

Faculty profile:



Name : D. Durgalakshmi

Qualification :M.Sc., M.Phil., Ph.D

Designation : Assistant Professor

Years of Experience: UG: 8 monthsPG: 6 Yrs

Previous Experience: UG: PG:

Area of Specialization: Nanomaterials, Biomaterials

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MEMBERSHIP

S.No.	Details	State/National/International
1	American Chemical Society (No: 30733828)	International

PROJECTS

S.no.	Title	Duration	Funding agency	Amount sanctioned (in lakhs)
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1.	Investigation on the Fabrication And Structural Physical Properties of Novel Nanobioglass Compsite Systems for Bone Tissue Engineering and Hyperthermia Applications	August 2012 to July 2015	Lady Tata Memorial Trusty, Mumbai & UK	8,40,000
2.	Fabrication of Silica Based Biomaterials From Nature Waste Towards Low Cost Bio Products	September 2016 to September 2021	DEPARTMENT OF SCIENCE AND TECHNOLOGY	35,00,000

RESEARCH GUIDANCE

Ph.D Awarded	2 (Thesis submitted)
Ph.D Guiding	
M.Phil Awarded	1
M.Phil Guiding	

WORKSHOPS

S.no.	Organized by	State/National/International	Topic	Date(s)
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1	Department of Medical Physics, CEG campus, Anna University, Chennai	International	International Workshop on Recent Materials for Healthcare and Industrial Applications	22-23, January 2018
2	Indian Institute of Science (IISC) Bengaluru	International	Workshop on ICME approaches to Innovation in Biomedical Implants	11-12, August 2018

CONFERENCES ATTENDED / PRESENTED PAPER

S.no	Organized by	State/National/International	Participated/Presented	Title	Date(s)
1.	Department of Biotechnology, Government of India & AIIMS, New Delhi.	Nationals	Presented	1st Annual Conference & Workshop of Indian Society of Nanomedicine	November 24th to 26th 2016
2.*	MIT Campus, Anna University, Chennai	International	Presented	9th International Conference on Trends in Industrial Measurements and Automation	January 6 th to 9 th 2017
3.*	Bharathidasan university, Trichy	National	Presented	Materials Research Society of India, MRSI symposium	14-16 February 2018
4.	MuthurangamGovt.Arts College(A), Vellore-632 002	State	Presented	National Web Conference on Synthesis and Characterization of Novel Materials	6-7, July 2020

5.	Centre for Biomaterials Cellular & Molecular Theranostics (CBCMT) at Vellore Institute of Technology (VIT), Vellore, India and Swansea University, United Kingdom	International	Participated	Current Innovations and the Future of Therapeutic Developments' CIFTD-2020,	1st -3 rd June, 2020
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CERTIFICATE COURSES /VALUE ADDED COURSES

S.no.	Offered by	Topic	Duration
1	Swayam - NPTEL	How Brain Creates Mind	Four{Feb-March} 2018

JOURNAL PUBLICATIONS

S.NO.	JOURNAL NAME	UGC /SCI/SCIE/WOS	ISBN / ISSN NUMBER	REFERENCE	DATE OF PUBLICATION/DOI
1	RSC Advances		2046-2069	Volume 6 PP.34342-34349	2016
2	RSC Advances		2046-2069	Volume 6 pp.19657-19661.	2016
3	Materials Research Express		2053-1591	Volume 4, Issue 7, pp. 075016.	2017
4	Journal of Nanoscience and Nanotechnology		1533-4899	Volume 17, Issue 5, pp. 3449-3453.	2017
5	Chemistry Select		2365-6549	Volume 3, Issue 25, pp. 7302-7309.	2018
6	Journal of Nanoscience and Nanotechnology.		1533-4899	Volume 18, Issue 7, pp. 4746-4754.	2018
7	AIP conference proceeding		000001984	Volume 1942, Issue 1 050075.	2018

8	Biomaterials science		2047-4849	Volume 6, Issue 7, pp.1764- 1776.	2018
9	International Journal of Applied Ceramic Technology		1744-7402	Volume 17, Issue 4, pp. 1976-1984	2019
10	Processing and Application of Ceramics		1820-6131	Volume 13, Issue 4, pp 376–386.	2019
11	AIP Conference Proceedings		000001984	Volume 2115 pp 030242.	2019
12	Journal of Inorganic and Organometallic Polymers and Materials		1574-1451	Volume 29 Issue 4, pp. 1390-1399.	2019
13	Vacuum		0042-207X	<i>Volume</i> 160 pp 181-188.	2019
14	Processing and Application of Ceramics		1820-6131	Volume 13 Issue 1 pp. 12-23.	2019
15	International Journal of Biological Macromolecules		0141-8130 (print); 1879-0003 (web)	volume 156, pp.969-980	2020
16	New Journal of Chemistry		1369-9261	<i>Volume</i> 44, Issue 48. pp. 21026-21037.	2020
17	Journal of Colloid and Interface Science.		0021-9797	Volume, pp 566 463-472.	2020
18	ACS Applied Materials & Interfaces,		1944-8252	Volume 12, Issue 17 pp 19245-19257.	2020
19	Materials Chemistry and Physics,		0254-0584	Volume 244 pp 122720.	2020
20	Journal of Water Process Engineering		2214-7144	Volume 34, pp 101078.	2020
21	Journal of Power Sources		0378-7753	Volume 466, pp 228305.	2020
22	Materials today Communications		2352-4928	Volume 25 pp 101253.	2020

23	Journal of Molecular Liquids		0167-7322	Volume 314 pp 113588.	(2020)
24	Biomaterials Science		2047-4849	volume 8, issue 14, pp 4003-4025.	2020
25	Multiphoton Microscopy in the Biomedical Sciences XX		1996-756X	volume 11244 pp. 112441B.	2020
26	AIP Conference Proceedings		000001984	Volume 2265, Issue 1, pp 030031.	2020
27	Journal of Materials Science Materials In Electronics		1573-482X	Volume 38 pp.1-8	2021
28	Materials Science and Engineering C		0928-4931	Volume 130 pp.112459-1-12	2021
29	Materials Science And Engineering C		0928-4931	Volume 126 PP. 111856-1-12	2021
30	Journal of Hazardous Materials		0304-3894	Volume 416 pp.125091-1-11	2021
31	Environmental Chemistry Letters		1610-3653	Volume 19 pp.1667-1691	2021
32	Environmental Pollution		0269-7491	Volume 269 pp.116172-1-9	2021
33	Sensors And Actuators B Chemical		0925-4005	Volume 350 pp.130833-1-10	2021
34	New Journal of Chemistry		1369-9261	Volume 45 Issue 13 pp.6080-6090	2021
35	Surfaces And Interfaces		2468-0230	Volume 23 pp.101010-1-8	2021

36	Environmental Pollution		0269-7491	Volume 287 pp.117304-1-7	2021
37	Materials Letters		0167-577X	Volume 303 pp.130470-1-6	2021
38	Journal Of Materials Research		2044-5326	Volume 36 pp.1-18	2021
39	Multiphoton Microscopy In The Biomedical Sciences		1996-756X	Volume 11648 pp.1164800-1-4	2021
40	Ceramic International		0272-8842	Volume 47 Issue 18 pp.25959-25972	2021
41	Environmental Research		0013-9351	Volume 195 pp.110852-1-8	2021
42	Materials Today Proceedings		2214-7854	Volume 1 pp.1-6	2021

WEBINARS [National/International]

S.no.	Organized by	State/National/International	Topic	Date(s)
1	College Name	State		

AWARDS: Materials Research Society of India (MRSI) - **Best PhD Thesis in Materials Science at national level in 2016.**

OTHERS:

Organizing Secretary in the *1st virtual summer school on “Nanoscience and Nanomaterials”* organized by the National Centre for Nanoscience and Nanotechnology, University of Madras from 10th July, 2020 to 30th July, 2020.

List of invited talks delivered

- **“Nanostructured materials for Healthcare Applications”** in the 5th International Conference on Recent Trends in Applied Science and Technology, organized by Manonmaniam Sundharanar University, Tirunelveli on 26th November 2021.

- **“Materials used for Medical Applications”** in The Academy of Sciences, Chennai on 5th June 2021.
- **“Biomedical applications of Nanoscale materials”** in the virtual Faculty Development Program on "Recent Trends on Smart Nanomaterials and its Diversified Applications“ conducted by VIT Vellore (3rd Feb 2021).
- **“The principles and applications of confocal microscope”** in RUSA Skill Based Internship Program (Bioanalytical Technique) organized by Department of Zoology, University of Madras, Chennai (13th February 2020).
- **“Introduction to Nanoscience”** in the seven day online faculty development programme on Contemporary Amelioration in nanostructured materials organized by Department of Science and Humanities, Jeppiaar Engineering College, Chennai. (26th August 2020).
- **“Nanostructured Materials For Biomedical Applications”** in the online FDP on Recent Trends in Physics organized by Department of science, St.Josephs college of Engineering, Chennai. (2nd September 2020).
- **“Phenomena at nanoscale: Properties of Nanomaterials”** in **1st Virtual Summer School on "Nanoscience and Nanomaterials"** organized by National Center for Nanoscience and Nanotechnology, University of Madras, Chennai. (12th July 2020).
- **“Medical Physics elaborating the techniques of ECG and EEG”** in Department of physics, J.B.A.S. College for Women, Chennai. (18thFebruary 2020).
- **“Physics and Philosophy”** at Summer Training Program in Physics (STPIP-2019) in Department of Nuclear physics, University of Madras, Chennai. (29th May 2019).
- **“Nanostructured Bioglass 45S5 for Orthopedic and Dentin regeneration”** at Institute of Biomaterials, Department of Materials Science and Engineering, University of Erlangen-Nuremberg, Germany. (10th Jan 2019).
- **“A Study on the Effect of Acid Catalyst in the Synthesis of Bioglass 45S5 Composition Prepared by Sol-Gel Method”** at International Conference on Biomaterials Bioengineering & Biothernostics (BioMET-2018), VIT, Vellore. (24th-28th July 2018).
- **“An introduction to basics of X-ray Photoelectron Spectroscopy (XPS) and its spectral measurement modalities”** in Training course on “Recent trends in thin film development and their applications in biomedical and Biosensor Devices” organized by Centre for Nanoscience and Nanotechnology at Satyabhama Institute of Science and technology, Chennai.(15th march, 2018).
- **“An introduction to CV studies for electrochemical sensor applications”** in Training course on “Recent trends in thin film development and their applications in biomedical and Biosensor Devices”organized by Centre for Nanoscience and Nanotechnology at Satyabhama Institute of Science and technology, Chennai.(21st March, 2018).
- **“How to Write a Research Article”** at Women's Christian College, Chennai. (31st August,

2017).

- **“Introduction to Nanotechnology and Nanorobotics”** for a **Faculty development program** at Jeppiaarcollege. (1st April 2017).
- **‘Investigation on various forms of nanobioglass 45S5 for orthopeadic and dentin regeneration’** at MRSI Symposium on “Advanced Materials for Sustainable Applications” in CSIR-North East Institute of Science and Technology, Jorhat. (18-21 February, 2016).