

# BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR

Accredited by NAAC With 'A' Grade Approved by AICTE, New Delhi & Affiliated to Shivaji University, Kolhapur Near Chitranagari, Kolhapur - 416013 (MS)

DTE INSTITUTE CODE : EN-6288

Tel.No.: (0231) 2638893, 2638894, Fax : 2636050

FOUNDER CHANCELLOR

Dr. Patangrao Kadam

M.A., LL. B., Ph. D.

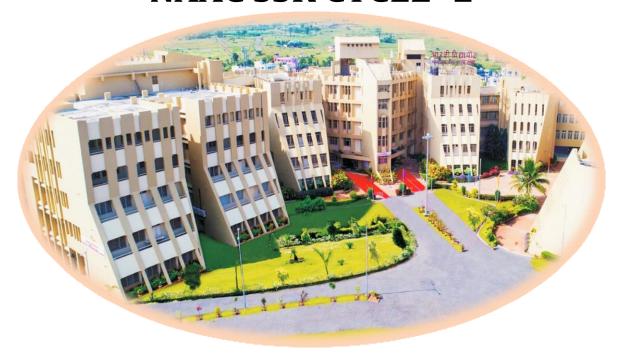
Web: http://coekolhapur.bharatividyapeeth.edu E- mail: coekolhapur@bharatividyapeeth.edu

PRINCIPAL

Dr. Vijay Ghorpade

M.E., Ph. D. (Computer)

# **NAAC SSR CYCLE-2**



<b>Criterion 3</b>	Research, Innovations and Extension						
Key Indicator 3.2	Innovation Ecosystem						
Methodology, 1	workshops/seminars/conferences including on Research Intellectual Property Rights (IPR) and entrepreneurship g the last five years						

Seminars: Impact Lecture Series on 'Innovation & Intellectual Property Rights Awareness'

# BHARATI PUNE DI VIDYAPEETH

## BHARATI VIDYAPEETH'S

# **COLLEGE OF ENGINEERING, KOLHAPUR**

• Organizing Department : Electronics & Telecommunication Engineering

• Name of Activity : Impact Lecture Series on "Innovation and Intellectual

property rights awareness"

• **Date of Activity** : 8<sup>th</sup> July 2022

• No. of Participants : 97

Participants From : Faculty TY students of college.

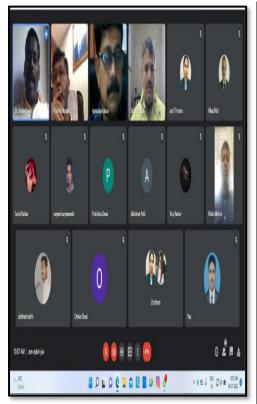
• **Resource Person** : Dr. S. B. Sadale

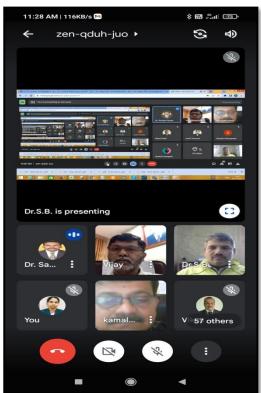
Details of Activity: Department of Electronics & Telecommunication organized Impact lecture series sponsored by MoE'S Innovation Cell (MIC) AICTE, New Delhi.

A online session on "Innovation and Intellectual property rights awareness" was scheduled on 8<sup>th</sup> July 2022 from 10.00 a.m to 11.30 a.m for faculty third year students of college. Resource person for same was Dr. S. B. Sadale Director IPR Shivaji University Kolhapur. This session include introduction Intellectual property rights and importance regarding Innovation in today life.

- Outcome of Activity: Students are gained Knowledge about IPR Innovation and able to understand importance of innovation. This lecture series is beneficial to encourage students for Innovation and IPR rather than accepting conventional Job.
- How it Bridges gap between Industry and Academia: Organizing such sessions will be helpful to students to gain knowledge about new trends in market
- Photo:







Mrs. A. H. Tirmare

**Co-Ordinator** 

Dr. S. S. Pawar

**IIC Coordinator** 

Dr. V. R. Ghorpade

**Principal** 



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Date: 07/07/2622

PRINCIPAL

Dr. Vijay Ghorpade

M.E., Ph. D. (Computer)

Ref. No. BV/COEK / 148 / 2022 -2023

To.

FOUNDER CHANCELLOR

Dr. Patangrao Kadam

M.A., LL. B., Ph. D.

Dr. S.B. Sadale,

Director IPR,

Shivaji University, Kolhapur.

Subject: Invitation as a Resource Person.

Dear Sir.

Department of Electronics & Telecommunication Engineering of Bharati Vidyapeeth's College of Engineering, Kolhapur has organized Online Impact lecture series on 'Innovation and Intellectual Property Rights Awareness' under Institution Innovation Council (IIC) sponsored by MoE's Innovation Cell (MIC), AICTE, New Delhi. This session is scheduled on 8<sup>th</sup> July 2022 from 10.00 a.m. to 11.30 a.m. for Third Year student of college.

It's our privilege to invite you as a Resource Person for this session and enlighten our students with your valuable guidance. We hope that you will accept our invitation and cooperate.

Thanks & Regards

Dr. V. R. Ghorpade

PRINCIPAL



# BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR

**FOUNDER & CHANCELLOR** Dr. Patangrao Kadam

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PRINCIPAL Dr. Vijay Ghorpade M.E., Ph. D. (Computer)

M.A., LL. B., Ph. D.

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NAAC- "A" Grade Out Ward: - BV/COEK/ 150 /2021-22

Date:- 10-7-22

To, Dr.S.B.Sadale Director IPR Shivaji University Kolhapur.

**Subject:** Thanking letter

Dear Sir,

We would like to extend our warm thanks to you for conducting session on "Innovation and Intellectual property rights awareness" under IIC Impact lecture series on 8th July 2022 for third and final year students. We hope your valuable guidance will be beneficial to students for understanding importance of Innovation and IPR.

We genuinely thank you once again for the support and time given by you and sincerely hope that you would continue to extend your valuable support and cooperation in our future initiatives as well.

Dr. Vijay. R. Ghorpade

Principal

# **Curriculum Vitae**

# Dr. Shivaji Babaso Sadale

M.Sc., Ph.D.



Assistant Professor

JSPS Fellow,

Marie Curie Fellow

Department of Technology,

Shivaji University,

Kolhapur-416 004

Maharashtra, India

# **Teacher Profile**

Name of the Faculty: Dr. S. B. Sadale
 Assistant Professor, Department of Technology,
 Shivaji University, Kolhapur, M.S. India-416 004



## 2. Educational Qualifications:

Sr.	Examination	Subject with specialization	Year of Passing	Name & Address of the
No.	Passed			University awarding
				Certificate / Degree
1.	B.Sc.	Physics	1997	Shivaji University, Kolhapur
2.	D.C.P.	Programming languages,	1998	Shivaji University, Kolhapur
		database		
3.	M.Sc.	Physics	2000	Shivaji University, Kolhapur
		(Materials Science)		
4.	B.Ed.	Sci. & Mathematics	2001	Shivaji University, Kolhapur
		Teaching Methodology		
5.	Ph. D.	Physics	2006	Shivaji University, Kolhapur

# 3. Research Interest: Materials Science, Nanomaterials, Energy Technologies, Organic Electronic and Lighting Devices

# 4. Teaching Experience: Total: 3 Years

# UG:

Designation	From	То	Years	Classes taught	Name & Address of the
					Institution
Lecturer	July 2008	March 2009	9 months		G. H. Raisoni Institute of Engineering & Technology, Pune, Maharashtra, India.
Assistant Professor	02/04/2012	Till the date	2 Years		Dept. of Technology, Shivaji University, Kolhapur

PG: 2 Years

Designation	From	То	Years	Classes taught	Name & Address of the
					Institution
Assistant	02/04/2012	Till the date	2 Years	M.Tech.	Dept. of Technology,
Professor					Shivaji University, Kolhapur
Assistant	01/04/2014	31/03/2015	1 Year	Masters in	Department of Electronics
Professor				Electronics and	and Electrical Engineering,
				Electrical	Keio University, Japan
				Engineering	

# 5. Other Work Experience: Total: 11 Years of Research Experience

Designation	From	То	Years	Name & Address of the Institution
Junior Research Fellow (J.R.F.)	14/08/2001	14/08/2003	2 Years	Department of Physics, Shivaji University, Kolhapur, India
Senior Research Fellow (S.R.F.)	15/08/2003	31/08/2004	1 Years	Department of Physics, Shivaji University, Kolhapur, India
CSIR-S.R.F.	01/04/2005	31/08/2006	16 months	Department of Physics, Shivaji University, Kolhapur, India
POST DOCTORAL FELLOW	01/09/2005	31/01/2007	17 months	Groupe d'Etude de la Matière Condensée, C.N.R.S., 1, place Aristide Briand, 92195 Meudon CEDEX, <b>France</b>
Marie Curie Fellow	01/03/2007	31/12/2007	10 months	Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology (FORTH), Hellas, <b>Greece.</b>
JSPS Fellow	01/04/ 2009	30/04/2011	2 Years	Department Of Electronic Science and Engineering, Kyoto University, JAPAN.
Researcher	01/05/2011	31/03/ 2012	1Year	Department Of Electronic Science and Engineering, Kyoto University, JAPAN.

# 6. Research Guidance

• UG Programs: B.Tech. and B.Sc.

## One INSPIRE Awardee working for project under my Mentorship

• PG Programs:M.Tech. and M.Sc.

• M.Sc. Projects: 10

• M.Phil.:Nil

• Ph.D.:Nil

# 7. Research Publications: 36

# A) Research papers published:

				400007 4007	
Year	International	National	University. State	Seminar	Total
1 0 001	Journals	Journals	level Journals	proceeding etc.	10001
2009-10	02				01
2010-11	03				03
2011-12	01			02	03
2012-13	03				03
2013-14	01			01	02
TOTAL	10				12

### i) Citation data

SCOI	SCOPUS Report Google Scholar Citation Report				on Report	Researchgate.net	No.	
(Num	bers Only)	•	(Num	bers onl	y)		Report	other
		4	# A					Pub.
Pub.	Citations	h-	Pub.	h-	i10-	Citations	Impact Points	
		index		index	Index			
29	355	12	35	14	17	437	28.10	

# ii) List of publications:

# A) International Peer Reviewed Publications

Sr.	Name of	Year	Title of the Paper	Name of the	Vol.	Page	Impact	citation
No.	Author/s			journal		Nos.	Factor	
1	P. S. Patil, E. A.	2003	Formation of Textured	Indian Journal	41	369		
	Ennaoui, S.		WS <sub>2</sub> thin films by Van	of Pure and		-		
	Fiechter, H.		Der Waals Rheotaxy	Applied		373		
	Tributch & S. B.		Process and Their	Physics				
	Sadale		Photoactivity.					
2	P.S. Patil, R.K.	2003	Properties of spray	Thin Solid	437	34		
	Kawar, S. B.		deposited tin oxide thin	Films		-		
	Sadale, and P.S.		films derived from tri-			44		
	Chigare		n-butyltin acetate.					

3	P.S. Patil, P.S.	2003	Thickness dependent	Materials	80	667	
	Chigare, S. B.	2003	properties of sprayed	Chemistry and	00	-	
	Sadale, and R.K.		iridium oxide thin	Physics		675	
	Kawar		films.	Tilysics		073	
4	P. S. Patil, P. V.	2003	Growth of Undoped	Proceedings of	1	146	
7	Kumbhar, M. M.	2003	SnO <sub>2</sub> Thin Films from	the12 <sup>th</sup> Inter.	1	-	
	Jawale, P. S.		Tri-Butyltin Acetate	Workshop on		148	
	Shinde, <b>S. B.</b>		and Their	The Physics of		110	
	Sadale and P. S.		Electroanalysis:Effect	Semi. Devices			
	Chigare		of Substrate	(IWPSD)			
	omgar v		Temperature.	(11,122)	<b>A</b>		
5	S.B.Sadale and	2004	Nucleation and Growth	Solid State	167/	273	
	P.S.Patil		of Bismuth Thin Films	Ionics	3-4	_	
			onto Fluorine Doped		#	283	
			Tin Oxide (FTO)		A		
			Coated Conducting				
			Glass Substrates from				
			Nitrate Solutions.		A.		
6	P.S. Patil, S.B.	2004	Electroanalysis of	Proceedings of	1	277	
	Sadale and R.K.		Spray Deposited	Int.		-	
	Kawar		Pristine Iridium Oxide	Conference on	7	282	
			and Molybdenum	Electroanal.			
			Doped Iridium Oxide	Chemistry &			
			Thin Film Coatings and	Allied Topics			
			their Electrochromism.	(ELAC-2004),			
				at, Goa			
7	P. S. Patil, A. R.	2005	Properties of Spray	Journal of	16-1	35	
	Patil, S. H.		Deposited Niobium	Materials		-	
	Mujawar and S.		Oxide Thin Films.	Science		41	
_	B. Sadale						
8	P. S. Patil, R. K.	2005	Electrochromism in	Electrochimic	50	2527	
	Kawar and S. B.	A	Spray Deposited	a Acta		- 2522	
4	Sadale		Iridium Oxide Thin			2532	
	D C D C D W	2005	Films.	A 1' 1	240	267	
9	P. S. Patil, R. K. Kawar and S. B.	2005	Effect of Substrate	Applied Surface	249	367	
			Temperature on Electrochromic	Science Science		- 274	
	Sadale			Science		374	
			Properties of Spray Deposited Ir-Oxide				
			Thin Films.				
10	P. S. Patil, S. H.	2005	Electrochromic	Applied	250	117	
10	Mujawar, A. I.	2003	Properties of Spray	Surface	230	_	
	Inamdar and <b>S.</b>		Deposited TiO <sub>2</sub> -doped	Science		123	
	B. Sadale		WO <sub>3</sub> Thin Films.	Science		123	
11	P.S. Patil, S. H.	2005	Structural, Electrical	Applied	252/	1643	
	Mujawar, A. I.		and Optical Properties	Surface	5	-	
	Inamdar, P.S.		of TiO <sub>2</sub> doped WO <sub>3</sub>	Science		1650	
			11 110 <sub>2</sub> doped 11 0 <sub>3</sub>	20.0		- 55 5	

Deshmukh and S.   B. Sadale.   2006   Synthesis of TYPE-I   Textured Tungsten   Disulfide Thin Films on   quartz substrate.   2006   Filectrochro. in Spray   Solar Energy   Materials and   Solar Cells   2006   Solar Cells   2007   2007   Solar Cells   2007   2007   2007   2007   2007   2007   2007   2007   2007   2007		Shinde, H.P.		Thin Films.				
B. Sadale   Color   Synthesis of TYPE-I   Textured Tungsten   Disulfide Thin Films on quartz substrate.   Crystal   Crystal   Growth   486								
13								
P.S. Patil	12		2006	Synthesis of TYPE-I	Journal of	286	481	
Disulfide Thin Films on quartz substrate.							_	
13   P.S. Patil, R.K.   2006   Promotion of Electrochro. in Spray   Materials and Solar Cells   1639   Materials and So		1.5.1 4.11		_	_		486	
13					Growin		100	
Rawar, S.B.   Belectrochro. in Spray   Deposited   Inamdar and S.S.   Molybdenum Oxide   Doped Iridium Oxide   Thin Films.   Synthesis and   Characterization of   type-II textured   tungsten disulfide thin   Films Synthesized by   Solar Cells   Solar Cells   Solar Cells	13	D C Datil D K	2006	_	Solar Energy	90	1620	
Sadale, A.I.	13	•	2000			70	1027	
Inamdar and S.S.   Molybdenum Oxide   Doped Iridium Oxide   Thin Films.		•					1630	
Mahajan		•		=	Solai Celis	<u> </u>	1039	
Thin Films.   S.B. Sadale and P.S. Patil   2006   Synthesis and characterization of type-II textured tungsten disulfide thin films by vdWR process, with Pb interfacial layer as texture promoter.						#		
14   S.B. Sadale and P.S. Patil   2006   Synthesis and characterization of type-II textured tungsten disulfide thin films by vdWR process, with Pb interfacial layer as texture promoter.		Manajan		_				
P.S. Patil	1.4	CD Codolo and	2006		Toyang of of	200	262	
type-II textured tungsten disulfide thin films by vdWR process with Pb interfacial tayer as texture promoter.  15 P. S. Patil, R. K. Kawar, S. B. Sadale, A. I. Inamdar, H.P. Deshmukh  16 P. S. Patil, R. K. Kawar and S. B. Sadale  Sadale  17 S.B. Sadale, S. R. Barman and P.S. Patil  18 P. S. Patil  Poperative of film thickness on Electrochromic activity of Spray persoluted Iridium Oxide Thin Films.  Poposited Iridium Oxide Thin Films.  Poposited Iridium Oxide Thin Films.  18 P. S. Patil  Pativative Surface  Pativative	14		2000	I -		290	303	
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films by vdWR process with Pb interfacial layer as texture promoter.  15 P. S. Patil, R. K. Kawar, S. B. Sadale, A. I. Inamdar, H.P. Deshmukh  P. S. Patil, R. K. Kawar and S. B. Sadale  Sadale  16 P. S. Patil, R. K. Kawar and S. B. Sadale  Sadale  Sadale  Sadale  17 S.B. Sadale, S. R. Barman and P. S. Patil  S.B. Sadale and P. S. Patil  P. S. Patil  P. S. Patil  P. S. Patil  S.B. Sadale and P. S. Patil  S. B. Sadale and P. S. Patil  S. B. Sadale and Characterization of Type-II Textured WS <sub>2</sub> Thin films on Bi Coated Quartz Substrates.  Solar Energy Materials and Solar Cells  Solar Cells  Solar Cells  Solar Cells  Solar Cells  Solar Cells  Solar Energy P. Selatil  Applied  252 8371  Applied  Sadale  Solar Energy P. Selatil  P. S. Patil  P. S. Patil  P. S. Patil  Solar Cells  Solar Cells  Solar Cells  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Solar Cells  Solar Cells  Solar Cells  Solar Cells  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Solar Cells  Solar Cells  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Solar Cells  Solar Energy P. Selatil  Solar Cells  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Solar Cells  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Solar Energy P. Selatil  Applied  Solar Energy P. Selatil  Applied					Growth		308	
With Pb interfacial layer as texture promoter   Section   Section   Surface   Science   Sa79								
as texture promoter,    15						A		
15       P. S. Patil, R. K. Kawar, S. B. Sadale, A. I. Inamdar, H.P. Deshmukh       Molybdenum Oxide Thin Films Synthesized by Spray Pyrolysis.       Applied Surface Science       252       8371         16       P. S. Patil, R. K. Kawar and S. B. Sadale       2006 Effect of film thickness on Electrochromic activity of Spray Deposited Iridium Oxide Thin Films.       Materials Chemistry and Physics       99/2 309         17       S.B. Sadale, S. R. Barman and P.S. Patil       2007 Formation of ⊥c texture of tungsten disulfide thin films with nickel.       Applied Surface Science       253 3489         18       S.B. Sadale and P. S. Patil       2007 Characterization of Type-II Textured WS₂ Thin films on Bi Coated Quartz Substrates.       Thin Solid Films       515 2935 Films         19       P. S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.       2007 Electrochemical investigations on spray deposited tin oxide thin films.       Solar Energy Materials and Solar Cells       91 864 Solar Energy Materials and Solar Energy Materials E								
Kawar, S. B.   Molybdenum Oxide   Surface   Surface   Science   8379		D. C. D. II D. II	2006		. 1: 1	252	0.27.1	
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Deshmukh  P. S. Patil, R. K. Kawar and S. B. Sadale  Spray Pyrolysis.  Description of Letexture of tungsten disulfide thin films with nickel.  S. B. Sadale and P. S. Patil  S. B. Sadale and P. S. Patil  S. B. Sadale and Characterization of Type-II Textured WS2 Thin films on Bi Coated Quartz Substrates.  P. S. Patil, P. S. Chigare, S. B. Sadale, S. H. Mujawar and P. S. Shinde.  Solar Energy Materials and Solar Cells  Solar Energy Materials and Solar Cells  Solar Energy Pyrolysis.  Materials P. S. Patil  P. S. Patil  P. S. Patil, P. S. Solar Cells  Solar Energy Pyrolysis.  Materials P. S. Patil  Solar Energy Pyrolysis.  Materials Pyrolysis.  Solar Energy Pyrolysis.  Physics  Solar Energy Pyrolysis.  Solar Energy Pyrolysis.  Physics  Solar Energy Pyrolysis.  Physics  Solar Energy Pyrolysis.  Physics  Solar Energy Pyrolysis.  Physics  Physics  Solar Energy Pyrolysis.  Physics  Solar Energy Pyrolysis.  Physics  Solar Energy Pyrolysis.  Pyrolysis.  Solar Energy Pyrolysis.  Pyrolysis.  Solar Energy Pyrolysis.  Pyrolysis.  Pyrolysis.  Pyrolysis.  Pyrolysis.  Solar Energy Pyrolysis.  Pyrolysis.  Solar Energy Pyro		•			Science		8379	
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Oxide Thin Films.17S.B. Sadale, S. R. Barman and P. S. Patil2007 Formation of ⊥c texture of tungsten disulfide thin films with nickel.Applied Surface Science253 3489 Surface 349518S.B. Sadale and P. S. Patil2007 Characterization and Characterization of Type-II Textured WS₂ Thin films on Bi Coated Quartz Substrates.Thin Solid Films515 2935 Films19P.S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.2007 Electrochemical investigations on spray deposited tin oxide thin films.Solar Energy Materials and Solar Cells91 859 Solar Cells20A.I. Inamdar, S.H. Mujawar, S.H.		Sadale	#4	DOL NO HONTON	Physics		313	
17       S.B. Sadale, S. R. Barman and P.S. Patil       2007       Formation of ⊥c texture of tungsten disulfide thin films with nickel.       Applied Surface Science       253       3489         18       S.B. Sadale and P. S. Patil       2007       Preparation and Characterization of Type-II Textured WS₂ Thin films on Bi Coated Quartz Substrates.       Tilm Solid Films       515       2935         19       P.S. Patil, P.S. Chigare, S.B. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.       2007       Electrochemical investigations on spray deposited tin oxide thin films.       Solar Energy Materials and Solar Cells       91       859         20       A.I. Inamdar, S.H. Mujawar, S.H. Muja			4	- CONTRACTOR - CON				
R. Barman and P.S. Patil of tungsten disulfide thin films with nickel. Science Science 3495  18 S.B. Sadale and 2007 Preparation and Characterization of Type-II Textured WS <sub>2</sub> Thin films on Bi Coated Quartz Substrates.  19 P.S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.  20 A.I. Inamdar, S.H. Mujawar, Selectrodeposited zinc S.H. Mujawar, Materials and Solar Energy Sola	15	CD C II C	2007		A 1' 1	252	2400	
P.S. Patil thin films with nickel. Science 3495  S.B. Sadale and P. S. Patil Textured WS2 Thin films on Bi Coated Quartz Substrates.  P.S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.  200 A.I. Inamdar, S.H. Mujawar, 2007 Electrodeposited zinc oxide thin films: Science 3495  thin films with nickel. Science 3495  Thin films with nickel. Science 3495  Thin Solid 515 2935  Films - 2942  Solar Energy 91 859  Materials and - Solar Cells 863	17	Volume.	2007			253	3489	
S.B. Sadale and P. S. Patil  Preparation and Characterization of Type-II Textured WS <sub>2</sub> Thin films on Bi Coated Quartz Substrates.  P.S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.  2007 Electrodeposited zinc Solar Energy S.H. Mujawar, S.H. Mujawar, S.H. Mujawar, Solar Energy Materials and Solar Cells Solar Energy Solar Energy Solar Cells Solar Cells Solar Energy Solar Energy Solar Cells Solar Energy Sol			A.	_			2405	
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Type-II Textured WS <sub>2</sub> Thin films on Bi Coated Quartz Substrates.  19 P.S. Patil, P.S. Chigare, S.B. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.  2007 Electrodeposited zinc Solar Energy Materials and Solar Cells	18	4007 4007 400	2007	-		515	2935	
Thin films on Bi Coated Quartz Substrates.  19 P.S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.  20 A.I. Inamdar, S.H. Mujawar, S.H. Mujawar, S.H. Mujawar, S.H. Mujawar, Solar Energy Solar Energy Materials and Solar Cells Solar Cells Solar Energy Solar Energ		P. S. Patil			Films		-	
Coated Quartz Substrates.  P.S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde.  Coated Quartz Substrates.  Solar Energy Materials and Solar Cells							2942	
P.S. Patil, P.S. 2007 Electrochemical investigations on spray deposited tin oxide thin Mujawar and P.S. Shinde.  Substrates.  Substrates.  Solar Energy 91 859 Materials and - Solar Cells 863  Materials and Solar Cells 863  A.I. Inamdar, 2007 Electrodeposited zinc Solar Energy 91 864 S.H. Mujawar, oxide thin films: Materials and -								
P.S. Patil, P.S. 2007 Electrochemical investigations on spray deposited tin oxide thin Mujawar and P.S. Shinde.  20 A.I. Inamdar, S.H. Mujawar, 2007 Electrodeposited zinc oxide thin films:  Solar Energy 91 859  Materials and Solar Cells 863  Assolution Solar Energy 91 864  Solar Energy 91 864  Materials and				~				
Chigare, S.B. investigations on spray deposited tin oxide thin Mujawar and P.S. Shinde.  Materials and Solar Cells  Solar Cells  863  A.I. Inamdar, S.H. Mujawar, S.H. Mujawar, oxide thin films:  Materials and Solar Energy 91  864  Materials and -								
Sadale, S.H. Mujawar and P.S. Shinde.  20 A.I. Inamdar, S.H. Mujawar, S.H. Mujawar, S.H. Mujawar, S.H. Mujawar, Sadale, S.H. deposited tin oxide thin films. Solar Cells Solar Cells Solar Energy 91 864 - Materials and -	19	·	2007			91	859	
Mujawar and P.S. Shinde.  20 A.I. Inamdar, S.H. Mujawar, Signature of Solar Energy of Solar En		<b>O</b> ,					-	
Shinde.  20 A.I. Inamdar, S.H. Mujawar, oxide thin films:  Solar Energy 91 864 oxide thin films: Materials and -				_	Solar Cells		863	
20 A.I. Inamdar, S.H. Mujawar, Signature Solar Energy Sol				films.				
S.H. Mujawar, oxide thin films: Materials and -								
	20		2007	<u> </u>		91	864	
S.B. Sadale, A.C.   Nucleation and growth   Solar Cells   870		_						
		S.B. Sadale, A.C.		Nucleation and growth	Solar Cells		870	

	Sonavane, M.B.		mechanism.					
	Shelar, P.S.							
	Shinde and P.S.							
	Patil							
21	P.S. Patil, <b>S. B.</b>	2007	Synthesis of	Applied	253	8560		
	Sadale, S.H.		electrochromic tin	surface		_		
	Mujawar, P.S.		oxide thin films with	Science		8567		
	Shinde and P.S.		faster response by spray					
	Chigare		Pyrolysis.					
22	S.B. Sadale,	2008	Photoelectrochemical	Journal	43-	1472		
	S.M. Chaqour,		and physical	Materials	6	-		
	O. Gorochov,		properties of tungsten	Research		1479		
	and M.		trioxide films	Bulletin				
	Neumann-		obtained by aerosol					
	Spallart		pyrolysis.					
23	P.S. Shinde,	2008	Photoelectrochemical	Solar Energy	92-	283		32
	S.B. Sadale,		and physical	Materials and	3	-		
	P.S. Patil, P.N.		properties of spray	Solar Cells		290		
	Bhosale, A.		deposited titanium					
	Brüger, M.N.		oxide thin films		7			
	Spallart, C.H.							
	Bhosale							
24	P. Horvath, M.	2008	ZnO thin films for	Sensor letters	6	1–6		
	Suchea, S.B.		cantilever coatings:					
	Sadale, S.	4	structural and					
	Christoulakis,		mechanical					
	R. Voicu,	1	properties,					
	C.Tibeica, I.	4	observations of					
	Bineva,		photoplastic effect					
	R.Muller, T.							
4	Kitsopoulos and	A						
	G. Kiriakidis							
25	S.B. Sadale and	2010	Photoelectrocatalysis	Journal of	13-2	127-		
	M. Neumann-		with Drop-Cast	New Materials		131		
	Spallart		Tungsten Trioxide	for				
			Films	Electrochemic				
26	CL: "D	2010	Di ( ) i d	al Systems The 15 <sup>th</sup>				
26	Shivaji B. Sadale, Kei	2010	Photocatalytic oxidation of methanol	International				
	Noda, Kei		and production of $H_2$ .	Conference on				
	Kobayashi,		and production of 112.	TiO <sub>2</sub>				
	Hirofumi			Photocatalysis				
	Yamada and			:Fundamentals				
	Kazumi			and				
	Matsushige,			Applications				
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				(m) 0 4 5) 0		ı	1
				$(TiO_2-15)$ , San			
				Diego,			
				California,			
				USA.			
		2011			0.0	7.70	
27	Shivaji B.	2011	Hydrogen production	physica status	8-2	552-	
	Sadale, Kei		from gas phase	solidi-c		554	
	Noda, Kei		photocatalytic				
	Kobayashi, and		decomposition of				
	Kazumi		methanol using Pt-				
			supported				
	Matsushige		* *				
			nanocrystalline WO <sub>3</sub>				
			films		A		
28	Shivaji B.	2011	Intricate Photocatalytic	Applied	257	1030	
	Sadale, Kei		Decomposition	Surface	4	0 -	
	Noda, Kei		Behavior of Gaseous	Science	A	1030	
	Kobayashi,		Methanol with			5	
	Hirofumi		Nanocrystalline				
			Tungsten Trioxide				
	Yamada and		Films in High Vacuum		1		
	Kazumi				-		
	Matsushige						
29	S. B. Sadale, K.	2011	Gas phase	15 <sup>th</sup> Internation	Won	the	
	Noda, K.		photocatalysis	al Conference	Awar	d for	
	Kobayashi, H.		with WO <sub>3</sub> and	On Thin Films		ıragem	
	Yamada and K.		composite WO <sub>3</sub> -TiO <sub>2</sub>	(ICTF-15),	ent	of	
			thin films			rch in	
	Matsushige	•	Unii iiiiis	Kyoto, Japan			
		- 1			Thin 1		
30	S. B. Sadale, K.	2012	Real-time Investigation	Thin Solid	520/	3847	
	Noda, K.		On Photocatalytic	Films	10	-	
	Kobayashi, H.	1	Oxidation of Gaseous			3851	
	Yamada & K.	4	Methanol with				
	Matsushige		Nanocrystalline				
	Watsushige		WO <sub>3</sub> -TiO <sub>2</sub>				
		#	<del>-</del> -				
4		2010	Composite Films	* 0*	1.0	126	
31	A. B. Kolekar	2013	BIO-FUEL-DI-ETHYL	J. of Int.	1-3	136	
	A.B. Dayte		ETHER (DME): A	Academic		-	
	C. H. Bhosale		REVIEW	Research for		142	
	S.B. Sadale			Multidisciplin			
				ary			
32	D S. Dalavi, R S.	2013	Efficient	Journal of	1	3722	
	Devan, R.A.	2013	Electrochromic	Materials	(23)	3,22	
	· ·			Chemistry C	(23)	2720	
	Patil,		performance of nano	Chemistry C		3728	
	R. S. Patil, Y		particulate WO <sub>3</sub> thin				
	R.Ma, S. B.		films				
	Sadale,						
	InY. Kim, Jin-						
	H.Kim and P. S.						
	Patil						
	1 4111						

33	S. S. Mali, H,	2013	Single-step synthesis of	CrystEngCom	15	5660		
	Kim, C, Su Shim,		3D nanostructured	m		_		
	W. Ri Bae, N. L.		TiO2 as a scattering			5667		
	Tarwal, S.		layer for vertically					
	B. Sadale,c P.S.		aligned 1D nanorod					
	Patil, Jin-H.Kim		photoanodes and their					
	and C.K.Hong		dye-sensitized					
			solar cell properties					
34	N.L. Tarwal,	2014	Photoluminescence	Ceramics	40-6	7669	1.968	
	K.V. Gurav, S.H.		andphotoelec-	International		_		
	Mujawar, S.B.		trochemical properties			7677		
	Sadale, K.W.		of the spray deposited			7077		
	Nam, W.R. Bae,		copper doped zinc					
	A.V. Moholkar,		oxide thin films					
	J.H. Kim, P.S.							
	Patil, J.H. Jang							

## B) Monographs: Nil

# C) Chapters in Books: 02

	1	1		7	
1	Shivaji B.	2009	Material Growth	NATO Science for Peace and	I,
	Sadale and		and Fundamental	Security Series C:	47-
	George	•	Material	Environmental Security,	66,
	Kiriakidis		Characterization	Sensors for Environment,	
		47	Techniques	Health and Security, published	
				by <b>Springer</b>	
2	George	2009	Systems and Set-	NATO Science for Peace and	I,
	Kiriakidis,	4	Ups for Effective	Security Series C:	159
	Konstantino	1	Sensing Response	Environmental Security,	_
+	s Moschovis	#	Applications	, ,	178
	and Shivaji			Sensors for Environment,	,
	B. Sadale			Health and Security, published	,
				by <b>Springer</b>	

- D) Edited Books :nil
- E) Books with ISBN with details of publishers: Nil
- F) Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database International Social Sciences Directory, EBSCO host, etc.)

# G) Details of patents and income generated :02

A) L	A) LIST OF PATENTS :02									
Sr. No.	Name of Author/s	Year of Public ation	Title of the Patent	Name of the Patent Office	Patent number					
1	S.B.Sadale and P.S.Patil	2004	AN IMPROVED SPRAY PYROLYSIS PROCESS FOR THE PREPARATION OF GOOD QUALITY THIN FILM SEMICONDUCTING COATINGS AND APPARATUS THEREFOR.	Indian patent	Granted, Patent no.:214163					
2	S.B.Sadale and P.S.Patil	2005	RHEOTAXIAL PROCESS FOR THE PREPARATION OF TYPE-II TEXTURED TUNGSTEN DISULFIDE THIN FILMS EXHIBITING A STACKING OF RHOMBOHEDRAL POLYMRIC CRYSTALLITES (3R) USING LEAD SULFIDE (PbS) INTERLAYER.	Indian patent	Patent no.:206142					

#### 8. Conferences Attended

- National
- Paper Presentation
- 1. Presented a poster in the 10<sup>th</sup> AGM of the Material Research Society of India (**MRSI**) at the **NCL**, **Pune**, **INDIA** during Feb.10-12, 2005.
- 2. Participated in E-MRS-spring meeting, Strasbourg, France, May 28<sup>th</sup> to June 1<sup>st</sup>, 2007.
- 3. Presented a paper entitled, "Hydrogen production using nanocrystalline WO<sub>3</sub> films loaded with platinum with gas phase photocatalysis", in the 57<sup>th</sup> Spring Meeting of The Japan Society of Applied Physics (JSAP), March 17 20, 2010 at Tokai University, Kanagawa, Japan.
- 4. Participated and presented a paper entitled, "Hydrogen Production from Gas Phase Photocatalytic Decomposition of Methanol using Pt. supported Nanocrystalline WO<sub>3</sub> Films", in "The 37<sup>th</sup> International Symposium on Compound Semiconductors" (ISCS, 2010) May 31 June 4, 2010, Takamatsu Symbol Tower, Kagawa, Japan.
- 5. Presented a paper entitled, "Photocatalytic Decomposition of Gaseous Methanol with Nanocrystalline Tungsten Trioxide Films in High Vacuum', in 3rd International Symposium on Transparent Conductive Materials (TCM-2010) at Crete, Greece during 17-21 October, 2010
- 6. Presented a paper entitled, "Hydrogen Production Using Gas Phase Photocatalysis With Nanocrystalline TiO<sub>2</sub>-WO<sub>3</sub> Composite Films in The 15<sup>th</sup> International Conference on TiO<sub>2</sub> Photocatalysis: Fundamentals and Applications (TiO<sub>2</sub>-15), November 15-18, 2010, San Diego, California, USA.

- 7. Presented a paper entitled "Real-time Investigations on Photocatalytic Oxidation of Gaseous Methanol with Nanocrystalline WO<sub>3</sub>-TiO<sub>2</sub> Composite Films in 7<sup>th</sup> International Symposium on Transparent Oxide thin Films for Electronics and Optics (TOEO-7), at International Conference Center, Waseda University, Tokyo, Japan during March 14-16, 2011.
- 8. Presented a paper entitled, "Gas phase photocatalysis with WO<sub>3</sub> and composite WO<sub>3</sub>-TiO<sub>2</sub> thin films in The 15<sup>th</sup> International Conference on Thin Films (ICTF-15), during November 8-11, 2011, at Kyoto, JAPAN [Won the Award for Encouragement of Research in Thin Films].
- 9. Presented a poster entitled ""Gas phase photocatalytic oxidation with nanostructured metal oxide thin films", in the International Conference on "New Age Science and Technology for Sustainable Development "and 3<sup>Rd</sup> Annual Conference of Indian JSPS Alumni Association", Organised jointly by CSIR-National Environmental Engineering Research Institute and Indian JSPS Alumni Association, Toyo University, Japan during August 6-7, 2012 at Nagpur, India.

#### Workshops attended (National)

- 1. Participated in the National Workshop on Advanced Methods for Materials Characterization (NWMC) held at Multipurpose Hall, BARC TSH, Anushaktinagar, Mumbai, INDIA, during October 11-15, 2001.
- 2. Participated in National Symposium on Recent Advances in Renewable Energy Technologies (RARE-T-2002), held at Shivaji University, Kolhapur, Maharashtra, India, during the period August 13-15, 2002.
- 3. Attended two days National Workshop on Industrial Electroplating held at Coimbatore, Tamilnadu, India, during a period 12-13 July 2003.
- Participated in CAMPIGN ON UNIVERSITY RESEARCH AND TRAINING (COURT) held at Shivaji University, Kolhapur, Maharashtra, India, during 26<sup>th</sup> and 27<sup>th</sup> June 2003.
- 5. Participated in National Seminar on Materials Processing and Characterization Techniques, (NS-MPCT) held at Department of Physics, Shivaji University, Kolhapur, Maharashtra, India, 28-29, March 2005.
- 6. Participated in One Day workshop "Review of Applied Physics Syllabus-2008", on 2<sup>nd</sup> January 2009 at Sinhgad College of Engineering, Pune 4110 41.
- 7. Participated in training course, "Introduction to COMSOL Multiphysics (ver 4.4), on 20<sup>th</sup> February 2014, conducted by COMSOL.

# International

# i. Paper Presentation List of paper/poster presented

Sr.	Name of	Year	Title of the Paper	Name of symposia / conference
No.	Author/s		-	
1.		2007	ZnO thin films for cantilever	E-MRS-spring meeting,
	Suchea, P.		coatings: structural and	Strasbourg, France
	Horvath S.		mechanical properties,	
	Christoulakis,		observations of photoplastic	
	R. Voicu, C.		effect	
	Tibeica, I.			
	Bineva, R.			
	Muller,T.			
	Kitsopoulos and		45000	
	G. Kiriakidis	2000	111.	
2.	S.B.Sadale,	2008	Ultra sensitive Ozone sensors	International conference on
	G. Kiriakidis		based on nanostructures of ZnO	nanomaterials and applications
	gr	2010	** 1	(ICNAMA-2008)
3.	Shivaji B.	2010	Hydrogen production using	57 <sup>th</sup> Spring Meeting of The Japan
	Sadale, Kei		nanocrystalline WO <sub>3</sub> films	Society of Applied Physics
	Noda, Kei		loaded with platinum with gas	(JSAP), March 17 - 20, 2010 at
	Kobayashi, and		phase photocatalysis	Tokai University, Kanagawa,
	Kazumi			Japan.
	Matsushige	2010		erry a eth y
4.	Shivaji B.	2010	Hydrogen Production from Gas	The 37 <sup>th</sup> International Symposium
	Sadale, Kei	A	Phase Photocatalytic	on Compound Semiconductors"
	Noda, Kei		Decomposition of Methanol	(ISCS, 2010) at Takamatsu
	Kobayashi, and		using Pt. supported	Symbol Tower, Kagawa, <b>Japan</b> .
	Kazumi	A 4	Nanocrystalline WO <sub>3</sub> Films	
	Matsushige	2010	Di de estate in December di estati	2 1
5.	Shivaji B.	2010	Photocatalytic Decomposition of	
	Sadale, Kei	1	Gaseous Methanol with	Transparent Conductive Materials
	Noda, Kei	A	Nanocrystalline Tungsten	(TCM-2010) at Crete, Greece
	Kobayashi, and	A	Trioxide Films in High Vacuum	during 17-21 October, 2010
	Kazumi	A		
	Matsushige	2010	Hydro con Drody etion Heine Con	The 15 <sup>th</sup> International Conference
6.	Shivaji B.	2010	Hydrogen Production Using Gas	
	Sadale, Kei Noda, Kei		Phase Photocatalysis With	on TiO <sub>2</sub> Photocatalysis:
4	Hb. 1885. 188		Nanocrystalline TiO <sub>2</sub> -WO <sub>3</sub>	Fundamentals and Applications (TiO. 15) San Diago, Colifornia
	Kobayashi, and Kazumi		Composite Films	(TiO <sub>2</sub> -15), San Diego, California, <b>USA</b> .
				USA.
7.	Matsushige S. B. Sadale, K.	2011	Paul time Investigations on	7 <sup>th</sup> International Symposium on
/•	Noda, K.	2011	Real-time Investigations on Photocatalytic Oxidation of	Transparent Oxide thin Films for
	Kobayashi, H.		Gaseous Methanol with	Electronics and Optics, at
	Yamada & K.		Nanocrystalline WO <sub>3</sub> -TiO <sub>2</sub>	International Conference Center,
	Matsushige		Composite Films	Waseda University, <b>Tokyo</b> ,
	iviaisusinge		Composite Films	3.
8.	S. B. Sadale, K.	2011	Gas phase photocatalysis with	<b>Japan</b> The 15 <sup>th</sup> International Conference
σ.	Noda, K.	2011	WO <sub>3</sub> and composite WO <sub>3</sub> -TiO <sub>2</sub>	on Thin Films (ICTF-15), at
	Kobayashi, H.		thin films $O_3$ and composite $O_3$ -11 $O_2$	Kyoto, <b>JAPAN</b>
	Yamada & K.			isyoto, jai att
	Matsushige			
9.	S. B. Sadale	2012	Gas phase photocatalytic	International Conference on "New
フ・	o. D. Sauaie	ZU1Z	Das phase photocatalytic	michianonal Comercial on New

			oxidation with nanostructured	Age Science and Technology for	
			metal oxide thin films	Sustainable Development "and	
				3 <sup>Rd</sup> Annual Conference of Indian	
				JSPS Alumni Association", at	
				Nagpur, India.	
10.	S. B. Sadale	2014	Effect of ZnS surface treatment	2 <sup>nd</sup> International Conference on	
			on solar cell performance of	"Physics of Materials and	
			ZnO/CdS core-shell nanorod	Materials Based Device	
			array photoelectrode	Fabrication (ICPM-MDF-2014)"	

### **Workshops attended (International)**

- 1.Attended Summer School of GOSPEL (General Olfaction and Sensing Projects on a European Level), 30<sup>th</sup> September to 5<sup>th</sup> October 2007. Europa Beach Hotel, Crete, Greece.
- 2. Kyoto workshop on Recent Progress in Advanced Probe Microscopy and Spectroscopy, March 16, 2010, Katsura campus, Kyoto University, **Japan.**
- 3."CONFERENCE AND SCHOOL ON NUCLEATION AGGREGATION AND GROWTH", at JNCASR, Bengaluru, India, 26<sup>th</sup> July to 6<sup>th</sup> August 2010.
- 4.TWO DAY WORSKSHOP on "Research Writings, Ethics, Plagiarism and Publishability", held during 26<sup>th</sup> -27<sup>th</sup> July 2012 at Shivaji University, Kolhapur, India.
- 5. A Workshop on "Brain Storming Session on Application of Sustainable Development in the State of Maharashtra", 26<sup>th</sup> & 27<sup>th</sup> November, 2012, jointly Organized by Maharashtra Academy of Sciences (MASc), and Shivaji University, Kolhapur (SUK), Sponsored by and Rajiv Gandhi Science & Technology Commission (RGSTC)
- 6. A Workshop on, "Engineering Thermodynamics", under the National Mission on Education through ICT (MHRD, Gov. of India) at Shivaji University, Kolhapur on 11/12/2012 and 11/12/2012.
- 7. A Workshop on, "Empowerment of Students and Teachers through Synchronous and Asynchronous Instructions under the National Mission on Education through ICT (MHRD, Gov. of India) at Shivaji University, Kolhapur on 02/02/2013 and 09/02/2013.
- 8. A Workshop on, "DATABASE MANAGEMENT SYSTEMS", under the National Mission on Education through ICT (MHRD, Gov. of India) at Shivaji University, Kolhapur on 21/05/2013 and 31/05/2013.

- International workshop on "Nanotechnology and Advanced Functional Materials (NTAFM 2013)" organised by Materials Research Society of India, MRSI (Pune Chapter) during July 24th-25th, 2013.
- 10. International Conference on "Frontiers in Energy, Environment, Health and Materials Research (EEMR- 2013)" organised by CSIR-Institute of Minerals and Materials Technology, Bhubaneswar, Odisha India in association with Indian JSPS Alumni Association during August 12<sup>th</sup>-13<sup>th</sup>, 2013.
- 11. Participated in International COMSOL Conference held on October 17-18, 2013 at Bangalore, India.

# 9. Research Project Work

# **Details of Funding received:**

Sr. No.	Title of Project				Duration (Year)	Status
1	Ultra fast solar hydrogen production using gas phase photocatalysis based on core-shell semiconductor nanostructures	Dr. S. B. Sadale	DST		July 2013- July 2015 2 Years	Ongoing
2	' '	Dr. S. B. Sadale (Co- PI)	BRNS	24,89,50 0	3 Years	Ongoing

#### a) National collaboration: Nil

S. No	HITTE	Funding agency	Duration (Year)	Cost Rs.	Status	 Name of collaborative Institute
-						

#### b) International collaboration:

Sr. No.	Title		Duration (Year)	Cost Rs.	Status		Name of collaborative Institute
1	Ultra fast solar hydrogen production using gas phase photocatalysis based on core-shell semiconductor nanostructures	DST- JSPS	July 2013- July 2015 2 Years	5,46,00 0		Sadale	Kyoto University, Japan

10. Areas of consultancy and income generated for the last 4 years:(Year wise) Nil

# 11.Fellowships/Awards:

- ❖ CSIR-New Delhi-Senior Research Fellow -NATIONAL LEVEL FELLOWHIP
- **❖ POST DOCTORAL FELLOW C.N.R.S., France**
- **❖** Marie Curie Fellow –European Commission (EU)
- **❖** JSPS Fellow-Japan
- ❖ Won Second Prize for Poster presentation in 2<sup>nd</sup> International Conference on Electroanalytical Chemistry and Allied Topics (ELAC)-2004, Paper entitled "Electroanalysis of Spray Deposited Pristine Iridium Oxide and Molybdenum Doped Iridium Oxide Thin Film Coatings and their Electrochromism" at Dona Paula, GOA-India, organized by Indian Society for Electro Analytical Chemistry during January 18 to 23, 2004.
- **❖ Award for Encouragement of Research in Thin Films**, in the 15<sup>th</sup> International Conference on Thin Films (ICTF-15), November 11, 2011 held in **Kyoto, Japan.**
- 12. Awards / recognitions for excellence in teaching at the state, national and international level
  Nil
- 13. Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies

### A. Invited Talks

- 1. Lecture on "Nanotechnology" at INSPIRE SCIENCE CAMP of DST organised by Jaysingpur College ,Jaysingpur,Tal.:Shirol, Dist.:Kolhapur
- 2. Lecture on "EM Spectrum and Life", at School of Nanoscience and Technology, Shivaji University, Kolhapur.
- 3. Invited talk on Energy: conservation at District Level Childrens Science Congress, arranged by National Children's Science Congress at V.S. Khandekar Prashala, Kolhapur
- 4. Invited talk on "Nanotechnology for Energy Demands", at SGGSIET, Nanded, Maharashtra, India

#### B. Worked as Judge/Resource Person

- 1. Resource person for District Level Childrens Science Congress, arranged by National Children's Science Congress at V.S. Khandekar Prashala, Kolhapur
- 2. Resource person for State Level Children's Science Congress-2012, arranged by National Children's Science Congress at Pune and Dhule, Maharashtra
- 3. Resource person for 15<sup>th</sup> ISTE Student National Convention, organised by Sanjay Ghodawat Group of Institutions, Atigre, Dist.:Kolhapur

4. Resource person for National Conference on emerging trends in technology, engineering and architecture, organised by D. Y. Patil College of Engg. & Tech., Kasaba Bawada, Kolhapur.

#### C. MEMBERSHIP OF ACADEMIC BODIES:

- Associated Member of Institute of Physics, London.
- Member of THE JAPAN SOCIETY OF APPLIED PHYSICS, Member number: 0079730
- Member of Indian JSPS Alumni Association.
- Member of the Indian Association of Physics Teachers (IAPT) (9959).
- Member of Materials Research Society of India (MRSI) (LMB 2273)

# 14. Participation in staff development programmes

#### Give details

a. Refresher courses

Nil

b. HRD programmes

Nil

- c. Orientation programmes
  - 1. Participated in the orientation programme on 'Advances in Teaching Strategies and Evaluation' organized by Department of Education, Shivaji University, Kolhapur, during 12<sup>th</sup> and 13<sup>th</sup> October, 2012.
- d. Staff training conducted by the university
  - 1. Participated One Day workshop on "Effectiveness in Teaching for Organizational Excellence", organized by Department of Technology, Shivaji University, Kolhapur, on 3<sup>rd</sup> Jan 2013
- e. Staff training conducted by other institutions
  - 1. Participated in the short term course on "Continuous Assessment and Examination Evaluation" organized by Academic Staff College, University of Rajasthan, Jaipur during October 21<sup>st</sup> to 26<sup>th</sup>, 2013.
- f. Summer/Winter schools, workshops, etc.
  - 1. Participated in the Summer School of **GOSPEL** (General Olfaction and Sensing Projects on a **European Level**), 30<sup>th</sup> September to 5<sup>th</sup> October **2007**. Europa Beach Hotel, Crete, Greece.

2. Participated in the 15<sup>th</sup> International Krutyn Summer School on **organic photonics and electronics** jointly organized by Center for Organic Photonics and Electronics Research (OPERA) in Kyushu University, Japan, Polish Supramolecular Chemistry Network Foundation, and the Institute of Physical Chemistry of the Polish Academy of Sciences, Poland during June 8-14, 2014.

#### 15. Programmes Organized

Sr. No.	Name of Programme	Coordinator	Funding agency	Cost Rs.	Duration (Year)	No. of Participants	Status
1.	One Day Awareness Camp on Beekeeping	Dr. S.B. Sadale	CBRTI, KVIC, Gov. of India	Rs. 5000/-	2012	100	Completed
2.	One day Workshop on organic electronic devices	Dr. S.B. Sadale	TEQIP-II, Shivaji University	Rs. 2,10000/ -	2013	350	Completed
3.	Alumni Meet of DoT students	Dr.S.B. Sadale	Shivaji University	Nil	2013	160	Completed
4.	Alumni Meet of DoT students	Dr.S.B. Sadale	Shivaji University	20,000	2014	150	Completed
5.	Science Camp (INSPIRE Science Camp)	Dr. S.B. Sadale	DST, Gov. of India	13,00,0	2014	200	Sanctioned

## 16. Collaboration

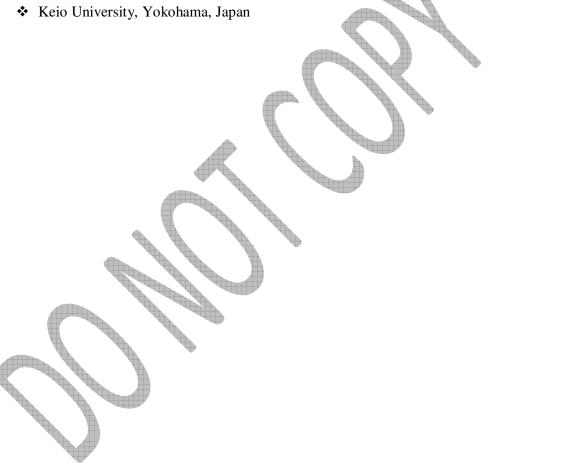
#### **National Collaboration:**

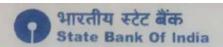
- ❖ Bhabha Atomic Research Centre, BARC, Mumbai
- National Chemical Laboratory, N.C.L., Pune
- ❖ Centre for Materials for Electronic Technology, Pune
- ❖ Central Electrochemical Research Institute, C.E.C.R.I., Karaikudi, T.N.
- Solapur University, Solapur, M.S.
- Pune University, Pune
- ❖ National Environmental Engineering Research Institute (NEERI), Nagpur.
- ❖ Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
- ❖ UGC-DAE Consortium for Scientific Research, Indore, M.P.

#### **International Collaboration:**

Groupe d'Etude de la Matière Condensée (GEMaC) University of Versailles Saint-Quentin-en-Yvelines and Centre National de la Recherche Scientifique (CNRS),

- Versailles, France
- ❖ Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology, Hellas, Heraklion, Crete
- \* Kyoto University, Kyoto, Japan.
- ❖ National Institute of Materials Science, NIMS, Japan
- ❖ The University of Aberdeen, King's College, Aberdeen, UK
- Engineering Research Institute, School of Engineering University of Ulster, Jordanstown campus, Newtownabbey, Co. Antrim BT37 0QB, UK
- University of Pannonia, Institute of Chemistry, Dept. of General and Inorg. Chem., Egyetem u. 10 H-8200 Veszprém, Hungary





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