# **FACULTY PROFILE**



1. Name : M.V. SOMESWARARAO.

2. Date of Birth : 18-05-1982

3. Designation : Associate Professor & Head

4. Department : Engineering Physics

5. Date of Joining in SRKREC: 18-10-2007

6. Contact No : 8309583299, 9963217092.

7. Email ID : somesh.phy@gmail.com

8. Total Experience : Teaching:16years

Research: 06years

9. Area of Specialization : Solid State Physics &Nano Materials

10. Unique ID : 1-471584521

11. Qualified in : APSET-2012

# A. Educational Details

S.No	Name of the	Subjects	Name of the	Year of Award	Class&
	Examination/		school / college/		% <b>of</b>
	Degree		University		Marks
1	Ph.D.	PHYSICS	Andhra University	November,2020	67
2	M.Phil.	PHYSICS	GITAM University.	April,2013	67
3	M.Sc.	PHYSICS	Acharya Nagarjuna	May, 2007	62
			University.		
4	D.C.	MDC	Andhra University	April 2002	75
4	B.Sc.	M.P.C.	Andhra University.	2003, April	75

# **Employment Details:**

S.No	Name and Address of Institution / Office	Post Held	Period		Total Period in
			From	То	each cadre
1	SRKR Engineering College	Associate Professor	2007	Till date	16years
		&Head of the Department of Engineering Physics			

# **B.** Research Details:

PhD. Thesis title: "FABRICATION AND CHARACTERIZATION OF OPTIMIZED

ELECTROSPUN TITANIUM DIOXIDE AND COMPOSITE

NANOFIBERS FOR ENERGY APPLICATIONS"

Guide Name & Affiliation: Dr.P.S.V. SUBBARAO.

Associate Professor, Department of Science and Technology.

Andhra University, Visakhapatnam.

# M.Phil. Thesis title: "STUDY OF STRUCTURAL, DI-ELECTRIC AND

#### **ELECTRICAL PROPERTIES OF Cu-DOPPED BARIUM**

#### **TITANATE CERAMICS"**

Guide Name & Affiliation: Dr.K.V. RAMESH.

Professor, Department of Science and Technology.

GITAM University, Visakhapatnam

## Scopus ID:

http://www.scopus.com/inward/authorDetails.url?authorID=57203880202&partnerID=MN8TOARS

**ORCID ID**: <a href="https://orcid.org/0000-0003-4365-1412">https://orcid.org/0000-0003-4365-1412</a>

# Google Scholar link:

https://scholar.google.com/citations?user=VWlh8ngAAAAJ&hl=en

Research Area(s)/Interests: Material Science and Nanomaterials.

#### 1.Details of Research Publications:

1. Electro spun composite nanofibers prepared by varying concentrations of

TiO2/ZnO solutions for photo catalytic applications.

M.V. Someswararao, R.S. Dubey, P.S.V. Subbarao.

Journal of Photochemistry and Photobiology 6 (2021) ISSN 2666-4690, Elsevier.

2. Electro spinning process parameters dependent investigation of TiO2.

M.V. Someswararao, R.S. Dubey, P.S.V. Subbarao, Shyam singh.

Results in Physics 11(2018) 223-231, ISSN:2211-3797, Elsevier.

# 3.Experimental studies of Barium titanate nanofibers prepared by

**Electro spinning** method.

M.V. Someswararao, R.S. Dubey.

NANOSYSTEMS: PHYSICS, CHEMISTRY, MATHEMATICS, 2019,10 (3), P.350-354.

ISSN:2220-8054

## 4. Experimental Investigation of Electro spun Titania Nanofibers

An Applied Voltage Influence.

M.V. Someswararao, D. Pradeep R.S. Dubey, P.S.V. Subbarao.

Materials Today: Proceedings 18 (2019)384-388 ISSN:2214-7853, Elsevier.

# 5. Fabrication and characterization of electro spun barium titan ate and polyvinyl pyridine composite nanofibers.

Adavi Bala Krishna, M.V. Someswararao, R.S. Dubey, P.S.V. Subbarao.

Materials Today: Proceedings 18 (2019) 2142-2146. ISSN:2214-7853, Elsevier.

# 6.Effect of Copper doping on Structural, Dielectric and DC electrical Resistivity properties of BaTiO3.

M.V. Someswararao, K.V. Ramesh, M.N.V. Ramesh, B. Srinivasarao.

Advances in Materials Physics and Chemistry, 2013, 3,77-82. ISSN:2162-531X.

- 7.Presented one conference paper in "2nd International Conference on Nano Science and Engineering Applications-2018" Organized by JNTUH and QATAR University.

  M.V. Someswararao, R.S. Dubey.
- 8. Photonic band gap analysis of 1D TiO2/SiO2 photonic crystals using plane wave method for thin film solar cell applications.

R.S. Dubey, M.V. Someswararao, Sigamani Saravanan.

IOP Conference Series: Materials Science and Engineering. 1263 (2022) 012007, ISSN:1757-8981.

9. Rare-Earth doped Material platforms for Quantum Nano photonics Process.

Published on 14-10-2022, Indian Patent Publication: 202221056581(Reference Number)

10. Effect of Fe doped and capping agent – Structural, optical, luminescence, and antibacterial activity of ZnO nanoparticles.

YBS Rao, D.Parajuli, MVS Rao, A.Ramakrishna, K.Ramanjaneyulu Chemical Physics Impact 7,100270.

11.Sol-Gel spin coated transparent single TiO2 and SiO2 thinfilm on glass for Optoelectronic applications.

M.V. Someswararao, Sigamani Saravanan.

Paper presented in the International Conference MECAP-2023 in S.R.K.R.E.C.on Sep,25<sup>th</sup> -26<sup>th</sup>,2023.

12. Submitted Chapter IX: "Innovation in MXene for Photo catalysis." To

**Book Title: MXenes: From Research to Emerging Applications. CRC Press.** 

M.V. Someswararao, Sigamani Saravanan

# 13. Antibacterial, antimicrobial and Environmental applications of TiO2 Nanoparticles.

Submitted to Nano world Journal which is under review.

# 2.Details of Conferences/ Workshops/ FDP/ Training Programs/ STTPs.

S.No	Name of the Programme	Duration	Organized by
1	Work shop on Nanotechnology for	2 <sup>nd</sup> June to 14th	I.I.T. MADRAS.
	Clean Energy, Conducted by I.I.T.MADRAS.	June -2008	
2	Workshop on Introduction to	25 <sup>th</sup> June to 4th July	I.I.T.BOMBAY.
	Research Methodologies, Conducted by I.I.T.BOMBAY.	2012.	
3	AICTE- STTP on Inculcating	23 <sup>rd</sup> June to 27 <sup>th</sup>	S.R.K.R.
	Human values in Technical Education.	June 2008	Engineering
			College
4	University and PG Teachers	19 <sup>th</sup> June 2017 to	MHRD Govt.of
	Training Program in PHYSICS. Conducted by	9 <sup>th</sup> July 2017.	India
	IISC Challakere.		And IISC
			Challakere.
5	One week FDP on Advanced Research Traits in	22-27 july,2020	VIGNAN
	Materials and Design of Mechanical Systems.		University.
6	One-week online workshop on ''Nanotechnology and	27-31 of July,2020.	MANIT.
	Nanomaterials for Interdisciplinary Applications' NNIA-2020.	27 37 07 041,2020.	BHOPAL
7	One week International FDP on "Latest Trends in Engineering,	10-15 of August	Lendi Institute
	Science and Technology: Nanomaterials' LIET-2020.	2020.	of Engineering
			&Technology.
			Vizianagaram.
8	National Webinar on Emerging Trends in Mathematical Sciences	6-7 of Jan,2021.	A.K.N.U.
	And Engineering Applications.		Rajahmundry.
9	FDP on Nanomaterials by Design for Energy Applications.	22-26 <sup>th</sup> of Feb,2022	MHRD and
	on 22-26 of Feb, 2022.		GIAN,JEC.
10	Attended to 3-day FDP on Inculcating Universal Human values in	31 <sup>st</sup> August to	AICTE with SRKREO
	Technical Education organized by AICTE at SRKREC.	2 <sup>nd</sup> September	

# 3. Any Other information:

(Administrative activities): Working as NBA, NAAC, Coordinator Since 2016.

Ratified as Assistant Professor in Physics from Andhra University in 2014.

Ratified as Assistant Professor in Physics from JNTU-Kakinada in 2017.

Ratified as Associate Professor in Physics from JNTU-Kakinada in 2022.

Taken Charge as Head of the Department of Engineering Physics since 1st September, 2023.

### **Personal Information**

Father's Name : Moganti Vithal Dasu

Mother's Name : Moganti Varalakshmi

Marrital Status : Married.

Permanent Address : Door No: 5-89,

Vinayaka Street,

Mogallu Village. PIN-534209.

West Godavari.dist-A.P.