Dr. D. SANGEETHA

1. **Designation** : **Associate Professor**
Institute for Energy Studies
Anna University,
Chennai – 600 025

2. **Email(s)** : sangeetha@annauniv.edu, sangeetha_univ@yahoo.co.in

3. **Phone** : 044 – 2235 7602, +91 – 9840203400

4. Academic Qualification

S.No.	Degree	Year	Subject	University/Institution	% Marks
1.	M.Sc (5 years Integrated)	1994	Polymers	University of Madras	72
2.	Ph.D	2000	Polymers	University of Madras	-
3.	MBA	2009	Technology Management	Anna University, Chennai	75
4.	AMIE	2013	Metallurgy and material	The Institution of Engineers (India)	8.5 CGPA
5.	M.E	2018	Computer integrated manufacturing	Anna University, Chennai	9.5 CGPA
6.	Ph.D	2021	Polymer composites	Anna University, Chennai	-

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

Sl.No	Thesis title	Name of Supervisor	Institute/Organization /University	Year of award
1.	Ziegler Natta Polymerization	Prof. H. Kothandaraman, (Retired) University of Madras, Chennai	University of Madras	2000
2.	Studies on the effect of silane treatment of plant waste natural fiber reinforced polymer composites	Prof. M. Omkumar, Department of Manufacturing Engineering, Anna University, Chennai	Anna University - Chennai	2021

6. Work experience (in chronological order).

S.No.	Positionsheld	Name of theInstitute	From	To
1.	Associate Professor	Institute for Energy Studies	27/08/2015	Till date
2.	Assistant Professor (Senior Grade)	Department of Mechanical Engineering, Anna University, Chennai - 25	19/03/2013	27/08/2015
3.	Lecturer, Assistant Professor (Senior Grade)	Department of Chemistry, Anna University, Chennai-600025	14/07/2004	18/03/2013
4.	Lecturer	Department of Chemistry, Bharath Deemed University, Chennai	Aug 2003	July 2004
5.	Polymer Scientist, Fuel Cell Development	Agni India Pvt., Ltd., Chennai	Oct 2002	July 2003
6.	Post Doctorate Fellow	Centre for Energy Research (R&D) SPIC Science Foundation	Aug 2001	Sept 2002

7. Professional Recognition/ Award/ Prize/ Certificate

S.No	Name of Award	Awarding Agency	Year
1	University Rank in M.Sc	University of Madras, Chennai	1994
2	Top 10 finalists as the Best Chemistry Teacher	Tata Chemicals in collaboration with Association of Chemistry Teachers (ACT)	2011
3	Top 50 innovators in India	DST-Lockheed Martin Innovators Growth Programme	2012
4	Active Researcher Award	Anna University, Chennai	2012
5	Highest mark in AMIE	Institution of Engineers (India)	2014
6	H.Nandy Memorial Award	Indian Engineering Congress	2014
7	Women's Achiever Award 2017	Anna University, Chennai	2017
8	CTDT Student Innovative Project Award	Dept. of Mechanical Engineering by Anna University, Chennai	2017
9	Wenlock Endowment Scholarship for high impact publications	Anna University, Chennai	2018
10	CTDT Student Innovative Project Award	Dept. of Mechanical Engineering by Anna University, Chennai	2018
11	First Rank in M.E (Computer Integrated Manufacturing)	Dept. of Manufacturing, Anna University, Chennai	2019
12	Professional Engineer in Metallurgy and Materials Engineering Discipline	Institution of Engineers (India)	2019
13	Research Excellence Award	CTDT, Anna University, Chennai	2020
14	Recognized as one among the top 2% scientists in the world	Stanford University, Elsevier	2022

8. **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.	Saranya Rathinavel, Janani Indrakumar, Purna Sai Korrapati, Sangeetha Dharmalingam	Synthesis and fabrication of amine functionalized SBA-15 incorporated PVA/Curcumin nanofiber for skin wound healing application	Colloids and Surfaces A: Physicochemical and Engineering aspects	637	128185	2022
2.	Moogambigai Sugumar, Dharmalingam Sangeetha	Statistical assessment of operational parameters using optimized sulphonated titanium nanotubes incorporated sulphonated polystyrene ethylene butylene polystyrene nanocomposite membrane for efficient electricity generation in microbial fuel cell	Energy	242	123000	2022
3.	Rajalakshmi Ekambaram, Sai Supriyalakshmi, Saravanan Vishnu Priya, Sivanath Babu, Sangeetha Dharmalingam	Fabrication and evaluation of Docetaxel doped ZnO nanoparticles incorporated PCL nanofibers for its hemocompatibility, cytotoxicity and apoptotic effects against A549	Materialia	21	101278	2022
4.	John Solomon, Vaidhegi Kugarajah, Paechimuthu Ganesan, Sangeetha Dharmalingam	Enhancing power generation by maintaining operating temperature using Phase Change Material for Microbial Fuel Cell application	Journal of Environmental Chemical Engineering	10	107057	2022
5.	Vaidhegi Kugarajah, John Solomon,	Enhancement of nitrate removal and electricity generation	Process Biochemistry	113	1	2022

	Kavinila Rajendran, Sangeetha Dharmalingam	in microbial fuel cell using eggshell supported biocathode				
6.	Moogambigai Sugumar, Vaidhegi Kugarajah, Sangeetha Dharmalingam	Optimization of operational factor using statistical design and analysis of nanofiller incorporated polymer electrolyte membrane towards performance enhancement of microbial fuel cell	Process safety and Environmental Protection	258	474	2022
7.	Rajalakshmi Ekambaram, Sangeetha Dharmalingam	Design and development of biomimetic electrospun SPEEK nanofibrous scaffold for bone regeneration applications: *in vitro* and *in vivo* study	Journal of Biomaterials Science: Polymer Edition	-	1	2022
8.	Ekambaram, R., Saravanan, S., Selvam, N., & Dharmalingam, S.	Statistical optimization of novel acemannan polysaccharides assisted TiO_2 nanorods based nanofibers for skin cancer application	Carbohydrate Polymer Technologies and Applications	2	100048	2021
9.	Ekambaram, R., Paraman, V., Raja, L., Suresh, M. K., & Dharmalingam, S.	Design and development of electrospun SPEEK incorporated with aminated zirconia and curcumin nanofibers for periodontal regeneration	Journal of the Mechanical Behavior of Biomedical Materials	-	104796	2021
10.	Kugarajah, V., & Dharmalingam, S.	Effect of silver incorporated sulphonated poly ether ether ketone membranes on microbial fuel cell performance and microbial community analysis	Chemical Engineering Journal	415	128961	2021
11.	Kugarajah, V., Sugumar, M., Swaminathan, E.,	Investigation on sulphonated zinc oxide nanorod	International Journal of Hydrogen Energy	46 (42)	22134-22148	2021

	Balasubramani, N., & Dharmalingam, S.	incorporated sulphonated poly (1, 4-phenylene ether ether sulfone) nanocomposite membranes for improved performance of microbial fuel cell				
12.	Ekambaram, R., Sugumar, M., Swaminathan, E., Raj, A. P. M., & Dharmalingam, S.	Design and fabrication of electrospun Morinda citrifolia-based nanofibrous scaffold as skin wound dressing material: in vitro and in silico analysis	Biomedical Materials	16(4)	045014	2021
13.	Victor, F. S., Kugarajah, V., Bangaru, M., Ranjan, S., & Dharmalingam, S.	Electrospun nanofibers of polyvinylidene fluoride incorporated with titanium nanotubes for purifying air with bacterial contamination.	Environmental Science and Pollution Research		1-14	2021
14.	Kugarajah, V., Ojha, A. K., Ranjan, S., Dasgupta, N., Ganesapillai, M., Dharmalingam, S., ... & Mishra, B. N.	Future Applications of Electrospun Nanofibers in Pressure Driven Water Treatment: A Brief Review and Update	Journal of Environmental Chemical Engineering		105107	2021
15.	Kugarajah, V., & Dharmalingam, S.	Sulphonated polyhedral oligomeric silsesquioxane/sulphonated poly ether ether ketone nanocomposite membranes for microbial fuel cell: Insights to the miniatures involved.	Chemosphere	260	127593	2020
16.	Ravikumar, D. K., Ragavan, S., & Dharmalingam, S.	Analysis of Mechanical and Thermal Properties of Aluminum-Chromium-Nitride-Coated Stainless	Journal of Materials Engineering and Performance	29(11)	7396-7407	2020

		Steel 316L Micrometal Lattice Fabricated by Selective Laser Sintering				
17.	Dharmalingam, S., Meenakshisundaram, O., & Kugarajah, V.	Effect of Degree of Silanization of Luffa on the properties of Luffa-Epoxy Composites	Colloids and Surfaces A: Physicochemical and Engineering Aspects	603	125273	2020
18.	Kugarajah, V., & Dharmalingam, S.	Investigation of a cation exchange membrane comprising Sulphonated Poly Ether Ether Ketone and Sulphonated Titanium Nanotubes in Microbial Fuel Cell and preliminary insights on microbial adhesion	Chemical Engineering Journal,	398	125558	2020
19.	Ekambaram, R., & Dharmalingam, S.	Fabrication and evaluation of electrospun biomimetic sulphonated PEEK nanofibrous scaffold for human skin cell proliferation and wound regeneration potential	Materials Science and Engineering: C	115	111150	2020
20.	Kugarajah, V., Sugumar, M., & Dharmalingam, S.	Nanocomposite membrane and microbial community analysis for improved performance in microbial fuel cell	Enzyme and Microbial Technology	140	109606	2020
21.	Sugumar, M. and Dharmalingam, S.,	Statistical optimization of process parameters in microbial fuel cell for enhanced power production using Sulphonated Polyhedral Oligomeric Silsesquioxane dispersed Sulphonated Polystyrene Ethylene	Journal of Power Sources	469	228400	2020

		Butylene Polystyrene nanocomposite membranes.				
22.	Rathinavel, S., Ekambaram, S., Korrapati, P.S. and Sangeetha, D.,	Design and fabrication of electrospun SBA-15-incorporated PVA with curcumin: a biomimetic nanoscaffold for skin tissue engineering	Biomedical Materials	15	035009	2020
23.	Dharmalingam, S., Meenakshisundaram, O., Elumalai, V. and Boopathy, R.S.,	An Investigation on the Interfacial Adhesion between Amine Functionalized Luffa Fiber and Epoxy Resin and Its Effect on Thermal and Mechanical Properties of Their Composites	Journal of Natural Fibers		1-16	2020
24.	Elumalai, V., Sravanthi, C.K.K. and Sangeetha, D.,	Synthesis characterization and performance evaluation of tungstic acid functionalized SBA-15/SPEEK composite membrane for proton exchange membrane fuel cell.	Applied Nanoscience	9	1163-1172	2019
25.	Elumalai, V., Rathinavel, S., Annapooranan, R., Ganapathikrishnan, M. and Sangeetha, D.,	Phosphonated mesoporous silica based composite membranes for high temperature proton exchange membrane fuel cells.	Journal of SolidState Electrochemistry	23	1837-1850	2019
26.	Elumalai, V., Deenadhayalan, T., Asitha, A.K., Kirubhakaran, D.J. and Sangeetha, D.,	Preparation of tungstic acid functionalized titanium oxide nanotubes and its effect on proton exchange membrane fuel cell	SN Applied Sciences	1	348	2019
27.	Elumalai, V. and Dharmalingam, S.,	Octa-imidazolium POSS/quaternizedpolysulfone composite anion exchange	Polymer Composites	40	1536-1544	2019

		membrane for alkaline fuel cell.				
28.	Felix Swamidoss, V., Bangaru, M., Nalathambi, G., Sangeetha, D. and Selvam, A.K.,	Silver-incorporated poly vinylidene fluoride nanofibers for bacterial filtration.	Aerosol Science and Technology	53	196-206	2019
29.	Elumalai, V. and Sangeetha, D.,	Synergic effect of ionic liquid grafted titanate nanotubes on the performance of anion exchange membrane fuel cell.	Journal of Power Sources	412	586-596	2019
30.	Swamidoss, V.F., Bangaru, M. and Sangeetha, D.,	A new approach to air filtration.	Filtration & Separation	56	22-24	2019
31.	Elumalai, V. and Sangeetha, D.,	Preparation of anion exchangeable titanate nanotubes and their effect on anion exchange membrane fuel cell.	Materials & Design	154	63-72	2018
32.	Elumalai, V., Annapooranan, R., Ganapathikrishnan, M. and Sangeetha, D.,	A synthesis study of phosphonated PSEBS for high temperature proton exchange membrane fuel cells.	Journal of APPlied Polymer Science	135	45954	2018
33.	Elumalai, V. and Sangeetha, D.,	Anion exchange composite membrane based on octa quaternary ammonium Polyhedral Oligomeric Silsesquioxane for alkaline fuel cells.	Journal of Power Sources	375	412-420	2018
34.	Elangovan, M. and Dharmalingam, S.,	Effect of polydopamine on quaternized poly (ether ether ketone) for antibiofouling anion exchange membrane in microbial fuel cell.	Polymers for Advanced Technologies	29	275-284	2018
35.	Elangovan, M. and Dharmalingam, S.,	Application of polysulphone based anion exchange membrane electrolyte for improved electricity generation	Materials Chemistry and Physics	199	528-536	2017

		in microbial fuel cell.				
36.	Venkatesan, P.N. and Dharmalingam, S.,	Characterization and performance study of phase inversed Sulfonated Poly Ether Ether Ketone–Silico tungstic composite membrane as an electrolyte for microbial fuel cell applications.	Renewable Energy	102	77-86	2017
37.	Kumar, D., Boopathy, S.R., Sangeetha, D. and Bharathiraja, G.,	Investigation of mechanical properties of horn powder-filled epoxy composites	StrojniskiVestnik-Journal of Mechanical Engineering	63	138-148	2017
38.	Elangovan, M. and Dharmalingam, S.,	Anti-biofouling anion exchange membrane using surface modified quaternized poly (ether imide) for microbial fuel cells	Journal of Applied Polymer Science	134		2016
39.	Venugopal, K. and Dharmalingam, S.,	Synthetic salt water desalination by electrodialysis using reinforced ion exchange membranes for acid–base production	International Journal of Plastics Technology	20	315-333	2016
40.	Elumalai, V. and Dharmalingam, S.,	Synthesis characterization and performance evaluation of ionic liquid immobilized SBA-15/quaternisedpolysulfone composite membrane for alkaline fuel cell.	Microporous and Mesoporous Materials	236	260-268	2016
41.	Elangovan, M. and Dharmalingam, S.,	Comparative study of microbial fuel cell performance using poly ether ether ketone-based anion and cation exchange membranes.	Journal of Polymer	23	250	2016
42.	Venugopal, K. and Dharmalingam, S.,	Development of monopolar and platinum intermediate bipolar	Desalination and Water Treatment	57	25939-25949	2016

		membranes: application in desalting brine solution.				
43.	Venkatesan, P.N. and Dharmalingam, S.,	Synthesis and characterization of Pt, Pt–Fe/TiO2 cathode catalysts and its evaluation in microbial fuel cell.	Materials for Renewable and Sustainable Energy	5	11	2016
44.	Venugopal, K. and Dharmalingam, S.,	Monopolar and Platinum Interfaced Bipolar Membrane Electrodialysis: Experimental Assessment Using Synthetic Salt Solution Heterogeneous Cation Exchange Membranes.	Journal of Membrane Science and Research	2	118-127	2016
45.	Elangovan, M. and Dharmalingam, S.,	Preparation and performance evaluation of poly (ether-imide) based anion exchange polymer membrane electrolyte for microbial fuel cell.	International Journal of Hydrogen Energy	41	8595-8605	2016
46.	Sivasankaran, A., Sangeetha, D. and Ahn, Y.H.,	Nanocomposite membranes based on sulfonated polystyrene ethylene butylene polystyrene (SSEBS) and sulfonated SiO2 for microbial fuel cell application	Chemical Engineering Journal	289	442-451	2016
47.	Elangovan, M. and Dharmalingam, S.,	A facile modification of a polysulphone based anti biofouling anion exchange membrane for microbial fuel cell application	RSC advances	6	20571-20581	2016
48.	Elangovan, M. and Dharmalingam, S.,	Scaleup suitability of sulfonated polyether ether ketone membrane-based microbial fuel cell.	Environmental Progress & Sustainable Energy	35	80-87	2015

49.	Sivasankaran, A. and Sangeetha, D.	Influence of sulfonated SiO2 in sulfonated polyether ether ketone nanocomposite membrane in microbial fuel cell.	Fuel	159	689-696	2015
50.	Venkatesan, P.N. and Dharmalingam, S.,	Effect of cation transport of SPEEK–Rutile TiO2 electrolyte on microbial fuel cell performance.	Journal of Membrane Science	492	518-527	2015
51.	Venkatesan, P.N. and Dharmalingam, S.,	Development of cation exchange resin-polymer electrolyte membranes for microbial fuel cell application.	Journal of materials science	50	6302-6312	2015
52.	Aravind, K. and Sangeetha, D.,	Characterization and in vitro studies of sulfonated polyether ether ketone/polyether sulfone/nano hydroxyapatite composite.	International Journal of Polymeric Materials and Polymeric Biomaterials	64	220-227	2015
53.	Ayyaru, S. and Dharmalingam, S.,	A study of influence on nanocomposite membrane of sulfonated TiO2 and sulfonated polystyrene-ethylene-butylene-polystyrene for microbial fuel cell application.	Energy	88	202-208	2015
54.	Vinodh, R. and Sangeetha, D.,	A novel composite membrane from QPSU and SiO2 for solid alkaline fuel cell applications.	International Journal of Green Energy	12	756-765	2015
55.	Padmavathi, R., Devi, A.S., Saranya, N., Gnanasundaram, P. and Sangeetha, D.,	Synthesis and characterization of Pt supported on multiwalled carbon nanotubes for improved catalytic performance in fuel cell applications.	Journal of Porous Materials	22	647-658	2015

56.	Bhavani, P. and Sangeetha, D.,	Glutaraldehyde cross-linked sulphonated poly styrene ethylene butylene poly styrene membranes for methanol fuel cells.	International Journal of Plastics Technology	19	137-152	2015
57.	Venugopal, K. and Dharmalingam, S.,	Development of Electrospun Ti incorporated Polyvinyl Pyrrollidone nanofiber and its characterizations.	Journal of the Indian Chemical Society	92	652-655	2015
58.	Venugopal, K. and Dharmalingam, S., .	Investigation on the application of polysulfone-based bipolar membrane for desalination of water.	Desalination and water treatment	54	285-294	2015
59.	Koilpillai, S.S. and Dharmalingam, S.,	A novel quaternized poly (ether sulfone) membrane for alkaline fuel cell application.	International Journal of Energy Research	39	317-325	2015
60.	Kalambettu, A., Damodaran, A., Dharmalingam, S. and Vallam, M.T.,	Evaluation of biodegradation of pineapple leaf fiber reinforced PVA composites.	Journal of Natural Fibers	12	39-51	2015
61.	Ashokkumar, M., Aravind, K. and Sangeetha, D.,	Evaluation of Polyether Sulfone/Nanohydroxyapatite Nanofiber Composite as Bone Graft Material.	Trends in Biomaterials & Artificial Organs	29		2015
62.	Venkatesan, P.N. and Dharmalingam, S.,	Effect of zeolite on SPEEK/zeolite hybrid membrane as electrolyte for microbial fuel cell applications.	RSC advances	5	84004-84013	2015
63.	Venugopal, K. and Dharmalingam, S.,	Evaluation of the efficiency of brackish desalination ion exchange membranes using electrodialysis process.	RSC advances	5	73901-73913	2015
64.	Vijayakumar, E. and Sangeetha, D.,	A quaternized mesoporous silica/polysulfone	RSC Advances	5	42828-42835	2015

		composite membrane for an efficient alkaline fuel cell application.				
65.	Kalambettu, A. and Dharmalingam, S.,	Fabrication and in vitro evaluation of Sulphonated Polyether Ether Ketone/nano Hydroxyapatite composites as bone graft materials.	Materials Chemistry and Physics	147	168-177	2014
66.	Srinivasan, V.S., Boopathy, S.R., Sangeetha, D. and Ramnath, B.V.,	Evaluation of mechanical and thermal properties of banana–flax based natural fibre composite.	Materials & Design	60	620-627	2014
67.	Padmavathi, R., Minnoli, M. and Sangeetha, D.,	Removal of heavy metal ions from waste water using anion exchange polymer membranes.	International Journal of Plastics Technology	18	88-99	2014
68.	Prabhu, N.V. and Sangeetha, D.,	Characterization and performance study of sulfonated poly ether ether ketone/Fe3O4 nano composite membrane as electrolyte for microbial fuel cell.	Chemical Engineering Journal	243	564-571	2014
69.	Aravind, K., Sundar, S.S. and Sangeetha, D.,	In Vivo Studies of Sulphonated Polyether Ether Ketone Based Composite Bone Graft Materials.	Trends in Biomaterials & Artificial Organs	28		2014
70.	Ayyaru, S. and Dharmalingam, S.,	Enhanced response of microbial fuel cell using sulfonated poly ether ether ketone membrane as a biochemical oxygen demand sensor.	Analytica chimica acta	818	15-22	2014
71.	Jothi, P.R. and Dharmalingam, S.,	An efficient proton conducting electrolyte membrane for high temperature fuel cell in aqueous-free medium.	Journal of membrane science	450	389-396	2014

72.	Venugopal, K. and Dharmalingam, S.,	Evaluation of synthetic salt water desalination by using a functionalized polysulfone based bipolar membrane electrodialysis cell.	Desalination	344	189-197	2014
73.	S Sundar, S., Aravind, K., Muruganantham, R. and Sangeetha, D.,	Evaluating Triboelectric Properties of Polymer Films: An Incipient Appliance and Case Studies.	Recent Patents on Materials Science	7	64-70	2014
74.	Padmavathi, R. and Sangeetha, D.,	Synthesis and characterization of electrospun carbon nanofiber supported Pt catalyst for fuel cells.	Electrochimica Acta	112	1-13	2013
75.	Iyengar, P.K., Bhat, K.A., Sangeetha, D. and Moorthy, T.V.,	Polymethyl methacrylate nanofiber-reinforced epoxy composite for shape-memory applications.	High Performance Polymers	25	1000-1006	2013
76.	Saravanabhavan, S.S. and Dharmalingam, S.,	Fabrication of polysulphone/hydroxyapatite nanofiber composite implant and evaluation of their in vitro bioactivity and biocompatibility towards the post-surgical therapy of gastric cancer.	Chemical engineering journal	234	380-388	2013
77.	Padmavathi, R. and Sangeetha, D.,	Design of novel SPEEK-based proton exchange membranes by self-assembly method for fuel cells.	Ionics	19	1423-1436	2013
78.	Bhat, K.A., Raghavan, R.N., Sangeetha, D. and Ramesh, S.,	Multi-walled Carbon Nanotube Reinforced Glass Ionomer Cements for Dental Restorations.	Trends in Biomaterials & Artificial Organs	27	168-176	2013
79.	Venugopal, K. and Dharmalingam, S.,	Utilization of bipolar membrane electrodialysis for salt water treatment.	Water environment research	85	663-670	2013

80.	Vinodh, R. and Sangeetha, D.,	Efficient utilization of anion exchange composites using silica filler for low temperature alkaline membrane fuel cells.	International Journal of Plastics Technology	17	35-50	2013
81.	Venkatesan, P.N. and Dharmalingam, S.,	Characterization and performance study on chitosan-functionalized multi walled carbon nano tube as separator in microbial fuel cell.	Journal of membrane science	435	92-98	2013
82.	Venkatkarthick, R., Elamathi, S., Sangeetha, D., Balaji, R., Kannan, B.S., Vasudevan, S., Davidson, D.J., Sozhan, G. and Ravichandran, S.,	Studies on polymer modified metal oxide anode for oxygen evolution reaction in saline water.	Journal of Electroanalytical Chemistry	697	1-4	2013
83.	Vinodh, R. and Sangeetha, D.,	Comparative study of composite membranes from nano-metal-oxide-incorporated polymer electrolytes for direct methanol alkaline membrane fuel cells.	Journal of applied polymer science	128	1930-1938	2013
84.	Perumal, B. and Sangeetha, D.,	Surface modification of sulfonated polystyrene ethylene butylene polystyrene membranes by layer-by-layer assembly of polysulfone for application in direct methanol fuel cell.	International Journal of Polymeric Materials and Polymeric Biomaterials	62	462-467	2013
85.	Venugopal, K. and Dharmalingam, S.,	Fundamental studies on a new series of SPSEBS-PVA-QPSEBS bipolar membrane: Membrane preparation and characterization.	Journal of applied polymer science	127	4983-4990	2013
86.	Mahendiravarman, E. and Sangeetha, D.,	Increased microbial fuel cell performance using quaternized poly ether ether ketone anionic	International journal of hydrogen energy	38	2471-2479	2013

		membrane electrolyte for electricity generation.				
87.	Bhat, K.A., Leo Prakash, P., Manoharan, N., Lakshmibai, A. and Sangeetha, D.,	Fabrication of polymethyl methacrylate/polysulfone/nanoceramic composites for orthopedic applications.	Journal of applied polymer science	127	2764-2775	2013
88.	Ayyaru, S. and Dharmalingam, S.,	Improved performance of microbial fuel cells using sulfonated polyether ether ketone (SPEEK) TiO 2–SO 3 H nanocomposite membrane.	RSC Advances	3	25243-25251	2013
89.	Ayyaru, S., Letchoumanane, P., Dharmalingam, S. and Stanislaus, A.R.,	Performance of sulfonated polystyrene–ethylene–butylene–polystyrene membrane in microbial fuel cell for bioelectricity production.	Journal of Power Sources	217	204-208	2012
90.	Sundar, S.S. and Sangeetha, D.,	Prolonged Amoxicillin Release Kinetics and Biocompatibility Using Chitosan/PVA Blend Membranes In-Vitro.	Trends in Biomaterials and Artificial Organs	26	176-182	2012
91.	ani, P. and Sangeetha, D.,	Blend membranes for direct methanol and proton exchange membrane fuel cells.	Chinese Journal of Polymer Science	30	548-560	2012
92.	Bhat, K.A., Prabhu, N.V. and Sangeetha, D.,	Polymer/silica Composites Fabricated by Sol-Gel Technique for Medical Applications.	Trends in Biomaterials & Artificial Organs	26	121-129	2012
93.	Venugopal, K. and Dharmalingam, S.,	Desalination efficiency of a novel bipolar membrane based on functionalized	Desalination	296	37-45	2012

		polysulfone.				
94.	Padmavathi, R., Karthikumar, R. and Sangeetha, D.,	Multilayered sulphonated polysulfone/silica composite membranes for fuel cell applications.	Electrochimica acta	71	283-293	2012
95.	Sundar, S.S. and Sangeetha, D.,	Fabrication and evaluation of electrospun collagen/poly (N-isopropyl acrylamide)/chitosan mat as blood-contacting biomaterials for drug delivery.	Journal of Materials Science: Materials in Medicine	23	1421-1430	2012
96.	Kalambettu, A.B., Rajangam, P. and Dharmalingam, S.,	The effect of chlorotrimethylsilane on bonding of nano hydroxyapatite with a chitosan–polyacrylamide matrix.	Carbohydrate research	352	143-150	2012
97.	Sundar, S.S. and Sangeetha, D.,	Investigation on sulphonated PEEK beads for drug delivery, bioactivity and tissue engineering applications.	Journal of Materials Science	47	2736-2742	2012
98.	Bhavani, P. and Sangeetha, D.,	Characterization of proton exchange membranes based on SPSEBS/SPSU blends.	Journal of Polymer Research	19	9824	2012
99.	Guhan, S., Muruganantham, R. and Sangeetha, D.,	Development of a solid polymer electrolyte membrane based on sulfonated poly (ether ether) ketone and polysulfone for fuel cell applications.	Canadian Journal of Chemistry	90	205-213	2012
100	Bhat, K.A., Rajangam, P. and Dharmalingam, S.,	Fabrication and characterization of polymethylmethacrylate/polysulphone/β-tricalcium phosphate composite for	Journal of Materials Science	47	1038-1045	2012

		orthopaedic applications.				
101	Vinodh, R. and Sangeetha, D.,	Carbon supported silver (Ag/C) electrocatalysts for alkaline membrane fuel cells.	Journal of Materials Science	47	852-859	2012
102	Logeswari, J., Pandurangan, A. and Sangeetha, D.,	An efficient catalyst for the large scale production of multi-walled carbon nanotubes.	Industrial & engineering chemistry research	50	13347-13354	2011
103	Ayyaru, S. and Dharmalingam, S.,	Development of MFC using sulphonated polyether ether ketone (SPEEK) membrane for electricity generation from waste water.	Bioresource technology	102	11167-11171	2011
104	Bhavani, P. and Sangeetha, D.,	SPSEBS/H 3 PO 4 composite electrolyte membranes for application in PEMFC and DMFC.	International Journal of Plastics Technology	15	97-111	2011
105	Bhavani, P. and Sangeetha, D.,	Proton conducting composite membranes for fuel cell application.	International journal of hydrogen energy	36	14858-14865	2011
106	Vinodh, R., Bhat, K.A. and Sangeetha, D.,	Fabrication, characterization and invitro bioactivity evaluation of QPSU/TiO 2 composite membranes.	Journal of Polymer Research	18	1469-1477	2011
107	Vinodh, R., Purushothaman, M. and Sangeetha, D.,	Novel quaternized polysulfone/ZrO2 composite membranes for solid alkaline fuel cell applications.	International journal of hydrogen energy	36	7291-7302	2011
108	Bhavani, P. and Sangeetha, D.,	Preparation and characterization of proton exchange membrane based on SPSEBS/PSU blends for fuel cell applications.	Energy	36	3360-3369	2011
109	Ganapathy, Sozhan&Elamathi,	Sulfonated Polystyrene-Block-	ECS Transactions	33	157-166	2011

	Dharmalingam& Sangeetha, Jothinathan& Lakshmi, Subramanian & Vasudevan, Subbiah & Ravichandran, Rengarajan& Balaji, Balasingam&Balasingam, Suresh kannan& Swaminathan.	(Ethylene-Ran-Butylene)-Block-Polystyrene (SPSEBS) Membrane for Sea Water Electrolysis to Generate Hydrogen.				
110	Ramaganthan, B., Sivakumar, P.M. and Dharmalingam, S.,	Synthesis, characterization of novel silicotungstic acid incorporated SPEEK/PVA-co-ethylene-based composite membranes for fuel cell.	Journal of materials science	46	1741-1748	2011
111	Vinodh, R., Padmavathi, R. and Sangeetha, D.,	Separation of heavy metals from water samples using anion exchange polymers by adsorption process.	Desalination	267	267-276	2011
112	Guhan, S., Prabhu, N.V. and Sangeetha, D.,	Development of sulfonated poly (ether ether ketone) electrolyte membrane for applications in hydrogen sensor.	Polymer Science Series A	53	1159-1166	2011
113	Vinodh, R., Ilakkiya, A., Elamathi, S. and Sangeetha, D.,	A novel anion exchange membrane from polystyrene (ethylene butylene) polystyrene: synthesis and characterization.	Materials Science and Engineering: B	167	43-50	2010
114	Swaminathan, E. and Dharmalingam, S.,	Evaluation of sulphonated polystyrene ethylene butylene polystyrene/montmorillonite nano-composites as proton exchange membranes.	International Journal of Plastics Technology	13	150-162	2009

115	Guhan, S., Kumar, N.A. and Sangeetha, D.,	Sulphonated poly ether ether ketone/polyvinyl alcohol/phosphotungstic acid composite membranes for PEM fuel cells.	Chinese Journal of Polymer Science	27	157-164	2009
116	Elamathi, S., Nithyakalyani, G., Sangeetha, D. and Ravichandran, S.,	Preparation and evaluation of ionomeric membranes based on sulfonated-poly (styrene_isobutylene _styrene) membranes for proton exchange membrane fuel cells (PEMFC).	Ionics	14	377-385	2008
117	Sangeetha, D.,	Conductivity and solvent uptake of proton exchange membrane based on polystyrene (ethylene–butylene) polystyrene triblock polymer.	European polymer journal	41	2644-2652	2005
118	Janaki, K., Elamathi, S. and Sangeetha, D.,	Development and characterization of polymer ceramic composites for orthopedic applications.	Artificial Organs	22	169-178	2005
119	Sangeetha, D.,	Sulphonated polystyrene–block–poly (ethylene–ran–butylene)-block polystyrene as polymer electrolytes for proton exchange membrane fuel cell.	Int J PlastTechnol	8	313-321	2004
120	Kothandaraman, H., Sangeetha, D., Sriramulu, A.A., Nayagam, M.P.M. and Aminabhavi, T.M.,	Polymerization kinetics of styrene using coordination catalysts containing rare earth compounds.	Journal of applied polymer science	80	995-1002	2001
121	Kothandaraman, H. and Sangeetha, D.,	Effect of the catalyst on the copolymers of styrene with methyl methacrylate by Ziegler–Natta polymerization.	European polymer journal	37	485-495	2001

9. Detail of patents.

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency/ Country	Status
1	A process for preparation of polymer membrane	**Sangeetha Dharmalingam** and Swaminathan Elamathi	258242	20/12/2013	India	Granted
2	Sulphonated polyether ether ketone/sulphonated TiO2 Composite as Proton Exchange Membrane for Microbial Fuel Cell	**Dharmalingam Sangeetha** and Ayyaru Sivasankaran	313707	23/06/2019	India	Granted
3	Design and development of PEM fuel cell stack	**Sangeetha Dharmalingam**, V.S. Senthil Kumar, Srinivasan Guhan and Lakshmanan Babu	335241	19/03/2020	India	Granted
4	A method of performance of a cation exchange membrane in a microbial fuel cell to generate electricity	**Dharmalingam Sangeetha** and Ayyaru Sivasankaran	393201	28/03/2022	India	Granted
5	A novel anion exchange membrane for fuel cell applications	**Dharmalingam Sangeetha** and Rajangam Vinodh	580/CHE /2011	28/02/20111	India	Filed

10. Books/Reports/Chapters/General articles

S.No	Title	Author's Name	Publisher	Year of Publication
1	A text book on Engineering Chemistry	**D. Sangeetha**	United Global Publishers, Chennai	2008
2	A Manual on Engineering Chemistry Laboratory	**D. Sangeetha** & G. Ramesh	Essar Publications, Chennai	2007
3	TAMIL BOOK on Engineering Chemistry I	Dr. Santhi Elango, Dr Chidambara Vinayagam and **Dr. D. Sangeetha**	Anna University Chennai Publication (Press: New Century Book House, Chennai)	2010
4	TAMIL Chemistry Laboratory Manual	Dr. Santhi Elango, Dr. Chidambara Vinayagam and **Dr. D. Sangeetha**	Anna University Chennai Publication (Press: New Century Book House, Chennai)	2010
5	TAMIL MANUAL for University Dept., Anna University	**Dr. D. Sangeetha** and S. Elamathi	NCBH, Chennai	2010
6	Ion Exchange Membranes for Bipolar Membrane Electrodialysis	**Dharmalingam Sangeetha** and Venugopal Krishnaveni	Academic Publishers (USA)	2012
7	Membranes for Microbial Fuel Cells	**Dharmalingam Sangeetha**, Kugarajah Vaidhegi and Sugumar Moogambigai	Elsevier	2018
8	Proton Exchange Membrane for Microbial Fuel Cells	**Sangeetha Dharmalingam,** Vaidhegi Kugarajah, Vijayakumar Elumalai	Elsevier	2021
9	Effects of biofouling on polymer electrolyte membranes in scaling-up of microbial electrochemical systems	**Sangeetha Dharmalingam,** John Solomon	Elsevier	2022
10	Nanomaterials in Biofuel Cells	**Sangeetha Dharmalingam,** Vaidhegi Kugarajah, John Solomon	Elsevier	2022
11	Fabrication of nanomaterials	Vaidhegi Kugarajah, Hushnaara Hadem, Atul Kumar Ojha, Shivendu Ranjan, Nandita Dasgupta, Bhartendu Nath Mishra, **Sangeetha Dharmalingam**	Elsevier	2022
12	Nanoparticles and nanofluids: Characteristics and behaviour aspects	Vaidhegi Kugarajah, Atul Kumar Ojha, Hushnaara Hadem, Nandita Dasgupta, Bhartendu Nath Mishra, Shivendu Ranjan, **Sangeetha Dharmalingam**	Elsevier	2022

11. Government funded projects

Sl. No.	Name of Proposal	Finding agency	Project value (Lakhs)
1	Synthesis and Characterization of Polymer Electrolyte Membranes for Fuel Cell Applications	DST Project: 2005 – 2008	7.32
2	Development of polymer blends as Electrolyte Membranes	BRNS Project: 2007– 2010 (JRF: S. Guhan)	13.47
3	Synthesis of a new alkaline hydroxyl conducting crosslinked polymer interface for alkaline fuel cells	DST Project: 2008-2011 (JRF: R. Vinodh)	20.34
4	Study of Polymer Nanohydroxyapatite composite scaffolds for Drug delivery and Tissue Engineering applications	CSIR Project: 2010-2013 (SRF: S. Shanmuga Sundar)	15.62
5	Study of Tribology of Sulfur containing Aromatic Polymer/nanohydroxyapatite Composites for Orthopedic Applications	ICMR Project: 2010-2013 (JRF: K. Aravind, S. Anitha, M. Arun, M. Ashokumar	11.2
6	Development of PEMFC (Terminal Aid Grant Project)	BRNS Project: 2010-2011 (JRF: R. Muruganantham)	9.14
7	Ion exchange membranes for Desalination process	BRNS Project: 2010-2013 (JRF: V.Krishnaveni)	21.62
8	Microbial Fuel Cell Development for Production of Electricity from Waste Biomass	DST (AFT) Project: 2010-2014 (JRFs: N.V.Prabhu and E.Mahendiravarman)	45.98
9	Nano fiber network ion conducting polymer composite for fuel cells	UGC Project: 2011-2013 (JRF: J. Palaniraja)	8.72
10	Electrospun Carbon Nanofibers in Electrode Preparation for Fuel Cells	CSIR Project: 2011-2015 (SRF: C. Ramkumar, E. Vijayakumar)	28.65
11	Development of bone graft material based on electrospun sulphonated poly ether ether ketone / nano hydroxyapatite (SPEEK/nHA) composites	ICMR Project: 2015-2018 (B. Yashasvi, E. Rajalakshmi)	17.13
12	An investigation on a scalable and sustainable microbial fuel cell for continuous electricity production from waste biomass	DBT Project: 2016-2019 (S. Moogambigai & K. Vaidhegi)	52
13	Synthesis of phosphonated polymer electrolyte membranes for high temperature fuel cells	SERB Project:2017-2020 (P. Vairachamy, R. Saranya)	24.06
14	Characterization and biofouling studies on silver incorporated sulphonated poly ether ether ketone (SPEEK) membranes for microbial fuel cell applications	STARS-MHRD Project: 2019-2022 (S. John Solomon)	46.69