resource Person in Celebration of Nanoscience week (15.10.2020 – 20.10.2020)	Sarah Tucker College (Autonomous), Palayamkottai, Tirunelveli	National
8	Tools & Techniques For Nanomaterials Characterization	Resource person in two weeks online FDP on "Exploring the Fabrication Techniques, Characterization and Applications of Functional Materials" 13 to 26 June 2022.	Faculty Development Training Centre, Government College of Technology, Coimbatore - 641 013.	National

Details of Faculty Development Programme

S.No.	Details of Short-Term Course/ Refresher/ FDP Programme	Date and Duration	Organized by
1	One Week Faculty Development Programme on "Insights Into Quality Research and Innovation	13.05.2020 to 20.05.2020 One week	Vivekanandha College of Engineering for Women, Chennai
2	One Week Faculty Development Program on Nanomaterials for Energy Harvesting and Biomedical Applications"	18.05.2020 to 22.05.2020 One week	Godavari Institute of Engineering and Technology (Autonomous), Rajamahendravaram, Andhra Pradesh.
3	Five Days online FDP on Statistical Mechanics.	25.05.2020 to 29.05.2020	PSGR Krishnammal College for Women, Coimbatore.
4	Two Weeks Faculty Development Programme on "MANAGING ONLINE CLASSES and CO-CREATING MOOCS:2.0"	18.05.2020 to 03.06.2020 Two Weeks	Ramanujan College, Delhi and MHRD, Delhi.
5	Knowledge Generation in Education during COVID-19 Pandemic- Qualitative Research	01.06.2020 to 06.06.2020	Bombay Teachers' Training College, HSNC University, Mumbai Department of Education, University of Mumbai.
6	One Week Faculty Development Program (Online) on Recent Trends in Materials Science	12.10.2020 to 16.10.2020 one week	GMR Institute of Technology, Rajam. kakinada

7	AICTE Sponsored online STTP on 'Nanomaterials for Clean Energy and Environmental Applications - Phase -II	16.11.2020 to 21.11.2022	Dr. Mahalingam College of Engineering and Technology, Pollachi
8	AICTE Sponsored online STTP on 'Nanomaterials for Clean Energy and Environmental Applications -Phase - III	23.11.2020 to 28.11.2020	Dr. Mahalingam College of Engineering and Technology, Pollachi
9	TEQIP-III Sponsored Two Week e-FDP on Advanced and New Generation Materials inElectrical and Electronics Engineering	08.02.2021 to 19.02.2021 Two Weeks	CoE in Advanced Materials Research, Department of Electrical and Electron- ICS Engineering in association with FET MJP, Rohilkhand University, Bareilly, U.P.
10	TEQIP III Sponsored "One- week e-FDP on Materials for Semiconductor Devices and PVModules	08.03.2021 to 13.03.2021 One week	CoE in Advanced Materials Research, Department of Electrical and Electronics Engineering in association with FET MJP,Rohilkhand University, Bareilly, U.P.,
11	National Level Workshop on Recent Trends and Opportunities in Physics	10.04.2021 to 17.04.2021	Department of Physics,School of Advanced Sciences, VIT-AP University, Andhra Pradesh, India.

12	AICTE Sponsored online Short-Term Training Programme on Emerging Trends in Nanomaterials for Electronic and Optoelectronic Devices-Series I- Synthesis and Functionalization of Nanomaterials	10.05.2021 to 15.05.2021	Department of Electronics and Communication Engineering, Swarnandhra College of Engineering & Technology, AP,.
13	AICTE Sponsored online Short-Term Training Programme on Emerging Trends in Nanomaterials for Electronic and Optoelectronic Devices-Series II- Fabrication and Characterization of Nanoelectronic Devices	17.05.2021 to 22.05.2021	Department of Electronics and Communication Engineering, Swarnandhra College of Engineering & Technology, AP,
14	AICTE Sponsored online Short Term Training Programme on Emerging Trends in Nanomaterials for Electronic and Optoelectronic Devices-Series III- Fabrication and Characterization of Optoelectronics and Photoelectronics Devices	24.05.2021 to 29.05.2021	Department of Electronics and Communication Engineering, Swarnandhra College of Engineering & Technology, AP,
15	AICTE Training and Learning (ATAL) Academy - Five Day Faculty Development Programme (FDP) on Nanoscience for Nanomaterials	20.09.2021-24.09.2021	Manakula Vinayagar Institute of Technology, Kalitheerthakuppam-605107, Puducherry.
16	5- day Faculty Development Program on "Material Characterization Techniques"	18.01.2022 to 22.01.2022	Bhavan's Vivekananda College of Science, of Science, Humanities

			And Commerce, Sainikpuri, Secunderabad.
17	National One Week Faculty Development Programme on Carbon Capture and Storage	21.02.2022 – 25.02.2022	Central University of Tamilnadu, Thiruvavarur,

Webinar Attended during Covid-19 Pandemic Period

Name of the Faculty	Title of the Event (online)	Organisation and Date
Dr. E. Kumar	Social Intelligence in Class Room	Sri Saradha Niketan College of science for women, karur 13-05-2020
	E-Content Preparation –finding copy writing free images and sounds	Loyola College of Education, Chennai 13 May, 2020
	Two Days online FDP program on “Research Trends in Nanoscience”	R.M.D. Engineering College, Kavaraipettai, Chennai, 13 and 14 th may 2020
	webinar on “Micro & Nanotechnology and its Applications”	G.T.N. Arts College (Autonomous), Dindugal, 14.05.2020
	Benchmark on research	Loyola College of Education, Chennai 15 May, 2020
	Functional Novel Materials For Electrochemical Sensors And Energy Storage Devices	Thiyagaraja College, Madurai and MING CHI university of Technology Taiwan, 15.05.2020
	ICT for Effective Physics Teaching, Learning & Evaluation	Stella Maris College (Autonomous) Chennai. 18.05.2020
	"Webinar on "Super Capacitors:	Ayya Nadar Janaki Ammal

	New Age Energy Storage Devices"	College, Sivakasi, 19.05.2020
	Assessment and accreditation as a measure of Internal Quality in HEI's	Logantha Narayanasamy Government College (Autonomous) Ponneri, 19-05-2020
	One Week Faculty Development Programme on Insights into Quality Research and Innovation	Vivekanandha College of Engineering for Women and from 13th May 2020 to 20th May 2020
	International Webinar on Materials for Energy, Environment and Health Care Applications.	The Gandhigram Rural University, Dindigul, 21.05.2020
	Micro, Nano and Atomic Scale Approaches in Electronic Applications	Micro, Nano and Atomic Scale Approaches in Electronic Applications, 21.05.2020
	Energy, Energy Everywhere, How to harness it?	V.O.Chidambaram College, Thoothukudi. 21.05.2020
	Online English Quiz	Mother Teresa College of Education, Illuppur, 22.05.2020
	Introducing Meta Cognition and Emotion	Tamil Nadu Teacher Education University, Chennai. 22.05.2020
	One Week Faculty Development Program on Nanomaterials for Energy Harvesting and Biomedical Applications"	Godavari Insitute of Engineering and Technology (Autonomous), Rajamahendravaram, Andhra Pradesh. 18.05.2020 to 22.05.2020
	Online Quiz Programme on Open and Distance Learning (ODL)	Tamil Nadu Open University, 23.05.2020
	Webinar on "Recent Advances Of Nanotechnology In Chemical & Biomedical Fields"	KPR Institute of Engineering and Technology, Coimbatore. 23.05.2020

	STRESS, DISEASE, AND WELLNESS MODERN LIFE	Tamil Nadu Teacher Education University, Chennai. 24.05.2020
	History of Nuclear Fission	V.O.Chidambaram College, Thoothukudi.25.05.2020
	Art of writing Research/Review Articles for publishing in Peer reviewed Journals.	MES College, Erumely, Kerala.25.05.2020
	YOGA FOR FITNESS AND WELLNESS	Tamil Nadu Teacher Education University, Chennai. 25.05.2020
	Quiz of Fundamental Physics.	RVS College of Engineering, Dindigul. 25.05.2020
	Efficacy of Siddha Medicine For Common Ailments Among Teacher	Tamil Nadu Teacher Education University, Chennai. 26.05.2020
	Opportunities and Challenges on Hydrogen Energy and Fuel Cell Technology.	Annai Vailankanni College of Engineering, Kanniyakumari. 26.05.2020
	International Webinar on "Passive and Active Hyperbolic Metamaterials and their Applications"	Department of Physics, SRM Institute of Science and Technology, Ramapuram Campus, Chennai on 26th May 2020.
	Covid-19: A window of opportunities.	Christian College of Education, Perambalur. 27.05.2020
	Five Days online FDP on Statistical Mechanics.	PSGR Krishnammal College for Women, Coimbatore. 25.05.2020 to 29.05.2020
	15 days online training on Moodle Learning Management System.	Bannari Amman Institute of Technology and IIT Bombay.
	Online National Quiz on "Awareness on Banking Aptitude"	Post Graduate and Research Department of Commerce Vivekananda College

		Tiruvedakam West Madurai 29.05.2020
	International Webinar Series on Cosmology and Nanotechnology	PG and Research Department of Physics, Nallamuthu Gounder Mahalingam College, Pollachi. 27 th May 2020 to 29 th May 2020.
	One Day Faculty Development Program on "INTRODUCTION TO MOODLE"	GOVERNMENT ARTS AND SCIENCE COLLEGE FOR WOMEN, BARGUR. 30.05.2020
	Faculty Development Programme [FDP] on "Online Teaching Via Google LMS During Covid-19 Pandemic"	C. Abdul Hakeem College [Autonomous] Melvisharam 632509, Ranipet District. 28.05.2020 to 30.05.2020
	Online Webinar On "Recent Advancements in Bio & Nanomaterials"	PG and Research Department of Physics, Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, Namakkal. 30.05.2020
	Online International Faculty Development Programme On Establishing Research Beyond The Horizon.	N.K.T. National College of Education for Women (Autonomous), Chennai. 26.05.2020 to 30.05.2020
	Two days Faculty Development Programme on Recent Trends in Material Frontiers	Department of Science, St. Joseph's College of Engineering, OMR, Chennai. 29.05.2020 & 30.05.2020.
	Yogasana and Pranayama during COVID – 19 Pandemic'	TNOU. 30.05.2020
	"Cyclic and Linear Sweep Voltammetry - Fundamentals & Applications"	Department of Chemistry, Bhaktavatsalam Memorial College for Women, Chennai, on 31.05.2020.

	Two Weeks Faculty Development Programme on "MANAGING ONLINE CLASSES and CO-CREATING MOOCS:2.0"	Ramanujan College, Delhi and MHRD, Delhi. from May 18 - June 03, 2020.
	International webinar on salesforce	PSN Engineering College, Tirunelveli. 03.06.2020
	Two days National Level FDP on "Open Educational Resources (OER)"	TNOU. 04.06.2020 & 05.06.2020
	Integration of effective body language as teaching and learning tool : The need of present scenario	Christian College of Education, Perambalur. 05.06.2020
	5 days INTERNATIONAL WEBINAR ON MODERN MANAGEMENT PRACTICES	Nehru College of Management, Coimbatore. 01.06.2020 to 05.06.2020
	Knowledge Generation in Education during COVID-19 Pandemic- Qualitative Research	Bombay Teachers' Training College, HSNC University, Mumbai Department of Education, University of Mumbai.01.06.2020 to 06.06.2020
	Technical Webinar on "Cyber Security"	Department of Computer Science and Engineering, PSN College of Engineering and Technology, Tirunelveli. 10.06.2020
	National Level Webinar on Revitalizing MSMEs Post COVID - 19 Crisis and Business Sustainability	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. 11.06.2020
	NATIONAL LEVEL E-QUIZ ON PLAY WITH PHYSICS	PG & Research Department of Physics jointly with Internal Quality Assurance Cell (IQAC), The MDT Hindu College, Tirunelveli,

		Tamil Nadu on 15.06.2020 & 16.06.2020.
	"Active Learning and Advanced Scientific Computing Methods (ALASCM-2020)"	Loyola College, Chennai. 15-06-2020 to 19-06-2020
	"International Webinar on "Thin-Film Deposition Techniques and its Applications"	The MDT Hindu College, Tirunelveli. 25.06.2020
	"INTERNATIONAL WEBINAR ON "RECENT ADVANCES IN MATERIALS SCIENCE AND TECHNOLOGY" (IWRAMSAT-2020)"	Aditanar College of Arts and Science, Tiruchendur. 26.06.2020
	"INTERNATIONAL WEBINAR ON Semiconductor design process in industries-2k20	Dept. of Physics, MS university Constituent college, kanniyakumari. 29.06.2020
	Materials Characterization Techniques	Department of Physics and Chemistry , St. Joseph's Institute of Technology on 29th June 2020.
	Online quiz on Environmental Protection	ARULMIGU PALANIANDVAR ARTS COLLEGE FOR WOMEN AUTONOMOUS, Palani.01.07.2020
	"Writing a Scientific Manuscript - Key Points to Remember & Key Factors for Writing a Scitific Proposal"	JP College of Arts and Science, Agarakattu, Ayikudi, Tenkasi District, Tamilnadu. 08.07.2020
	International webinar series on Astronomy and Astrophysics.	Karunya Institute of Technology and sciences, Coimbatore. 08.07.2020
	National webinar series on Time Resolved Raman Spectroscopy of dynamically shocked materials.	Annai Vailankanni College of Engineering Kanyakumari. 10.07.2020
	Sustainable Development in Context of India: Its Chemical Scenario	Department of Chemistry in collaboration with IQAC, Nabadwip Vidyasagar College on 10th July, 2020

	Modern methods to solve Non-linear dynamical equations	Lenora College of Engineering, Rampachodavaram, Karnataka. 15.07.2020
	National Webinar on Recent Trends in Physics of Materials-2020 (NWRTPM-Series) Defects Analysis in Crystalline Materials by Spectroscopic Techniques"	PG and Research Department of Physics, Pachiyappa's College, Chennai. 18.07.2020

10. National/International Conferences

a) Papers Presented in International / National Conferences

S.No	Title of the Paper	Title of the Conference/ Seminar	Organized by
1.	"Preparation and studies of cerium dioxide (CeO ₂) nanocrystal by microwave assisted solution method"	National Seminar on Crystal Growth of Laser and NLO Materials (NSCGOM - 2008)	National College, Trichy, 25-26 September 2008
2.	Characterization of cerium dioxide (CeO ₂) nanoparticles by microwave oven."	National Conference on Nano Materials (NCN - 2008)	Karunya University, Coimbatore, 17-18 October 2008
3	Characterization of Cds-Zns nanocomposites synthesized by microwave assisted solution method"	International Symposium for Research Scholars, Metallurgy, Material Science and Engineering. (ISRS-2008)	IIT Madras, 10-12 December 2008.
4	Synthesis and Studies of PANI/CeO ₂ nanocomposites	National Seminar on Crystal Growth conducted by S.S.N College	Kalavakkam, Chennai, 27-29 January 2009.

5	Synthesis and Characterization of cerium dioxide (CeO_2) nanoparticles by using a microwave Oven.	National conference on Recent Advancement and development in material Science (RAADIMS '09)	MEPCO Engineering College, Sivakasi, 20-21 February 2009.
6	Synthesis and Characterization of PANI/ CeO_2 nanocomposites	International Conference on Photonics, Nanotechnology and computer Applications (ICOPNAC - 2009).	PRIST UNIVERSITY, Vallum, Thanjavur. 25-28 February 2009
7	characterization of Ceria/Polyaniline nanocomposites prepared by solvo thermal route	National Seminar on Advances in Material Sciences (NSAMAS - 2009)	Dept. of Physics, M.S University, Tirunelveli, 16-17 March 2009.
8	Synthesis and Structural studies of PANI/ CeO_2 nanocomposites	National conference on recent Trends in crystal growth, thin films and Nano-structured materials	Adithanar College of Arts and Science, Tiruchendur, 5-6 August 2009.
9	Synthesis and Characterization of PMMA/ CeO_2 nanocomposites	National conference on recent Trends in crystal growth, thin films and Nano-structured materials	Adithanar College of Arts and Science, Tiruchendur, 5-6 August 2009.

10	Synthesis and characterization of MnO ₂ nanoparticles	National seminar on Recent Trends in Materials science	Sadakathullah Appa College, Tirunelveli. 16 Feb 2015
11	Preparation and characterization of Polyaniline/Manganese Dioxide nanocomposites	National seminar on Recent Trends in Materials science	Sadakathullah Appa College, Tirunelveli. 16 Feb 2015
12	Preparation and Investigation on Structural and Spectral properties of Polyaniline/Manganese dioxide nanocomposites via In Situ Polymerization	International Conference on "Advances in Materials (AiM-2017)	M. Kumarasamy College of Engineering, Karur, April 2017
13	Preparation of Titanium Dioxide Nanoparticles and Evaluation of its Structural and Spectral Properties	International Conference on Synthetic Materials for Science and Engineering Applications (SMSEA-2018)	M. Kumarasamy College of Engineering, Karur, April 2018
14	Preparation and Investigations on Electric Impedance, Modulus and Dielectric Properties of Polyaniline/Manganese Dioxide Nanocomposites	First International conference on Recent Innovations In Applied Science, Engineering and Technology	SCAD College of Engineering and Technology, Cheranmahadevi, 13 April 2018
15	Investigation on Electric Impedance, Modulus, and Dielectric Properties of Manganese Dioxide Nanocomposites	National Seminar on Advances in Material Sciences (NSAMAS - 2018)	Mononmaniam Sundaranar University, Tirunelveli, June 2018.
16	Preparation and Characterization of TiO ₂ Nanoparticles via	International conference on multidisciplinary approaches in social	Sri SRNM college, sattur, Tamilnadu, Dec 2018.

microwave assisted solvothermal method	sciences, Humanities and science	
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b) Participation in International Conferences/Seminars/Symposia/Workshop

S.No.	Name of the event	Place & dates	Attended/ Title of paper presented
1.	National Conference	M.D.T Hindu College, Tirunelveli, February,2015	Synthesis and structural investigation on manganese dioxide nanoparticles using microwave assisted solution method.
2.	International Conference	Devanga Arts college, January 2016	Microwave assisted synthesis of MnO ₂ nanoparticles
3.	International Conference	Sri SRNM college, Feb 2017	Investigation on the preparation and properties of nanostructured cerium dioxide
4.	International Conference	Sri SRNM college, Feb 2018	Synthesis and investigations on Structural, optical and electrical conductivity of MnO ₂ nanoparticles.
5	International Conference	Sri SRNM college, March 2018	Structural characterisation of PANI\MnO ₂ nanocomposites

11. Served as Member in Professional Bodies/Committees (BoS, Academic Council, Inspection Committees, National forums etc.)

- I. Member – Physics Board – UG and PG, Tamil Nadu State Council for Higher Education (TANSCHÉ), Chennai.
- II. Member – Board of Studies, School of Science, Tamil Nadu Open University, Chennai,
- III. Member- Academic Audit, Stella Maris College, Chennai
- IV. Technical Reviewer in International Journals:
 - a) Electrochemicals Letters, by Electrochemical society, USA.
 - b) Journal of Chemical Engineering and Technology - Wiley publication, Germany.
 - c) Journal of nanoparticle research- Springer.
 - d) Journal of Experimental nanoscience – Taylor-francis group
 - e) Advances of Optical Materials- Hiwai Publications- USA
 - f) International Research Journal of Pure and Applied Chemistry- SCIENCEDOMAIN *international- USA*
 - g) American Chemical Science Journal- SCIENCEDOMAIN *international- USA*
 - h) Journal of Scientific Research- Bangladesh
 - i) Journal of Electronic Materials (JEMS), Springer
- V. Member of Governing Council, Discipline committee and Staff selection committee in Infant Jesus College of Engineering and Technology, Keelavallanadu.
- VI. Special talk about “Universe, nanotechnology and plasma” in All India Radio, Tirunelveli.
- VII. Guest lecture delivered about “Nano Science” at ISTE Staff chapter at Government College of Engineering, Tirunelveli.

- VIII. Guest lecture delivered about “Synthesis of Nanocomposites” at STC College, Tirunelveli.
- IX. Guest lecture delivered about “Nanoscience and Nanotechnology” at Saratha College for Women, Tirunelveli.
- X. Guest lecture delivered about “Introduction to Nanoscience and Nanotechnology” at Sadakathullah Appa College, Tirunelveli.
- XI. Guest lecture delivered in TNSCST sponsored workshop, about solar Energy and applications at GVN college, Kovilpatti. Tamilnadu
- XII. Guest lecture delivered at Dist. Science Centre, Tirunelveli, about “Einstein theory of Relativity”.

Declaration

I hereby declare that the aforesaid particulars are true to the best of my knowledge and belief.

Dr. E. Kumar

