

Dr.M.SIVAKUMARPROFESSOR

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science/school-of-physical-sciences/docs/11404.pdf

Academic Qualifications

Degree	Institution	Year	Branch	Class
PhD	Alagappa University	2004	PHYSICS	AWARDED
MPhil	Alagappa University	1996	PHYSICS	FIRST
MSc	Alagappa University	1995	PHYSICS	FIRST
BSc	Alagappa Govt.Arts College, MK	1993	PHYSICS	FIRST

	University			
BLIS	Alagappa University	2002	Library and Information Science	FIRST

Teaching Experience

Total Teaching Experience : 25 Years

Position	Institution	Duration
Professor	Alagappa University	20.02.2022 - Till
		Date
Associate Professor	Alagappa University	20.02.2019 -
		19.02.2022
Assistant Professor	Alagappa University	20.02.2007 -
		19.02.2019
Post-Doctoral Fellow	Department of Chemical Engineering,	15.11.2004 -
	National Taiwan University, Taipei-106,	28.07.2006
	Taiwan, ROC	
Guest Lecturer	Department of Physics, Alagappa	27.07.1999 -
	Government Arts College, Karaikudi	30.10.2004
Lecturer and Head	Sri Nagalakshmi Ammal College of Sciences,	05.01.1998 -
	Pappunayakkanpatty, Madurai District	24.07.1999

PDF/ Visiting Professor : Abroad

Position	Institution	Duration
Principal Indian Scientist in	National Taiwan University of Science and	One Month in a
DST-NSC- India – Taiwan	Technology, Taipei-106, Taiwan, ROC	Year during
Collaborative Research		2011-2013
Project		
Post-Doctoral Fellow	Department of Chemical Engineering,	15.11.2004 -
	National Taiwan University, Taipei-106,	28.07.2006
	Taiwan, ROC	

Research Experience

Total Research Experience : 20 Years

Position	Institution / University	Duration
Assistant Professor	Alagappa University	20.02.2007 - Till
Associate Professor		Date
Professor		
Post-Doctoral Fellow	Department of Chemical Engineering,	15.11.2004 -

	National Taiwan University, Taipei-106, Taiwan, ROC	28.07.2006
Ph.D.	Alagappa University	Feb' 2001- July 2004
Project Assistant II	CSIR-CECRI	Oct'1996 to Jan'1998
M.Phil.	Alagappa University	August 1995 to July 1996

Academic and Additional Responsibilities

S.No	Position	University Bodies	Period	
			From	To
1	Coordinator	Entrepreneurship Development Cell,	Jan'2022	Till Date
		Alagappa University		
2	Member	Centre for Yoga Education, Alagappa	July	Till Date
		University	2016	
3	Co-ordinator	Department Placement Officer	2016	Till Date
4	Coordinator	M.Phil. Physics (Week-end) Programme,	Aug'	July 2019
		Alagappa University	2016	
5	Programme	Unit- 3, NSS-YRC, Alagappa University	Feb'2018	Mar'2023
	Officer			
6	Coordinator	Science Block Canteen and Student Facility	Jan'2017	Feb'2018
		Centre, Alagappa University		
7	Member	MSc Physics Board of Studies- Alagappa	Feb'2007	Till Date
		University		
8	Member	UG, PG, MPhil, PhD Physics Board of	2021	Till Date
		Studies- Affiliated Colleges of Alagappa		
		University		
9	Member	MSc Physics Board of Studies – External	2021	2024
		Member for Affiliated Colleges of		
		Bharathidasan University, Tiruchirappalli		

- Solid State Ionics
- Energy materials
- Biofuels

Patents Filed

- Title of the Patent -
- Title of the Patent -

Research Supervision / Guidance

Program	of Study	Completed	Ongoing
	PDF	-	-
Research	Ph.D	15	9
	M.Phil	37	-
Project	PG	71	5
	UG / Others	1	-

Publications

International		N	ational	Others	
Journals	Conferences	Journals Conferences		Books / Chapters / Monographs / Manuals	
155	118		132	5	

Cumulative Impact Factor (as per JCR) : 403.6

h-index : 23

i10 index : 46

Total Citations : 2232

Publications

Thesis Evaluated : 22

Viva voce Examiner : 8

Funded Research Projects

Ongoing Projects:

		Period			Budget
S.No	Agency	From	То	Project Title	(Rs. In lakhs)
1	MHRD,	15 Sep	tember	Theme Based Research Project under	
	RUSA 2.0,	2021 to	till date	RUSA 2.0	10
	Govt. of				
	India				

Completed Projects:

		Peri	od		Budget
S.No.	Agency	From	To	Project Title	(Rs. In
					lakhs)
1.	DST- SERB	24.10.20	17 to	A PURSUIT OF PROSPECTIVE LAYER /	
		23.12.2	2020	OLIVINE TYPE ELECTRODE MATERIALS	35.25
				FOR SODIUM BATTERIES	
2.	MHRD, RUSA,	15 Septembe	er 2018 to	Theme Based Research Project under	
	Govt.of India	till date		RUSA 2.0	10
				Studies on the high-performance	
				electrode materials	
				for alternative energy storage devices	
3.	UGC	01.07.20	12 to	STUDIES ON COMPOSITE POLYMER	
		31.12.2	2015	ELECTROLYTES BASED ON	11.208
				COPOLYMERS FOR SECONDARY	
				LITHIUM BATTERIES	
4.	Indo-Taiwan	01.04.2	010-	SYNTHESIS AND CHARACTERIZATION	
	Collaborative	31.03.2	2013	OF VANADIUM BASED CATHODE	26

	Research		MATERIALS FOR LITHIUM ION	per side
	Project		SECONDARY BATTERIES	
	sanctioned by			
	DST-NSC			
5.	Alagappa	2010 to 2012	STUDIES ON CONDUCTIVE ELEMENTS	
	University		COATED LiCoO ₂ AND LiFePO ₄ CATHODE	0.64
			MATERIALS FOR LITHIUM BATTERIES	
6.	DST- SERC	20.01.2010 to	SYNTHESIS AND CHARACTERIZATION	
		19.01.2013	OF NANO CRYSTALLINE LiFePO₄	25.514
			CATHODE MATERIALS FOR LITHIUM	
			BATTERY FABRICATION BY POLYOL	
			PROCESS	

Other Fund Received as Research Mentor:

	Agency	Period			
S.No		From	То	Project Title	Budget (Rs. In lakhs)

Consultancy Projects:

	Agency	Period	riod	Project Title	
S.No		From	То		Budget (Rs. In lakhs)

Others:

S.No	Agency	Period	riod		
		From	То	Project Title (R	Budget (Rs. In lakhs)

Distinctive Achievements / Awards

- **Post-Doctoral Fellowship** 15.11.2004 to 31.07.2006 –National Science Committee, Taiwan ROC.
- **Principal Indian Scientist** of DST-NSC supported India Taiwan Collaborative Research Project from 2011-14.
- Received Vallal Alagappar Research Recognition Award 2020 towards the contribution in research outcome of the University in the form of "h" index on 13.01.2021.
- **Shining Researcher Award** In recognition of the contribution made towards Excellence in Research at Alagappa University on 05.09.2022.
- Best Faculty and Research Excellence Award Best Achiever Award 2021 by Dr.Guna Swathi Education and Research Trust, Rameswaram 31.03.2021
- Outstanding Reviewing Contribution in Electrochimica Acta, Elsevier Publications. 2017
- **Best Paper Award** for our paper entitled "Effect of ZrO₂ filler on P(S-MMA) gel blend polymer electrolyte for Lithium polymer battery" -M.Ramachandran, R.Subadevi, M.Sivakumar Presented in the International Conference on Nanoscience and Nanotechnology for Energy Applications (EApp-2016) organized by Centre for Nanoscience and Nanotechnology and Centre of Excellence for Energy Research, Sathyabama University, Chennai-600 119. India during 27-29, June 2016.
- **Best Paper Presentation** for our paper entitled "Optimization of S/MnO₂ composite cathode material for lithium sulfur batteries" **G.Radhika, K.Krishnaveni, R.Subadevi, M.Sivakumar** National Conference on Nanomaterials, NCN-2017 during held at the PG & Research Department of Physics, Arignar Anna Government Arts College, Namakkal 637 002, Tamil Nadu India during 20-21 July 2017.
- **Best Poster Presentation** for our paper entitled "Synthesis and characterization of P2-NaxMn_{1/2}Fe_{1/2}O₂ iron and manganese based electrode material for sodium ion rehargeable batteries" **P.Arjunan, R.Subadevi, M.Sivakumar** One day International Seminar on Materials Science and Technology (ISMST-2017) organized by Department of Physics, Mother Teresa Women's University, Kodaikanal, India on 4th Aug 2017.
- **Best Poster Presentation** for our paper entitled "Designing of stable layered cathode material for sodium ion batteries using post-transition metals" **P.Arjunan**, **R.Subadevi**, **M.Sivakumar*** Presented in the International Conference on Momentous Role of Nanomaterials in Renewable Energy Devices -2018 (IC MNRE-2018) organized by the Department of Physics, Alagappa University, Karaikudi-630 003 during 1-2, March 2018.
- Best Oral Presentation for our paper entitled "Zn substituted layered P2-type cathode material with improved cell voltage profile for sodium ion battery" P.Arjunan, M.Kouthaman, K.Kannan, R.Subadevi, M.Sivakumar* Presented in the National Conference on Advanced

Materials for Sustainable Energy and Sensors (NCAMSES-2019) organized by the Department of Physics, Alagappa University, Karaikudi-600 003 during 20-22, March 2019.

- **Best Oral Presentation** for our paper entitled "Synthesis and characterization of O3-type layered cathode material for sodium rechargeable batteries" **M.Kouthaman, L.Priya, P.Arjunan, K.Kannan, R.Subadevi*, M.Sivakumar*** Presented in the international conference on international virtual conference on recent trends in energy materials (INCRTEM-2020) organized by the Department of Physics, Alagappa University, Karaikudi-600 003 during 20-22, September 2020.
- **Best Paper Award** for our paper entitled "O3 type Layered NaMnNiCuO₂ cathode material for rechargeable sodium batteries" **L.Priya, R.Subadevi*, M.Sivakumar*** 14-15, July 2021, presented in **National Conference on Recent Trends in Energy Materials RTEM-2021,** organized by the Department of Physics, Arumugam Pillai Seethai Ammal College, Tiruppathur, Tamil Nadu, India.
- **Best Paper Award (ORAL)** for our paper entitled "Investigation of Fe₂O₃/ZnO nanocomposite as electrode material for redox flow battery application" **L.Priya, R.Subadevi*, M.Sivakumar*** Presented in the National Conference on New Avenues and Advancements in Material Science (NAAMS-2022), 26.09.2022.
- 1st Prize in Oral Presentation for our paper entitled "Fabrication of two dimensional MoS₂-ZrO₂ nanocomposite for a high-performance asymmetric supercapacitor" S.S.Pradeepa, K.Sutharthani, R.Subadevi*, M.Sivakumar* Presented in the International Conference on Current Research and Advancement in Materials Science Spectroscopy (ICCAMS-2023), organized by Dept. of Physics, St.Joseph's College, Tiruchirappalli in association with Indian Spectrophysics Association, Chennai, held at St.Joseph's College (Autonomous), Tiruchirappalli-620002, during 10-11, February 2023.
- Award for Outstanding Contribution in Reviewing in Electrochimica Acta Elsevier Publications
- Award for Contribution in Reviewing in Materials Chemistry and Physics Elsevier Publications
- Award for Contribution in Reviewing in Energy Elsevier Publications
- Award for Contribution in Reviewing in Chemical Physics Letters Elsevier Publications
- Award for Contribution in Reviewing in Thin Solid Films Elsevier Publications

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 30

Position	Programme	Duration	Institution
Member	ACT NEXT-2022	10.01.2023	Department of Physics,
			Alagappa University
Convenor	My Story - Motivational	15.11.2022	Entrepreneurship
	Session by Successful		Development Cell (TN
	Entrepreneur/Start-up		Scheme) of Alagappa

	Founder		University
Convenor	One day Workshop on	14.11.2022	Entrepreneurship
	"Entrepreneurship and		Development Cell (TN
	Innovation" as Career		Scheme) of Alagappa
	Opportunity		University
Member	World Standards Day	14.10.2022	Department of Physics,
			Alagappa University
Convenor	World Standards Day	13.11.2021	Department of Physics,
			Alagappa University
Member	ACT NEXT-2020	12.02.2021	Department of Physics,
			Alagappa University
Member	World Standards Day	14.10.2020	Department of Physics,
			Alagappa University
Member	International conference on	09-11.09.2020	Department of Physics,
	international virtual		Alagappa University
	conference on recent trends		
	in energy materials		
	(INCRTEM – 2020)		
Member	ACT NEXT-2019	28.08.2020	Department of Physics,
			Alagappa University
Member	National Conference on	20-22.03.2019	Department of Physics,
	Advanced Materials for		Alagappa University
	Sustainable Energy and		
	Sensors (NCAMSES–2019)		
Convenor	International Conference on	01-02.03.2018	Department of Physics,
	Momentous Role of		Alagappa University
	Nanomaterials in		
	Renewable Energy Devices		
	- 2018 (IC MNRE-2018)		
Member	Business Oriented	31 st Jan' to 1 st Feb' 2018	Department of Physics,
	Analytical Research and		Alagappa University
	Development 2018		
	(BOARD-2018)		
Coordinator	National Theme Meet on	20-21, September 2017	Department of Physics,
	University-Industry		Alagappa University
	Interface 2017 (NTM U2I-		
	2017		
Member	ACT NEXT-2016	28 th April 2017	Department of Physics,

			Alagappa University
Member	National Conference on Futuristic Materials (NCFM-2017)	27-28, March 2017	Department of Physics, Alagappa University
Member	Business Oriented Hands-on Training on Analytical Instrumentation (HI-BOAT- 2017)	2-3, March 2017	Department of Physics, Alagappa University
Member	Alagappa University Inter Collegiate Yoga Competition 2016-17	24 th February 2017	Centre for Yoga Education, Alagappa University
Member	Workshop and Activity based Yoga (WAY-2017)	8 th February 2017	Centre for Yoga Education, Alagappa University
Member	National Seminar on Advanced Materials Research NSAMR-2017	19.01.2017	Department of Physics, Alagappa University
Co-convenor	National Seminar on "Recent Advancements in Frontier Areas of Materials Science	23-24th March, 2016	Department of Physics, Alagappa University
Convenor	ACT NEXT-2015	18 th March 2016.	Department of Physics, Alagappa University
Convenor	International Workshop on Advanced Materials -2014 (IWAM-2014)	20-21 March 2014	School of Physics, Alagappa University
Member	National Workshop on Characterization Techniques (NWCT-2, 2013)	24 & 26, March 2013	School of Physics, Alagappa University
Member	National Workshop on Characterization Techniques (NWCT-1, 2012)	24 & 26, March 2012	School of Physics, Alagappa University
Convenor	International Workshop on Advanced Energy Materials (IWAEM-2012)	9-10, February 2012	School of Physics, Alagappa University
Member	State Level Workshop on Structure solving by Powder	26-27, July 2011	School of Physics, Alagappa University

	X-ray diffraction (SLWSSP-XRD 2011)		
Member	National Conference on	10 th & 11 th March, 2010	School of Physics,
	Recent Trends in Advanced		Alagappa University
	Energy Materials		
Member	National Workshop on	13-17, July, 2009	School of Physics,
	"Theory and Practice of		Alagappa University
	XRD Techniques"		
Member	National Workshop on	16, March, 2009	School of Physics,
	"Crystal Growth and		Alagappa University
	Characterization"		
Member	National Workshop on	March 07, 2008	School of Physics,
	"Recent Advances in		Alagappa University
	Materials Science"		

Events Participated

Number of Conferences / Seminars / Workshops: 31

Overseas Exposure / Visits

- Presented an Invited Lecture in the 2023 ISCM -1, Tainan, Taiwan, ROC during 30.01.2023 to 05.02.2023
- Visited thrice National Taiwan University of Science and Technology (NTUST), Taipei, Taiwan, ROC during 2010-2013 under Indo-Taiwan Collaborative project in S&T cooperation with Prof.Fu-Ming, Wang, Graduate Institute of Advanced Science and Engg., NTUST, Taipei-106.
- Availed Post Doctoral Fellowship (PDF) in Taiwan under Prof.Nae-Lih Wu, Chairman, Department of Chemical Engineering, National Taiwan University (NTU), Taipei-106, TAIWAN, Republic of China, from November 15th, 2004 to 27th July2006.

Membership

Professional Bodies

- 1. Life Member- Indian Association of Physics Teachers (IAPT)
- 2. Life Active Member- Society for Advancement of Electrochemical Science and Technology (SAEST)
- 3. Life Member- Society for Polymer Science India- Tiruvananthapuram Chapter (SIPS)
- 4. Life Member Indian Physics Association (IPA)
- 5. Fellow Member Bose Science Society
- 6. Life Member- Indian Society for ElectroAnalytical Chemistry
- 7. Life Member Indian Society for Atomic and Molecular Physics (ISAMP) (No.1595)

Advisory Board

Year / Period	Name of the BoS / AdministrativeCommittee / Academic Committee	Role
20/07/2023	SATHI- Committee Principal Invigilator for physical sciences	PI
03/05/2023	NAAC – Criterion wise Co-ordinating committee member	Member
2023	Department of Physics - Library In-charge	In Charge
April/2023	External examiner for affiliated colleges – Practical examination	Examiner
2022-2023 (June- May)	IQAC- Academic auditor Member	Member
07/10/2022	Affiliated colleges inspection committee member – Revival of approved research centre (RDM college - Sivaganga)	Member
07/10/2022	Affiliated colleges inspection committee member – Revival of approved research centre (Sree Sevugan Annamalai college - Devakottai)	Member
07/10/2022	Affiliated colleges inspection committee member – Revival of approved research centre (Alagappa Government Arts college - Karaikudi)	Member
03/08/2022	Affiliated colleges – Board of studies in M.Phil. physics - Member	Member
2022-2023 to 2024-2025	Constitution of Board of studies in M.Phil. physics - Member	Member
2022-2023 to 2024-2025	Constitution of Board of studies in B.Sc., Electronics - Member	Member
2021 – till now	Placement Co-ordinator – Department level	Co- ordinator
2021-Till now	Entrepreneurship Development Cell- Co-ordinator (Govt. of Tamil Nadu Schemes)	Co- ordinator
May 2020	Question Paper setting board M.Sc., Physics – Chairman (Alagappa University)	Chairman
01/10/2019	32 nd Convocation Momento and Shall Committee	Member

	Member – Alagappa University	
2019-2020	Infrastructural inspection committee – Member	Member
	(Morning Star Arts and Science college – Pasumpon)	
April -2019	Affiliated colleges External Examiner - project viva	Examiner
1	and Practical examination (Government Arts college	
	- Paramakudi)	
12/02/2018 to	NSS and RRC Programme officer for Unit No: 3 –	Programme
14/0212023	Alagappa University	officer
2018-2019	Stock Verification officer – (Alagappa University	
	Department of English and Foreign Language)	
12/11/2018	31 nd Convocation Momento and Shall Committee	Member
	Member – Alagappa University	
05/09/2018	Celebration of Teacher's Day – Gift Committee	Member
	Member (Alagappa University)	
2017-2018	Infrastructural inspection committee – Member	Member
	(Puratchi Thalaivar Dr. M.G.R. Arts and Science	
	College – Uchippuli)	
06/11/2017 to	Affiliated colleges Examination Inspection Squad -	Member
05/12/2017	Committee Member	
2017-2018 to	Affiliated colleges – Re-Constitution of Board of	Member
2019-2020	studies in M.Sc., Physics - Member	
2016-2022	Remedial Coaching Class – Co-ordinator (Alagappa	Co-
	University Department of Physics)	ordinator
2016-2018	Establishment – Canteen in Science Campus – Co-	Co-
	ordinator	ordinator
2016-2018	Weekend Programme M.Phil., - Co-ordinator	Co-
	(Alagappa University Department of Physics)	ordinator
2016- till now	Yoga Education – Member (AUCPE)	Member
29/09/2016	29 nd Convocation Day Momento and Shall	Member
	Committee Member – Alagappa University	
06/09/2016	Celebration of Teacher's Day – Convenor Gift	Member
	Committee (Alagappa University)	
05/04/2016 to	Affiliated colleges Examination Inspection Squad -	Member
07/05/2016	Committee Member	
06/04/2016	107 th Founders Day Celebration – Committee	Member
	Member	
22/01/2016	Selection of Teaching Staff – Certificates	Member
	Verification Committee Member	
2017-2018 to	Affiliated colleges – Re-Constitution of Board of	Member
2019-2020	studies in M.Phil., Physics - Member	
03/12/2015	Selection of Teaching Staff – Certificates	Member
	Verification Committee Member (Alagappa	
	University Faculty of Science)	
01/12/2015 to	Educational Trip – Co-ordinator	Co-
03/12/2015	_	ordinator
06/04/2015	106 th Founders Day Celebration – Committee	Member
	Member	
2014-2015	Stock Verification officer – (Alagappa University	Member

	Department of Industrial Chemistry)	
2014-2015	Stock Verification (Book and Equipment) officer –	Member
	(Alagappa University DDE book section)	
06/11/2014 to	Affiliated colleges Examination Inspection Squad -	Member
01/12/2014	Committee Member	
11/04/2014	Conduct of Distance Education Examination –	
	University Representative	
2013-2014	Stock Verification officer Furniture, Equipment and	Member
	Non-Consumable – (Alagappa University Centre for	
	Nehru Studies)	
2012-2013	Stock Verification officer Furniture, Equipment and	Member
	Non-Consumable – (Alagappa University	
	Department of Mathematics)	
2011-2012	Stock Verification officer Furniture, Equipment and	Member
	Non-Consumables – (Alagappa University Centre for	
	Adult Education)	
2010-2011	Course Advisor – Member School of Physics	Member
	(Alagappa University)	

Academic Bodies in Other Institutes/ Universities

Year / Period	Name of the BoS / Administrative	Role
	Committee / Academic Committee	
November	Question paper setter - M.Sc. Physics -	Chairman
2023	Bharathidasan University	
November	Examiner – Ph.D. Public viva-voce - St. Jude's	Examiner
2023	College, Thoothoor	
November	Doctoral committee for Ph.D. (Full time) -	Examiner
2023	Gandhigram Rural Institute, Gandhigram	
September	Ph.D. Thesis - Periyar University, Salem	Evaluator
2023		
August 2023	Ph.D. Public viva-voce - Manonmaniam	Examiner
_	Sundaranar University, Tirunelveli	
August 2023	Ph.D. Public viva-voce - Periyar University,	Examiner
	Salem	
July 2023	Subject expert for CAS - Government arts	Subject expert
-	college, Paramakudi.	
June 2023	Engagement of project personnel - CSIR -	Selection
	CECRI, Karaikudi	Committee
		member
May 2023	Eminent educationist - Kendriya Vidyalaya,	VMC member
	Karaikudi	
April 2023	Question paper setter - M.Sc. Physics-	Chairman
	Bharathidasan University	
April 2023	M.Sc. Electronics Practical examination -	Examiner
	Government Arts College, Paramakudi,	

	Alagappa University	
2022	Result awaiting committee- Thassim Beei Abdul	Member
	Kadar College for Women, Kilakarai	
December	Ph.D. Thesis- Manonmaniam Sundaranar	Evaluator
2022	University, Tirunelveli	
December	Ph.D. Public viva-voce - Nehru Memorial	Examiner
2022	College, Tiruchirappalli	
November	PG degree answer script valuation -	Examiner
2022	Bharathidasan University, Tiruchirappalli	
June 2022	Ph.D. viva -voce - Nesamony Memorial Christian	Examiner
	College, Marthandam	
April 2022	Doctoral committee for Ph.D. (Full time) - SRM	Examiner
	Institute of Science and Technology,	
	Kattankulahur	
March 2022	Ph.D. Thesis Public viva voce - A. V. C College,	Examiner
	Mayiladuthurai	
February	Ph.D. Thesis - Manonmaniam Sundaranar	Evaluator
2022	University, Tirunelveli	
2021-2024	PG Physics - Bharathidasan University	Member
2021-2023	Department of physics- Sri Kaliswari College	Subject Expert
November	University Rank examination (Question paper	Chairman
2020	setter) - Bharathidasan University	
April 2020	Question paper setter - M.Sc. Physics -	Chairman
	Bharathidasan University	
April 2020	Question paper setter - M.Phil - Bharathidasan	Chairman
	University	
April 2019	M.Sc. Electronics Project viva - Government	Examiner
	Arts College, Paramakudi	
December	Staff selection expert - Bharath Niketan Engineering	Expert
2012	College, Aundipatty	

Ph.D. Thesis Guided

1. No. of PhD Thesis evaluated : 15

2. No. of PhD Public Viva Voce Examination conducted : 15

S. No	Name of the Scholar	Title of the Thesis	Year of
			Completion
1.	R.Muruganantham	SYNTHESIS AND SURFACE MODIFICATION OF IRON	2015

	(Reg.No.0046)	BASED POSITIVE ELECTRODE MATERIALS BY	
		POLYOL TECHNIQUE FOR THE DEVELOPMENT OF	
		HIGH RATE LITHIUM ION BATTERIES	
2.	P.Prahasini,	EXPLORATION OF BRANNERITE TYPE VANADIUM	2016
	(Reg.No.161)	BASED TRANSITION METAL OXIDES-ENLIGHTENING	
		THE CONVERSION ANODE FOR LITHIUM	
		SECONDARY BATTERIES	
3.	R.Muthupradeepa	DEVELOPMENT OF IONIC LIQUID BASED	2017
	(Reg.No.0167)	COPOLYMERIC GEL ELECTROLYTES FOR LITHIUM	
		SECONDARY BATTERIES	
4.	M.Shanthi	PREPARATION AND CHARACTERIZATION OF SOLID	2018
	(As Co-Guide)	AND GEL POLYMER ELECTROLYTES BASED ON	
	(Reg.No.1286)	POLY(VINYLIDENE CHLORIDE-co-ACRYLONITRILE)	
5.	R.Dhanalakshmi	DEVELOPMENT OF LITHIUM IRON ORTHOSILICATE	2019
	(Reg.No.:0033)	CATHODE MATERIALS FOR LITHIUM SECONDARY	
		BATTERIES	
6.	K.Krishnaveni	STUDIES ON THE EFFECT OF VARIOUS	2019
	(Reg.No.:0442)	CARBONACEOUS MATERIALS IN	
		SULFUR/POLYACRYLONITRILE (S/PAN) COMPOSITE	
		FOR LITHIUM-SULFUR BATTERIES	
7.	M.Ramachandran	INVESTIGATIONS ON COMPOSITE MATERIALS FOR	2019
	(Reg.No.:0162)	POLYMER GEL ELECTROLYTES EMPLOYED IN	
		LITHIUM POLYMER BATTERIES	
8.	G.Radhika	DELVE OF COMPOSITE ELECTRODES BASED ON	2019
	(Reg.No.:0443)	SULFUR WITH TRANSISTION METAL OXIDE FOR	
		LITHIUM-SULFUR BATTERIES	
9.	P.Rajkumar	A PURSUIT FOR VARIOUS CARBONACEOUS	2020
	(As Co-Guide)	MATERIAL BASED SULFUR COMPOSITE	
	(Reg.No.: 1244)	ELECTRODES EMPLOYED IN HIGH PERFORMANCE	
		LITHIUM-SULFUR BATTERIES	
10.	K.Diwakar	AN EXHAUSTIVE EXPLORATION OF WIDESPREAD	2021
	(Reg.No.1178)	POSITIVE AND NEGATIVE ELECTRODES FOR HIGH	
		PERFORMANCE SECONDARY BATTERIES	
11.	V.Priyanka	A COMPREHENSIVE EXPLORATION ON MARICITE	2021
	(Reg.No.1274)	AND OLIVINE POLYMORPHS IN PHOSPHATE BASED	
		ELECTRODES FOR EMERGING SODIUM BATTERIES	
12.	P.Arjunan	AN INTENSE INVESTIGATION ON LAYERED	2021
	(Reg.No.1402)	ELECTRODES AND SUPERIONIC CONDUCTING	

		POLYMER SEPARATOR WITH ENRICHED	
		ELECTROCHEMICAL PERFORMANCES FOR HIGH	
		ENERGY DENSITY SODIUM BATTERY APPLICATION	
13.	C.Kalaiselvi	A VENTURE SYNTHESIS ON SEPIOLITE CLAY	2021
	(As Co-Guide)	MINERAL BASED CATHODES FOR EVOLVING	
	(Reg.No.1115)	LITHIUM-SULFUR BATTERIES"	
14.	M.Kouthaman	AN EXTENSIVE INVESTIGATION ON LAYERED 03-	2022
	(Reg.No.R20161540)	TYPE SODIUM TRANSITION METAL OXIDE BASED	
		CATHODE MATERIALS FOR EMERGING SODIUM	
		BATTERY APPLICATION".	
15.	K.Kannan	COMPREHENSIVE ANALYSIS ON Ti-BASED LAYERED	2022
	(Reg.No.R20161537)	O3 AND P2 TYPE ANODE MATERIAL FOR EVOLVING	
		SODIUM BATTERY	

List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact
		Factor
1.	Sulfur encapsulated carbon templet as a structured cathode material for secondary	2.912
	sodium-sulfur battery	
	Premnahth Jeyaraj Janshirani ^a , Subadevi Rengapillai ^{a,*} , Soundarrajan Elumalai ^b ,	
	Raghu Subashchandrabose ^b , and Sivakumar Marimuthu ^a *Ionics (Accepted for	
	Publication)	
2.	Eco-friendly production of carbon electrode from biomass for high performance Lithiu	3.0
	and Zinc ion capacitors with hybrid energy storage characteristics	
	P.Rajkumar, V.Thirumal, G.Radhika, RM.Gnanamuthu, R.Subadevi, M.Sivakumar,	
	Kisoo Yoo, Jinho Kim Materials Letters	
3.	Porous carbon derived from bacteria and yeast: the potential electrode material for the	2.8
	development of symmetric high energy density supercapacitors	
	K.Krishnaveni, V.Thirumal, G.Radhika, P.Rajkumar, R.Subadevi, M.Sivakumar,	
	Kisoo Yoo, Jinho Kim	
	Journal of Materials Science: Materials in Electronics	

4.	NiO/ZnO Composite Derived Metal-Organic Framework as Advanced Electrode	3.52
	Materials for Zinc Hybrid Redox Flow Battery	
	L.Priya, J.J.Premnahth, R.Subadevi*, M.Sivakumar*	
	ChemPhysChem (In Print)	
5.	Investigation on two-dimensional molybdenum oxide-graphitic carbon nitride (MoO3-	5.7
	g-C3N4) heterostructures based hybrid electrodes for the fabrication of high energy	
	density solid state supercapacitors	
	S.S.Pradeepa, K.Sutharathani, R.Subadevi*, Wei-Ren Liu, M.Sivakumar*	
6.	An impact of sea sponge-derived hard carbon with the symbiosis of sodium ion battery	5.7
	and biomedical applications	
	T.Meenatchia, R.Subadevia,*, P.Kumarb, S.Raghuc, Wei-Ren Liud,*, M.Sivakumar	
	a,*	
	Journal of Taiwan Institute of Chemical Engineers (Published online)	
7.	Dual metal (Fe and Mg) substituted layered titanium-based P2 and O3-type negative	4.969
	electrodes for rechargeable sodium batteries	
	K.Kannan, M.Kouthaman, R.Suba Devi*, M.Sivakumar*	
	Advanced Powder Technoloy	
8.	Structural and Electrochemical Properties of Musa acuminata Fiber Derived Hard	3.252
	Carbon as Anode of Sodium-Ion Batteries.	
	Meenatchi Thenappan1, Kouthaman Mathiyalagan, Mozaffar Abdollahifar2, Subadevi	
	Rengapillai * and Sivakumar Marimuthu*	
	Energies	
9.	Exploration of Magnetic Sesquioxide Nanocomposite as a Potential Electrode Material	4.97
	for the Fabrication of High Energy density Asymmetric Supercapacitors	
	S.S. Pradeepa, K. Sutharthani, R. Subadevi*, M. Sivakumar*	
	Journal of Electroanalytical Chemistry	
10.	10. Hard Carbon Reprising Porous Morphology Derived from Coconut Sheath for	3.252
	Sodium-ion Battery	
	Meenatchi Thenappan, Subadevi Rengapillai* and Sivakumar Marimuthu*	
	Energies	
11.	Study on the effect of co-substitution of transition metals on O3-type Na-Mn-Ni-O	5.477
	cathode materials for promising sodium-ion batteries	
	M.Kouthaman, K.Kannan, R.Subadevi*, M.Sivakumar*	
	Journal of the Taiwan Institute of Chemical Engineers	
12.	Turning trash to treasure: Reusable glucose kit as a cell using ZnO derived from Metal	3.252

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	organic framework (MOF) electrode for redox flow battery	
	Priya Lakshmanan 1, Subadevi Rengapillai2, Sivakumar Marimuthu2*, and	
	Suryanarayanan Vembu 2,	
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13.	A reign of bio-mass derived carbon with the synergy of energy storage and biomedical	8.907
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	Rajkumar Palanisamy a,f,i, Diwakar Karuppiah a, Subadevi Rengapillai a,*,	
	Mozaffar Abdollahifar b,c,d , Gnanamuthu Ramasamy e , Fu-Ming Wang f , Wei-Ren	
	Liu g , Kumar Ponnuchamy h , Joongpyo Shim i , Sivakumar Marimuthu a,*	
	Journal of Energy Storage	
14.	High-performance asymmetric supercapacitor fabricated with a novel	5.633
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	MadhanKuppusamya SenthilkumaranMarimuthua AravinthKaruppanana	
	RadhikaGovindarajub SivakumarMarimuthuc SubadeviRengapillaic	
	MozafarAbdollahifarde AswinKumarAnbalaganf RamasamyPerumalsamya	
	Colloid and Interface Science Communications	
15.	A combined first principles and experimental study on Al-doped Na3V2(PO4)2F3	4.865
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	Shu-HanZhuanga Chun-ChuenYangb MingtaoZhengcd SubadeviRengapillaie	
	Sivakumar Marimuthue Yu-Shen Chiangf Bor KaeChangf Chia-HungHuanggh Wei-	
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16.	Layered O3-type Na9/10Cr1/2Fe1/2O2 as new cathode for rechargeable sodium-ion	5.518
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17.	Influence of cerium oxide as a dispersoid in blend poly(styrene-co-	2.99
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	M.Ramachandran, R.Subadevi, P.Rajkumar, R.Muthupradeepa, M.Sivakumar*	
	Polymer International	
18.	Effect of tungsten and carbon in germanium oxide as a high-performance electrode for	6.959
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	K.Diwakar, P.Rajkumar, R.Subadevi*, P.Arjunan, M.Sivakumar*	
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20. Enhanced enactment of graphene amalgamated sodium cobalt phosphate composite	5.477
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K. Kannan, M. Kouthaman, P. Arjunan, R. Subadevi*, M. Sivakumar*	
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24. Electrochemical Analyses Of ZrO2 dispersoid incorporated Poly (styrene-methyl	3.125
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25. Fabrication of Li(Ni–Zn–Mn)O2 layered cathode material for energy conversion and	3.752
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M.Sivakumard, Chang Woo Leeb, RM.Gnanamuthua,*	
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26. A study on High rate and high stable Sodium vanadium phosphate electrode for	2.779
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27.	Gradual development of maricite NaMnPO4 with the influence of diols chain length in	4.326
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28.	Improved electrochemical properties of P2 type layer electrode through extended	4.537
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30.	Electrospun assisted antimony phosphate (SbPO4) anode for elevated performance in	6.371
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32.	Study on Efficient Electrode from Electronic waste renewed carbon material for	7.968
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33.	Carbon scaffold VPO4 as an anode for Lithium and sodium ion batteries	2.647
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34.	Optimization of Prismatic Type Layered Electrode Materials for High Performance	5.164
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35.	Probe on Hard Carbon electrode derived from Orange Peel for energy storage	3.117
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	T.Meenatchi1, V.Priyanka1, R.Subadevi1,*, Wei-Ren Liu2, Chia-Hung Huang3,	
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36.	Exploration of the Effect of Transition Metal on the Divergence of Orthorhombic	6.959
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37.	Enhancing structural stability of layered O3-type Na-Mn-Ni-Cu-O	5.477
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38.	Iron Substituted Layered P2-type Na1/2Ti6/10Ni3/10Fe1/10O2 as innovative Anode	3.428
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39.	Titanium deputized layered O3-type NaFe9/20Cr9/20Ti1/10O2 cathode material for	3.574
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40.	Influence of nickel strike as adhesive layer on electrodeposited Zn-Co-Ni alloy and	1.46
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51.	Titanium based Layered O3-NaTi7/10Ni3/20Mg3/20O2 anode material for	3.574
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57.	Effect of Polyaniline on Sulfur/Sepiolite Composite Cathode for Lithium-Sulfur	4.967
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58.	Graphene oxide-crowned poly(acrylonitrile)/sulfur as a lithium–sulfur battery cathode:	2.11
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60.	Micro-/Mesoporous Nature of Carbon Nanofiber/Silica Matrix as an Effective Sulfur	
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63.	Egg Shell Membrane Derived Carbon Coated On Li ₂ FeSiO ₄ Cathode Material for Li-	
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64.	Effect of downsizing the maricite type α phase sodium cobalt phosphate (α-NaCoPO ₄)	2.533
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65.	Sulfur nested with mixture of MnO ₂ /AB composite as efficient host for high	
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71.	A solution-processed binary composite as a cathode material in lithium–sulfur batteries	2.983
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78.	Role of pH on synthesis and characterization of cerium oxide (CeO ₂) nano	4.11
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Resource persons in various capacities

National Conferences (papers: 143

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