

# JSS Mahavidyapeetha JSS Academy of Technical Education Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060



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# **FACULTY PROFILE**

Department: Engineering Physics

#### 1. Personal Details

NAME	Dr. R.SHASHIDHAR	
DEPARTMENT	Engineering Physics	
DESIGNATION	Associate Professor & Head	
PHONE	+91 98444 65346	
EMAIL ID	shashidharr@jssateb.ac.in	
Date of Joining (JSSATEB)	26-11-1997	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

## **Experience**

Total Experience in Tears Teaching. 20 Tears Industry. This Teaching Teaching.	Total Experience in Years	Teaching: 28 Years	Industry: Nil	Research: 01 year
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#### 3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.Sc	Physics, Maths, Electronics	1993	SSFGC, Tumkur	Bangalore University, Karnataka INDIA
M.Sc.,	Physics (specialization::Electronics)	1996	Jnanabharathi, Department of Physics, Bangalore.	Bangalore University, Karnataka INDIA
Ph.D.	Condensed Matter Physics	2015	Jnanabharathi, Department of Physics, Bangalore.	Bangalore University, Karnataka INDIA

#### Research & Publications

Papers Published in Web of	International: 16	National: 00
Science indexed Journals		
Papers Published in SCOPUS	International: 14	National: 01
indexed Journals		
Papers Published in other	International: 03	National: 01
Journals		
Papers Presented in	International:-13	National: 04
Conferences / Symposium		
Books / Book chapters	Name of the book:	
Published	Publisher:	
	Year of Publication:	

#### 5. Research Guidance

PhD Guide? Give field &	Yes, Condensed Matter Physics	University:
University		a. Visvesvaraya Technological
		University:
PhDs / Projects Guided	Ph.D Awarded: 01	Projects at Master's Level: Nil
	Guiding :03 (four)	Projects at Bachelor's Level: Nil

#### 6. Grants

#### i. Funds Received (Projects):

Title of the project	Name of the	Funding agency	Fund granted	Sanctioned	
	investigator(s)		in Rs	Year	
Influence of thickness and temperature	Dr. R shashidhar,		1,00,000	2022	
on solution processed	Dr. Nityanand Choudhary				
SnO <sub>2</sub> based solar cells and sensors	& Mr. Anand B C	I-STEM, center for			
Thickness and temperature effects on	Dr. R shashidhar,	Nano Science and	30,000	2022	
solution-processed TiO <sub>2</sub> /ZnO based	Dr. Roopashree B &	Engineering			
Dye Sensitized Solar cells"	Mr. Prakasha G S	(CeNSE), Indian			
Thickness and temperature effects on	Dr. R shashidhar, &	(IISc), Bangalore	30,000	2022	
solution-processed Titanium Dioxide	Mr. Mashukeshwara R S	under reverse			
and Copper Oxide Thin Films"		funding			
Fabrication and characterization of	Dr. R shashidhar, &		30,000	2022	
ZnO/SnS based sensors and solar cells	Mr. Prakasha G S				

ii. Patents: Nil iii. Consultancy: Nil

## 7. Awards Received

Received best award for the paper entitled "Influence of various alcoholic solvents on structural, morphological and compositional properties of sprayed TiO2 films" in International Journal of Physics and Research (IJPR) Transstellar Journal Publications Research Consultancy (TJPRC) Pvt. Ltd. on June 2013

#### 8. Publications

#### i. International Journals

SI. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1.	morphological,		Emergent Materials	April 2024	Both	4.8	Springer
2	Effect of post air annealing on the characteristics of spray deposited ZnO thin films and their use as MOS Ethanol gas sensor	Shashidhar R, Madhukeshwara R S	Indian Journal of Pure and applied Physics	62 (2024) 212-221	Both	0.846	NISCAIR- CSIR, India
3	Annealing temperature	S. Uday Balegar, N Srinatha, R Shashidhar, A Raghu	Materials Today Proceedings	92 (2023) 1453–1458	WOS	2.59	Elsevier Ltd.
4	1	Anand B C, R Shashidhar, Nityanand Choudhary	Journal of the Korean Physical Society	82, 2023	Both	0.800	Springer

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5	low hysteresis MoS type humidity sensors via SRCBD poly crystalline Sn <sub>x</sub> O <sub>y</sub> thin films	Anand B C, R Shashidhar, Nityanand Choudhary	Digest Journal of Nanomaterias and Biostructures	18,1 2023	Both	1.000	National Institute R and D of Materials Physics
6	Synthesis of Nanoparticles by Solution Combustion Method: A Review	Nityanand Choudhary & R Shashidhar	JSS Journal of Scientific Studies	1,2,2023	Others	-	J S S Academy of Technical Education
7	A. Thermodynamic model to study the ferroelectric behaviour of lactic acid derivatives with keto linkage group	Singh, A.,Shashidhar R & Rastogi,	Phase Transitions	95, 10, 2022.	Both	1.400	Taylor and Francis Ltd
8	Study the Phase Transition Properties of Sm CA* Phase in Antiferroelectric Mesogen W-358 Series.		Indian Journal of Pure & Applied Physics (IJPAP),	60, 8, 2022	Both	0.846	NISCAIR- CSIR, India
9	Influence of Thickness and illumination on Electrical Properties of MOS capacitor of spray pyrolysed mixed phase CdTe <sub>2</sub> O <sub>5</sub> -CdTeO <sub>3</sub> - CdTe film	R.Shashidhar & Nityanand Choudhary	Emergent Materials	1-9, 2021	Both	4.8	Springer Nature
10	Cost effective SnS heterojunction solar cells synthesized by spray pyrolysis	R.Shashidhar & Nityanand Choudhary	Journal Sol- Gel Science & Technology	96,1,2020	Both	2.50	Springer
11	Thickness dependent studies of hetero-junction solar cell synthesized on quartz substrate by spray pyrolysis technique	R.Shashidhar & Nityanand Choudhary	Indian Journal of Pure and applied Physics	58, 2020	Both	0.846	NISCAIR- CSIR, India
12	Luminescence of bio-synthesized rod like Bismuth Oxychloride nanoparticles	Nityanand Choudhary & R.Shashidhar	Advances in Natural Sciences: Nano Science & Nano Technology	10,3,2019	Both	1.7	Vietnam Academy of Science and Technology (VAST) (VN) and IOP (UK)
13	Optical properties of (TiO <sub>2</sub> ) <sub>1-X</sub> (Al <sub>2</sub> O <sub>3</sub> ) <sub>X</sub> Pseudo binary oxides thin films prepared by spray Pyrolysis7technique	H.D.Chandrashekhar, Basavaraj Angadi, R.Shashidhar, L.C.S.Murthy & Poornima P	Materials Today Proceedings	3,6,2016	Both	2.59	ELSEVIER
14	Nano porous Al <sub>2</sub> O <sub>3</sub> - TiO <sub>2</sub> thin film based humidity sensor prepared by spray pyrolysis technique	H.D.Chandrashekhar, Basavaraj Angadi, YT Ravikiran, Poornima P, R.Shashidhar & L.C.S.Murthy	AIP Conference Proceedings	1728,1,2016	Both	0.41	AIP
15	Isochronal Effect of Optical Studies of TiO <sub>2</sub> Thin Films Deposited by Spray Pyrolysis Technique	H.D.Chandrashekhar, Basavaraj Angadi, R.Shashidhar, L.C.S.Murthy & P.Poornima.	Journal of Advanced Science Letters	22,4,2016	Both	0.60	American Scientific Publishers
16	Raman spectral studies of spray deposited CuO thin films	Shashidhar R, Angadi Basavaraj, Chandra shekhar H D and Murthy L C S	Journal of Advanced Science Letters	22,2,2016	Both	0.60	American Scientific Publishers
17	Influence of spray deposited TiO <sub>2</sub> film thickness on the performance of Au/n-TiO <sub>2</sub> /pSi/Al low cost hetero- junction solar cell and its utility as a carrier blocking	Shashidhar,R .Angadi,B, Chandra Shekar, H.D, Murthy, L.C.S	Solid State Physics AIP Conf. Proc	1665,2015	Both	0.41	AIP

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18	Effect of ethanol concentration on the porosity of TiO <sub>2</sub> films prepared by spray pyrolysis and their utility as humidity sensor	Shashidhar, R, Angadi, Basavaraj, Chandra Shekar, H D, Murthy, LCS and Rao, KSRK	IEEE XPLORE	2015	Scopous	3.557	IEEE
19	Effect of isothermal annealing on properties of TiO <sub>2</sub> thin films towards MOS capacitor applications	H.D.Chandra shekhar, Basavaraja angadi,R.Shashidhar, and L.C.S.Murthy	International Journal of Engineering Science and Technology (IJEST) UK	6,4,2014	others	-	Multicraft
20	Influence of various alcoholic solvents on structural, morphological and compositional properties of sprayed TiO2 films	R. Shashidhar and LCS.Murthy	International Journal of Physics and Research (IJPR)	3,2,2013	others	-	Transstellar Journal Publications and Research Consultancy Private Limited (TJPRC PVT. LTD.)
21	Influence of thickness and air annealing on structural,morphological, compositional, electrical properties of sprayed TiO <sub>2</sub> thin films	R. Shashidhar and LCS.Murthy	International Journal of Engineering Science and Technology (IJEST)	5,4,2013	others	-	SJIF

## ii. National Journals

SI. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1	Effect of thickness on Electrical properties of anatase TiO <sub>2</sub> thin films by Spray Pyrolysis technique	Poornima.P H D Chandrashekar, Basavaraj Angadi, LCSMurthy, Shashidhar R	Journal of Electrochemic al Society of India	65,3-4,2016	others	-	IISc., Bangalore
2	Preparation of characterization of spray deposited CdTe thin films towards fabrication of low cost heterojunction solar cells	Poornima.P ShashidharR, H D Chandrashekar, Basavaraj Angadi, L CS Murthy	Journal of Electrochemic al Society of India	65,3-4,2016	others	-	IISc., Bangalore

# iii. Conferences

SI. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1	Effect of	Poornima.P Angadi,B.	Recent	2016	others	-	Sathyabama
	temperature on	Chandrashekar,H.D.	Advances in				University,
	electrical studies	Murthy, L.C.S.	Nanoscience &				Chennai
	of MOS	Shashidhar R	Nanotechnology				
	(Al/Al <sub>2</sub> O <sub>3</sub> /Si)		Proceedings				
	device						

2	Preparation and	R. Shashidhar,	Advances in	2014	others	-	First
	characterization of	Basavaraj Angadi,	Applied				Impression,
	spray deposited	H.D.Chandra Shekar,	Physical and				Excellent
	CuO thin films	& L.C.S.Murthy	Chemical				publishing
	towards		Sciences-A				house, New
	fabrication of low		Sustainable				Delhi –
	cost hetero-		Approach				110070,
	junction solar cells						India,

# iv. Workshops / Conferences Attended

SI. No.	Name of the workshop / Conference	Organiser	Date
1	Two Day Online International Conference on "Advanced Materials Science and Applications" (ICAMSA-2020)	Department of Physics, MSRIT, Bangalore, Karnataka, India	3 <sup>rd</sup> to 4 <sup>th</sup> September 2020
2	National Conference Advanced Lithium Ion Batteries: Science and Technology (NALIBST-2019)	Indian Institute of Science, Bangalore ,	27-28 December 2019
3	Second international conference on Current applications in material science	SJB Institute of Technology, Bangalore	4 <sup>th</sup> May 2019
4	International Conference on Nanotechnology (NANOCON 2018)	Bharati Vidhyapeeth, Pune	25 <sup>th</sup> to 26 <sup>th</sup> October 2018
5	International conference on surface engineering (INCOSURF-2018)	India (ECSI and Department of Inorganicand Physical Chemistry, IISc., Bangalore	9 <sup>th</sup> to 11 <sup>th</sup> August 2018
6	Recent advances in Nano science and Nano technology	Government Science College Hassan	26 <sup>th</sup> February 2016
7	International Conference on Condense Matter and Applied Physics (ICC-2015)	Govt. Engineering College Bikaner, Karni Industrial Area, Pugal Road, Bikaner-334004, (Rajasthan) INDIA	30 <sup>th</sup> to 31 <sup>st</sup> October 2015
8	Recent Advances In Nano-Science And Technology (RAINSAT-2015)	Sathyabama University,Chennai	8 <sup>th</sup> to 10 <sup>th</sup> July 2015
9	2 <sup>nd</sup> international symposium on physics and technology of sensors(ISPTS-2)	YASHADA Auditorium, Rajbhavan complex, Baner road near Savitribai Phule Pune University, Sakal Nagar, Aundh, Pune-411007,India.	8 <sup>th</sup> to 10 <sup>th</sup> March 2015
10	International Conference on Large Area & Flexible Microelectronics, (ILAFM-2014)	RV Engg College Bangalore, India	18 <sup>th</sup> to 20 <sup>th</sup> December 2014
11	59 <sup>th</sup> Department of Atomic Energy Solid State Physics Symposium (DAE-SSPS)	VIT University, Vellore,Tamilnadu, India	16 <sup>th</sup> to 20 <sup>th</sup> December 2014
12	International Conference on Nanotechnology (NANOCON-2014)	Bharati Vidyapeeth University, Pune, India	14 <sup>th</sup> to 15 <sup>th</sup> October 2014
13	International Conference on Electrochemical Science and Technology (ICONEST-2014)	IISc., Bangalore, India	7 <sup>th</sup> to 8 <sup>th</sup> August 2014
14	International Conference on Nano Science& Engineering Application (ICONSEA- 2014)	Hyderabad,Andhra Pradesh, INDIA	26 <sup>th</sup> to 28 <sup>th</sup> June 2014

15	Recent trends in thin film technology	Walchand Hirachand	14 <sup>th</sup> to 15 <sup>th</sup> November
		College of Arts & Science,	2008
		Walchand Hirachand	
		Marg, Ashok Chowk,	
		Solpur	
16	National symposium on instrumentation-31	Indian Institute of	10 <sup>th</sup> to 15 <sup>th</sup> October 2006
		Science,Bangalore and	
		Institute of Technology	
		Management,	
		Gwalior	

# v. Workshops / Conference (Orgainsed):Nil

# vi. Conference Attended (those sponsored by AICTE / ISTE /IETE /TEQIP or any other sponsoring body)

SI. No.	Name of the workshop / Conference	Organiser	Date
1	FDP on "Sustainable Development Goals"	Department of Management	28th - 29th
		Studies, JSSATE, Bengaluru	June 2024
2	FDP on "Applied Physics in VTU Curriculum"	Department of Basic Sciences,	15th – 19th
		Cambridge Institute of	May 2023
		Technology, Bengaluru	
3	Frontiers in Material Research for Energy	ThyagarajarCollege of	11 <sup>th</sup> to 17 <sup>th</sup>
	Application	Engineering,Madurai	December
			2017
4	Short term training programme on	AICTE-ISTE	23 <sup>rd</sup> to 27 <sup>th</sup>
	electrochemical energy conversion andstorage	at Dr. AITBangalore	August 2004

9. Details of NPTEL / COURSERA courses completed

SI. No.	Name of the subject	Organised by	Date of completion / Award	Grade / Marks
1	Solid State Physics	NPTEL	28.09.2021	53 %
2	Semiconductor Physics	Coursera	28.05.2020	88.8%
3	Selection Of Nano materials For Energy Harvesting And Storage Application	NPTEL	28.09.2019	71.0%

# 10. Membership of Professional Bodies:

1.BOE, VTU, Belgavi( 2022, 2024)
2.BOE, Bangalore University, Bangalore (2022)
3.BOE, BNMIT, Bangalore (2022, 2024)
4.BOE, MSRIT, Bangalore (2022)
5. BOE, GAT, Bangalore (2021, 2024)
6. BOE, Dr. AIT, Bangalore (2015, 2024)
7. BOE, BMSCE, Bangalore (2012)
8. BOE, SJBIT, Bangalore (2023)
9. Life member (LM 41963) of the Indian Society for Technical Education (ISTE) (2015)
10. Life member (LM 232) of the Electrochemical Society of India, Indian Institute of Science, Bangalore-
560012 (2004)

# 11. Any other information you will like to share about your professional experience

Dr.R.Shashidhar Associate Professor & HOD of Physics JSS Academy of Technical Education Bangalore 560060