

Government Arts College (Autonomous), Coimbatore 641 018

Performance - Teacher Appraisal Report

i. General Information

- a) Name : **Dr. N. MEENAKSHI SUNDARAM**
 b) Address : 1A Lingabhairavi Apt., Peelamedu Pudur, Cbe.- 4.
 (Residence) nmsphy@gmail.com, 9566302759
 c) Designation : Assistant Professor
 d) Dept. : Dept. of Physics, Govt. Arts College (Autonomous),
 Coimbatore - 641 018.
 e) Date of Birth : 15 May 1975
 f) Specialization : Crystal Nucleation, Nanoscience, Biomaterials,
 Materials for Energy, Environment and Healthcare



A) Academic Qualifications

Level	Degree	Subject / Specialization	Board / Dept / College / Institution / University	Month Year	% of Marks / Rank
X	SSLC	Mathematics, Science	Govt. Boys Higher Sec. School, Idappadi, Salem Dt. - 637105	April 1990	70.40
XII	HSC	Physics, Chemistry, Maths, Biology	Govt. Boys Higher Sec. School, Idappadi, Salem Dt. - 637105	March 1992	67.67
UG	B.Sc.	Physics / <i>Appl. Electronics</i>	Sri Sowdeswari College Salem- 636010 (Univ. of Madras)	June 1995	70.52 class 1 st
PG	M.Sc.	Physics / <i>Adv. Electronics</i>	Dept of Physics, Annamalai Univ., Chidambaram - 608002	May 1997	68.81 Univ. II Rank
Research	M.Phil.	Physics / <i>Crystal Growth</i>	Dept of Physics, College of Engg, Anna University, Chennai 600025	Feb. 1999	70.80 Univ. III Rank
Research	Ph.D	Physics / <i>Biomaterials</i>	Crystal Growth Centre, AC Tech, Anna University, Chennai 600025	Nov. 2005	By Thesis
PG	M.Tech.	Nanotechnology <i>Biomaterials</i>	Anna University Regional Centre, Coimbatore - 641047	July 2013	09.33 CGPA Univ II rank
Diploma	PGDCA	Computer Application	Bharathiar University, Coimbatore 641046	June 2018	First Class
Dept. Exam	Account Test	Acc. Test for Exe. Officers	TN Govt 152- The Account Test for Executive Officers	March 2018	Pass

ii. Research Experience & Training

Research	Title of the Work / Thesis	Place / University	Period
M.Phil.	In Vitro Crystallisation and Characterization of Cholesterol	Dept of Physics / CGC, College of Engg., Anna University, Chennai - 25	1997-1999
Ph.D.	Investigations on Cholesterol, Hydroxyapatite and Lysozyme Crystallisation and Influence of Magnetic Field on the Nucleation Process	Crystal Growth Centre, Anna University, Chennai 600 025	1999-2005
Doctoral (part PhD)	Crystallogenesis of Proteins under high Magnetic Field	IMB/IPHT, Friedrich Schiller University, Jena, Germany 9 07745	2002-2003
Post Doctoral	Nano phase Biomaterials (Under DST BOYSCAST Post Doctoral fellowship)	The University of Oklahoma, Norman, USA 73019	2008-2009
M.Tech.	Synthesis and characterization of hydroxyapatite on spider silk for biomedical applications	Anna University Regional Centre, Coimbatore - 641047	2012-2013

B) Research Projects carried out / Associated

Sl. No.	Role / Responsibility	PI /Co-PI	Funding Agency	Project Title	Budget INR	Period	Status
1.	N. Meenakshi Sundaram (PI)	Prof. A. Kandaswamy (Co-PI)	DST (SER B) India	Development of Iron Oxide -Hydroxy apatite nano particles for hyperthermia Biomedical Ap.	35.13 Lakhs	2014-2017	Completed
2.	N. Meenakshi Sundaram (PI)	Dr. M. Alagappan (Co-PI)	UGC (Major) India	Fabrication of nanoscale biosensor for cholesterol detection	11.78 Lakhs	2013-2016	Completed
3.	N. Meenakshi Sundaram (PI)	Dr. V. Rajendran (Co-PI)	DST (SER C) India	Development of nano Crystalline Hydroxyapatite for Drug Design and Biomedical Applications	24.03 Lakhs	2007-2010	Completed

4.	N. Meenakshi Sundaram (<i>Research Assistant</i>)	Dr S. Narayana Kalkura (PI)	UGC (Major) India	Investigations on compounds causing crystal deposition diseases	6.50 Lakhs	2003-2005	Completed
5.	N. Meenakshi Sundaram (<i>Research Scientist</i>)	Prof. Rolf Hilgenfeld (IMB) & Prof Thomas Klupsch (IPHT)	EU - EBCI Germany	Study of Protein Nucleation and crystal growth under magnetic field for high quality protein crystals	1.75k Euro	2002-2003	Completed
6.	N. Meenakshi Sundaram (<i>Project Assistant</i>)	Dr S. Narayana Kalkura (PI)	AICTE - India	Crystallogensis of Proteins to Obtain Better Quality Protein Crystal for Structural Analysis	10 Lakhs	1999 - 2001	Completed
7.	N. Meenakshi Sundaram (<i>Research Assistant</i>)	Dr S. Narayana Kalkura (PI)	AICTE - India	Investigations on cholesterol crystallization for devising newer drugs and treatment	7.7 Lakhs	1998 - 1999	Completed

B1. Research Guidance (give names of Students guided successfully)

Guidance of PhD thesis work				
Sl. No.	Name of PhD Scholar (Univ. Reg. No.)	PhD Thesis Title	University	(Period) / Date of viva-voce exam
1.	Dr. K. L. Palanisamy (7076012129)	Synthesis and characterization of Carrier oil stabilized of Iron Oxide nanoparticles	Anna University, Chennai	(2008-2015) 12.08.2015
2.	Dr. V. Devabharathi (7076012108)	Orange enzyme mediated synthesis of ZnO for Solar Cell Applications	Anna University, Chennai	(2008-2015) 04.12.2015
3.	Dr. M. Sneha (1424569105)	Hydroxyapatite magnetite nanocomposites for bone cancer therapy	Anna University, Chennai	(2014-2017) 23.03.2017

4.	Dr. Umapathi (1413569107)	Modified Poisson Boltzmann model of Si nanowire field effect transistor biosensors	Anna University, Chennai	(2014-2019) 27.05.2019
5.	Dr. S. Vignesh Raj (1413569135)	Hydrothermal growth of hydroxyapatite metal nanocomposites for hard tissue engineering	Anna University, Chennai	(2014-2020) 07.10.2020
6.	Dr. R. Saranya* (17243691244)	Oyster Shell derived Hydroxyapatite Composite for Bone Tissue Engineering	Anna University, Chennai	(2017-2025) 25.04.2025
7.	Ms. M. Renugadevi (22710/B1/2019)	Metal oxide - zeolitic imidazolate framework nanocomposites for Supercapacitor	Bharathiar University, Coimbatore	(2019-2026) 12.08.2026
* Joint Supervisor				

B2. UG & PG Students Research Projects Supervised / Guided	
UG - B.Tech (KSR)	PG - M.Tech - Nanotechnology
B. Divya (2007)- Development of Nano HAp	R. Sirajuddin (2010) -Boran Nitrite Nanotubes
R. Elango (2007) -Molecular docking	M. Senthil Kumar (2010) –ZnO nanomaterials
Ramesh (2007) -Herbal plant antibacterial	B. Kalpana (2010) Antibacterial of Silver nps
M.Sc. (KSRCT)	S. Duraimurugan (2011) nano ZnO gas sensor
R. Palanivelu (2007)-HAp-bacterial interaction	K. Ezaveni (2011) HAp -polymer -tissue Engg
Vijay Jebin (2007)-Glucose sensor	K. Prabakaran (2011) Dye sensitized solar cells
R.Akila (2007) -Environmental remediation	Senpagavalli (2012) Solar cell simulation
UG -B.E. Biomedical Engg (PSGCT)	Vidyaraj (2012) Fuel cell electrode fabrication
2012-13 -Diabetic Retinopathy Imaging	R.Nithya (2013) -HAp Ciproflaxin tissue engg
2013-14 -FET based cholesterol Sensor <i>“BEST PROJECT” Award</i>	Subash (2013) -TiO ₂ np food packing
2014 -15 -Photo induced cancer therapy	Pon Janani (2014) -Meniscus Tissue Engg.
2015 - 16 -Simulation of Collagen fibre tissue	Ragavi (2015) -CdS /CdSe Quantum dots
Nivethitha (2015) -CNT water purification	V.Vijayalaksmi (2015) -Cholesterol Sensor

C) Participation in Seminars, Conferences, Symposia Workshops, Refresher courses, training etc. (If necessary, give a separate list)

C1. Orientation / Refresher / Other Equivalent Courses attended						
Name of the course	Title / Topic of the Course	Name of the Academic Staff College / University / Institution	No. of days	Period		Grade/ Marks
				From	To	
Orientation Programme	TRB 2015 Orientation	UGC-HRDC, Bharathiar University, Coimbatore - 46	28	16.12.2016	12.01.2017	A
Refresher Course	Physics	UGC-HRDC, Bharathiar University, Coimbatore - 46	21	23.11.2018	13.12.2018	A
Refresher Course	Physics	UGC-HRDC, Bharathiar University, Coimbatore - 46	14	22.01.2020	04.02.2020	A
Refresher Course	Physics & Nanotech.	UGC-HRDC, Bharathiar University, Coimbatore - 46	14	08.09.2021	21.09.2021	A+
Refresher Course	Physics	UGC-HRDC, University of Madras, Chennai - 600 005	14	21.11.2023	05.12.2023	A+
Refresher Course	Material Science	UGC-MMTTC, Bharathidasan University, Tiruchirappalli - 620 023	14	10.09.2025	23.09.2025	A+

C2. Conference / Work shop / FDP / SDP and other events organized.

Sl. No	PROGRAMME	Place	Role	DURATION
1.	National Conference on Nanomaterials (NCN 2019)	LRG Government Arts College for Women Tiruppur - 641604	Organizing Committee	24.01.2019 to 25.01.2019
2.	International Conference on Nanomaterials and Nanotechnology (NANO 2015)	KSR College of Technology, Tiruchengode - 637 209	Technical Committee	07.12.2015 to 10.12.2015
3.	BIOMED 2015 -Biomedical Exhibition cum Presentation	PSG College of Technology Coimbatore -641 004	Organizing Secretary	10.04.2015
4.	TEQIP II sponsored FDP on	PSG College of	Coordinator	18.08.2014 to

	Advances in Molecular Diagnostics and Therapeutics	Technology Coimbatore -641 004		24.08.2014
5.	National Conference on Micro and Nano technologies (NCMN2013)	PSG College of Technology Coimbatore -641 004	Organizing Secretary	09.04.2013
6.	International Conference on Nanomaterials and Nanotechnology (NANO 2010)	KSR College of Technology, Tiruchengode - 637 209	Technical Committee Chair	13.12.2010 to 16.12.2010
	National Conference on Nanotechnology	KSR College of Technology, Tiruchengode - 637 209	Organizing Secretary	27.02.2007 to 28.02.2007

C3. Invited Talks / Guest lectures / Seminars / Lectures / Delivered / Presented				
Sl. No	Title of the Talk	Event	Organized By	Date / Period
1.	Crystal nucleation in biomineralization	8th International Conference on Recent Trends in Applied Science and Technology (ICRAST)	Dept. of Physics, Gandhigram Rural Institute, deemed to be University, Dindigul - 624 302	11.12.2025 to 12.12.2025
2.	Nucleation: A step toward nano	International Conference on Artificial Intelligence Innovations for Advanced Research and Emerging Materials Science (INNOV' 25)	PG and Research Dept. of Physics Government Arts College (Auto.) Salem - 636 007	07.03.2025
3.	Measurements in Physics and Astrophysics	Inservice Training for Science Teachers - TNSCST	TNSCST & LRG Government Arts College for Women, Tirupur 641604	02.01.2024 to 06.01.2024
4.	Physical Science Job opportunities	TNSCST - Young Student Scientist Programme (YSSP 2019)	Bharathidasan College of Arts and Science, Erode -	19.05.2019

			638116	
5.	Recants trends in biomaterials and biosensors	ICMR sponsored Workshop on” Uses of functional materials in Healthcare”	Kongu Engineering College, Perundurai, Erode	27.04.2017 to 28.04.2017
6.	Biocompatible composite materials for medical application	ICMR sponsored Seminar on Biocompatible materials for medical applications	Pavai College of Technology, Namakkal-637018	03.03.2017
7.	Nanostructured Biomaterials for healthcare applications	National Conference on Advanced Materials for Energy and Environmental Applications (AMEEA)	Dept. of Physics, Bharathiar University, Coimbatore 641 046	18.03.2015 to 20.03.2015
8.	Role of nanomaterials in Biomedical Engineering	Association of Biomedical Engineering Meeting	Biomedical Engg., NGP College of Technology, Coimbatore	27.03.2015
9.	Advances on Nanomaterials & Nanotechnology for Industrial Applications	One day Workshop on “Nano Enabled Smart Materials Technology”	M. Kumarasamy College of Engg., Karur	30.01.2015
10.	Development of biomagnetic nanosystem for Hyperthermia and Biomedical Applications	National Conference on Advances in Tissue Engineering and Regenerative Medical Technology (TERMTEch-2014),	PSG Institute of Advanced Studies, Coimbatore	12.12.2014 to 13.12.2014
11.	Smart nanostructures for sensor applications	Biomedical Engineering Dept. Association	Faculty of Engineering, Avinashilingam Univ., Coimbatore	15.09.2014
12.	Nanostructures and Toxicology issues in	National Level Seminar on “Challenges in Bio Compatibility of	Dept. of Mechanical Engineering, Nandha Engineering College,	20.09.2014

	Biomaterials	Implantable Materials and Mechanical Behaviors”	Erode	
13.	Perspectives of Biomedical Engineering	First year Orientation Programme for BE Biomedical Engineering	BME, PSG College of Technology	23.07.2014
14.	Role of Nanotechnology on Biosensor design and Fabrication	Workshop on “Advances in Nanotechnology: Fabrication, Processing and Applications”	Centre for Nano Science and Technology, Bharathidasan University, Tiruchirappali	01.03.2014
15.	A recent Review on cholesterol biosensor	TEQIP II sponsored FDP on “Recent Advances in Biosensors for Healthcare Technology	PSG College of Technology	17.02.2014 to 23.02.2014

C4. Participation in FDP / WORKSHOP / Courses / Training programmes			
No	PROGRAMME	Organized By	Period
1.	Workshop on Outcome based Education (OBE)	TANSCHÉ & Government Arts College (Autonomous), Coimbatore - 641 018	31.07.2025
2.	TANSCHÉ Inservice Teacher Training Programme in ‘Physical Sciences’	TANSCHÉ & Government Arts College (Autonomous), Coimbatore - 641 018	05.05.2022 - 06.05.2022
3.	Public Outreach talks on, “To the moon and beyond”, Prof. Jayanth Moorthi, (Online mode)	Indian Institute of Astro-physics, Bangalore & Kodaikanal Solar Observatory (KSO)	20.07.2021
4.	National Academic Depository Awareness / Training Programme	Bharathiar University, Coimbatore - 641 018	25.07.2018
5.	FDP on Smart Grid and Renewable Energy Systems	EEE, PSG College of Technology	December 14 - 20, 2014,
6.	FDP on Advances in Molecular diagnostics and therapeutics	BME, PSG College of Technology	August 18 - 24, 2014

7.	FDP on BIOMEMS and Biomaterials	BME, PSG College of Technology	July 14 - 20, 2014
8.	Workshop on Nanoscale Processing for MEMS and NEMS	Indian Institute of Science, Bangalore	July 07, 2014
9.	FDP on Recent advances in Biosensors for healthcare Technology (TEQIP II)	BME, PSG College of Technology	Feb. 17 - 23, 2014
10.	INUP Hands-on training on Nanofabrication technologies	IIT-B, Powai, Mumbai	November 26 -30, 2013
11.	TEQIP FDP on 'Wireless Technologies in Health Care,	BME, PSG College of Technology	November 15 -24, 2013
12.	TEQIP Workshop on 'Timeless Leadership' by Director IIM Kozhikode	PSG Institute of Management, Coimbatore	September 19 & 20, 2013
13.	INUP Hands-on training on Nanofabrication technologies	PSG Institute of Advanced Studies, Cbe.	October 26 -28, 2013
14.	TEQIP sponsored Workshop on PG Laboratories	ECE, PSG College of Technology	08 October 2013
15.	UGC -Academic Staff College-FDP Refresher course on 'Nanosciences'	Bharathiar University, Coimbatore 641046	December 01 -21, 2012
16.	AICTE FDP on 'Fundamentals of Nanoscience and Technology'	CGC, Anna University, Chennai	December 07-21, 2011
17.	77 th Annual Meeting of Indian Academy of Sciences	PRL (CSIR Lab), Ahmedabad	November 18-20, 2011
18.	COMSOL Conference	Mövenpick, Bangalore	November 4-5, 2011
19.	ISO 9001:2008 Awareness	PSG Tech, Coimbatore	10-11-2011
20.	INSA Workshop on Recent Advances in Biophysics	CCMB, CSIR lab Hyderabad	23 May- 15 June 2007

iii. Teaching Experience / Research Experience etc.

Courses Taught	Name of University / College / Institution	Duration		Experience		
		From	To	YY	MM	DD
UG - (BSc / BE/BTech) Physics, Nanotech, Biomaterial	KSR College of Technology (Autonomous), Tiruchengode - 637 209	12.12.2005	27.05.2011	05	05	16
	PSG College of Technology (Autonomous), Coimbatore - 641 004	06.06.2011	03.08.2015	04	01	27
	Government Arts College (Autonomous), Salem - 636 007	05.10.2015	13.06.2017	01	07	09
	LRG Government Arts College (Women), Tirupur - 641 604	14.06.2017	22.01.2026	08	07	09
	Government Arts College (Autonomous), Coimbatore - 641 018	23.01.2026	Till date	00	06	00
	Total UG Teaching Experience	12.12.2005	Till date	20	4	01
PG - (MSc / MTech/ Physics, Nanotech, Biomaterial	KSR College of Technology (Autonomous), Tiruchengode - 637 209	12.12.2005	27.05.2011	05	05	16
	PSG College of Technology (Autonomous), Coimbatore - 641 004	06.06.2011	03.08.2015	04	01	27
	Government Arts College (Autonomous), Salem - 636 007	05.10.2015	13.06.2017	01	07	09
	LRG Government Arts College (Women), Tirupur - 641 604	14.06.2017	22.01.2026	00	00	00
	Government Arts College (Autonomous), Coimbatore - 641 018	23.01.2026	Till date	00	06	00
	Total PG Teaching Experience	12.12.2005	Till date	11	8	22

Total Teaching Experience (in years and months):

- a) Under Graduate Teaching Experience (12-12-2005 to till date) : **20 years**
- b) Post Graduate Teaching Experience (12-12-2005 to till date) : **12 years**
- c) Academic Research Experience (14-08-1997 to till date) : **29 years**

Publication Details: Books Published & Editorship

1. Processes and Characterization of Advanced Nanostructured Materials, MacMillan Advanced Research Series (ISBN 10: 0230-33201-0, 978-0230-33201-3), (2010) V.Rajendran, **N. Meenakshi Sundaram**, Kurt Eckler, Hillibrand
2. Engineering Physics -I (For I year BE BTech Anna University Chennai) Sri Balaji Publications, Erode, **N. Meenakshi Sundaram**, K. L. Palanisamy (ISBN: 978-81-908993-1-4) (2014)
3. *National Journal of Technology*, Associate Editor, C/o PSG College of Tech. (ISSN-0973-1334) (2014-2017)
4. *Proceedings of 3rd National Conference on Micro and Nanotechnologies NCMN* - 2013, April 10, 2013. PSG College of Technology, Coimbatore 641004, Editors: **N. Meenakshi Sundaram**, M. Alagappan.

Research Articles / Papers Published in International Journals

Sl. No	Authors	Article title	Journal title	Volume, Pages	Year	Impact Factor
1.	N Meenakshi Sundaram , M Ashok, S.Narayana Kalkura	Observation of Cholesterol Nucleation in a Magnetic Field	Acta Crystallographica D: Biological Crystallography	58, 1711-1714	2002	7.652
2.	M. Ashok, N. Meenakshi Sundaram , S. Narayana Kalkura	Crystallization of hydroxyapatite at physiological temperature	Materials Letters	57 (13), 2066-2070	2003	3.423
3.	T.K.Anee, M. Palanichamy, N. Meenakshi Sundaram , S. Narayana	Influence of iron and temp. on the crystallization of calcium phosphates at the physiological pH	Materials Letters	58, (3-4), 478-482	2004	3.423

	Kalkura					
4.	N. Meenakshi Sundaram, D.Arivuoli, R.Dhanasekaran, S. Narayana Kalkura	In vitro solubility, growth and characterization of cholesteryl acetate	Journal of Crystal Growth	267, 1-2, 301-305	2004	1.632
5.	T.K. Anee, N. Meenakshi Sundaram, D. Arivuoli, P. Ramasamy, S. N. Kalkura	Influence of an organic and an inorganic additive on the crystallization of dicalcium phosphate dehydrate	Journal of Crystal Growth	285, (3) 380-387	2005	1.632
6.	N. Meenakshi Sundaram, M. Ashok, Y. Yokogawa, S.N. Kalkura	Crystallization of hydroxyapatite nanocrystals under magnetic field	Materials Letters	60, (6), 761-765	2006	3.423
7.	M. Ashok, S. N. Kalkura, N. Meenakshi Sundaram, D. Arivuoli	Growth and characterization of hydroxyapatite crystals by hydrothermal method	Journal of Materials Science: Materials in Medicine	18, 895-898	2007	3.896
8.	M. Rajkumar, N. Meenakshi Sundaram, V. Rajendran	Development of nanocomposites based on hydroxyl-apatite /sodium alginate: synthesis and characterization	Materials Characterization (Elsevier)	62, 469-479	2011	4.36
9.	M. Rajkumar, K.Kavitha, N.Meenakshi Sundaram, V. Rajendran	Nanohydroxyapatite–Chitosan–Gelatin Polyelectrolyte Complex with Enhanced Mechanical and Bioactivity	Materials Science and Engineering: C	33, (6), 3237–3244	2013	7.328
10.	V. Devabharathi,	Influence of pH on the	Superlattices	75,	2014	3.118

	K.L. Palanisamy, N. Meenakshi Sundaram	performance of ZnO nanocrystal based dye sensitized solar cells	and Microstructures	99–104		
11.	Sowmya S, Steffie M, Jaisree MPJ, Meenakshi Sundaram N	Multiphysics Modeling and Simulation of Nanoscale Cantilever Array Sensor for the Detection of HIV Antigens	Journal of Nano Science and Nano Technology	2(1), 15-18,	2014	1.560
12.	R.Sakthivishnu, R. Nithya, M.Alagappan, N.Meenakshi Sundaram	Influence of NaOH on structural, morphological and bandgap analysis of CdS Nanoparticles	Journal of Nano Science and Nano Technology	2(1), 90-93,	2014	1.560
13.	R.Nithya, N. Meenakshi Sundaram	Biodegradation and cytotoxicity of Ciprofloxacin loaded hydroxy apatite -Poly caprolactone nano composite film for sustainable bone implants	International Journal of Nanomedicine	10, 99-106	2015	5.115
14.	M. Sneha, N.Meenakshi Sundaram	Synthesis and characterization of Iron Oxide hydroxy apatite nanocrystals for biomedical applications.	International Journal of Nanomedicine	10, 119-127	2015	5.115
15.	Sneha M., Meenakshi Sundaram N.	Synthesis and characterization of Magnetite / hydroxy apatite tubes using natural template for biomedical applications	Bulletin of Materials Science	In press	2016	1.392

16.	Vignesh Raj S., Rajkumar M., Meenakshi Sundaram N. , Kandaswamy A.	Direct hydrothermal synthesis of hydroxy apatite/alumina nanocomposite	Materials Characterization	134 416 - 421	2017	4.36
17.	K Umapathi, N.Meenakshi Sundaram , P Kalpana	Investigation of the effect of finite-sized ions on the nanowire field-effect transistor in electrolyte concentration using a modified Poisson– Boltzmann model	Physics and Chemistry of Liquids	1-10	2017	1.707
18.	Vignesh Raj S., Rajkumar M., Meenakshi Sundaram N. ,	Synthesis and characterization of hydroxyapatite- alumina ceramic nanocomposites for biomedical applications	Bulletin of Materials Science	41 (4), 93	2018	1.392
19.	K Umapathi, N Meenakshi Sundaram , P Kalpana	The impact of the modified Poisson– Boltzmann model on protein bound to a lipid coated silicon nanowire field effect transistor biosensor in an electrolyte environment	Physics and Chemistry of Liquids	57 (3), 371-381	2019	1.707
20.	Saranya, R., B. Aruna Devi, N. Meenakshi Sundaram	Preparation of ciprofloxacin-loaded oyster shell derived hydroxyapatite composite film for biomedical applications	Journal of the Australian Ceramic Society	59.3 621-632.	2023	2.100

21.	Renugadevi, M., Sundaram, N.M. , Siva, V.	SnO ₂ @ZIF-8 Core– shell structured nanocrystallites: Structural and Electrochemical investigation	Journal of Nanoparticle Research	27, 158	2025	2.730
22.	Renugadevi, M. Meenakshi Sundaram, N. , Dineshbabu, N., Murugan, A., Siva, V., S. Adline Benila	Construction of MnO ₂ Encapsulated ZIF-8 Composites as Electrode Material for Asymmetric Super capacitor: Improved Electrochemical Performance via Redox Additive Electrolytes	Journal of Inorganic and Organometallic Polymers and Materials	10.1007/s 10904- 026- 04448-w	2026	5.32
			Total Impact points			73.945

viii) Innovations/Contributions in Teaching (If necessary, give a separate list)

a)	Design of curriculum	: Regular and periodic Upgradation of Curriculum and Syllabus for Physics, Materials science, Nanoscience subjects in UG and PG based on societal needs
b)	Teaching Methods	: - Lectures through board and chalk, educational quiz, - Group discussions, Seminars, - Teaching through Audio Visual aids, - Field visits and training.
c)	Laboratory experiments	: - Experiments based on problems solving ability in accordance with the syllabus - Questionnaires and conducting viva-voce.
d)	Evaluation Methods	: - Tests, seminars, problem solving experiments, Paper presentation - Attentiveness of the student is periodically watched - Problem solving Exercises, Projects
e)	Preparation of resource material	: - Refer from prescribed text books and reference books - Consultation with senior professors - Scientific Journals and research articles

		• Internet, Magazines, News papers • SWAYAM portal (https://swayam.gov.in/) • NPTEL portal (https://nptel.ac.in/)
f)	Remedial Teaching / Students	○ Special coaching classes ○ Identifying students problems helping them in solving problems ○ Parental counselling
g)	Any other	Academic research updates will be referred at google scholar weblink: https://scholar.google.com/citations?user=ZiJRDd4AAAAJ&hl=en

ix) Extension Work / Community Service (If necessary give a separate list)

- Participated in the Career Guidance programme conducted for Govt Schools students to create awareness among students

D) Participation in Corporate Life

Please give a short account your contribution to:

a)	College / University/Institution	○ Implementing the instructions from HoD & Principal ○ Maintaining the student's discipline inside the college campus ○ Motivating the Students to participate in extracurricular activities ○ Assisting for NAAC, IQAC, AQAR, NIRF & AISHE documents ○ Tutor for I year BSc Physics (TM) students (2026-2029) batch
b)	Co-curricular Activities	❖ Identify the student's potentials and skills, and direct them to participate in appropriate programmes, job fairs organized by various institutions / scientific companies / and industries.
c)	Enrichment of Campus Life	➤ Helping /assisting the Principal, HoDs, Colleague and guiding students to enrich the campus life through scientific / cultural activities. ➤ Supporting the college events such as sports, games and cultural activities
d)	Student's Welfare and Discipline	• Periodical counselling to the students, their parents and family members in the guidance and counselling centre.
e)	Membership/ Participation in Bodies/ Committees	❖ BoS Member - MTech Nanotech - Anna University (2008-09), KSR College of Technol.(2008-11), ❖ BoS Member BE Biomedical Engineering, PSG College of Tech. (2012-2015)

	on Education and National Development	❖ BoS Member M.Tech. Nanoscience &Tech., PSG Tech. (2012-2015) ❖ BoS member (Anna University) BE BME, Adiyamaan college of Engg., Hosur (2014-16) ❖ BoS member -Physics -Govt Arts College, Salem -7 (2016-17) ❖ BoS member -Physics CA-Bharathiar University -(2021-2025) ❖ BoS member -Physics - Govt Arts College (Autonomous), Coimbatore (2026 onwards)
f)	Professional Organization of Teachers	➤ Indian Society of Technical Education (MISTE) - Life Member (LM - 54081) 2007 ➤ Association of Physics Teachers (2025) ➤ Indian Science and Technology Association (ISTA) - Life Member 007/2023

E. (a) Membership of Professional Bodies, Societies etc.

1. Biomedical Engineering Society of India (BMESI) Life Member (LM -1144) 2015
2. Society for Biomaterials and Artificial Organs (SBAOI) - Life Member (LM - 666)
3. Magnetic Society of India (MSI) Life Member (LM - 658) 2014
4. Institute for Smart Structures and Systems (ISSS) - Life Member (LM - 458) 2012
5. Indian Society of Technical Education (MISTE) - Life Member (LM - 54081) 2007
6. Indian Association for Crystal Growth (IACG) Life Member (LM - 89) 2000
7. International Organization of Biological Crystallization (IOBC) 2002
8. Asian Crystallographic Association (AsCA) 2001
9. Indian National Science Congress (ISCA) 1999
10. Electron Microscope Society of India (EMSI) 1999

(b) Review of research articles in Scientific Journals

- Journal of Crystal Growth (Elsevier)
- Crystal Research and Technology (Wiley)
- Journal of Nanomedicine (Dove Press)
- Journal of Nanoparticle Research (Springer Nature)
- Materials Characterization (Elsevier)
- Bulletin of Materials Science (Indian Academy of Sciences -Springer)

Other Academic activities

Position	Period	Institution	Teaching/ Research
Asst. Prof. & Head	June 2017 - Jan 2026	Dept. of Physics CA, LRG Government Arts College, Tirupur 641 604	Physics Teaching and Research
Assistant Professor	Oct 2015 - June 2017	Dept. of Physics, Government Arts College (Autonomous), Salem 636007	Physics Teaching and Research
Associate Professor	June 2011 - Aug. 2015	Dept of Biomedical Engineering, PSG College of Technology, Coimbatore 641004	Biomedical Materials Teaching and Research
Professor and Head	July 2009 - May 2011	Centre for Nanoscience and Tech., KSR College of Tech. Tiruchengode 637 215	Nanotechnology and Dept. administration
BOYSCAST Post Doc	July 2008 - June 2009	The University of Oklahoma Norman USA 73069	Nano-biomaterials & Tissue Engineering
Assistant Professor	Aug. 2007- June 2008	CNST, KSR College of Technology Tiruchengode 637 215	Nano-crystalline biomaterials
Assistant Professor	Dec.2005- Aug. 2007	Dept. of Biotechnology KSR College of Tech., Tiruchengode	Biophysics & Instrumentation
Visiting Scientist	Mar.2002 - Nov.2002	Institute of Molecular Biotechnology, FSU, Jena, Germany	Protein Crystal Structure
Research Fellow	Aug.1998 - Nov. 2005	Crystal Growth Centre, Anna University, India 600 025	Biological Crystal Growth

F. Awards / Honors / Fellowships / Recognition / other relevant information.

- DST BOYSCAST PDF fellowship Award (OU, USA) (2007-08)
- UGC Sir C.V.Raman Post Doctoral Fellow (2015-16)
- Marquis Who's Who in Science and Engineering, USA (2008)
- Visit to Dept. of Biomolecular Engineering at KAIST Taejon South Korea (2005)
- Synchrotron Radiation Lab visit at DESY Hamburg Germany (2002)
- Invited Talk on PhD Thesis Presentation at TIFR Mumbai (2005)

- Research community websites and social links:

<https://www.scopus.com/authid/detail.uri?authorId=7003360953>

<https://scholar.google.com/citations?user=ZiJRDd4AAAAJ&hl=en&oi=ao>

https://www.researchgate.net/profile/Meenakshisundaram_N

<http://orcid.org/0000-0003-3062-0561>

<https://vidwan.inflibnet.ac.in/profile/168874>

(Signature of the Teacher)