

## Dr. G. RAVI Vice-Chancellor

## HIGHLIGHTS OF ACADEMIC MILE STONES:

- Awarded **D.Sc.**, (Doctor of Science) in Physics in 2018.
- Selected & attended for LEAP (Leadership for Academicians) by MHRD-2019.
- Selected for prestigious **FRS** (Fellow Royal Society), UK in 2021.
- Awarded most prestigious **JSPS** and performed **PDF** at Japan (2002-2004).
- Published **395** research papers in highly reputed International journals.
- Average impact factor- :3.68 Citations-6819; h-index-40; i-10 index-181.
- Number of Publications in 2022: 24 with average Impact factor: 5.35
- Number of Patents Granted-1; Published-3; filed-4
- **Papers presented** in International/National Conferences-**363**.
- Number of **books** as chapters writen-5
- Number of Awards received- 22
- Guidance: PDF-2; PhD-25; M.Phil-49; M.Sc-60
- Visited **22** countries across all the continents for research purpose.
- Invited lectures delivered- 45
- Editor in International Journals 2
- Ph.D thesis evaluated-56; Ph.D viva conducted -60
- Executed **10 projects** with the worth of **403.1 lakhs**.
- Devices fabricated from research and delivered to society 5
- Number of conferences/seminars/events organized -30
- Membership in professional bodies -10
- As Head of Physics the **h-index** of the department increased from **28 to 66**
- As Dean Industry-consultancy, **small scale industry** is established in the campus.

Aca	demic Quali	fications: Ph.D., PDF(JSPS),	D.Sc., FRSC, I	FASCh.	
Sl. No	Degree	University/Institution	Year of Passing	Subject	Class/ Grade Obtained
1.	D.Sc.	Alagappa University, Karaikudi	2018	Physics	Highly commended
2.	Ph.D.	Anna University, Chennai	1995	Physics	Highly commended
3.	M.Phil.	Anna University, Chennai	1990	Physics	First Class
4.	M.Sc.	Bharathidasan University	1989	Physics	First Class
5.	B.Sc.	Bharathidasan University	1986	Physics	First Class
6.	PDF (JSPS)	National Institute for Materials Science, Japan	Apr.2002- Mar.2004	Physics	JSPS Award
7.	Visiting Professor	Shizuoka University, Japan	Aug. – Nov. 2012	Physics	
8.	Honorable Guest Professor	Shizuoka University, Japan	April 2014 April 2016 April 2018 April 2019 April 2021	Physics	

#### **Teaching Experience: 27 Years & 6 months**

S No	Institution	Position	Period		
S.No	Institution	Posicioli	From	То	
1	Alagappa University	Lecturer, Crystal Research Centre	Feb.1995	Nov.2004	
2	Alagappa University	Reader, Dept. of Physics	Dec.2004	Nov.2007	
3	Alagappa University	Associate Professor in Physics	Dec.2007	Nov. 2010	
4	Alagappa University	Professor, Dept. of Physics	Dec. 2010	Till date	

### Research Experience: 32 Years Additional Responsibilities

- 1. Head, Department of Physics, Alagappa University, Karaikudi
- 2. Dean, Industry & Consultancy
- 3. Director, Internal Quality Assurance Cell (IQAC)
- 4. Chairperson, School of Physical Sciences
- 5. Member, Senate, Alagappa University, Karaikudi
- 6. Member, NAAC Steering Committee, Alagappa University, Karaikudi
- 7. Member, Research Advisory Committee, Alagappa University, Karaikudi
- 8. Chairman, Board of Studies, Department of Physics, Alagappa University, Karaikudi
- 9. Co-ordinator, UGC-SAP & DST-FIST Deputy co-ordinator, DST-PURSE
- 10. Institute Co-ordinator, MHRD-SPARC
- 11. **Member;** NIRF, USIC, IPR & Ranking cell

### **Areas of Research**

- 1. Nano materials synthesis and Thin Films preparation for supercapacitors, Photocatalytic, sensor and solar cell applications
- 2. Crystal growth of organic & inorganic materials
- 3. Opto-electronics and E-O modulator –Devices

Research Supervision / Guidance					
Pr	ogram of Study	Completed	Ongoing		
	PDF	2			
Research	Ph.D. Guide/Co-Guide	18/7	3/3		
	M.Phil.	49	01		
Drojoct	PG	60	04		
Project	UG / Others				

Publications						
Journals		Confe	rences	Others		
International	National	International	National	Books / Chapters / Monographs / Manuals		
341	53	171	192	5		
h-index i-10 index Total Citations		: :	40 182 6842			

## Patents : Granted-1; Published-3; Filed-4

S.No	Title	Author(s)	Application Number	Filing Date
1.	An Improved quaternary chalcogenide material and a method of manufacture thereof	<b>G.Ravi</b> et al	202041055941 TEMP/E- 1/62206/2020- CHE CBR No.43478.	23/12/2020 Granted No. 389221 Granted on 14.02.2022
2.	A heterostructured (SmCoO <sub>3</sub> /RGO) material and a method of manufacture there of	<b>G.Ravi</b> et al	202141008342 /TEMP/E- 1/9115/2021- CHE CBR No. 7232	27/02/2021

3.	Influence of nano silica on the growth and yield of maize crop	<b>G.Ravi</b> et al	202141013142 /TEMP/E- 1/15077/2021- CHE CBR No 11076.	25/03/2021
4.	Hydrogen Free Method of Growing Carbon Nanorods	<b>G.Ravi</b> et al	202141018296 /TEMP/E- 1/20113/2021- CHE CBR No. 14513	20/04/2021
5.	Improved quaternary chalcogenide Cu <sub>2</sub> NiSnS <sub>4</sub> material and manufacturing method thereof	<b>G.Ravi</b> et al	10-2021- 0066048 DPP-2021- 0130-KR 24/05/2021	24/05/2021
6.	Heterostructured (SmCoO <sub>3</sub> /rGO) material and its manufacturing method	<b>G.Ravi</b> et al	DPP-2021- 0367-KR,10- 2021-0068885, 28/05/2021	28/05/2021
7.	Morphological evolution of carnation flower like cu <sub>2</sub> cosns <sub>4</sub> battery type electrodes and preparation methods thereof	<b>G.Ravi</b> et al	202241042493 /TEMP/E- 1/48170/2022- CHE CBR No.29579	25/07/2022

# **Funded Research Projects**

## **Completed Projects**

S.	S. Period		iod		Budget
No	Agency	From	То	Project Title	(Rs. In lakhs)
1.	TNSC&ST	1997	1999	Fabrication of Electro-Optical devices using DKDP Crystals	1.97
2.	TNSC&ST	1995	1999	Water quality assessment based on crystal of triflurides of lanthanum	3.60
3.	AICTE	1998	2001	Growth and Characterization of Organic NLO crystals for EO Modulators	10.0
4.	DST	2007	2011	A Venture for Developing Electro-Optic Modulator from DAST Single Crystals	25.0
5.	UGC	2011	2015	Preparation of ZnO nanostructure thin films by spin coating method of spintronics and optical applications	13.0

6.	DST-SERB (EMR)	2018	2021	Graphene oxide decorated metal oxide thin films on flexible substrates for high performance electrochromic and super capacitors applications	35.6
7.	MHRD- SPARC	2019	2022	2D QDs( two Dimensional QDs): Synthesis and Applications in Electroluminescent diodes, Sensors and Solar cells.	59.93
8.	MHRD- RUSA	2019	2021	Developement of pure and graphene decorated metal oxides/sulphides based nanostructured materials for sustainable energy and sensor applications	5.0

## **Combined Department Projects: (Completed): As Active Member**

S. No	Agoncy	Pe	riod	Budget (Rs. In lakh)	
5. NU	Agency	From	То	Duuget (KS. III lakii)	
1.	UGC-SAP (DRS I)	2004	2009	82.25	
2.	UGC-SAP (DRS II)	2009	2014	70.50	
3.	DST FIST (Level I)	2005	2009	35.00	
4.	DST-PURSE	2011	2014	600.00	

# Funded Research Projects (As Co-ordinator)

S. No		Pe	riod		Budget
	Agency	From	То	Project Title	(Rs. In lakhs)
1	UGC-SAP (DRS III)	2015	2020	Preparation of crystals, Thin films and Battery materials for devices	105
2	DST FIST Level-II	2016	2021	Growth and study of different metal oxide thin films for gas sensors and memory devices	144
3	DST- PURSE Deputy co- ordinator	2017	2020	Infrastructure development for all Science Departments	700

### **Consultancy Projects**

		F	Period		Amount	
S. No	Agency	From	То	Project Title	Earned (Rs.)	
1.	Universities,	2007	2022	Consultancies on	~1,40,00,000	
1.	Colleges, Institutions	(June)	(July)	Characterization	~1,40,00,000	

#### **Distinctive Achievements / Awards / Recognition**

- 1. Senior Research Fellow (SRF)- CSIR, Govt. of India, 1993
- 2. Young Researcher Award- (IUMRS-ICA), IISc., Bangalore, India, 1998
- 3. Young Scientist Award- ICCG-13, Kyoto, Japan, 2001
- 4. Young Invited Researcher Award, Cheju, Korea (ICPOP), 2001
- 5. Invited Special Researcher, NIMS, Japan, Nov. 2001-March 2002
- 6. JSPS Award, Japan Society for Promotion of Science, Japan, April 2002-March 2004
- 7. Invited Special Researcher, NIMS, Japan, June-Nov. 2004.
- 8. Best Researcher Award, Alagappa University, 2005
- 9. Invited Special Researcher, NIMS, Japan, Jan.- Feb. 2006
- 10. Visiting Professor, Shizuoka University, Japan, Aug.-Nov. 2012
- 11. Honorable Guest Professor, Shizuoka University, Japan, April 2014
- 12. Alagappa Excellence Award for Research (2015-2016), Alagappa University, 2016
- 13. Honorable Guest Professor, Shizuoka University, Japan, April 2016
- 14. JSPS Invitation Fellowship, Japan, Nov.-Dec. 2016
- 15. Appreciation Award, Alagappa University, Karaikudi, Feb. 2017
- 16. Honorable Guest Professor, Shizuoka University, Japan, April 2018
- 17. Honorable Guest Professor, Shizuoka University, Japan, April 2019
- 18. Vallal Alagappar Research recognition Award, Alagappa Univ. Jan. 2021
- 19. Dr. APJ Abdul Kalam Lifetime Achievement National Award, 2021
- 20. FRSC Academic Award, 2021
- 21. Honorable Guest Professor, Shizuoka University, Japan, April 2021- Mar.2023
- 22. Fellow Academy of Sciences Chennai (FASCh), 2021.

## **Events organized in leading roles**

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

# **Events Participated**

### Conferences/ Seminars / Workshops: 363;

## **Other Training Programs: 06**

Overseas Exposure/Visits						
S.No	Country Visited	Duration of Visit	Month & Year	Purpose of Visit		
1.	Bangladesh	10 days	Oct. 1999	Dhaka, Invited talk in the Int. conference		
2.	Ianan	14 dava	Aug 2000	Tohoku University, Sendai, Invited talk &		
Ζ.	Japan	14 days	Aug. 2000	Chair session in Int. conference (ACCG)		
3.	Singapore	2 days	Sep. 2000	National University of Singapore, Lab visit		
4.	Japan	7 days	July 2001	Presented papers in ICCG-13, Int. conf. at Kyoto		
5.	Korea	12 days	Aug. 2001	Cheju, Invited under Young Scientist Programme		
6.	Japan	5 months	Nov.2001 -	Invited Special Researcher, NIMS, Tsukuba		
0.	Japan	5 monuis	Mar.2002			
7.	Ianan	2 years	Apr.2002-	JSPS Fellow, NIMS, Tsukuba		
7. Japan	2 years	Mar.2004				
8.	USA	15 days	Aug. 2002	Seattle, Presented papers in Int. Conf.		
9.	Canada	2 days	Aug. 2002	Vancouver, Lab visit		
10.	Sri Lanka	1 day	Oct. 2002	Colombo, Lab visit		
11.	Germany	2 days	June 2003	Bonn Univ., Bonn, Invited lecture		
12.	France	4 days	June 2003	Strasburg, Presented papers in MRS International Conference		
13.	Switzerland	3 days	June 2003	Zurich, Quantum Electronics Lab visit		
14.	Malaysia	2 days	Oct. 2003	Kuala Lumpur, Lab visit		
15.	Japan	6 months	June-	Invited Special Researcher, (NIMS),		
13.	Japan	omonuis	Nov.2004	Tsukuba		
16.	England	3 days	Aug. 2004	Oxford Univ., Lab visit (Clarendon Lab)		
17.	Italy	2 days	Aug. 2004	Univ. of Rome, Lab visit		
18.	France	4 days	Aug.2004	Grenoble, Presented papers in ICCG		
19.	Netherlands	2 days	Aug. 2004	Amsterdam, Lab visit		
20.	Belgium	1 day	Aug. 2004	Brussels, Lab visit		
21.	Germany	1 day	Aug. 2004	Aachen University, Lab visit		
22.	China	15 days	Oct. 2005	Beijing, Papers Presented & Lab visit (CAS)		
23.	Japan	2 months	JanFeb. <b>2006</b>	Invited Special Researcher (NIMS)		

24.	Taiwan	3 days	Mar. 2006	Taipei, Delivered lecture (NUT)
25.	Mexico	3 days	Aug. 2010	Mexico city & Cancun, Delivered lectures
26.	Brazil	1 day	Aug. 2010	Sao Paulo, Lab visit
27.	South Africa	2 days	Aug. 2010	Johannesburg, Lab visit
28.	Japan	4 months	Aug	Visiting Professor, RIE, Shizuoka University
			Nov.2012	
29.	Australia	4 days	Oct. 2012	Brisbane, Papers Presented & Lab visit,
				Queensland University
30.	Thailand	2 days	Nov. 2012	Bangkok, Lab visit
31.	Japan	5 days	2014 &	Shizuoka University, Japan, Honorable
			2015	Guest Professor
32.	Japan	2 months	NovDec.	Shizuoka University, Japan, JSPS Invitation
			2016	Fellow
33.	Australia	7 days	Feb- Mar.	Monash University, Australia, LEAP
			2019	(MHRD) Program.
34.	Spain	3 days	Sep 23-25,	Invited Talk in 6 <sup>th</sup> Int. Conference on
			2019	Photonics (PHRONESIS), Barcelona.

#### **Membership in**

#### **Professional Bodies**

- 1. Life member in Indian Crystal Growth Association
- 2. Life member in Indian Physics Association (IPA)
- 3. SPIE: International Society for Optical Engg. USA
- 4. Life member Indian National Science Congress
- 5. Life member-Materials Research Society of India (MRSI)
- 6. Life member-Japan Society for Promotion of Science (JSPS), Japan.
- 7. Life member-National Institute for Materials Science (NIMS), Japan.
- 8. Life member-Bose Science Society -India
- 9. Fellow Member Royal Society of Chemistry, UK.
- 10. Fellow Member Academy of Sciences, Chennai.

#### **Editor in International Journals**

- 1. Journal of Nanomaterials, Hindawi (I.F: 2.986)
- 2. Journal of Sol-Gel Science and Technology, Springer (I.F: 2.326)

### **Editorial Board**

- 1. Azhagu News Letter
- 2. Department News Letter
- 3. Department Journal

## **Advisory Board**

- 1. Internal Quality Assurance Cell (IQAC): Director
- 2. Intellectual Property and Patent Cell : Member
- 3. Instrumentation Centre : Member

## Academic Bodies (such as Board of Studies etc.,)

- 1. Board of Studies-Chairman: M.Sc., Physics, Affiliated colleges, Alagappa University.
- 2. Board of Studies-Chairman: M.Sc., Physics (Regular & DDE), Alagappa University.
- 3. Board of Studies-Member: B.Sc., Physics, Affiliated colleges, Alagappa University.
- 4. Board of Studies Member: M.Sc Physics-MS University, Tirunelveli.
- 5. Board of Studies Member: B.Sc Physics-MS University, Tirunelveli.
- 6. Board of Studies Member: M.Sc Physics-Bharathidasan University, Trichy.
- 7. Board of Studies Member: M.Sc Physics-Bharathiar University, Coimbatore.
- 8. Board of Studies Member: M.Sc Physics-Periyar University, Salem.
- 9. Board of Studies Member: M.Sc Physics-Annamalai University, Chidambaram.
- 10. Board of Studies Member: M.Sc Physics-Madurai Kamaraj University, Madurai.
- 11. Board of Studies Member: M.Sc Physics Avinashilingam Institute, Coimbatore.
- 12. Passing Board- Member: B.Sc., Thasim Beevi College for Women, Kilakarai.
- 13. Member Academic Council Karpagam University, Coimbatore.