

Name of the Faculty : Dr. S. Porchelvi
 Department : Physics
 Designation : Associate Professor & Head
 Coordinator, IQAC
 Teaching Experience : 20 Years
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Educational Qualification:

Qualification	Year of Passing	Name of the College	Name of the University	% of Marks / Grades Obtained
B.Sc., Physics	1994	K.N. Govt. Arts College for Women	Bharathidhasan University, Trichy	79.5% Distinction
B.Ed., Physics	1997	Govt. College of Education, Orathanadu	DOTe	59.5% SecondClass
M.Sc., Physics	1996	Rajah's Serfoji Govt. Arts College	Bharathidhasan University, Trichy	73% First Class
M.Phil., Physics	1999	Urumu Dhanalakshmi College, Trichy	Bharathidhasan University, Trichy	75% Distinction
Ph.D., Physics	2018	University College of Engineering, Anna University, Dindigul	Anna University, Chennai	9/10

➡ Title of the M.Phil., Dissertation: Characteristics of Barium doped Zirconium Oxide Thin Films.

➡ Title of the Ph.D., Thesis: Development and Characterization of Sulfonated Poly Ether Ether Ketone Nano Composite Proton Exchange Membrane for Direct Methanol Fuel Cell Applications

Research Publications:

➡ High Conductive Proton Exchange Membrane (SPEEK/MMT) and its Characterization, Materials Research Innovation (IF 0.37), ISSN: 1432-8917, 2017.

- Dielectric Dispersion and Relaxation Behaviour Of Synthesized Polymer Electrolyte Membrane for Electrochemical Applications, International Research Journal of Engineering and Technology (IRJET), ISSN: 2395-0056, 2017.
- SPEEK based Hybrid Proton Conducting Membrane for Fuel Cell Applications, Advance Engineering and Research Development SJIF: 5.71, ISSN: 2348-4470, 2018.
- Polyimide based Polymer Electrolyte Membranes containing Polyrotaxane for Direct Methanol Fuel Cell Applications, Journal of Advance Engineering and Research Development (SJIF): 5.71, ISSN: 2348-4470, 2018.
- Polyimide Based Polymer Electrolyte Membrane For Direct Methanol Fuel Cell Applications, International Journal of Scientific Research and Reviews(IJSRR), ISSN: 2279-0543, 2019.
- Preparation and Characterization of Al doped SnO₂ Nanocrystalline Thin Films by Spray Pyrolysis Technique, International Journal for Research in Applied Science & Engineering Technology (IJRASET) IF: 7.177, ISSN: 2321-9653, 2020.
- Synthesis and Characterization of Polymer blend Membrane for Electrochemical Applications, International Journal for Innovative Research in Multidisciplinary Field 6.719, ISSN: 2455-0620, 2021.
- Green synthesis of Silver Nanoparticles from Jasminum Multiflorum Leaf Extract and Evaluation of Antioxidant Activity, Journal of Applied Science and Computations, ISSN: 0022-1945, 2021.
- Comparison between Variety of Turmeric Brands by Using Silver Nano-particle, Wesleyan Journal of Research, ISSN: 0975-7945, 2021.
- SPEEK based Hybrid Proton Conducting Membrane for Fuel Cell Application, Momentous Role of Nano Materials in Renewable Energy Devices, (IC MNRE 2018) ISBN: 9788193 – 447321, March 2018.
- Thermal, Morphological and conductivity study of synthesized polymer electrolyte membrane for Fuel cell applications, BRNS & CSIR Sponsored International conference on Energy Environment and Advanced Materials for a Sustainable Future, Energy, Environment and Advanced Materials for a Sustainable Future, (ICEEAMSF – 2017), ISBN: 9788193 – 300527, 2017.

Papers Presented in Conference/Seminar/Symposium/Workshop:

Programme	Title of the Paper	Theme of the Programme	Venue	Date
National Level Conference	Synthesis and Characterization of SPEEK/ZrP Composite Membrane for Fuel Cell Application	NCAM-2019	Mother Teresa Women's University, Kodaikanal	20.09.19
National Level Conference	Symmetric analysis of novel multilevel bridge inverter with fuel cell	NCAES'19	SNS college of Technology, Coimbatore	04.05.19
National Level Conference	Synthesis and Thermal Analysis of SPEEK based proton exchange membrane for fuel cell applications	NSMSA-2018	Mother Teresa Women's University, Kodaikanal	30.07.18
International Level Conference	Incorporation of Phosphotungstic acid with SPEEK base membrane for Fuel cell applications	ICONN 2017	SRM University, Chennai	09.08.17 to 11.08.17
International Level Conference	Dielectric Dispersion and Relaxation Behaviour of Synthesized Polymer Electrolyte Membrane for Electrochemical Applications	ISMST – 2017	Mother Teresa Women's University, Kodaikanal.	04.08.17
International Level Conference	Structural and Dielectric performance of polymer nanocomposite membrane for	Advanced Functional Materials and Applications (NCAFMA – 2017	Kalasalingam University, Krishnankoil.	30.03.17 & 31.03.17

	electrochemical applications’,			
National Level Conference	Dielectric behavior of sulfonated poly (ether ether ketone) with Polymer blend nanocomposite for Direct Methanol Fuel Cell Applications	Materials Science & Technology (NCMST 2016)	IIST, Thiruvananthapuram.	12.07.16 to 14.07.16
International Level Conference	Synthesis and characterization of polymer blend nanocomposite membrane for DMFC applications	Recent Innovations in Engineering	Sri Subramanya College of Engineering and Technology, SSCET, Palani	02.04.16
International Level	Improvement on proton conductivity of polymer nanocomposite membrane for Direct Methanol Fuel cell Applications	Frontiers in Nanoscience & Nanotechnology (ICFNN- 2016)	SASTRA University, Thanjavur	26.02.16 to 28.02.16
National Level Conference	Polymer blend nanocomposite membrane for fuel cell applications	The widening Horizons of Chemistry - III(TWHC – III-2015)	Arulmigu Palaniandavar Arts College for Women, Palani	05.03.15
National Level Conference	Materials Science	Advancement in Materials Science (AMS 2014)	CIT, Coimbatore.	26.09.14 & 27.09.14
State Level Seminar	Eco Friendly Energy	Recent Trends in Material Science and Energy Science	Arulmigu Palaniandavar Arts College for Women, Palani	07.03.14
National Level Conference	Nanotechnology applications- Fuel cell	Emerging Multidisciplinary Trends of Nanotechnology	Fatima Michael College of Engg. & Tech., Madurai.	20.04.13

National Level Conference	Renewable Energy system – Fuel Cell	Energy and Nanotechnology	Arulmigu Palaniandavar Arts College for Women, Palani	12.04.13
FDP	Participated	Material Science and Metallurgy	PSNA College of Engineering & Technology, Dindigul.	22.03.11 & 23.03.11
FDP	Participated	Bridge course on Physics	Centre for Faculty Development, Anna University, Chennai	20.06.14 & 21.06.14
FDP	Participated	Pedagogical Tools in Higher Education	M.V.M Government Arts College for Women, Dindigul	30.01.20 & 31.01.20
Orientation Course	Participated	Basics of Computer Science	Periyar Centenary Girls' Polytechnic College	14.09.98 to 19.09.98
Refresher Course	Participated	Engineering Physics	Anna University, Dindigul	20.06.18 to 26.06.18
State Level Workshop	Participated	Petroleum Conservation Research Association conducted by Ministry of Petroleum & Natural Gas Government of India	Sakthi College of Arts & Science for Women, Oddanchatram	25.01.20
State Level Workshop	Participated	Women and Legal Rights	Mother Teresa Women's university, Kodaikanal	16.12.19 to 20.12.19
National Level Workshop	Participated	Materials Characterization Techniques	Kalasalingam University, Krishnankoil.	09.01.15
National Level Workshop	Participated	Advancement in materials science (AMS 2014)	Coimbatore Institute of Technology, Coimbatore.	26.09.14 & 27.09.14
National Level Workshop	Participated	Advanced Materials (IWAM-2014)	Alagappa University, Karaikudi	20.03.14 & 21.03.14
National Level Workshop	Participated	Advanced Materials for Engineering Application (AMEA- 2012)	Institute of Engineering and Technology, Pollachi.	02.11.12 & 03.11.12
National Level Workshop	Participated	Nano Science and Nano Technology	Sri G.V.G Visalakshi College for Women, Udumalpet.	07.03.12
National Level	Participated	Advanced energy Materials (IWAEM-2012)	Alagappa University, Karaikudi	09.02.12 & 10.02.12

Workshop				
National Level Workshop	Participated	Recent Trends in Polymer Science & Technology	PSG College of Technology, Coimbatore	26.08.11 & 27.08.11
National Level Workshop	Participated	Application of Polymer Nano-composite Materials in Various Fields” (APNM – 2011)	Kongu College of Engineering & Technology, Erode	16.07.11
National Level Workshop	Participated	Advanced Functional Materials and Applications	Kalasalingam University, Krishnankovil	16.12.11 & 17.12.11
National Level Workshop	Participated	Recent Trends in Spectroscopy	P.R. College, Thanjavur.	11.10.04
State Level Webinar	Participated	Solar Energy Devices and Applications	M.V.M. Govt. College for Women, Dindigul	26.05.21
National Level Webinar	Participated	Geographical Information System	Indian Institute of Remote Sensing (IIRS), ISRO.	28.09.20 to 15.10.20
State Level Webinar	Participated	Synthesis and Characterization of Nano materials	Sri Subrmanya College of Engineering and Technology, Palani.	24.07.20
State Level Webinar	Participated	An Introduction to Patent and Career Opportunities in IPR	Seethalakshmi Ramaswami College, Thiruchirapalli	09.07.20
State Level Webinar	Participated	Material science and Application	Arulmigu Palani Andavar Arts college for women, Palani.	29.05.20
State Level Webinar	Participated	MRI & Raman Spectroscopy	Arulmigu Palani Andavar Arts College for Women, Palani.	27.05.20 to 28.05.20
State Level Webinar	Participated	Functional Novel Materials for Electrochemical Sensors and Energy Storage Devices	Thiyagaraja College, Madurai	15.05.20
State Level Webinar	Participated	Micro & Nano Technology and its Applications	GTN Arts College, Dindigul.	14.05.20
State Level Webinar	Participated	Role of IQAC in Higher Education Institutions	Sri GVG Visalakshi College for Women, Udumalpet.	05.05.20

Positions Held:

- Member, Board of Studies for B.Sc., (Physics) & M.Sc., (Physics) of Mother Teresa Women's University, Kodaikanal, 2021.
- Special Lecture on "Fuel Cells and its Applications" at Arulmigu Palani Andavar College of Arts and Culture, Palani on 04.10.18.
- Special Lecture (Webinar) on "Green Energy Device- Fuel Cell" at Sri Adi Chunchanagiri College for Women, Cumbum on 05.12.20.
- Convenor, National Level Webinar on "Capacity building Programme for future Physicists" from 03rd t 05th June 2021.
- Convenor, National Level Webinar on "ICT Tools for Classroom Teaching and Virtual Lab" on 16th October 2020.
- Convenor, National Level Webinar on "Fuel Cell Technology-Green Energy" on 15th July 2020.
- Convenor, State Level Webinar on "Application of Semiconductors in Optoelectronics" on 24th May 2021.
- Convenor, State Level Webinar on "Crystal Growth and its Characterization" on 19th May 2021.
- Convenor, Online Quiz on "Physics in Daily Life" from 03rd July 2020 to 05th July 2020.
- Convenor, Online Quiz on "Space Mission" from 27th July 2020 to 29th July 2021.

