Curriculum Vitae

1) Personal Information:

Name : **Prof. (Dr.) P. N. BHOSALE**

Designation : Professor & Head
Department of Chemistry
Incharge Head- Department of Geography

Subject, Specialization : Inorganic Chemistry

Date of Birth : 22nd August 1955

Present Address : Department of Chemistry,
Shivaji University, Kolhapur - 416004
MS, INDIA

Residential Address : Plot No. 8, Arunodaya Housing Society
Shahupark, Rajendranager, Kolhapur - 416004, MS, India.
Phone: 0231/ 2693459 (R)
Mobile. 09420007500, 0231-2609338 (O)
Email. p_n_bhosale@rediffmail.com
drpnbhosale@gmail.com

2) I) Educational Qualification:

Degree	Institution conferring	Specialization	Class	Year
B.Sc.	Shivaji University, Kolhapur	Chemistry	Ist Class	1980
M.Sc.	Shivaji University, Kolhapur	Inorganic Chemistry	Ist Class	1982
Ph.D.	Shivaji University, Kolhapur	Materials Science (Physics)	-	1985

II) Research/Teaching Experience:

Sr. No.	Duration	Institution	Designation	Nature of Work
1.	Aug 1982 to 1985	Dept. of Physics	DNES Research Assistant	Research
2.	14th Aug 1985 to 19th April 1994	Lecturer Kisan Veer Mahavidyalaya Wai, Dist. Satara	Lecturer in Inorganic Chemistry	Teaching
3.	20th April 1994 to Aug. 1996	Department of Chemistry, Shivaji University, Kolhapur	Lecturer in Senior Scale	Teaching and Research
4.	Aug. 1996 to 30th June 2004	Department of Chemistry, SUK.	Reader	Teaching and Research

5.	01 July 2004 onwards	Department of Chemistry, SUK.	Professor	Teaching and Research

3) Positions Held

Co-ordinator:

- Department of Industrial Chemistry
  August - 2004 to August - 2007.
- Department of Applied Chemistry
  August - 2007 to March - 2015.
- UGC-SAP DRS-I & DST-FIST, Program
  April - 2009 to till date.

Placement Officer:

- Placement Officer : Central Placement Cell, Shivaji University, Kolhapur. 2010 to till date.
  Major Achievments:
  More than 3000 Placements Completed.
- Co-ordinator : Career & Counselling Cell, Shivaji University, Kolhapur. 2010 to till date (15 Life Devlopment Skill Workshops Conducted).

Convener:

"International Conference on Nanomaterials and Applications" (ICNAMA-2008) Department of Chemistry and Department of Physics, Shivaji University, Kolhapur. 9-11 December 2008.

4) Administrative Experience:

Administrative Activity:

- Member of **SENATE**, Shivaji University, Kolhapur. Dec. 2005 to Aug. 2010.
- Member of **Management Council**, Shivaji University, Kolhapur. Jan.2006 to Aug. 2010.
- Member of **Statues Committee**, Shivaji University, Kolhapur.
- Member of **Special Cell**, Shivaji University, Kolhapur.

Social Projects (Nodal Officer MoU & MoC Program):

- Kolhapur **Jaggery Cluster Development** Program (2012 - 2017), Shahu Gul, Kolhapur. **(Rs. 15 Crores)**
- **Silver Cluster Development** Program (2013 - 2017), Chandi Karkhandar, Hupri. **(Rs. 15 Crores)**
- **Lupin Pharma**. Tarapur, Mumbai (2011 - 2015)
- Central Leather Research Institute (CLRI), Chennai. **(2007-2012, Rs. 2.5 Crores)**
- Kolhapur Zila Charmavastu Utpadak Kolhapuri Chappal Cluster, Kolhapur. **(Rs. 15 Crores)**

Chairman of the Following Committees:

- Chairman: Board of Examination in Applied Chemistry. 2008 till date.
- Chairman: Ad-hoc board, Nanoscience.
- Chairman: Solid State Electrochemistry (SAEST) Karaikudi (Tamilnadu)

5) Honours, Awards and Prizes:

- Awarded Research Fellowship by **Ministry of Non-Conventional Energy Resources, Govt. of India,** Delhi, from Aug. 1982 to Aug. 1985.
- **Best Paper Award** in 2nd International Conference on Electro Chemical Power System (CECRI) 21-22 Dec. 2004, Hyderabad.
- **Best Poster Presentation** award in National conference 2008 SUK.
- **Best Poster 21st AGM of MRSI**: Advanced Ceramic Materials: monoliths to composites, Feb. 9-11, 2010, Sardar Patel University, Vallabh Vidyanagar, Gujarat.
- **Best Poster Presentation** award NSAM-2011, Department of Chemistry, Shivaji University, Kolhapur.
- SEM image have been selected as one of 4 winners of **Nano Today cover competition,** Jan. 2011, **Impact factor - 13.237**
- ***Shiv Gourav Award***, Shivaji University, Kolhapur, 2011-2012.
- **Life Active member** of The Society of Advancement of Electrochemical Science and Technology (SAEST).
- Fellow of **Maharashtra Academy of Sciences**, Fellowship No. BLF 940.
- **Life active member,** Society of Materials Chemistry, BARC, Mumbai.
- **Best poster presentation,** ETTC- 2013, Y. C. College Satara.
- **Best oral presentation,** CTCNS- 2014, Department of Chemistry, Shivaji University, Kolhapur.
- **Best poster presentation,** CTCNS- 2014, Department of Chemistry, Shivaji University, Kolhapur.
- **Best poster presentation,** ICPPC 2014, Mahatma Gandhi University, Kottayam, Kerala.
- **Best poster presentation,** FCMS 2015, Department of Chemistry, Shivaji University, Kolhapur.
- **Best poster presentation,** ICGC-2015, Dept. of Chemistry, Goa University, Goa
- **Reviewer** of various highly impact factor research journals.
- **Best poster presentation,** ICGC-2015, Dept. of Chemistry, Goa University, Goa
- **Best poster presentation,** (ICSMC-2015), Department of Chemistry, Mumbai University, Mumbai
- **Best poster presentation,** National Seminar of Application of Chemical and Material Science for Sustainable Development, (2016) Department of Chemistry, Shivaji University, Kolhapur.

6) Research Specialization and Fields of Research Interest:

Solid State Chemistry & Materials Science, Electrochemical Energy conversion through ECPV Cells, Smart Materials, Photocatalysis, Thin Film Science, Nanoscience and Nanotechnology of Thin Film.

7) Consultancy

- Kolhapur Jaggery Cluster Development Program, Kolhapur.
- Silver Cluster Development Program, Hupri.
- Kolhapur Zila Charmavastu Utpadak Kolhapuri Chappal Cluster.

8) Co-ordinator - Departmental Scheme

Sponsoring Agency	Duration	Total Amount Rs.
UGC-SAP-DRS - I	2007 - 2012	50,00,000/-
UGC-SAP-DRS - II	2013 - 2017	75,00,000/-
DST-FIST Level – I	2009 – till date	185,00,000/-

9) Research projects:

I) Principal Investigator of Research projects (Completed):

Sponsoring Agency	Title of the project	Duration	Total Amount Rs.
CLRI	Product and Quality Standerdization of Ethnic Kolhapuri Chappal	2007-2012	2.5 Crores (Completed)
UGC	Photocatalytic Decomposition of Toxic Organics from Water Using Nanocrystalline Hybrid Transition Metal Oxide Thin Films	2012 - 2015	11,20,800/-
DAE-BRNS	Fabrication of NiO/WO_3 thin films for complementary electrochromic device	2012-2015	24,99,000/-

II) Co- Investigator in Research projects (Completed):

Sponsoring Agency	Title of the project	Duration	Total Amount Rs.
DAE-BRNS	Synthesis and characterization of organo-luminophors for light emitting devices.	1999-2002	10, 27, 000/-

DST	Detoxification of waste water using Semiconductor Devices (Physics & Chemistry)	2005-2008	29,57,565/-
DAE-BRNS	Development of Polymer solar cells based on nanostructured TiO_2 (Physics & Chemistry)	2008-2011	28,34,250/-

III) Mentor of Fast track Research projects:(Completed)

Sponsoring Agency	Title of the project	Duration	Total Amount Rs.
DST	Synthesis of New Quaternary $MoBiInSe_5$ Mixed Metal Chalcogenide Thin films for Solar cell applications. *Dr. R. M. Mane & Dr. P. N. Bhosale*	2012 - Ongoi	22,99,800/-
DST	Multicolor electrochromic nanostructured thin films for Dynamic light control. *Dr. R. R. Kharade & Dr. P. N. Bhosale*	2012- Ongoing	22,85,000/-

10) Research Guidance:

- No. of Ph. D. Students Awarded **: 21**
- No. of Ph. D. Students Working **: 06**
- No. of Ph. D. Students Co-guide **: 04**
- No. of M. Phil Awarded **: 04**
- M.Sc. T & D. Awarded **: 02**
- No. of M. Sc. Projects Completed **: More than 450**
- No. of INSPIRE fellow working : **3**

11) Research Achievements:

- Number of Research papers Published
  i) International Research Journals **: 97**
  ii) National Research Journals **: 19**
- Number of Research papers published in Proceedings of National and International Conference / Symposia / Workshops / Seminars. **: 32**
- Number of Research papers Abstracted in Souvenirs of National and International Conference / Symposia / Workshops / Seminars. **: 167**

- Number of National and International Conference / Symposia / Workshop / Seminars Attended. **: 92**
- Number of **Patent Granted.** **: 1**
  "A Simple Method For the preparation of Large Area Semiconductor Thin films" S. H. Pawar, **P. N. Bhosale** and C. D. Lokhande
  Indian patent 164202 (1987).
- Number of Invited talk Delivered : **33**

12) International Collabration and Linkage:

- **Prof. Jin Hyeok Kim**
  Photonic and Electronic Thin Film Laboratory, Department of Materials Science and Engineering, Chonnam National University, Gwangju, South Korea.

- **Prof. Jaeyeong Heo**
  Department of Materials Science and Engineering and Optoelectronics Convergence Research Center, Chonnam National University, Gwangju, South Korea.

- **Prof. Chang Kook Hong**
  Polymer Energy Materials Laboratory, Advanced Chemical Engineering Department, Chonnam National University, Gwangju, South Korea.

신소재공학부 전남대학교 공과대학
SCHOOL OF MATERIALS SCIENCE & ENGINEERING | COLLEGE OF ENGINEERING, CHONNAM NATIONAL UNIVERSITY

TO WHOM IT MAY CONCERN

I am happy to write few lines about Prof. (Dr.) P.N. Bhosale, Department of Chemistry, Shivaji University, Kolhapur, India and his international research collaboration with me. I have been working with him since last three years and, indeed, I am privileged to continue it. In these past three years of active research, I found him as an expert in the research fields such as synthesis and characterizations of various transition metal oxides (TMOs) and nano-crystalline mixed metal chalcogenide (MMC) thin films. Through these three years, he has surpassed many issues on the verge of the applications of TMOs. His research efforts have made such a great impact that we could publish number of quality research papers in highly reputed international journals.

Currently, one of his M.Sc. students is carrying out his doctoral studies at my Photonics and Electronics Laboratory, Chonnam National University, Gwangju, South Korea. While the other one is working as an exchange student. Both of them are doing their very best and have proved that they are studied under his milestone guidance at Master's degree level. Moreover, I wish our research collaboration will be beneficial to more young researchers from Chonnam National University and Shivaji University in near future.

This interaction at research collaboration will be a powerful and original way to strengthen ties between the faculties of material science and engineering from Chonnam National University and Shivaji University too. I look forward to working with Prof. (Dr.) P. N. Bhosale on the aforementioned promising and prospective research field. I wish him success in all his future endeavours.

With my best wishes,

Jin Hyeok Kim,
Professor, Ph.D.
Department of Materials Science and Engineering
Chonnam National University
E-mail : jinhyeok@chonnam.ac.kr
homeage: http://pvsolar.chonnam.ac.kr/

500-757 광주광역시 북구 용봉동 77 전화 062-530-1703 팩스 062-530-1629
77 Yongbong-Dong, Buk-Gu, Gwangju 500-757, Korea Phone: 062-530-1703 Fax: 062-530-1629 http://altair.chonnam.ac.kr/~nse/

Chonnam National University
Department of Materials Science and Engineering
77 Yongbong-ro, Buk-gu, Gwangju, Korea 500–757

Prof. Jaeyeong Heo

December 21, 2014

It is my pleasure to write on international research collaboration with Prof. (Dr.) P. N. Bhosale, Professor of Inorganic Chemistry, Shivaji University, Kolhapur, India to whom I have been having lucid and fruitful research interaction. As an outcome of our research interaction we have published quality research articles in highly reputed international journals over the last years. One of his Ph.D. students, Kishorkumar Khot, worked in my Nanodevices and Materials for Energy Laboratory (NMEL) as a Research Scholar at Chonnam National University, Gwangju, South Korea.

I hope that our research collaboration will help young researchers majoring materials science particularly mixed metal chalcogenide and mixed transition metal oxide thin films which will be highly beneficial to UG, PG and Ph.D. students of Chonnam National University, Gwangju, South Korea and Shivaji University Kolhapur, India.

Our enthusiastic research collaboration will be a powerful and original way to strengthen ties between the faculties of Materials Science and Engineering at Chonnam National University and Shivaji University. I look forward to working with Prof. (Dr.) P. N. Bhosale on this exciting research field. I wish him every success for his future assignments.

Best regards,

Jaeyeong Heo

Jaeyeong Heo
Department of Materials Science and Engineering
Chonnam National University
South Korea

Prof. (Dr.) Chang Kook Hong
Professor
Department of Advanced
Chemicals & Engineering

전남대학교 CHONNAM NATIONAL UNIVERSITY

Chonnam National University,
77 Yongbong-ro
Buk-gu, Gwangju, Korea.
Contact: (cell) +82-01-3719-7483
(Fax): +82-62-530-1889
Email: hongck@jnu.ac.kr

Date: 19-12-2014

'TO WHOM IT MAY CONCERN'

This is to certify that we have international research collaboration in Materials Science with Prof. (Dr.) P. N. Bhosale, Professor of Inorganic Chemistry, Shivaji University, Kolhapur, India and I am very much happy to write about our collaboration with Prof. Dr. P. N. Bhosale. I known him since last three years as an International collaborative professor.This Letter of Collaboration is designed to strengthen a friendly relationship through mutual cooperation in research between Shivaji University, Kolhapur, India and Chonnam National University, Gwangju, S. Korea.

I have a good research collaboration with Prof. P. N. Bhosale and his materials Research group, Department of Chemistry, Shivaji University, Kolhapur, India. He is expert in inorganic nanocrystalline materials, specially Inorganic nanomaterials thin film synthesis, such as mixed metal chalcogenide thin films and its application towards solar cells, electrochromism, photocatalysis, and thermocooling applications. Based on these hot topics, we have published nearly 15 research articles in high impact factor research journals. Moreover, recently we have submitted 10 collaborative research papers and one Indo-Korean joint research project proposal. On the other hand, I and Prof. P. N. Bhosale working on novel chacogenide materials for solar cell application. This research is currently underway in both laboratories.

I hope, this collaboration will help not only Materials Research Laboratory's students but also all U.G, P.G. and Ph.D. students pursuing their degrees from Shjivaji University and Chonnam National University.

This research collaboration will be a powerful and original way to strengthen ties between science and engineering faculty from Chonnam National Univeristy and the Shivaji University, Kolhapur scholars. I look forward to working with Prof. (Dr.) P. N. Bhosale on this exciting research world.

With Best Regards

Chang Kook Hong

Prof. (Dr.) Chang Kook Hong
Professor,
Advanced Chemical Engineering Department
Chonnam National University
Gwangju, Korea 500-757
Tel: +82-62-530-0635 (Lab), +82-62-530-1907
Fax: +82-62-530-1849
Email: hongck@chonnam.ac.kr (C. K. Hong)

ANNEXER - I

A - List of Ph. D. Students: Awarded

Sr. No.	Name of the students	Title of Ph.D. Thesis	Date of Ph. D. Award and Present position
1	**Dr. Patil Arun Ramchandra**	Synthesis, Growth Mechanism and Analytical Studies on Chemically Grown V-VI Compound Thin Films and Their Role in Electrochemical Photovoltaic Cells.	**16/10/2002** Visiting Scientist, South Korea, Principal Vishvakarma Institute, Pune.
2	**Dr. Mane Raghunath Kushaba**	Studies on Preparation, Characterisation of Thin Films of V-VI Group Compounds and Their Use in Electrochemical Photovoltaic (ECPV) Cells.	**22/06/2003** Associate Professor, K. R. P. Kanya Mahavidyalaya, Islampur.
3	**Dr. Patil Anil Balaso**	Analytical Studies of Guanylhdrazone Complexes With Some Metal Ions.	**31/07/2003** Assistant Professor, Deshbhakt Anandrao Balvantrao Naik Arts and Science College, Chikhali.
4	**Dr. Ajalkar Balu Dhondiba**	Synthesis and Characterisation of Chemically Grown Thin Films of Some Transition Metal Chalcogenides.	**04/12/2003** Associate Professor, Shivaraj College, Gadhinglaj.
5	**Dr. (Mrs.) Patil Vaishali Arun**	Preparation, Properties and Applications of Chemically Grown Thin Films of Chalcogenides.	**16/07/2004** Visiting Scientist, South Korea.
6	**Dr. Patil Nitin Santaram**	Studies on Preparation, Properties and Applications of Chemically Grown Mixed Bismuth- Antimony Selenide Thin Films.	**22/05/2009** Associate Professor, Krantisinh Nana Patil College, Walwa.
7	**Dr. Sargar Ankush Mahadeo**	Synthesis, Characterisation and Applications of Electrodeposited Zirconium Dichalcogenide Thin Films.	**21/05/2009** Assistant Professor, Dr. Patangrao Kadam Mahavidyalaya, Sangliwadi.
8	**Dr. Mane Rahul Maruti**	Characterisation And Applications of Chemically	**14/07/2010** Young Scientist fellow.

		Deposited VIB-IIIA-VA-VIA Group Chalcogenide Thin Films.	(DST-Fast Track)
9	**Dr. Mane Sambhaji Rajaram**	Studies On Preparation, Properties and Applications of Chemically Deposited Heteropolyoxometalate Polymeric Thin Films.	**31/07/2010** Associate Professor, K. R. P. Kanya Mahavidyalaya, Islampur.
10	**Dr. Gawale Sanjay Nivrutti**	Synthesis and Characterisation of Mixed Transition Metal Chalcogenide (TMDC) Thin Films.	**12/07/2010** Vice Principal & Associate Professor, DBJ college, Chiplun.
11	**Dr. (Miss.) Kharade Rohini Ramchandra**	Studies on Synthesis, Characterization and Properties of Chemically deposited Nanocrystalline Transition Metal Oxide Thin Films.	**25/06/2012** Assistant Professor, Goa University, Goa.
12	**Dr. (Mrs.) Patil Sanjeevani Mahadeo.**	Development of Injection Dye Sensitized Nanocrystalline mixed Metal Chalcogenide Thin Films.	**01/09/2012** Assistant Professor, Deshbhakt Anandrao Balvantrao Naik Arts and Science College, Chikhali.
13	**Dr. (Mrs.) Salunkhe Manauti Madhavrao.**	Studies on Synthesis, Characterization and Applications of VIB-VA-VIA Group Chalcogenide Thin Films.	**23/03/2013** Research Associate, Defense Institute of Advance Technology,
14	**Dr. (Mrs.) Pawar Sarita Bramhadev.**	Chemosynthesis of nanocrystalline Lead sulphide Thin Film and their application in Quantum dot sensitized solar cells.	**25/03/2013**
15	**Dr. (Miss.) Kharade Suvarta Dattatray**	Novel synthetic route for monodispersed nanocrystalline VI^{B}-V^{A}-I^{B}-VI^{A} group mixed metal chalcogenide thin films	**12/05/2014** Assistant Professor, Dept. of Applied Chemistry, Shivaji University, Kolhapur
16	**Dr. Patil Satishkumar Vitthal**	Studies on physicochemical synthesis, characterization and applications of chemically deposited VI^{B}-III^{A}-V^{A}-VI^{A} group chalcogenide thin films	**24/05/2014** Assistant Professor, C. T. Bora College of Science, Shirur, Pune
17	**Dr. (Miss.) Pawar Nita Bapusaheb**	Preparation, characterization and applications of chemically deposited nanocrystalline	**05/07/2014** Assistant Professor, ManajirajeBhosale

		ternary/quaternary metal chalcogenide thin films by simple colloidal route	Techicam Campus, Urun Islampur.
18	**Mr. Vishvanath B. Ghanwat**	Chemosynthesis of nanocrystalline mixed metal chalcogenide (MMC) thin films and their optoelectronic applications	**17/05/2016** Junior Research Fellow UGC-BSR Scheme. **(Submitted)**
19	**Mr. Vijay V. Kondalkar**	Optoelectronic and optostructural investigations of chemically synthesized nanocrystalline mixed transition metal oxide (MTMO) thin films	**04/10/2015** BRNS Major Research Project (JRF). **(Submitted)**
20	**Miss. Pallavi B. Patil**	Development of nanocrystalline Bi_2Te_3 loaded TiO_2 thin film devices and their applications	**23/01/2016** Junior Research Fellow UGC-BSR Scheme.
21	**Mr. Kishorkumar V. Khot**	Deposition, characterization and applications of nanocrystalline CICSSe thin films by hybrid chemical process	**28/01/2016** DST Inspire Fellowship.

B - List of Ph. D. Students: Submitted & Working

Sr. No.	Name of student	Title of Ph.D. Thesis	Date of Registration and Present position
1	**Mr. Sushant B. Jadhav**	Development and validation of analytical methods and its application to pharmaceutical drugs by applying ObD principles	**01/07/2012** Assistant Manager, Dr. Reddys Laboratory Ltd. Hyderabad.
2	**Miss. Neha D. Desai**	Development of Dye Sensitized Bi_2Se_3: TiO_2 nanocomposite for photoelectrochemical Solar cell Applications	**01/07/2013** DST Inspire Fellowship. **(Submitted)**
3	**Miss. Chaitali S. Bagade**	Studies on Synthesis, properties and Applications of Quaternary, Multinary Nanocrystalline metal Chalcogenide Thin Films.	**01/07/2013** DST Inspire Fellowship. **(Submitted)**
4	**Miss. Monika Pradeep Joshi**	Facile synthesis of mixed metal chalcogenide thin films by hybride chemical route for solar cell application	**01/07/2015**
5	**Mr. Satish Shivaji Patil**	Temple free synthesis of multinary nanocrystalline metal chalcogenide thin films via	**01/07/2015**

		hydrothermal route for efficient solar cell application	
6	**Miss.Gayatri Bhaskar Kasar**	Preparation,characterization of metal nanoparticle and their application as catalyst	**01/07/2015**

C - List of Ph. D. Students: Working under co-guidance

Sr. No.	Name of student	Title of Ph. D. Thesis	Date of Registration and Present position
1	**Mr. Suhas S. Mohite**	Preparation, Characterization and Applications of Nanocrystalline Mixed Metal Chalcogenide Thin Films.	**01/07/2010** Assistant Professor, Bharti Vidyapeeth, Pune
2	**Mr. Sandip K. Jagdale**	Studies on preparation, Characterization and Applications of Mixed transition metal chalcogenide (MTMS) Thin Films.	**01/07/2011** Assistant Professor, S. B. Patil College of Engineering, Indapur **(Submitted)**
3	**Mr. Dadaso B. Shinde**	Optostructural and optoelectronic studies of Nanocrystalline Mixed Transition metal oxide Thin films.	**01/07/2011** Assistant professor, Shripancham Khemraj Mahavidyalaya, Sawantwadi **(Submitted)**
4	**Mr. Balaji J. Walekar**	Synthesis of N-heterocyclic compounds using metal nanoparticles and their applications in thin film coating.	**01/07/2012** Assistant Professor, Smt. Kusumtai Rajarambapu Patil Kanya Mahavidyalaya, Islampur. **(Submitted)**

D - List of M. Phil. Students: Awarded

Sr. No.	Name of student	Title of M. Phil. Thesis	Date of M. Phil. Award and Present position
1	**Mr. Bhagwat N. Raut**	Photometric determination of some transition metal ions with Schiff Bases	**26/08/1996** Shri Shivaji College, Kandhar Dist. Nanded
2.	**Mr. Sanjay N. Gawale**	Studies on Co-ordination compounds of metal ions using Photometric Technique	**27/05/1999** Vice Principal & Associate Professor

			in Chemistry, DBJ college, Chiplun.
3	**Miss. Vandana R. Patil**	Synthesis and characterization of nanocrystalline Cu (II) substituted heteropolyoxometallate thin films	**08/03/2004** Assistant Professor Bhogawati Mahavidyalaya, Bhogawati
4	**Miss. Sapana Balasaheb Patil**	Studies on Chemosynthesis of Electrochromic Molybdenum oxide Thin Films.	**07/04/2012** Lecturer, Walwa College, Walwa.

E - List of M. Sc. T & D Students

Sr. No.	Name of student	Title of Dissertation
1.	**Miss. Jayashree M. Mane**	Chemosynthesis, Characterization and Applications of $CuInSe_2$ Thin Films.
2.	**Mrs. Vidya S. Patil**	Simple and Novel Technique for synthesis of Nanocrystalline Metal Chalcogenide Thin Films.
3.	**Mrs. Manisha P. Shinde**	Bandgap tunable synthesis of $CuCdInSe_3$ Nanocrystalline Thin Films Via Hydrothermal Route and their applications

ANNEXER - II

Invited Talks and Resource Person

No.	Date	Subject	Location
1	1st to 3rd Sept. 2005	Training Workshop of B. Sc. Part-III on New Syllabus in Chemistry	Yashavantrao Chavan Institute of Science, Satara
2	7th Feb. 2006	Environmental Hazards and Disasters: Causes, Impacts and Management	Raja Shripatrao Bhagawantrao Mahavidyalaya, Aundh
3	4th & 5th Dec. 2009	Applications of Solid State Materials	Sharadchandra Pawar Mahavidyalaya, Lonand
4	10th to 30th Mar. 2010	Resource Person for Refresher Course in Analytical Chemistry	Chemistry of Academic Staff College, University of Pune, Pune
5	14th to 18th June 2010	Nanomaterials and Nanoscience-Current status and Challenges	College of Engineering, Kolhapur (KIT)
6	18th to 19th Oct 2010	Resource Person for Refresher Course in Chemistry Environmental Pollution, Semiconductor Thin Films, Nanotechnology	University of Mumbai, Mumbai
7	28th Apr. 2012	Nanotechnology: Fundamentals and Applications	Changu Kana Thakur Arts, Commerce and Science College, New Panvel
8	28th Aug. 2012	Personality Development and Career Opportunities in Commerce and Management	Dept. of Commerce and Management, Vidyanagar Kolhapur
9	30th & 31st Aug. 2012	Personality Development and Career Opportunities	Dept. of Applied Chemistry, Shivaji University, Kolhapur
10	11th Sept. 2012	Life Skill Development	Mahavir Mahavidyalaya, Kolhapur.
11	14th Sept. 2012	New Horizon in Applied Sciences	Sharadchandra Pawar Mahavidyalaya, Lonand

12	15th to 24th Sept. 2012	Life Skills Development	Adult & Continuing Education and Career Counselling Cell, Shivaji University, Kolhapur
13	25th Sept. 2012	Life Skill Development	Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon
14	27th Sept. 2012	Developing Soft Skills among B. A./B. Com./B. Sc. Part-III students	Shahajiraje Mahavidyalaya, Khatav
15	26th & 27th Sept. 2012	Developing Soft Skills among B. A./ B. Com./B. Sc. Students	Smt. Kusumtai Rajarampuri Patil, Kanya Mahavidyalaya, Islampur.
16	15th Feb. 2013	Career and Counselling activity- Objectives, Career abd Life Planning	Yashwantrao Chavan Warna Mahavidyalaya, Warnanagar.
17	16th Feb 2013	Development of Soft Skill	Dr. Vasantraodada Patil Mahavidyalaya, Sangli.
18	16th Feb. 2013	Life Skills Development	Dr. Patangarao Kadam Mahavidyalaya, Sangli.
19	20th Feb. 2013	Life Skills, Time and Stress Management	Dahiwadi College, Dahiwadi
20	26th Feb. 2013	Career and Life Planning	Dr. Ghali College, Gadhanglaj
21	4th to 5th Mar. 2013	One day Workshop and deliver lecture on Life Skill Development in under Graduate students by Career and Counselling Cell	Deshbhakt Anandrao Balwantrao Naik Art's & Science College, Chikhali
22	31st Jul. 2013	A Workshop on Revised Syllabus for B. Sc.-I of Analytical Chemistry	Vishwasrao Naik Arts, Commerce & Baba Naik Science Mahavidyalaya, Shirala.
23	20th Apr. 2013	Synthesis, Characterization and Applications of Nanocrystalline Metal Oxide/ Chalcogenide Thin Film	Recent Trends & Technology of Nano Materials & Smart Devices (RTT-NSD-2013), Solapur University, Solapur.
24	5th Sept 2013	Industry trends and placement activities	Bharti Vidyapeeth's Insatitute of Technology (Polytechnic) Palus
25	10th Oct. 2013	Revised Syllabus of B. Sc. Part-I Organic & Industrial Chemistry	Vishwasrao Naik Arts, Commerce & Baba Naik Science Mahavidyalaya,

			Shirala.
26	17th Oct. 2013	Placement opportunity	Bahai Academy, Shivajinagar Panchgani.
27	11th Nov. to 2nd Dec. 2013	Resource Person for Special winter school Program in Chemistry	Department of Chemistry, Shivaji University, Kolhapur.
28	30th June 2014	Resource Person for Frontiers in Chemical Sciences (FCS-2014)	Solapur University, Solapur
29	30th to 31st August 2014	Resource Person for UGC (WRO) Sponcered National Seminar on Recent trends in Analytical Chemistry (RTAC-2014).	Art, Commerce and Science college, Sateral
30	12 Dec., 2014	National Conference on "Aspect of Economical and Practical Appliations of Non-conventional Energy Sources in India".	Shikashanmaharshi Dr. Bapuji Salunkhe Mahavidyalaya, Miraj.
31	26th to 27th Dec., 2014.	National Conference on "Recent Trends in Interdispilinary Research in Material Science" (NCRTIRMS-2014).	Department of Mechanical and Civil Enginnering, Annasaheb Dange College of Engineering and Technology, Asta.
32	13th to 14th Feb 2015.	" Review of Progress in Nanoscience "	Department of Chemistry, New Arts, Commerce and Science College Ahmednagar
33	3rd March 2015	"Introduction to Nanoscience and Technology"	Department of Chemistry, Balwant College, Vita
34	12th Feb 2016	The Discovery, Development & Study of Nanocrystalline Materials & their Applications	Vivekanand College, Kolhapur
35	12th Aug 2016	Promising hierarchically Nanostructured Mixed Metal Chalcogenide Thin Films For Photoelectrochemical Performance	D.P.Bhosale College, Koregaon
36.	12th Jan 2017	Rational design and fabrication of hydrothermally synthesized hierachically nanostructured transition metal oxide (NTMO)	C.T.Bora College, Shirur

		thin film Device For Harvesting Solar Energy	
37.	20th Jan 2017	Synthesis of Promising Hierachically Nanostructured Mixed Metal Chalcogenide Thin Films For Photoelectrochemical Performance	Vikhe patil College, Pravranagar

ANNEXER - III

List of Publications

A - Research papers published in National & International Research Journals.

Sr. No.	Authors	Title of Research paper	Name of Journal, Volume, Year & Page No.	Impact Factor
1.	S. H. Pawar, **P.N. Bhosale**, M. D. Uplane and S. P. Tamhankar	Growth of Bi_2S_3 film using a solution gas interface technique.	*Thin Solid Films, 110 (1983) 165.*	*1.86*
2.	S. H. Pawar, **P. N. Bhosale,** M.D. Uplane and S.P. Tamhankar.	Growth of Sb_2S_3 films by solution –gas interface technique.	*Indian J. of pure and Appl. Physics, 21(1983) 665*	*0.71*
3.	S. H. Pawar and **P. N. Bhosale**	Growth of Thin Film by Solution Gas Interface: A new Technique.	*Materials Chemistry and Physics, 11(1984) 461*	*2.12*
4.	S. H. Pawar and **P. N. Bhosale**	Optical and electrical Properties of Bi_{2-x} As_x S_3 Films prepared by Solution –Gas Interface Technique.	*Bulletin of Electrochemistry, 1(1985) 495.*	*1.01*
5.	S. H. Pawar, L. P. Deshmukh and **P. N. Bhosale**	Photo electrode dependent electrical properties of CdS:In electrolyte junction solar cell.	*Bulletin of Electrochemistry, 1(6) (1985) 573.*	*1.01*
6.	S. H. Pawar and **P. N. Bhosale**	Studies on ECPV cells formed with Sb_2S_3	*Indian J. Physics. 60A (1986) 273.*	

		Thin film Electrode.		
7.	S. H. Pawar and **P. N. Bhosale**	Preparation and properties of Bi_{2-x} As_x S_3 Thin Films by Solution –Gas Interface Technique.	*Bulletin of Mat. Sci., 8 (1986) 64.*	*1.01*
8.	S. H. Pawar, **P. N. Bhosale** and A. J. Pawar.	Spray Pyrolytic Deposition of CuBi.S_2 Thin Films.	*Bulletin of Mat. Sci., 8 (1986) 120.*	*1.01*
9.	G. B. Kolekar, T. N. Lokhande, **P. N. Bhosale** and M. A. Anuse	Extraction, Separation and Spectrophotometric Determination of Bismuth (III) Using 1-(4-Bromophenyl) 4,4,6-Trimethyl (1H, 4H) Pyrimidine2 – Thiol	*Analytical Letters, 31(1998)13.*	*0.98*
10.	A. R. Patil, V. N. Patil, L. P. Deshmukh and **P. N. Bhosale***.	A study of Bismuth Sulphosellenide Thin films: Growth from the Solution and Properties.	*Materials Chemistry and physics 65(2000) 262.*	*2.12*
11.	**P. N. Bhosale***, L. P. Deshmukh and A. R. Patil	Bi_2 $(S_{1-x}Se_x)_3$ Thin film Composites: Chemical Synthesis and Properties.	*Indian J. Pure & Appl.Phys.39 (2001) 111*	*0.71*
12.	R. K. Mane, B. D. Ajalkar and **P. N. Bhosale*.**	Synthesis, Growth Mechanism and Characterization of Chemically Deposited Nanocrystalline Bismuth sulphotelluride Thin Films.	*Transaction SAEST 36(2001) 111.*	*0.72*
13.	S. R. Pujari, **P. N. Bhosale,** P. M. R. Rao and S. R. Patil	Sensitized Monomer emission of Phenathrene Doped Perylene in Crystalline Powder and in Polymer Matrix.	*Materials Research Bulletin 37(2002) 439.*	*1.94*
14.	A. R. Patil, V. N. Patil, M. A. Anuse, **P. N. Bhosale** and L. P.	Chemical compositional Analysis of Bismuth	*Thin Solid Films 414(2002) 155.*	*1.86*

	Deshmukh	Sulphoselenide Thin Films.		
15.	S. R. Pujari, **P. N. Bhosale**, P. M. R. Rao and S. R. Patil	Photophysical studies of N-phenylanthranilic Acid in Polymer Films.	*Indian J. Chem. A, 1075 (2002) 340.*	*0.76*
16.	S. R. Pujari, **P. N. Bhosale,** P. M. R. Rao and S. R. Patil	Structural and Optical Studies of Perylene Doped Polymer Thin Films	*Indian Journal of Pure & Applied Phys. 40(2002) 896.*	*0.71*
17.	S. R. Pujari, **P. N. Bhosale**, P. M. Rao and S. R. Patil	Monomer Fluorescence Quenching and Exciplex Formation in the Photoreaction of 9-Methylanthacence with substituted Aniline.	*J. of Saudi Chem. Soc. 6 (2) (2002) 219.*	
18.	S. R. Pujari, S. A. Jadhav, **P. N. Bhosale**, P. M. R. Rao and S. R. Patil	Fluoresence Studies of Biphenyl Doped by Pyrene and Perylene	*Indian Journal of Pure and Appl. Phys. 40(2002) 115.*	*0.71*
19.	S. R. Pujari, M .D. Kamble, **P. N. Bhosale**, P. M. Rao and S. R. Patil	Optical Studies of Perylene Doped Polymer Thin Films.	*Mater. Res. Bull, 37 (2002) 1641.*	*1.94*
20.	R. K. Mane, B. D. Ajalkar and **P. N. Bhosale***	Studies on Chemically Deposited Bismuth sulphotelluride [$Bi_2(S_{1-x}Te_x)_3$] Thin Films.	*Indian J. Pure & Appl. Phys. 40(2002) 660.*	*0.71*
21.	R. K. Mane, B. D. Ajalkar and **P. N. Bhosale***	Electrical and Optical Properties of Bismuth sulphotelluride Thin Films prepared by Arrested precipitation Technique.	*Materials chemistry and Physics 82(2003) 534*	*2.12*
22.	P. D. More, G. S. Shahane, M. K. Dongare, A. A. Belhekar, **P. N. Bhosale** and L. P. Deshmukh	Microcrystallographic and Spectral Response Studies of $Cd(Se_{1-x}Te_x)$ Alloyed Thin Films.	*Indian Journal of Pure & Appl. Phys 40(2002) 62*	*0.71*
23.	V. B. Pujari, V. B. Gaikwad, E. U. Masumdar, P. D. More, **P. N. Bhosale**	Chemically Synthesized (CdHg)Se Pseudobinaries Some Characteristic	*Turk. J. Phys. 26 (2002) 1.*	

	and L. P. Deshmukh	Properties.		
24.	B. D. Ajalkar, R. K. Mane, B. D. Sarwade, S. R. Patil and **P. N. Bhosale***	Synthesis and Compositional Analysis of Molybdenum Sulphoselenide Thin Films.	*Saudi Chemical Society 7(2003)279.*	
25.	P. D. More, A. A. Belhekar, **P. N. Bhosale** & L. P. Deshmukh	Electrical Conduction in Chemically Deposited [$Cd(Se_{1-x}Te_x)$] Mixed /Alloyed Thin Films.	*Turk . J. of Phys. 74(2003)267.*	
26.	P. D. More, G. S. Shahane, **P. N. Bhosale** & L. P. Deshmukh	Spectrostructural Characterization of [$Cd(Se_{1-x}Te_x)$] Alloyed Thin Films.	*Mat. Chem .& Phys. 71(2003)265.*	*2.12*
27.	S. R. Pujari, **P. N. Bhosale,** P. M. R. Rao and S. R. Pujari	Microwave Assisted Synthesis and Characterisation of Organo-luminophors for Light Emitting Devices.	*Indian Association of Nuclear Chemists and Allied Scientists, 2 (2003) 70.*	
28.	E. U. Masumdar, S. H. Mane, , V. B. Pujari **P. N. Bhosale** and L. P. Deshmukh	CdSe:Sb Electrode For Photoelectrochemical Applications	*J. Mat. Sci & Mat. In Electronics. 14(2003) 43.*	*1.96*
29.	B. D. Ajalkar, S. H. Burungale, D. S. Bhange and **P. N. Bhosale***	Chemical Synthesis and Compositional Analysis of Mixed [$Mo(S_{1-x}Se_x)_2$] semiconductor Thin Films.	*Journal of Material Science 39 (2004) 1.*	*2.21*
30.	B. D. Ajalkar, R. K. Mane, B. D. Sarwade and **P. N. Bhosale***	Optical And Electrical Studies On Molybdenum Sulphoselenide [$Mo(S_{1-x}Se_x)_2$] Thin Films Prepared By Arrested Precipitation Technique(APT).	*Solar Energ. Mater & Solar Cells. . 81(2004) 101.*	*4.97*
31.	P. D. More, A. A. Belhekar, M. K. Dongare, **P. N. Bhosale** and L. P.	Chemical Analysis Technique For Quantitative Determination Of Cd,	*Indian J. Phys. A 78(2004) 501.*	

	Deshmukh.	Se and Te From Thin Cd ($Se_{1-x}Te_x$) Films.		
32.	R. K. Mane, B. D. Ajalkar and **P. N. Bhosale*.**	Electrical And Optical Properties of Bismuth Sulphotelluride Thin Films Prepared By Arrested Precipitation Technique(APT).	*Materials chemistry and Physics 84(2004) 247.*	*2.12*
33.	Pravin S. Shinde, Pramod S. Patil, **P.N. Bhosale**, and Chandrakant H. Bhosale	Structural, Optical, and Photoelectrochemical Properties of Sprayed TiO_2 Thin Films: Effect of Precursor Concentration	*Journal of American Ceramic Society, 91 (2008) 1227*	*2.38*
34.	N. S. Patil, A. M. Sargar, S. R. Mane, **P. N. Bhosale*.**	Growth mechanism and characterization of chemically grown Sb doped Bi_2Se_3 thin films	*Applied Surface Science, 254 (2008) 5261.*	*2.61*
35.	S. R. Mane, N. S. Patil, A. M. Sargar, **P. N. Bhosale*.**	Preparation and characterization of thallium(I) doped molybdenum heteropolyoxometalate semiconducting thin films	*Materials Chemistry and Physics, 112 (2008) 74.*	*2.12*
36.	P. S. Shinde, S. B. Sadale, P. S. Patil, **P. N. Bhosale**, A. Brüger, M. Neumann-Spallart, C. H. Bhosale	Properties of spray deposited titanium dioxide thin films and their application in photoelectrocatalysis	*Solar Energy Materials and Solar Cells, 92 (2008) 283.*	*4.97*
37.	A. I. Inamdar, S. H. Mujawar, S. R. Barman, **P. N. Bhosale** and P. S. Patil	Effect of bath temperature on electrodeposition of zinc oxides thin films via an acetate medium.	*Semiconductor Science and Technology, 23 (2008) 085013.*	*1.41*
38.	A. M. Sargar, N. S. Patil, S. R. Mane, S. N. Gawale, **P. N. Bhosale*.**	Optostructural and electrical studies on electrodeposited Indium doped ZrS_2 thin films	*Journal of Alloys and Compounds, 474 (2009) 14.*	*2.60*
39.	P. S. Shinde, P. S.	UVA and solar light	*Applied Catalysis*	*5.74*

	Patil, **P. N. Bhosale**, A. Brüger, G. Nauer, M. Neumann-Spallart, C. H. Bhosale	assisted photoelectrocatalytic degradation of AO7 dye in water using spray deposited TiO_2 thin films	*B: Environmental, 89 (2009) 288.*	
40.	N. S. Patil, A. M. Sargar, S. R. Mane, **P.N. Bhosale***.	Effect of Sb doping on thermoelectric properties of chemically deposited bismuth selenide films	*Materials Chemistry and Physics, 115 (2009) 47.*	*2.12*
41.	A. M. Sargar, N. S. Patil, S. R. Mane, S. N. Gawale, **P. N. Bhosale*.**	Electrochemical Synthesis and Characterization of $ZrSe_2$ Thin Films	*Int. J. Electrochem. Sci., 4 (2009)887.*	*2.07*
42.	A. M. Sargar, N. S. Patil, S. R. Mane and **P. N. Bhosale*.**	Optostructural and Electrical Studies on Electrodeposited Zirconium Sulphoselenide $[Zr(S_{0.5}Se_{0.5})_2]$ Thin Films.	*Rasayan Journal of Chemistry, 2 (2009) 364.*	*0.32*
43.	Vandana Patil, **P. N. Bhosale*.**	Morphological and Structural Studies on Cu(II) Substituted Vanadium Hetero poly-oxometallate Thin Film	*Asian Journal of Chemistry, 21 (6) 4721-4727.*	*0.34*
44.	R. M. Mane, S. R. Mane, R. R. Kharade, **P. N. Bhosale*.**	Synthesis and Characterization of New Quaternary $MoBiInSe_5$ Mixed Metal Chalcogenide Thin Films.	*J. Alloys and Compounds, 491 (2010) 321–324.*	*2.60*
45.	S. N. Gawale, A. M. Sargar, S. R. Mane, R. R. Kharade, R. M. Mane and **P. N. Bhosale*.**	Electrosynthesis and characterisation of WSe_2 thin films.	*Journal of Applied Archives Science, 2010, 2 (1) 218-224.*	
46.	R. M. Mane, N. S. Patil, S. R. Mane, R. R. Kharade and **P. N. Bhosale*.**	Optical and Electrical Studies on $MoBi_2Se_5$ Thin Films Prepared by Arrested Precipitation Technique (APT).	*Journal of Applied Archives Science 2, 2 (2010) 275-283*	

47.	S. R. Mane, N. S. Patil, A. M. Sargar, S. N.Gawale, R. M. Mane, Miss. R. R. Kharade, and **P. N. Bhosale*.**	Synthesis and characterization of chemically deposited Tl_3 ($PW_{12}O_{40}$) semiconducting thin films	*Journal of Applied Archives Science 2, 2 (2010) 294-303*	
48.	R. R. Kharade, S. R. Mane, R. M. Mane, P. S. Patil and **P. N. Bhosale*.**	Synthesis and characterization of chemically grown electrochromic tungsten oxide.	*Journal of Sol-Gel Science and Technology, 56 (2010) 177–183.*	*1.64*
49.	R. M. Mane, R. R. Kharade, S. R. Mane, P. S. Patil and **P. N. Bhosale*.**	Influence of Indium doping on the optostructural and morphological properties of chemically deposited $MoBi_2Se_5$ mixed metal chalcoginide thin films.	*Digest Journal of Nanomaterials and Biostructures,6 (2011) 55-65*	*1.26*
50.	S. B. Patil, S. R. Mane, V. R. Patil, R. R. Kharade, **P. N. Bhosale*.**	Chemosynthesis and Characterization of Electrochromic Vanadium Doped Molybdenum Oxide Thin Films	*Archieves of Applied Science Research, 3 (3), (2011) 481-491.*	
51.	S. R. Mane, R. M. Mane, R. R. Kharade, S. N. Gawale, S. M. Patil, **P. N. Bhosale*.**	Influence of Tl^+ doping on optostructural and electrical properties of chemically grown tungsten hetero-polyoxometallate thin films.	*Digest Journal of Nanomaterials and Biostructures 6, (2011) 461-466.*	*1.26*
52.	Sawanta S. Mali, Pravin S. Shinde, C.A. Betty, **P. N. Bhosale,** Won J. Lee and Pramod S. Patil	Nanocoral architecture of TiO_2 by hydrothermal process: Synthesis and characterization	*Applied Surface Science, 257 (2011) 9737–9746.*	*2.61*
53.	S. S. Mohite, R. R. Kharade, S. S. Mali, D. G. Kanase, P. S. Patil, **P. N. Bhosale*.**	Low temperature synthesis of novel $MoBiCuSe_4$ nanowire thin films by vacuum deposition method and their characterization	*Research Journal of Chemistry and Environment, 15 (2011) 653-657.*	*0.39*

54.	S. M. Patil, S. R. Mane, R. M. Mane, S. S. Mali, P. S. Patil, and **P. N. Bhosale*.**	Synthesis and X-ray photoelectron spectroscopy (XPS) and thermoelectric studies of ternary $Bi_2(Te_{0.5}Se_{0.5})_3$ mixed-metal chalcogenide thin films by the arrested precipitation technique	*Can. J. Chem.89 (2011) 1–7.*	*0.94*
55.	S. S. Mali, S. K. Desai, D. S. Dalavi, C. A. Betty, **P. N. Bhosale** and P. S. Patil	CdS-sensitized TiO_2 nanocorals: hydrothermal synthesis, characterization, application	*Photochemical & Photobiological Sciences, 2011, 10, 1652-1658.*	*2.86*
56.	Sawanta S. Mali, Chirayath A. Betty, **Popatrao N. Bhosale** and Pramod S. Patil	Hydrothermal synthesis of rutile TiO_2 with hierarchical microspheres and their characterization	*Cryst Eng Comm, 13 (2011) 6349-6351.*	*3.85*
57.	Rohini R. Kharade, S. P. Patil, R. M. Mane, P. S. Patil, **P. N. Bhosale***.	Synthesis and electrochromic application of surfactants tailored WO_3 Nanostructures	*Optical Materials 34 (2011) 322–326.*	*2.06*
58.	S. B. Pawar, J. S. Shaikh, R. S. Devan, Y. R. Ma, D. Haranath, **P. N. Bhosale**, P. S. Patil	Facile and low cost chemosynthesis of nanostructured PbS with tunable optical properties	*Applied Surface Science, 258 (2011) 1869-1875.*	*2.61*
59.	Sawanta S. Mali, C. A. Betty, **P. N. Bhosale**, P. S. Patil	Eosin-Y and N3-Dye sensitized solar cells (DSSCs) based on novel nanocoral TiO_2: A comparative study	*Electrochimica Acta, 59 (2012) 113-120.*	*4.06*
60.	S. M. Patil, S. N. Gavale, R. K. Mane, N. S. Patil, S. S. Mali, P. S. Patil and **P. N. Bhosale*.**	XPS characterization and opto structural study of chemically deposited Sb (III) doped $Bi_2(Te_{1-x}Se_x)_3$ thin films	*Archives of Physics Research, 2012, 3 (3):245-257*	
61.	Sawanta S. Mali, D. S. Dalavi, **P. N.**	Electro-Optical Properties of Copper	*RSC Advances 2 (2012) 2100-*	*3.70*

	Bhosale, C. A. Betty, A. K. Chuahan, P. S. Patil	Phthalocyanines (CuPc) Vacuum Deposited Thin Films	*2104.*	
62.	S. B. Pawar, S. A. Pawar, **P. N. Bhosale**, P. S. Patil	Photoelectrochemical properties of chemosynthesized CdS Thin Films	*Solid State Physics AIP Conf. Proc. 1447 (2012) 1071-1072*	
63.	S. B. Pawar, S. A. Pawar, R. R. Bandgar, **P. N. Bhosale**, P. S. Patil	Chemosynthesis of cabbage-like CdS thin films and their photoelectrochemical activity	*Invertis Journal of Renewable Energy, 1 (2011) 1-5.*	
64.	S. S. Mali, C. A. Betty, **P. N. Bhosale**, R. S. Devan, Y. R. Ma, S. S. Kolekar, P. S. Patil	Hydrothermal synthesis of rutile TiO_2 nanoflowers using Bronsted acidic ionic liquid [BAIL]: Synthesis, characterization and growth mechanism	*Crystal Engineering Communication, 14 (2012) 1920-1924.*	*3.85*
65.	S. V. Patil, R. M. Mane, R. R. Kharade, **P. N. Bhosale*.**	Novel synthetic route for quaternary $MoBiGaSe_5$ mixed metal chalcogenide (MMC) thin films	*Digest Journal of Nanomaterials and Biostructures 7 (2012) 237-245.*	*1.26*
66.	S. S. Mali, **P. N. Bhosale**, C. A. Betty, P. S. Patil	Synthesis and characterization of Cu_2ZnSnS_4 thin films by SILAR method	*Journal of Physics and Chemistry of Solids, 73 (2012) 735–740*	*1.59*
67.	M. M. Salunkhe, R. M. Mane, **P. N. Bhosale*.**	Photoelectrochemical cell performance of chemically deposited $MoBi_2Te_5$ thin films	*Advanced Materials Letters, 3 (2012) 71-76*	*1.93*
68.	M. M. Salunkhe, R. R. Kharade, R. M. Mane and **P. N. Bhosale*.**	Synthesis and characterization of nanocrystalline $MoBi_2Te_5$ thin films for photoelectrode applications	*Philosophical Magazine Letters iFirst, (2012)1-9.*	*1.25*
69.	S. S. Mali, **P. N. Bhosale**, C. A. Betty, P. S. Patil	Novel synthesis of kesterite Cu_2ZnSnS_4 nanoflakes by successive ionic layer adsorption and	*Electrochimica Acta, (2012) 0013-4686*	*4.06*

		reaction technique: Characterization and , Application		
70.	R. R. Kharade, K. R. Patil, P. S. Patil, **P. N. Bhosale*.**	Novel microwave assisted sol-gel synthesis (MW-SGS) and electrochromic performance of petal like h-WO_3 thin films.	*Materials Research Bulletin, 47(2012) 1787–1793.*	*1.96*
71.	Manauti M. Salunkhe, Rohini R. Kharade, Suvarta D. Kharade, Sawanta S. Mali, P. S. Patil and **P. N. Bhosale*.**	Synthesis of Fibrous Reticulate Nanocrystalline n-type $MoBi_2(Se_{1-x}Te_x)_5$ Thin Films for Thermocooling Applications.	*Materials Research Bulletin, 47 (2012) 3860-3867.*	*1.96*
72.	S. S. Mali, S. K. Desai, S. K. Kalagi, C. A. Betty, **P. N. Bhosale**, R. S. Devan, Y. R. Ma, P. S. Patil	PbS quantum dot sensitized anatase TiO_2 nanocorals for quatum dot sensitized solar cell applications	*Dalton Transactions, 41 (2012) 6130-6136.*	*4.09*
73.	S. S. Mali, C. A. Betty, **P. N. Bhosale**, P. S. Patil	Synthesis, characterization of hydrothermally grown MW-CNT-TiO_2 photoelectrodes and their visible light absorption properties	*ECS Journal of Solid State Science and Technology, 1 (2) (2012) M15-M23.*	*0.75*
74.	N. B. Pawar, S. M. Patil, M. M. Salunkhe, S. D. Kharade, R. M. Mane, V. B. Ghanwat and **P. N. Bhosale*.**	Synthesis and Characterization of $MoBi_2S_5$ Thin Films by Simple Colloidal Route.	*Advanced Materials Manufacturing and Characterization 1 (2012) 223.*	
75.	S. S. Mali, P. S. Shinde, C. A. Betty, **P. N. Bhosale**, W. J. Lee, P. S. Patil.	Multistep hydrothermal route for nanocoral architecture of anatase TiO_2: Synthesis and characterization of dye-sensitized solar cell performance	*Progress in Photovoltaics: Research and Applications, (2012) DOI:10.1002/pip. 2295.*	*9.69*
76.	S. S. Mali, C. A. Betty,	Efficient dye-sensitized	*Crystal*	*3.85*

	P. N. Bhosale, P. S. Shinde, M. R. Pramod, S. R. Jadkar, P. S. Patil.	solar cells based on hierarchical rutile TiO_2 microspheres	*Engineering Communication, 14 (2012) 8156-8161.*	
77.	S. S. Mali, R. S. Devan, Y. R. Ma, C. A. Betty, **P. N. Bhosale**, R. P. Panmand, B. B. Kale, S. R. Jadkar, P. S. Patil, J. H. Kim, C. K. Hong.	Effective light harvesting in CdS nanoparticles-sensitized rutile TiO_2 microspheres	*Electrochimica Acta, 90 (2012) 666-672.*	*4.06*
78.	N. B. Pawar, S. S. Mali,M. M. Salunkhe, R. M. Mane, P. S. Patil, **P. N. Bhosale*.**	Effect of Surfactant on Optical and Structural Properties of Chemically Deposited $MoBi_2S_5$ Thin Films	*New Journal of Chemistry (2012), 36, 1807-1812*	*3.15*
79.	Sawanta S. Mali, C. A. Betty, R. S. Devan, Y. R. Ma and **P. N. Bhosale** and P. S. Patil,	Hierarchical nanostructured TiO2 for solar cells application,	*J. Nanomedic Nanotechnol 3 (2012) 104*	*5.18*
80.	M. M. Salunkhe, N. B. Pawar, S. D. Kharade, S. M. Patil, S. S. Mohite, **P. N. Bhosale*.**	Annealing Effect on the Structural and Electrical Properties of n-type $MoBi_2(Se_{0.5}Te_{0.5})_5$ Thin Film	*Nano Materials Synthesis and Characterization, (2012) 187-192.*	
81.	S. P. Patil, S. S. Mali, R. M. Mane, R. R. Kharade, V. B. Ghanwat, V. V. Kondalkar and **P. N. Bhoasale*.**	Synthesis and characterization of novel $MoBiGaSe_5$ thin films by vacuum deposition technique	*Advanced Nano Materials for Industrial Applications (2012) 51-56.*	
82.	S. B. Pawar, S. A. Pawar, P. S. Patil, **P. N. Bhosale*.**	Chemosynthesis of ZnO nanorods and its photoelectrochemical property	*Applications of Nano materials: Electronics, Energy and Environment (2012) 113-118.*	
83.	S. S. Mali, R. S. Devan, Y. R. Ma, C. A. Betty, **P. N. Bhosale**, R. P. Panmand, B. B. Kale, S. R. Jadkar, P.	Effective light harvesting in CdS nanoparticle-sensitized rutile TiO_2 microspheres	*Electrochimica Acta 90 (2013) 666–672*	*4.06*

	S. Patil, J. H. Kimg, C. K. Hong			
84.	S . R. Mane, R. M. Mane, P. S. Patil and **P. N. Bhosale*.**	Effect of Annealing Temperature on Structural Properties of Nanocrystalline Tl_3 (PW_{12} O_{40}) Thin Films	*Advanced Materials Letters VBRI Press, 4(1), (2013), 94-98.*	*1.93*
85.	Rohini R. Kharade, Sawanta S. Mali, Satish P. Patil, Kashinath R. Patil, Pramod S. Patil, **Popatrao N. Bhosale*.**	Enhanced Electrochromic Coloration in Ag Nanoparticle Decorated WO_3 Thin Films	*Electrochimica Acta, 102 (2013) 358– 368*	*4.06*
86.	S. A. Pawar, D. S. Patil, S. B. Pawar, T. S. Bhat, P. P. Waifalkar, S. H. Pisal, **P. N. Bhosale**, P. S. Patil.	Hydrothermal synthesis of CdSe microspheres	*AIP Conference Proceedings, 1536 (2013) 371-372.*	
87.	S. B. Pawar, S. A. Pawar, P. S. Patil, **P. N. Bhosale*.**	Chemosynthesis of PbS thin film by SILAR technique	*AIP Conference Proceedings, 1536 (2013) 483-484.*	
88.	S. A. Pawar, S. B. Pawar, A. S. Kamble, D. S. Patil, **P. N. Bhosale,** P. S. Patil.	Investigation of chemosynthesized CdSe microclusters	*AIP Conference Proceedings, 1512 (2013) 414-415.*	
89.	S. V. Patil, R. M. Mane, N. B. Pawar, S. D. Kharade, S. S. Mali, P. S. Patil, G. L. Agawane, J. H. Kim and **P. N. Bhosale*.**	Opto-structural and electrical properties of chemically grown Ga doped $MoBi_2Se_5$ thin films	*Material Science: Material Electronics 24 (2013) 4669-4676.*	*1.96*
90.	S. K. Jagadale, R. M., Mane, **P.N. Bhosale,** R. K. Mane.	Synthesis and characterization of nanostructured CdZnSSe thin films by arrested precipitation technique (APT)	*Advanced Nanomaterials and Emerging Engineering Technologies (ICANMEET), (2013) 506-508.*	
91.	S. D. Kharade, N. B. Pawar, V. B. Ghanwat, S. S. Mali, W. R. Bae, P. S. Patil, C. K. Hong, J. H. Kim and **P. N. Bhosale*.**	Room Temperature Deposition of Nanostructured Bi_2Se_3 Thin Films for Photoelectrochemical Application: Effect of	*New Journal of Chemistry 37 (2013) 2821-2828.*	*3.15*

		Chelating Agents		
92.	S. D. Kharade, N. B. Pawar, S. S. Mali, C. K. Hong, P. S. Patil, M. G. Kang, J. H. Kim and **P. N. Bhosale*.**	Effect of Copper Content on Optostructural, Morphological and Photoelectrochemical Properties of $MoBi_{2-x}Cu_xSe_4$ Thin Films	*Journal of Materials Science 48:20 (2013) 7300-7311.*	*2.30*
93.	S. M. Patil, M. M. Salunkhe, N. B. Pawar, **P. N. Bhosale**	Synthesis and Thermoelectric Study of Sb (III) Doped $Bi_2(Te_{1-x}Se_x)_3$ Thin Films by APT	*International Journal of Materials Science and Applications 2(1) (2013) 30-36*	
94.	N. B. Pawar, S. S. Mali, S. D. Kharade, M. G. Gang, P. S. Patil, J. H. Kim, C. K. Hong, **P. N. Bhosale***.	Influence of vacuum annealing on the structural and photoelectrochemical properties of nanocrystalline MoBi2S5thinfilms	*Current Applied Physics* 14 (2014) 508-515	*2.02*
95.	Sawanta S. Mali, Promod S. Patil, **Popatrao N. Bhosale**, Chang Kook Hong,	Novel hybrid solar cells based on α-Copper phthalocyanine-Cadmium sulfide planar heterojunction,	*Journal of Materials Sciences 49, (2014), 5100-5111*	*2.30*
96.	S. M. Bhosale, M.P. Suryawanshi, M.A. Gaikwad, P.N. Bhosale**,** J.H. Kim and A.V. Moholkar.	Influence of growth temperatures on the properties of photoactive CZTS thin films using a spray pyrolysis technique	*Materials Letters 129, (2014) 153-155*	*2.26*
97.	Sawanta S. Mali, C. A. Betty, **P. N. Bhosale**, P. S. Patil and C. K. Hong,	From nanocorals to nanorods to nanoflowers nanoarchitecture for efficient dye-sensitized solar cells at relatively low film thickness: All Hydrothermal Process	*Scientific Reports. 4 (2014) 1-8*	*5.07*
98.	Rohini R. Kharade**,** S.S. Mali, S.S. Mohite, V.V. Kondalkar, P.S. Patil and **P. N. Bhosale**	Hybrid Physico-Chemical Synthesis and Electrochromic Performance of WO_3/MoO_3Thin Films	*Electroanalysis [Special Issue: Topical Cluster: Electroanalysis in India]26, 11 (2014) 2388–*	*2.50*

			2397	
99.	V.V. Kondalkar, R. R. Kharade, S.S. Mali, R.M. Mane, P.B. Patil, P.S. Patil, S. Choudhury and **P. N. Bhosale**	Nanobrick-like WO_3 Thin Films: Hydrothermal Synthesis and Electrochromic Application	*Superlattices and Microstructures 73, (2014) 290–295*	*1.97*
100.	N. B. Pawar, S. D. Kharade, R. M. Mane, S. S. Mali, C. K. Hong, P. S. Patil and **P. N. Bhosale**	Influence of Indium (III) Content $MoBi_{(2-x)}In_xS_5$ Thin Film for Photoelectrochemical solar cell	*Solid State Sciences 35 (2014) 10–17*	*1.67*
101.	K. V. Khot, S. S. Mali, N. B. Pawar, R. M. Mane, V. V. Kondalkar, V. B. Ghanwat, P. S. Patil, C. K. Hong, J. H. Kim, J. Y. Heo and **P. N. Bhosale.**	Novel Synthesis of Interconnected Nanocubic PbS Thin Films by Facile Aqueous Chemical Route	*Journal of Material Science: Material Electronics. 25 (2014) 3762*	*1.96*
102.	V.V. Kondalkar, S.S. Mali, N.B. Pawar, R.M. Mane, S. Choudhury, C.K. Hong, P.S. Patil, S.R. Patil, **P.N. Bhosale**	Microwave-assisted rapid synthesis of highly porous TiO_2 thin films with nanocrystalline framework for efficient photoelectrochemical conversion	*Electrochimica Acta 143 (2014) 89–97*	*4.06*
103.	R.M. Mane, V.B. Ghanwat, V.V. Kondalkar, K.V. Khot, S.R. Mane, P.S. Patil, **P.N. Bhosale**	Nanocrystalline $MoBi_2Se_5$ Ternary Mixed Metal Chalcogenide Thin-films for Solar Cell Applications	*Procedia Materials Science, 6 (2014), 1285–1291.*	
104.	S.R. Mane , B.J. Walekar, R.M. Mane, V.V. Kondalkar, V.B. Ghanwat, **P.N. Bhosale**	Molybdenum Heteropolyoxometalate Thin Films for Solar Cell Applications	*Procedia Materials Science, 6 (2014), 1104–1109.*	
105.	Manauti Salunkhe, Nita Pawar, P.S. Patil and **P.N. Bhosale**	Effect of annealing temperature on photoelectrochemical properties of nanocrystalline $MoBi_2(Se_{0.5}Te_{0.5})_5$ thin films	*Philosophical Magazine, 94, (2014) 3195–3205*	
106.	K. V. Khot, S. S. Mali, N. B. Pawar, R. R. Kharade, R. M. Mane, V. V.	Development of nanocoral-like Cd(SSe) thin films using an arrested precipitation	*New Journal of Chemistry 2014, 38, 5964-5974.*	*3.15*

	Kondalkar, P. B. Patil, P. S. Patil, C. K. Hong, J. H. Kim, J. Heo, **P. N. Bhosale***	technique and their application		
107.	P. B. Patil, S. S. Mali, V. V. Kondalkar, N. B. Pawar, K. V. Khot, C. K. Hong, P. S. Patil and **P. N. Bhosale***	Single step hydrothermal synthesis of hierarchical TiO_2 microflowers with radially assembled nanorods for enhanced photovoltaic performance	*RSC Advances 4 (2014) 47278-47286*	*3.70*
108.	V. B. Ghanwat, S. S. Mali, S. D. Kharade, N. B. Pawar, S. V. Patil, R. M. Mane, P. S. Patil, C. K. Hong and **P. N. Bhosale***	Microwave assisted synthesis, characterization and thermoelectric properties of nanocrystalline copper antimony selenide thin films	*RSC Advances 4 (2014) 51632-51639*	*3.70*
109.	K. V. Khot, S. S. Mali, R. R. Kharade, R. M. Mane, P. S. Patil, C. K. Hong, J. H. Kim, J. Heo, **P. N. Bhosale***	Novel-approach for fabrication of CdS thin films for photoelectrochemical solar cell application	*Journal of Materials Science: Materials in Electronics 2014, 25, 12, 5606-5617*	*1.96*
110	V. V. Kondalkar, S. S. Mali, R. M. Mane, P. B. Dandge, S. Choudhury, C. K. Hong, P. S. Patil, S. R. Patil, J. H. Kim, and **P. N. Bhosale***	Photoelectrocatalysis of Cefotaxime Using Nanostructured TiO2 Photoanode: Identification of the Degradation Products andDetermination of the Toxicity Level	Industrial & Engineering Chemistry Research, *2014, 53, 18152−18162.*	*2.23*
111	V. V. Kondalkar, S. S. Mali, R. R. charade, K. V. khot, P. B. Patil, R. M. Mane, S. Choudhury, C. K. Hong, P. S. Patil, J. H. Kim, and **P. N. Bhosale***	High performing smart electrochromic device based on honeycomb nanostructured h-WO3 thin films: Hydrothermal assisted synthesis.	*Dalton Transaction [DOI: 10.1039/c0xx00000x]*	*4.09*
112	M. M Salunkhe, KV Khot, PS Patil, TM Bhave, **PN Bhosale***	Novel route for the synthesis of surfactant-assisted MoBi 2 (Se 0.5	*New Journal of Chemistry*	*3.15*

		Te 0.5) 5 thin films for solar cell applications		
113	M. M. Salunkhe, N. B. Pawar, K. V. Khot, P. S. Patil, T. M. Bhave, **P. N. Bhosale***	Effect of indium(III) doping on chemosynthesized $MoBi_2Te_5$ thin films and it's photoresponse property	*J Mater Sci: Mater Electron DOI 10.1007/s10854-015-2778-9*	*1.96*
114	S. S. Mohite, S. S. Mali, R. R. Kharade, C. K. Hong, D. G. Kanase, P. S. Patil, **P. N. Bhosale***	Single source precursor for vacuum evaporation of $MoBi_2Se_5$ photoactive thin films	*J Mater Sci: Mater Electron DOI 10.1007/s10854-015-2772-2*	*1.96*
115	V. V. Kondalkar, . S. Mali, Rohini R. Kharade, R. M. Mane, P. S. Patil, C. K. Hong,J. H. Kim, S. Choudhury, **P. N. Bhosale***	Langmuir–Blodgett self organized nanocrystalline tungsten oxide thin films for electrochromic performance	*RSC Advances 5 (34), 26923-26931*	*3.70*
116	K. V. Khot, S. S Mali, N. B Pawar, R. R. Kharade, R. M Mane, P. B. Patil, P. S. Patil, C. K. Hong, J. H. Kim, J. Heo and P. N. Bhosale*	Simplistic Construction of Cadmium Sulfoselenide Thin Films via Hybrid Chemical Process for Enhanced Photoelectrochemical Performance	*RSC Advances, 2015, (Accepated Manuscript)*	*3.70*
117	Kishorkumar V. Khot Sawanta S. Mali, Rahul M. Mane, Pramod S. Patil, Chang Kook Hong, Jin Hyeok Kim, Jaeyeong Heo, **Popatrao N. Bhosale***	Synthesis, characterization and photoelectrochemical properties of PbS sensitized vertically aligned ZnO nanorods: modified aqueous route	*J Mater Sci: Mater Electron DOI 10.1007/s10854-015-3307-6*	*1.966*
118	Chaitali S. Bagade, Sawanta S Mali, Vishvanath B. Ghanwat, Kishorkumar Vikas Khot, Pallavi Patil, Suvarta D. Kharade, Rahul M Mane, Neha D Desai, C K Hong, P S Patil and **Popatrao N Bhosale***	A facile and low cost strategy to synthesize Cd1-xZnxSe thin films for photoelectrochemical performance: Effect of zinc content	*RSC Adv., 2015, Accepted Manuscript 2015,5, 55658-55668*	*3.708*

119	Vishvanath B. Ghanwat, Sawanta S. Mali, Rahul M. Mane, Pramod S. Patil, Chang Kook Hong and **Popatrao N. Bhosale***	Thermoelectric properties of nanocrystalline Cu3SbSe4 thin films deposited by a self-organized arrested precipitation technique	*New J. Chem., 2015, Advance Article DOI: 10.1039/C5NJ00686D, Paper*	3.159
120	Pallavi B. Patil, Sawanta S. Mali, Vijay V. Kondalkar, Kishorkumar V. Khot, Rahul M. Mane, Chang K. Hong, Pramod S. Patil, Jin H. Kim, **Popatrao N. Bhosale***	An approach towards TiO_2 chrysanthemum flowers with tunable properties: influence of reaction time in hydrothermal process	*J Mater Sci: Mater Electron DOI 10.1007/s10854-015-3191-0*	*1.966*
121	Pallavi B. Patil, Sawanta S. Mali, Vijay V. Kondalkar, Rahul M. Mane, Pramod S. Patil, Chang K. Hong, **Popatrao N. Bhosale***	Bismuth Telluride quantum dot assisted Titanium Oxide microflowers for efficient photoelectrochemicl performance	Mater Lett 159 (2015) 177-181	2.489
122	Pallavi B. Patil, Sawanta S. Mali, Vijay V. Kondalkar, Rahul M. Mane, Pramod S. Patil, Chang K. Hong, **Popatrao N. Bhosale***	Morphologically controlled electrodeposition of fern shaped Bi_2Te_3 thin films for photoelectrochemical performance	Journal of Electroanalytical Chemistry, 758, (2015), 178-190	2.72
123	Chaitali S. Bagade, Vishvanath B. Ghanwat, Kishorkumar V. Khot, **Popatrao N. Bhosale***	Efficient improvement of photoelectrochemical performance of CdSe thin film deposited via arrested precipitation technique	Mater Lett, 164 (2016) 52-55	2.489
124	Neha D. Desai, Vishvanath B. Ghanwat, Kishorkumar V. Khot, Sawanta S. Mali, Chang K. Hong, **Popatrao N. Bhosale***	Effect of substrate on the nanostructured Bi_2Se_3 thin films for solar cell applications	*J Mater Sci: Mater Electron 10.1007/s10854-015-4036-6*	1.569
125	Chaitali S. Bagade,	Synthesis of	*J Mater Sci: Mater*	1.569

	Vishvanath B. Ghanwat, Sawanta S. Mali, Kishorkumar V. Khot, Chang K. Hong, **Popatrao N. Bhosale***	(CdZn)Se thin films by a facile aqueous phase route and their photoelectrochemical performance for solar cell application	*Electron 10.1007/s10854-016-4504-7*	
126	Suvarta D. Kharade, Nita B Pawar, Kishorkumar Vikas Khot, Pallavi Patil, Sawanta S Mali, P S Patil, C K Hong and **Popatrao N. Bhosale***	Enhanced photoelectrochemical performance of novel p-type $MoBiCuSe_4$ thin films deposited by a simple surfactant mediated solution route	*RSC Adv., 2016, Accepted Manuscript DOI: 10.1039/C5RA21553F*	3.84
127	Kishorkumar V. Khot, Sawanta S. Mali, Vishvanath B. Ghanwat, Suvarta D. Kharade, Rahul M. Mane, Chang Kook Hong and **Popatrao N. Bhosale***	Photocurrent enhancement in a $Cu_2Cd(SSe)_2$ photoanode synthesized via an arrested precipitation route	*New J. Chem., 2016, Advance Article DOI: 10.1039/C5NJ03046C*	3.02
128	Manauti M. Salunkhe, Kishorkumar V. Khot, Sanjay H. Sahare, **Popatrao N. Bhosale*** and Tejashree Bhave	Low temperature and controlled synthesis of $Bi_2(S_{1-x}Se_x)_3$ thin films using a simple chemical route: effect of bath composition	*RSC Adv., 2015,5, 57090-57100*	3.84
129	Neha Desai, Sawanta Mali, Vijay Kondalkar, Rahul Mane, Chang Hong and **Popatrao Bhosale***	Chemically Grown MoO_3 Nanorods for Antibacterial Activity Study	*J Nanomed Nanotechnol 2015, 6:6 http://dx.doi.org/10.4172/2157-7439.1000338*	5.72
130	Vishvanath B Ghanwat, Sawanta S Mali, Chaitali S Bagade, Rahul M Mane, Chang Kook Hong, **PN Bhosale***	Thermoelectric Properties of Indium (III)-Doped Copper Antimony Selenide Thin Films Deposited Using a Microwave-Assisted Technique	*Energy Technology : 6 APR 2016 DOI: 10.1002/ente.201500508*	2.82
131	K.V. Khot, V.B. Ghanwat, C.S. Bagade, S.S. Mali, R.R. Bhosale, A.S. Bagali, T.D. Dongale, **P.N. Bhosale**	Synthesis of SnS_2 thin film via non vacuum arrested precipitation technique for solar cell application	*Materials Letters, 180, (2016), 23-26*	2.48

132	Rohini R. Kharade, Pallavi B. Patil, Kishor V. Khot, Vishvnath B. Ghanwat, Vijay V. Kondalkar, Chaitali S. Bagade, N. D. Desai, R. M. Mane and **P. N. Bhosale**	Controlled Electrochemical Polymerization Strategies for Electroactive Polyaniline Thin Films	*Macromolecule Symposia 362 (2016) 7 DOI: 10.1002/masy.20 1400262*	0.913
133	Kishorkumar V. Khot, Sawanta S. Mali, Pallavi B. Patil, Rohini R. Kharade, Rahul M. Mane, Chang Kook Hong and **Popatrao N. Bhosale**	You have full text access to this contentNovel Approach for Invention of Nubbly-Like Cd(SSe) Thin Film: Photoelectrochemi cal Application	*Macromolecule Symposia 362 (2016) 82 DOI: 10.1002/masy.20 1400224*	0.913
134	Vijay V. Kondalkar, Pallavi B. Patil, Rahul M. Mane, Pramod S. Patil, Sipra Choudhury and **Popatrao N. Bhosale**	Electrochromic Performance of Nickel Oxide Thin Film: Synthesis via Electrodeposition Technique	*Macromolecule Symposia 361 (2016) 47 DOI: 10.1002/masy.20 1400253*	0.913
135	Chaitali S. Bagade, Vishvanath B. Ghanwat, Suvarta D. Kharade, Kishorkumar V. Khot, Rohini R. Kharade, Neha D. Desai and **Popatrao N. Bhosale**	Formation of Ternary $CdZnSe_2$ Chalcogenide Thin Film by Microwave Assisted Chemical Bath Deposition	*Macromolecule Symposia 362 (2016) 60 DOI: 10.1002/masy.20 1400252*	0.913
136	Pallavi B. Patil, Sawanta S. Mali, Kishorkumar V. Khot, Vijay V. Kondalkar, Vishvanath B. Ghanwat, Rahul M. Mane, Rohini R. Kharade and **Popatrao N. Bhosale**	Synthesis of Bismuth Telluride Thin Film for Thermoelectric Application Via Electrodeposition Technique	*Macromolecule Symposia 361 (2016)152 DOI: 10.1002/masy.20 1400234*	0.913
137	Kishorkumar V. Khot1, Vishvanth B. Ghanwat1, Pallavi B. Patil1, Chaitali S. Bagade1, Rahul M. Mane1, Dadaso B.	Synthesis And Characterization Of Highly Ordered Nanosized Pbs Thin Films: Modified Silar	*Nanosystems physics chemistry mathematics* ***Accepted***	0.726

	Shinde1, Sandip K. Jagadale1, **P. N. Bhosale**			
138	Chaitali. S. Bagade, Vishvnath. B. Ghanwat, Kishorkumar. V. Khot, Pallavi. B. Patil, Rahul. M. Mane and **P.N. Bhosale***	Facile Synthesis Of (CdZn)Se Nanocrystalline Thin Films Via Arrested Precipitation Technique(Apt) For Photovoltaic Application	*Nanosystems physics chemistry mathematics* ***Accepted***	0.726
139	S. K. Jagadalea, D. B Shindeb, R. M. Manec, K. V. Khotc, V. B. Ghanwatc, **P. N. Bhosalec*,** and R. K. Mane	Chemosynthesis, Characterization And Photoelectrochemical Performance Of Cdzn(Sse)2 Thin Films By Arrested Precipitation Technique (Apt)	*Nanosystems physics chemistry mathematics* ***Accepted***	0.726
140	N. D. Desai, S. M. Patil, K. V. Khot, R. M. Mane and **P.N. Bhosale***	Surfactant Assisted Synthesis Of Nanocrystalline N-Bi_2Se_3 Thin Films At Room Temperature Via Arrested Precipitation Technique	*Nanosystems physics chemistry mathematics* ***Accepted***	0.726
141.	SB Jadhav, CK Kumar, R Bandichhor, **P.N Bhosale**	Development of RP UPLC-TOF/MS, stability indicating method for omeprazole and its related substances by applying two level factorial design; and identification and synthesis of non-pharmacopoeial impurities	*Journal of pharmaceutical and biomedical analysis (2016)* 118, 370-379	*3.16*
142.	SB Jadhav, RM Mane, KL Narayanan, **P.N Bhosale**	Analytical Enantio-Separation of Linagliptin in Linagliptin and Metformin HCl Dosage Forms by Applying Two-Level Factorial	*Scientia Pharmaceutica (2016) 84 (4), 671-684*	*0.97*

		Design		
143.	TD Dongale, SV Katkar, KV Khot, KV More, SD Delekar, **P.N Bhosale**, RK Kamat	Simulation of Randomly Textured Tandem Silicon Solar Cells Using Quadratic Complex Rational Function Approach Along with Artificial Neural Network	*Journal of Nanoengineering and Nanomanufacturing 6, (2016),103-108*	
144.	SS Jadhav, SS Mali, CK Hong, PS Patil, **P.N Bhosale**, GN Mulik	Novel synthesis of efficient counter electrode by facile arrested precipitation technique (APT)	*J Mater Sci: Mater Electron* 27 (4), *(2016)* 3812-3820	*1.79*
145.	Neha D. Desai Sawanta S. Mali Rahul M. Mane Vishvanath B. Ghanwat Chang K. Hong **Popatrao N. Bhosale**	Influence of deposition temperature on the optical, structural, morphological, compositional and photoelectrochemical properties of TiO_2 thin films	*J Mater Sci: Mater Electron* 27 (11) *(2016)* 11739–11750	*1.79*
146.	Sandip K. Jagadale Kishorkumar V Khot Chaitali S. Bagade Rahul M. Mane Vishvanath B. Ghanwat Raghunath K. Mane Sawanta S. Mali Chang K. Hong **P. N. Bhosale**	Novel synthetic route for the synthesis of ternary Cd(SSe) photoelectrode and their photoelectrochemical application	*J Mater Sci: Mater Electron (2016) Accepted manuscript*	*1.79*
147.	T. D. Dongale,N. D. Desai K. V. Khot N. B. Mullani P. S. Pawar R. S. Tikke V. B. Patil P. P. Waifalkar P. B. Patil R. K. Kamat P. S. Patil	Effect of surfactants on the data directionality and learning behaviour of Al/TiO_2/FTO thin film memristor-based electronic synapse	*Journal of solid state electrochemistry (2016) Accepted manuscript*	*2.32*

	P. N. Bhosale			
148.	Nita B. Pawar, Sawanta S. Mali, Suvarta D. Kharade, Vijay V. Kondalkar, Vishvanath B. Ghanwat, Kishorkumar V. Khot, Pramod S. Patil, Popatrao N. Bhosale	Microwave assisted novel $MoBi_2S_5$ nanoflowers: Synthesis, characterization, photoelectrochemical performance	*Solid State Sciences 61, (2016) 89-93*	*2.04*

B - Research Articles published in Proceedings and Books.

1) Solution-Gas Interface and Growth of Thin Films.
P. N. Bhosale and S. H. Pawar
Book: Emerging Trends in Surfaces, Interface and Thin Films. Eds. A.S. Nigvekar, A. Pimple and P.V. Panat. *Dept. of Physics, University of Pune* (1983) 65-74.

2) Studies on ECPV Cells made with n-Bi_2S_3 Films Formed by Solution-Gas Interface Technique.
S. H. Pawar and **P. N. Bhosale**
Book: *Photovoltaic Materials & Devices.* Eds. B.K. Das and S.N. Singh, Wiley Eastern Ltd., New Delhi (1984) 381-391.

3) Electrochemical Photovoltaic (ECPV) Cells Formed with Chemically Deposited n-Bi_2S_3 Photoelectrode.
P. N. Bhosale and S. H. Pawar
Book: *Solid State Energy Conversion.* Eds. S.H. Pawar, C.H. Bhosale and R.N. Patil. Shivaji University, Kolhapur (1985) 48-59.

4) Preparation and Characterisation of Chemically Deposited Mixed Bismuth Sulphotelluride Thin Films.
R. Patil, R. K. Mane and **P. N. Bhosale*.**
Proc. *10th International Workshop on Physics of Semiconductor Devices*. (IWPSD-1999). IIT & SPL New Delhi (1999) p. 1408.
Editors: Vkram Kumar, S. K. Agarwal.

5) Growth of Bismuth Sulphotelluride [$Bi_2(S_{1-x}Te_x)_3$] Thin Films by chemical Deposition Method and Their Characterisation.
R. K. Mane, B. D. Ajalkar & **P. N. Bhosale*.**
Proc. *Indo-Japanese Workshop on Micro-System Technology, Solid State Physics, Labotory, Delhi* (23-25 Nov.2000)

6) Synthesis, Growth Mechanism and Characterisation of Chemically Deposited Nanocrystalline Bismuth sulphotelluride Thin Films.
R. K. Mane, B. D. Ajalkar and **P. N. Bhosale*.**
Proc. *International Conference on Electrochemical Power systems* (ICEPS 2000) Chennai (9-10 Nov.2000) Vol. 2, P. 155-164.

7) Preparation and Characterisation of Chemically Deposited [$Bi_2(S_{1-x}Te_x)_3$] Thin Films.
R. K. Mane, B. D. Ajalkar & **P. N. Bhosale*.**
Proc. *Indo-Japanese Workshop on Micro-System Technology, 23-25 Nov. (2000) S.S.P.L. New Delhi, Vol. 1, P.71.*

8) [Cd(S,Te)] Thin Films : Growth & Characteristics.
P. D. More, V. B. Gaikwad, G. S. Shahane, L. P. Deshmukh and **P.N. Bhosale*.**
Proc. *International Workshop on Preparation & Characterisation of Technologically Important Single Crystals.*26-28 Feb. 2001, NPL, New Delhi (2001) P. 160.

9) A Combinatorial Approach to the Development of Molybdenum Sulphoselenide Thin Films Using Arrested Precipitation Technique (APT).
B. D. Ajalkar, R. K. Mane, and **P. N. Bhosale*.**
Proc. *11th International workshop on the Physics of Semiconductor Devices* (IWPSD) *Vol* 2(Dec.11-15, 2001) p.1263 IIT, Delhi.

10) Comparative Study of Bismuth Chalcogenides Thin Films by Arrested Precipitation Technique (APT).
R. K. Mane, B. D. Ajalkar and **P. N. Bhosale*.**
Proc. *11th International workshop on the Physics of Semiconductor Devices Vol* 2 (Dec.11-15, 2001) p.1332 IIT, Delhi.

11) Preparation, Growth Mechanism and Chemical Compositional Analysis of [$Sb_2(S_{1-x}Se_x)_3$] Thin Films Using Arrested Precipitation Technique (APT).
P. N. Bhosale*, V. N. Patil, A. R. Patil & B. D. Ajalkar.
Proc*. 11th International workshop on the Physics of Semiconductor Devices Vol* 2 (Dec.11-15, 2001) P.1053 IIT, Delhi.

12) Effect of Copper Doping in Bismuth Tri-selenide [Bi_2Se_3] on XRD Pattern.
B. D. Ajalkar, R. K. Mane and **P. N. Bhosale*.**

***Proc**. Seventh International Symposium on Advances in Electrochemical Science and Technology* (ISAEST-2002) 27-29 Nov. 2002 IIT, Chennai, India (2002) p. 1073.

13) Electrochemical studies of nanocrystalline bismuth sulphotelluride $Bi_2(S_{1-x}Te_x)_3$ thin films.
R. K. Mane, B. D. Ajalkar & **P. N. Bhosale***.
***Proc.** Seventh International Symposium on Advances in Electrochemical Science and Technology* (ISAEST-VII), Nov 27-29, 2002 at Chennai India.

14) Optical, Electrical and Growth Mechanism of Sb2(S1-xSex)3 Thin Film Prepared by Arrested Precipitation Technique (APT).
V. N. Patil, A. R. Patil ,**P. N. Bhosale**, and D. N. Chape.
***Proc** 12th International Workshop on Physics of Semiconductor Devices.* (IWPSD 2003) Vol-1 Page 140-142 Editors: K. N. Bhat, A. Das Gupta
Indian Institute of Technology Madras, Chennai, Dec.16-20, 2003.

15) Morphological and Compositional Analysis of Antimony Sulphoselenide Thin Films Synthesized by Arrested Precipitation Technique (APT)
V. N. Patil, A. R. Patil, L. P. Deshmukh and **P. N. Bhosale*.**
***Proc** 12th International Workshop on Physics of Semiconductor Devices.* . (IWPSD 2003) Vol-1 Page 143-145 Editors: K. N. Bhat, A. Das Gupta
Indian Institute of Technology Madras, Chennai, Dec.16-20, 2003.

16) Synthesis and Properties of $(Bi_{1-x}Sb_x)_2Se_3$ Thin Films.
P. N. Bhosale*., N. S. Patil, B. D. Ajalkar, R. K. Mane, L. P. Deshmukh, N. D. Deshpande, and R. S. Kadam.
***Proc.** 12th International Workshop on Physics of Semiconductor Devices*. (IWPSD 2003) Vol-1 Page 188-190 Editors: K. N. Bhat, A. Das Gupta
Indian Institute of Technology Madras, Chennai, Dec.16-20, 2003.

17) Studies on PEC Properties of $[Mo(S_{1-x}Se_x)_2]$ Thin Films Electrode.
B. D. Ajalkar, R. K. Mane, N. S. Patil, S. R. Patil and **P. N. Bhosale***.
Proc 12th International Workshop on Physics of Semiconductor Devices. . (IWPSD 2003) Vol-1 Page 191-193 Editors: K. N. Bhat, A. Das Gupta
Indian Institute of Technology Madras, Chennai, Dec.16-20, 2003.

18) Photoelectrode Analysis and PEC Studies on Chemically Grown Bismuth sulphotelluride Thin Films.
R. K. Mane, B. D. Ajalkar, N. S. Patil, L. P. Deshmukh and **P. N. Bhosale***.
***Proc** 12th International Workshop on Physics of Semiconductor Devices*. . (IWPSD 2003) Vol-1 Page 194-196 Editors: K. N. Bhat, A. Das Gupta
Indian Institute of Technology,Madras, Chennai, Dec.16-20, 2003.

19) Compositional analysis studies of chemically synthesized Antimony doped CdSe thin films.
E. U. Masumdar, L. P. Deshmukh and **P. N. Bhosale***.
Proc. *National Seminar on Science and Technology of Thin Films (NSSTTF-2004)*

20) Chemical compositional analysis of chemically synthesized $Bi_2(S_{(1-x)}Te_x)_3$ Thin films.
R. K. Mane and **P. N. Bhosale*.**
Proc. *National Seminar on Science and Technology of Thin Films (NSSTTF-2004).*

21) Investigation of photoelectrochemical (PEC) properties in Chemically Deposited Molybdenum Sulphoselenide Thin Films.
B. D. Ajalkar, A. M. Sargar and **P. N. Bhosale*.**
Proc. *International Conference on Electrochemical Power Systems.*
Viceroy Hotel, Hyderabad, December 20-21,2004(CECRI)

22) Microstructural Studies on Chemically Deposited Bi_2 $(S_{(1-x)}Te_x)_3$ Thin Films.
R. K. Mane and **P. N. Bhosale*.**
Proc International Conference on Electrochemical Power Systems.
Viceroy Hotel, Hyderabad, December 20-21,2004 (CECRI)

23) Synthesis and Characterization of Spray deposited TiO2 Thin Films.
P. S. Shinde, P. S. Patil, **P. N. Bhosale** and C. H. Bhosale,
Proceedings of National Seminar on Materials for Advanced Technologies,
Shivaji University, Kolhapur (NASMAT), (2006) 59-65.

24) Solar assisted photoelectrocatalytic degradation of oxalic acid using TiO_2 thin films.
P. S. Shinde, P. S. Patil, **P. N. Bhosale** and C. H. Bhosale
Proc. DAE Solid State Physics Symposium (2007) SSP,
Department of Studies in Physics University of Mysore Manasagangotri Mysore.

25) Electrochromic behavoiur of Chemically deosited Tungsten oxide thin films.
R. R. Kharade, R. M. Mane, S. N. Gawale, H. M. Yadav, **P. N. Bhosale*.**
Proc. International conference on Recent Trends in Materials and Characterization (RETMAC-2010), 14, 15 Feb. 2010, National Institute of Technology Karnataka Surathkal, India. (2010) 406-410.

26) Synthesis and Characterization of $MoBi_2S_5$ Thin Film by Simple Colloidal Route

N. B. Pawar, S. M. Patil, M. M. Salunkhe, S. D. Kharade, R. M. Mane, V. B. Ghanwat and **P. N. Bhosale*.**
Proc. International Conference on Materials Processing and Characterization (ICPMC) Gokaraju Rangaraju Institute of Engineering and Technology 8-10th March 2012, Bachupally, Hyderabad.

27) Tuning of Optical Band Gap and Structural Features of Single Phase Ag_2WO_4 Thin Films: A Hybrid Synthesis
R. R. Kharade, S. S. Mali, S. R. Mane, S. S. Mohite, S. V. Patil, V. V. Kondalkar, **P. N. Bhosale*.**
Proc. International Conference on Materials Processing and Characterization (ICPMC) Gokaraju Rangaraju Institute of Engineering and Technology 8-10th March 2012, Bachupally, Hyderabad.

28) Synthesis and Characterization of Mixed Metal Chalcogenide Thin Films
R. M. Mane, **P. N. Bhosale.**
Book Publication, Lambert Academic Publishing (Germany). *8th May 2013*
ISBN No. *978-3659341229*

29) Synthesis and Characterization of Nanostructured CdZnSSe Thin Films by Arrested Precipitation Technique (APT).
S. K. Jagadale ,R. M. Mane, **P. N. Bhosale** and R. K. Mane
Proceedings of the"International Conference on Advanced Nanomaterials & Emerging Engineering Technologies" (ICANMEET-20 13), Chennai, New Delhi, India, 24th - 26th July, 2013.

30) Nanocrystalline $MoBi_2Se_5$ Ternary Mixed Metal Chalcogenide Thin-Films for Solar Cell Applications
R. M. Mane, V. B. Ghanwat, V. V. Kondalkar, K. V. Khot, S. R. Mane, P. S. Patil and **P. N. Bhosale***
International Conference on Materials Processing and Characterization (ICPMC) Gokaraju Rangaraju Institute of Engineering and Technology

31) Molybdenum Heteropolyoxometalate Thin Films for Solar Cell Applications
S. R. Mane, B. J. Walekar, R. M. Mane, V. V. Kondalkar, V. B. Ghanwat and **P. N. Bhosale**
International Conference on Materials Processing and Characterization (ICPMC) Gokaraju Rangaraju Institute of Engineering and Technology.

32) Novel-approach for invention of nubbly-like Cd(SSe) thin film: Photoelectrochemical solar cell application.
K. V. Khot, P. B. Patil, R. R. Kharade, R. M. Mane and **P. N. Bhosale.**
Macromolecular Symposia (*Accepted, ISBN No: 1521-3900*)
Third International Conference on Polymer Processing and Characterization (ICPPC 2014).

33) Synthesis of Bismuth Telluride Thin Film for Thermoelectric Application via Electrodeposition Technique.
P. B. Patil, K. V. Khot, V. V. Kondalkar, V. B. Ghanwat, R. M. Mane and **P. N. Bhosale.**
Macromolecular Symposia (*Accepted, ISBN No: 1521-3900*)
Third International Conference on Polymer Processing and Characterization (ICPPC 2014).

34) Rapid formation of ternary $CdZnSe_2$ chalcogenide thin film by microwave assisted chemical bath deposition.
C. S. Bagade, V. B. Ghanwat, S. D. Kharade ,K. V. Khot, R. R. Kharade, N. D. Desai, **P. N. Bhosale.**
Macromolecular Symposia (*Accepted, ISBN No: 1521-3900*)
Third International Conference on Polymer Processing and Characterization (ICPPC 2014).

35) Enhanced Electrochromic Performance of Nickel Oxide Thin Film: Synthesis via Electrodeposition Technique.
V. V.Kondalkar, P. B.Patil, K. V. Khot R. R. Kharade, R. M. Mane, P. S. Patil, S. Choudhury, **P. N. Bhosale.**
Macromolecular Symposia (*Accepted, ISBN No: 1521-3900*)
Third International Conference on Polymer Processing and Characterization (ICPPC 2014).

36) Fabrication of Dye Sensitized Solar Cells using Tagetes Erecta Flower Dye Extract as a Photosensitizer.
R. H. Mane, S. H. Mane, B. J. Walekar, P. S. Patil, **P. N. Bhosale**, S. R. Mane**.**
Macromolecular Symposia (*Accepted, ISBN No: 1521-3900*)
Third International Conference on Polymer Processing and Characterization (ICPPC 2014).

37) Synthesis And Characterization Of Highly Ordered Nanosized Pbs Thin Films: Modified Silar
Kishorkumar V. Khot1, Vishvanth B. Ghanwat1, Pallavi B. Patil1, Chaitali S. Bagade1, Rahul M. Mane1, Dadaso B. Shinde1, Sandip K. Jagadale1, **P. N. Bhosale**
International Conference On Nanomaterials And Nanotechnology (NANO 15), KSR Campus Tiruchengode, India, 7th to 10th December 2015.

38) Facile Synthesis Of (CdZn)Se Nanocrystalline Thin Films Via Arrested Precipitation Technique(Apt) For Photovoltaic Application
Chaitali. S. Bagade, Vishvnath. B. Ghanwat, Kishorkumar. V. Khot, Pallavi. B. Patil, Rahul. M. Mane and **P.N. Bhosale***

International Conference On Nanomaterials And Nanotechnology (NANO 15), KSR Campus Tiruchengode, India, 7th to 10th December 2015.

39) Chemosynthesis, Characterization And Photoelectrochemical Performance Of Cdzn(Sse)2 Thin Films By Arrested Precipitation Technique (Apt)

40) S. K. Jagadalea, D. B Shindeb, R. M. Manec, K. V. Khotc, V. B. Ghanwatc, **P. N. Bhosalec*,** and R. K. Mane
International Conference On Nanomaterials And Nanotechnology (NANO 15), KSR Campus Tiruchengode, India, 7th to 10th December 2015.

41) Surfactant Assisted Synthesis Of Nanocrystalline N-Bi_2Se_3 Thin Films At Room Temperature Via Arrested Precipitation Technique
N. D. Desai, S. M. Patil, K. V. Khot, R. M. Mane and **P.N. Bhosale***
International Conference On Nanomaterials And Nanotechnology (NANO 15), KSR Campus Tiruchengode, India, 7th to 10th December 2015.

C – Papers Abstracted in Souvenirs of National and International Conference / Symposia / Workshop / Seminars.

1) Synergetic Solvent Extraction and Spectrophotometric Determination of Nickel (II) with 2- Acetyl Pyridine Thiosemicarbazone.
S. N. Gawale and **P. N. Bhosale*.**
National Conference on application of Solvent Extraction in Chemistry and Industry. Kolhapur, March 6, 1996.

2) Extractive Spectrophotometric Determination of Platinum (III) with Pyrimidinethiol
M. A. Anuse, **P. N. Bhosale** and M. B. Chavan
15th Conference of Indian Council of Chemists, Aurangabad, Oct. 24, 1996.

3) Quenching of Excimer Fluoresence in Crystalline Pyrene.
S. B. Patwari, **P. N. Bhosale** and S. R. Patil.
7th National Convention / Conference of Electrochemists, Kolhapur Nov. 17, 1996.

4) Extraction and Separation Studies of Platinum (II) with N-n Octylaniline.
T. N. Lokhande, **P. N. Bhosale** and M. A. Anuse.
34th Annual Convention of Chemists, Department of Chemistry, Dr. Babasaheb
Ambedkar Biochemical Research Center, New Delhi, Dec. 17, 1997.

5) Liquid Anion Exchanger, Study of Gold (III) with N-n octylaniline in Halide Media and its Separation from Platinum and base Metals.

T. N. Lokhande, **P. N. Bhosale** and M. A. Anuse.
35th Annual Convention of Chemists, Department of Chemistry, Karnataka University, Dharwad, Nov. 4, 1998.

6) Extraction of Ruthenium (IV) from Hydrochloric Acid Medium with N-n octylaniline .
T. N. Lokhande, **P. N. Bhosale** and M. A. Anuse.
Nuclear and Radio Chemistry Symposium, Bhaba Atomic Research Center, Mumbai, Jan. 19, 1999.

7) A Study of Bismuth sulphoselenide Thin Films: Growth From The Solutions and Properties.
A. R. Patil, V. N. Patil, R. K. Mane and **P. N. Bhosale**.
National Seminar on Recent Trends in Materials Science (NSRTMS-99), Department of Physics, Sri Venkateswara University, Tirupati, Nov. 25, 1999.

8) Preparation and Characterisation of Chemically deposited Mixed Antimony sulphoselenide Thin Films.
A. R. Patil, R. K. Mane, M. A. Anuse and **P. N. Bhosale*.**
National Seminar on Recent Trends in Materials Science (NSRTMS-99), Department of Physics, Sri Venkateswara University, Tirupati, Nov. 25, 1999.

9) Preparation Characterisation and Growth Mechanism of Chemically Deposited Nanocrystalline Bismuth sulphoTelluride Thin Films.
R. K. Mane, A. R. Patil, V. N. Patil and **P. N. Bhosale*.**
National Seminar on Recent Trends in Materials Science (NSRTMS-99), Department of Physics, Sri Venkateswara University, Tirupati, Nov. 25, 1999.

10) XRD Studies of $Cd_{1-x}Pb_xSe$ Alloyed Thin Films.
R. N. Mulik, D. S. Sutrave, V. B. Patil, P. D. More**, P. N. Bhosale**, G. S. Shahane and L. P. Deshmukh.
National Seminar on Recent Trends in Materials Science (NSRTMS-99), Department of Physics, Sri Venkateswara University, Tirupati, Nov. 25, 1999.

11) Extraction of Thallium Salicylate from n-Octylaniline
T. N. Shilimkar, **P. N. Bhosale** and M. A. Anuse
8th Indian Council of Chemists, Jalgaon, Dec. 27, 1999.

12) Synthesis,Characterisation and Analysis of Chemically Grown Thin Films of Bismuth sulphotelluride [$Bi_2(S_{1-x}Te_x)_3$].
R. K. Mane, V. N. Patil, B. D. Ajalkar & **P. N. Bhosale*.**
National Conference Micro-System Tiruchirappalli. Sept. 28, 2000.

13) Spectrosructural Characterisation of $CdSe_{1-x}Te_x$ Alloyed Thin Films.
P. D. More, G. S. Shahane, **P. N. Bhosale** & L. P. Deshmukh.

National conference on Materials & Semiconductor Technologies in Electronic Research. MASTER-2000
G. B. Pant University of Agriculture & Technology, Pantnagar U.P. Feb. 9-10, 2000.

14) A Study $Bi_2(S,Se)_3$ Thin Films: Growth From Solution and Characterisation.
A. R. Patil, V. N. Patil, L. P. Deshmukh & **P. N. Bhosale*.**
National Conference on Materials and Semiconductor Technologies in Electronic Research- MASTER-2000.

15) Molybdenum Sulphoselenide Thin Films by Arrested Precipitation Technique (APT) separation of Molybdenum & Selenium by Solvent Extraction.
B. D. Ajalkar, R. K. Mane, S. H. Burungale, M. A. Anuse and **P. N. Bhosale***.
20th Conference of Indian Council of Chemist, Mysore. Dec. 22-24,2001.

16) Growth of Molybdenum Sulphoselenide $Mo(S_{1-x}Se_x)_2$ Thin Films Prepared by Arrested Precipitation Technique (APT) and their characterization.
R. K. Mane, B. D. Ajalkar & **P. N. Bhosale*.**
5th NCSSI, Nagpur, Feb.2002.

17) Analysis, Studies & properties of Bismuth Sulphotelluride $Bi_2(S_{1-x}Te_x)_3$ Thin Films Prepared by Arrested Precipitation Technique (APT) & their Characterisation.
R. K. Mane, B. D. Ajalkar & **P. N. Bhosale*.**
5th NCSSI, Nagpur, Feb.2002.

18) Electrical and Optical Characterisation of Chemically Deposited Molybdenum sulphoselenide [$Mo(S_{1-x}Se_x)_2$] semiconductor Thin Films.
R. K. Mane, B. D. Ajalkar & **P. N. Bhosale*.**
National Seminar on Advanced Materials (NSAM) Gorkhapur, Mar. 15, 2002.

19) Chemical Analysis of Bismuth sulphotelluride[$Bi_2(S_{1-x}Te_x)_3$] Semiconductor Thin Films.
R. K. Mane, B. D. Ajalkar & **P. N. Bhosale*.**
National Seminar on Advanced Materials (NSAM) Gorkhapur, Mar. 15, 2002.

20) Chemical Compositional analysis of Chemically Synthesized Bi2(S1-x Tex)3 Thin Films.
R. K. Mane and **P. N. Bhosale***.
National Seminar on Science and Technology of Thin Films.
Rajarshi Shahu Mahavidyalaya, Latur (M. S.)India October16-17, 2004.

21) Compositional Analysis Studies of Chemically Synthesized Antimony Doped CdSe Thin Films.

E. U. Masumdar, L. P. Deshmukh and **P. N. Bhosale*.**
National Seminar on Science and Technology of Thin Films.
Rajarshi Shahu Mahavidyalaya, Latur (M. S.)India October16-17, 2004.

22) Effect of Composition on Chemically Grown Molybdenum Sulphoselenide Mo $(S_{1-x}Se_x)_2$ Thin Films.
C. D. Ajalkar, N. S. Patil, P. S. Chigare, A. M. Sargar and **P. N. Bhosale*.**
National Seminar on Materials for Advanced Technologies.
Dept. of Physics, Shivaji University, Kolhapur. January 23-25, 2006.

23) Synthesis and Characterisation Spray Deposited TiO_2 Thin Films.
P. S. Shinde, P. S. Patil, **P. N. Bhosale** and C. H. Bhosale.
National Seminar on Materials for Advanced Technologies.
Dept. of Physics, Shivaji University, Kolhapur. January 23-25, 2006.

24) Spectrophotometrc determination of Gold (III) by using 9,10-phenanthroquinone- Guanyl hydrazone.
A. B. Patil, S. R. Mane & **P. N. Bhosale*.**
National Conference on Recent Trends in Chemistry, Mangalwedha Dist. Solapur 3rd & 4th May 2006.

25) Effect of film thickness on photoelectrochemical properties of spray deposited titanium oxide thin films,
P. S. Shinde, P. S. Patil, **P. N. Bhosale** and C. H. Bhosale,
Eighth International symposium on Advances in Electrochemical Science and Technology (ISAEST-8), National Institute of Oceanography (NIO), Goa, (India),28-30 Nov., 2006.

26) Structural, optical and photoelectrochemical properties of sprayed TiO_2 thin films,
P. S. Shinde, P. S. Patil, **P. N. Bhosale**, and C. H. Bhosale,
***25th** Indian Council of Chemists, Birala College, Kalyan (W), (India), 27-29 Dec., 2006*.

27) Effect of annealing on photoelectrochemical properties of sprayed titanium dioxide thin films
P. S. Shinde, P. S. Patil, **P. N. Bhosale**, and C. H. Bhosale
National Seminar on New Horizons in Physics (NS-NHP-07), Satara (India), 20-21 January, 2007.

28) Enhanced photoelectrochemical (PEC) activity of spray deposited TiO_2 thin films
P. S. Shinde, P. S. Patil, **P. N. Bhosale**, and C. H. Bhosale
Materials Research Society of India, NPL,Delhi (India),10-12 Feb.,2007.

29) Solar assisted photoelectrocatalytic degradation of oxalic acid using TiO_2 thin films.
P. S. Shinde, P. S. Patil, **P. N. Bhosale** and C. H. Bhosale,
DAE Solid State Physics Symposium, 27-31 Dec 2007, Mysore.

30) Photoelectrochemical study of tungsten doped titanium dioxide thin films.
P. S. Shinde, P. S. Patil, **P. N. Bhosale**, and C. H. Bhosale,
National Conference on Current Trends in Materials Research For Advanced
Technology (NCMRAT-2007), 2007, Aurangadad (India).

31) Electrosynthesis and characterisation of $ZrSe_2$ thin films.
A. M. Sargar, N. S. Patil, S. R. Mane, S. N. Gawale, R. M. Mane and **P. N. Bhosale*.**
International conference on advanced materials and applications (ICAMA-2007), November 15-17, 2007, Shivaji University, Kolhapur.

32) Optostructural analysis of antimony bismuth selenide thin films elaborated by arrested precipitation technique
N. S. Patil, A. M. Sargar, S. R. Mane and **P. N. Bhosale***.
International conference on advanced materials and applications (ICAMA-2007), November 15-17,2007, Shivaji University, Kolhapur.

33) Synthesis and characterization of a new quaternary MoBiInSe5 mixed chalcogenide thin films
R. M. Mane, N. S. Patil, A. M. Sargar, S. R. Mane, V. N. Shinde, and **P. N. Bhosale*.**
International Conference on Biomedical Engineering and Nanotechnology (ICBENT- 2008) Oct. 21-23, 2008, D.Y.P.University, Kolhapur

34) Electrosynthesis and Characterization of Zirconium Sulphoselenide $Zr(S_{0.5}Se_{0.5})_2$ thin films
A. M. Sargar, R. M. Mane, N. S. Patil, S.R. Mane, V. N. Shinde, **P. N. Bhosale*.**
International Conference on Biomedical Engineering and Nanotechnology (ICBENT- 2008) Oct. 21-23, 2008, D.Y.P.University, Kolhapur.

35) Studies on Cu(II) substituted vanadium hetropolyxometallate thin films prepared by simple chemical growth process
V. R. Patil, N. S. Patil , A. M. Sargar, S. R. Mane, R. M. Mane, S. N. Gawale, **P. N. Bhosale*.**
National Conference On Synthesis of New Materials For Industrial Applications – Feb. 1st and 2nd 2008, Shivaji University, Kolhapur.

36) Studies on optostructural properties of Bi2-xSbxSe3 thin films prepared by arrested precipitation technique (APT)

N. S. Patil, A. M. Sargar, S. R. Mane, R. M. Mane, V. R. Patil, S. N. Gawale, **P. N. Bhosale*.**
National Conference On Synthesis of New Materials For Industrial Applications – 2008 Feb. 1st and 2nd 2008, Shivaji University, Kolhapur.

37) Structural, Morphological and Optical studies of chemically deposited zirconium dichalcogenide thin films
A. M. Sargar, S. R. Mane, N. S. Patil, R. M. Mane, V. R. Patil , S. N. Gawale and **P. N. Bhosale*.**
Best Poster Presentation award
National Conference On Synthesis of New Materials For Industrial Applications – 1st and 2nd 2008, Shivaji University, Kolhapur.

38) Structural and electrical studies on thallium (I) substituted Molybdenum Hetropolyoxmetalate Semiconducting thin films
S. R. Mane, N. S. Patil, A. M. Sargar, R. M. Mane, V. R. Patil N. S. Patil and **P. N. Bhosale*.**
International Conference On Materials Science Research and Nanotechnology (ICMSRN- 2008)Feb. 27-29 2008, Dept. of Physics, Mother Teresa Womens University, Kodaikanal.

39) Synthesis and characterization of ZrS2 thin films
A. M. Sargar, N. S. Patil, S. R. Mane, N. S. Gawale, R. M. Mane, V. R. Patil and **P. N. Bhosale*.**
International Conference On Materials Science Research and Nanotechnology (ICMSRN- 2008)Feb. 27-29 2008, Dept. of Physics Mother Teresa Womens University, Kodaikanal.

40) Properties of chemically deposited Bi2Se3 thin films
N. S. Patil, A. M. Sargar, S. R. Mane, R. M. Mane, S.N. Gawale**, P. N. Bhosale*.**
International Conference On Materials Science Research and Nanotechnology (ICMSRN- 2008) Feb. 27-29 2008, Dept. of Physics, Mother Teresa Womens University, Kodaikanal.

41) Electrosynthesis and characterization of ZrSe2 thin films.
A. M. Sargar, N. S. Patil, S. R. Mane, N. S. Gawale, R. M. Mane, V. R. Patil and **P. N. Bhosale*.**
International Coference On Materials Science Research And Nanotechnology (ICMSRN- 2008)Feb. 27-29 2008, Dept. of Physics Mother Teresa Womens University, Kodaikanal.

42) Influence of TI+ doping on optostructural and electrical properties of $TI_3(PW_{12}O_{40})$ thin films.
S. R. Mane, N. S. Patil, A. M. Sargar, R. M. Mane, V. R. Patil, R. R. Kharade and **P. N. Bhosale*.**

International Conference On Nanomaterials and Applications (ICNAMA-2008) Dec. 9-11, 2008 Shivaji University, Kolhapur.

43) Electrosynthesis and characterization of indium doped ZrSe2 thin films
A. M. Sargar, N. S. Patil, S. R. Mane, R. M. Mane, B. D. Ajalkar, S. N. Gawale and **P. N. Bhosale*.**
International Conference On Nanomaterials and Applications (ICNAMA-2008) Dec. 9- 11,2008 Shivaji University, Kolhapur.

44) Influence of Bi^{3+}on photoconductive properties of chemically deposited Sb_2Se_3 thin films
N. S. Patil, S. R. Mane, A. M. Sargar, R. M. Mane, J. D. Desai, B. D. Ajalkar and **P. N. Bhosale*.**
International Conference On Nanomaterials and Applications (ICNAMA-2008) Dec. 9- 11,2008 Shivaji University, Kolhapur.

45) Synthesis and characterization of chemically deposited nanomaterial thin films of Copper Iron Sulfide.
S. N. Gawale, A. M. Sargar, R. M. Mane, S. R. Mane, N. S. Patil, **P. N. Bhosale*.**
International Conference On Nanomaterials and Applications (ICNAMA-2008) Dec. 9-11,2008 Shivaji University, Kolhapur.

46) Optostructural and compositional studies of Cu (II) substituted Vanadium Heteropolyoxometalate thin films.
V. R. Patil, S. R. Mane, A. M. Sargar, S. B. Patil, R. R. Kharade, S. M. Patil and **P. N. Bhosale*.**
International Conference On Nanomaterials and Applications (ICNAMA-2008) Dec.9- 11,2008 Shivaji University, Kolhapur.

47) A new efficient photoelectrochemical process for degradation of environmentally toxic impurities in water using nanocrystalline oxide semiconductor thin films.
P. S. Shinde, P. S. Patil, **P. N. Bhosale**, M. Nuemann-Spallart and C. H. Bhosale.
International Conference on Nanomaterials for Advanced Applications (ICNAMA-2008) Department of Chemistry and Department of Physics, Shivaji University, Kolhapur.

48) Preparation and characterization of chemicaly deposited new ternary $MoBi_2Se_5$ mixed chalcogenide thin films
R. M. Mane , N. S. Patil , A. M. Sargar , S. R. Mane, V. N. Shinde and **P.N. Bhosale*.**
International Conference on Nanomaterials and Applications (ICNAMA-2008) Dec. 9- 11, 2008 Shivaji University, Kolhapur.

49) Studies on chemosynthesis of nanocrystalline vanadium doped molybdenum oxide thin film.
S. B. Patil, S. R. Mane, V. R. Patil, A. M. Sargar, R. R. Kharade, S. V. Patil, S. M. Patil and **P. N. Bhosale*.**
ICNAMA-2008, December 9-11, Shivaji University, Kolhapur.

50) Li^+ intercalated electrochromic nanocrystalline tungsten oxide thin films prepared by simple chemical bath deposition technique
R. R. Kharade, S. B. Patil, V. R. Patil and **P. N. Bhosale*.**
International workshop on Nanotechnology and Advanced Functional Materials. July 9-11,2009 National Chemical Laboratory, Pune.

51) Structural and electrochromic properties of MoO_3 and vanadium doped molybdenum oxide thin films
S. B. Patil, R. R. Kharade, V. R. Patil, S. M. Patil and **P.N. Bhosale*.**
International workshop on Nanotechnology and Advanced Functional Materials. July 9-11,2009 National Chemical Laboratory, Pune.

52) Photoelectrochemical cells performance of chemically deposited new ternary $MoBi_2Se_5$ mixed metal nano crystalline thin films
R. M. Mane, N. S. Patil, S. N. Gawale , S. R. Mane, S. V. Patil, R. R. Kharade, S. M. Patil and **P. N. Bhosale*.**
International Workshop on Nanotechnology and Advanced Functional Materials NCL Pune – 2009, Jully 9-11, 2009 National Chemical Laboratory Pune.

53) Hydrothermally grown TiO_2 nanocorals.
S. S. Mali, C. A. Betty, **P. N. Bhosale**, P. S. Patil,
Commercialization of Renewable Energy Technology, Oct. 21-23; 2009,
Dr. D. Y. Patil University, Kolhapur.

54) Synthesis and Characterization of Chemically Deposited of $MoBiInSe_5$ Mixed Metal Chalcoginide Thin Films For PEC Solar Cell Application.
R. M. Mane, R. R. Kharade, S. R. Mane, S. N.Gawale, and **P. N. Bhosale***.
National Conference On Commercialization of Renewable Energy Technology (Cret-2009) 21st-23rd Oct.2009.D.Y.Patil University Kolhapur.

55) Electrochromic Properties Of Chemically Deposited Tungsten Oxide Thin Films.
R. R. Kharade, R. M. Mane, S. B. Patil, and **P. N. Bhosale***.
National Conference On Commercialization Of Renewable Energy Technology (Cret-2009) 21st-23rd Oct.2009.D.Y.Patil University Kolhapur.

56) Photoelectrochemical performance of hydrothermally grown TiO2 nanocorals.

S. S. Mali, C. A. Betty, **P. N. Bhosale**, P. S. Patil,
8th National conference on Solid state Ionics: Materials for novel devices, Dec. 7-9, 2009, HS Gour University, Sagar, M P.

57) Influence of Indium doping on the optical and electrical properties of chemically deposited $MoBi_2Se_5$ mixed metal chalcoginide thin films.
R. M. Mane, N. S. Patil, S. R. Mane, S. P. Patil, S. M. Patil, R. R. Kharade and **P. N. Bhosale***.
UGC-SAP National Seminar on Advanced Synthetic Methodologies and Functional Materials Dec. 23rd and 24th, 2009, Shivaji University Kolhapur.

58) Electchromic Behaviour of Tungsten Oxide thin films.
R. R. Kharade, S. R. Mane, R. M. Mane, S. N. Gawale, H. M. Yadav and **P. N. Bhosale*.**
UGC-SAP National Seminar on Advanced Synthetic Methodologies and Functional Materials Dec. 23rd and 24th, 2009, Shivaji University Kolhapur.

59) Nanocoral architecture of TiO_2 from hydrothermal route.
S. S. Mali, C. A. Betty, **P. N. Bhosale**, P. S. Patil
AWARD WINNER POSTER
21st AGM of MRSI: Advanced Ceramic Materials: monoliths to composites, Feb. 9-11, 2010, Sardar Patel University, Vallabh Vidyanagar, Gujarat.

60) Electrochromic behavoiur of Chemically deosited Tungsten oxide thin films.
R. R. Kharade, R. M. Mane, S. N. Gawale, H. M. Yadav, **P. N. Bhosale***.
International conference on Recent Trends in Materials and Characterization (RETMAC-2010), 14, 15 Feb. 2010, National Institute of Technology Karnataka Surathkal, India.

61) Enhanced Photoelectrical Properties of Hydrothermal Grown TiO2 nanocorals.
S. S. Mali, C. A. Betty, **P. N. Bhosale** and P. S. Patil.
International conference on Advances in Electron Microscopy and Related Techniques & XXXI Annual Meeting of EMSI-2010 Mar 8-10, 2010 BARC, Mumbai.

62) Development of Nitrogen-Doped TiO2 nanocorals for best performance solar cell in Visible Light.
Sawanta S. Mali, Namrata A. Narewadikar, Nanda Patil, C. A. Betty, **P. N. Bhosale** and P. S. Patil
National Seminar on Advanced Materials-2010 (NSAM), March 19-20, 2010, Department of Physics, Shivaji University, Kolhapur.

63) Electrochromic Tungsten Oxide Thin Films:Synthesis and Characterization.
R. R. Kharade, S. R. Mane, R. M. Mane, H. M. Yadav and **P. N. Bhosale*.**
National Seminar on Advanced Materials-2010 (NSAM), March 19-20, 2010, Department of Physics, Shivaji University, Kolhapur.

64) Effect of Tl^{+} doping on Photoelectrochemical Performance of Chemically Deposited Tungsten heteropolyoxometalate thin films.
S. R. Mane, R. M. Mane , R. R. Kharade, S. N. Gawale, N. S. Patil , S. M. Patil, H. M. Yadav, M. M. Salunkhe and **P.N. Bhosale*.**
National Seminar on Advanced Materials-2010 (NSAM), March 19-20, 2010, Department of Physics, Shivaji University, Kolhapur.

65) Optostructural and photoelectrochemical studies on MoBiInSe5 thin films for solar cell application
R. M. Mane, S. R. Mane, R. R. Kharade, S. N. Gawale, N. S. Patil ,H. M. Yadav, M. M. Salunkhe, S. M. Patil and **P. N. Bhosale*.**
National Seminar on Advanced Materials-2010 (NSAM), March 19-20, 2010, Department of Physics, Shivaji University, Kolhapur.

66) Photoelectrochemical and compositional studies on WSe2 thin films
S. N. Gawale, R. M. Mane, S. R. Mane, R. R. Kharade, N. S. Patil ,H. M. Yadav, M. M. Salunkhe, S. M. Patil, **P. N. Bhosale*.**
National Seminar on Advanced Materials-2010 (NSAM), March 19-20, 2010, Department of Physics, Shivaji University, Kolhapur.

67) Optostructural, Compositional and Electrical Properties of BiSbTe3 Thin Films.
S. M. Patil, S. R. Mane, R. M. Mane, S. N. Gawale, R. R. Kharade, H. M. Yadav, M. M. Salunkhe, **P. N. Bhosale*.**
National Seminar on Advanced Materials-2010 (NSAM), March 19-20, 2010, Department of Physics, Shivaji University, Kolhapur.

68) Electrochromic properties of chemically deposited $Tl_3(PW_{12}O_{40})$ heteropolyoxometalate thin films.
S. R. Mane, R. M. Mane, R. R. Kharade, S. N. Gawale and **P. N. Bhosale*.**
Ninth interatonal Symposium on Advaced Electrochemical science & technology, (ISAEST-9),2-4, 2010, Hotel Green Park, Chennai.

69) Photoelectrochemical (PEC) performance of $MoBiInSe_5$ mixed metal chalcogenide thin films.
R. M. Mane, S. R. Mane, R. R. Kharade, S. V. Patil and **P. N. Bhosale***.
Ninth interatonal Symposium on Advaced Electrochemical science & technology, (ISAEST-9),2-4, 2010,Hotel Green Park, Chennai.

70) Hybrid Electro-Chemo synthesis and characterization of $Mo_xW_{(1-x)}Se_2$ Thin films.
S. N. Gawale, R. M. Mane, S. R. Mane, R. R. Kharade, S. V. Patil and **P. N. Bhosale*.**
Ninth interatonal Symposium on Advaced Electrochemical science & technology, (ISAEST-9),2-4, 2010,Hotel Green Park, Chennai.

71) Optostructural, Electrical and Photoelectrochemical studies of ternary mixed metal chalcogenide thin films.
S. M. Patil, R. M. Mane, S. R. Mane, R. R. Kharade, S. V. Patil and **P. N. Bhosale*.**
Ninth interatonal Symposium on Advaced Electrochemical science & technology, (ISAEST-9), Dec. 2-4, 2010,Hotel Green Park, Chennai.

72) Proton Intercalated Tungsten Trioxide Thin Films for Electrochromic Displays.
R. R. Kharade, R. M. Mane, S. V. Patil, S. R. Mane, S. N. Gawale, S. D. Kharade and **P. N. Bhosale*.**
Ninth interatonal Symposium on Advaced Electrochemical science & technology, (ISAEST-9), Dec. 2-4, 2010,Hotel Green Park, Chennai.

73) Influence of In (III) concetration on the optrostructural and optoelectronic properties of chemically deposited mixed metal chalcogenide thin films.
R. M. Mane, S. M. Patil, S. R. Mane, R. R. Kharade, S. V. Patil and **P. N. Bhosale*.**
Natonal Seminar on Advaced in Synthetic Methodogies & New Materials (ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

74) A Novel Synthetic Route for deposition of bismuth Tellurium Selenide Thin Films.
S. M. Patil, R. M. Mane, S. R. Mane, R. R. Kharade, S. V. Patil and **P. N. Bhosale*.**
Natonal Seminar on Advaced in Synthetic Methodogies & New Materials (ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

75) Opto-structural and Morphological Studies on Chemically grown $MoBi_2Te_5$ thin films.
M. M. Salunkhe, R. M. Mane, R. R. Kharade, N. B. Pawar and **P. N. Bhosale*.**
Natonal Seminar on Advaced in Synthetic Methodogies & New Materials-(ASMNM-2011), 21-22 Jan. 2011,Department of Chemistry, Shivaji University Kolhapur.

76) Photoelectrochemical (PEC) Properties of Tungstenhetero - Polyoxometalate (Tl_3PO_4) $(WO_3)_{12}$ thin films
Best Paper Award ASMNM-2011.
S. R. Mane, R. M. Man**e**, R. R. Kharade, S. N. Gawale and **P. N. Bhosale*.**
Natonal Seminar on Advaced in Synthetic Methodogies & New Materials-(ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

77) X-ray Photoelectron Spectra of Nanostructured Tungsten Oxide Thin Films
Rohini R. Kharade, R. M. Mane, S. R. Mane, S. V. Patil, P. S. Patil and **P. N. Bhosale*.**
International Conference on Supramolecular Chemistry and Nanomaterials, 13-15 Feb, 2011, Department of Chemistry, Mumbai University, Mumbai.

78) Influence of In (III) concetration on the optrostructural and optoelectronic properties of chemically deposited mixed metal chalcogenide thin films.
R. M. Mane, S. M.Patil, S. R. Mane, R. R. Kharade, S. V. Patil and **P. N. Bhosale*.**
National Seminar on Advanced in Synthetic Mythologies & New Materials (ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

79) A Novel Synthetic Route for deposition of bismuth Tellurium Selenide Thin Films.
S. M. Patil, R. M. Mane, S. R. Mane, R. R. Kharade, S. V. Patil and **P. N. Bhosale*.**
National Seminar on Advanced in Synthetic Mythologies & New Materials (ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

80) Photoelectrochemical (PEC) Properties of Tungstenhetero – Polyoxometalate (Tl_3PO_4)$(WO_3)_{12}$ thin films
S. R. Mane, R. M. Mane, R. R. Kharade, S. N. Gawale and **P. N. Bhosale*.**
National Seminar on Advanced in Synthetic Mythologies & New Materials (ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

81) Size quantization effect of Indium doped $MoBi_2Se_5$ mixed metal chalcogenide Thin films on photoelectrochemical performance
R. M. Mane , V. V. Kondalkar, V. B. Ghanwat, S. P. Kharade , M. M.Saluknhe, S. R. Mane, and **P. N. Bhosale*.**
National Seminar on Physics of Materials and materials based fabrication organized by Dept. of physics , shivaji University Kohapur dated 17-18 Feb.2011.

82) Tuning of Optical Band Gap and Structural Features of Single Phase Ag_2WO_4 Thin Films: A Hybrid Synthesis
R. R. Kharade, S. S. Mali, S. R. Mane, S. S. Mohite, S. V. Patil, V. V. Kondalkar, **P. N. Bhosale*.**
International Conference on Materials Processing and Characterization (ICPMC) **8-**10 March 2012, Gokaraju Rangaraju Institute of Engineering and Technology, Bachupally, Hyderabad.

83) Effect of monovalent cation doping on electrochromic performance of WO_3 thin films deposited by hybrid combinatorial synthesis.
R. R. Kharade, S. S. Mali, S. R. Mane, S. P. Patil, S. S. Mohite, P. S. Patil, **P. N. Bhosale***.
International conference on Physics of Materials and Materials Based Fabrication (ICPM-MDF) 18-21 Jan 2012, Department of Physics, Shivaji University.

84) Synthesis and Characterization of $MoBi_2S_5$thin Films For Photovoltaic Applications
N. B. Pawar, R. R. Kharade, P.S. Patil and **P. N. Bhosale*.**
International Conference on Nanomaterials and Nanotechnology (ICNANO) 18-21 Dec. 2011 University of Delhi, Delhi 2011.

85) Growth Mechanism and Characterization of $MoBiCuSe_4$ Thin Films Deposited by APT at Room Temperature
S. D. Kharade, N. B. Pawar, R. M. Mane, V. V. Kondalkar and **P. N. Bhosale***.
National Seminar on Recent Advances in Synthetic Chemistry and Nanomaterials (RASCN) 21-22 Jan 2012, Department of Chemistry, Shivaji University.

86) Hydrotope Induced Microwave Assisted Synthesis of Octahydroquinazolinone
S. B. Kamble, R. M. Mane, **P. N. Bhosale**, R. S. Salunkhe.
International Conference on Nanomaterials and Nanotechnology (ICNANO) 18-21 Dec. 2011, University of Delhi, Delhi 2011.

87) Opto-structural and Morphological Studies on Chemically grown $MoBi_2Te_5$ thin films.
M. M. Salunkhe, R. M. Mane, R. R. Kharade, N. B. Pawar and **P. N. Bhosale***.
National Seminar on Advanced in Synthetic Mythologies & New Materials-(ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

88) Photoelectrochemical Cell Performance of Chemically Deposited $MoBi_2Te_5$ Thin Films

M. M. Salunkhe, S. M. Patil, R. M. Mane, S. V. Patil and **P. N. Bhosale***.
International Conference on Nanomaterials and Nanotechnology (ICNANO) 18-21 Dec. 2011, University of Delhi, Delhi 2011.

89) An Aqueous Medium Based Synthesis & Characterization of Nanocrystalline $MoBi_2(Se_{0.5}Te_{0.5})_5$ Thin Films
M. M. Salunkhe, R. R. Kharade, R. M. Mane, N. B. Pawar, S. D. Kharade and **P. N. Bhosale*.**
International conference on Physics of Materials and Materials Based Fabrication (ICPM-MDF) 18-21 Jan 2012, Department of Physics, Shivaji University.

90) Opto-Structural and Morphological Studies of Nanoporous $MoBiCuSe_4$ Thin Films
S. D. Kharade, M. M. Salunkhe, S. S. Mohite and **P. N. Bhosale*.**
International Conference on Nanomaterials and Nanotechnology (ICNANO) 18-21 Dec. 2011, University of Delhi, Delhi 2011.

91) Chemosynthesis of $MoBi_2S_5$ Nanocrystalline Thin Film by Simple Colloidal Route
N. B. Pawar, S. M. Patil, M. M. Salunkhe, S. D. Kharade, R. M. Mane and **P. N. Bhosale*.**
International conference on Physics of Materials and Materials Based Fabrication (ICPM-MDF) 18-21 Jan 2012, Department of Physics, Shivaji University**.**

92) Room Temperature Synthesis of Nanoporous Copper Doped MoBi2Se5 Mixed Metal Chalcogenide Thin Films by Arrested Precipitation Technique
S. D. Kharade, N. B. Pawar, R. R. Kharade, M. M. Salunkhe, R. M. Mane and **P. N. Bhosale*.**
International conference on Physics of Materials and Materials Based Fabrication (ICPM-MDF) 18-21 Jan 2012, Department of Physics, Shivaji University.

93) X-Ray Photoelectron and Raman spectroscopic studies of CZTS thin films Materials Based Device Fabrication
B. M. Patil, S. S. Mali, D.S. Dalavi, U.T. Pawar, S.S. Shinde, P.R. Patil, A.K. Bhosale, C.A. Betty, **P.N. Bhosale**, P.S. Patil
International conference on Physics of Materials and Materials Based Fabrication (ICPM-MDF) 18-21 Jan 2012, Department of Physics, Shivaji University.

94) Synthesis of $MoBi_2S_5$ Colloidal Nanoparticles Using Tri-n-octyl phospine oxide (TOPO) Surfactant

N. B. Pawar, M. M. Salunkhe, R. R. Kharade, V. B. Ghanawat and **P. N. Bhosale*.**
National Seminar on Recent Advances in Synthetic Chemistry and Nanomaterials (RASCN) 21-22 Jan 2012, Department of Chemistry, Shivaji University, Kolhapur.

95) Growth Mechanism and Characterization of $MoBiCuSe_4$ Thin Films Deposited by APT at Room Temperature
S. D. Kharade, N. B. Pawar, R. M. Mane, V. V. Kondalkar and **P. N. Bhosale***
National Seminar on Recent Advances in Synthetic Chemistry and Nanomaterials (RASCN) 21-22 Jan 2012, Department of Chemistry, Shivaji University.

96) Synthesis and Characterization of $MoBi_2S_5$ Thin Film by Simple Colloidal Route
N. B. Pawar, S. M. Patil, M. M. Salunkhe, S. D. Kharade, R. M. Mane, V. B. Ghanwat and **P. N. Bhosale*.**
International Conference on Materials Processing and Characterization (ICPMC) Gokaraju Rangaraju Institute of Engineering and Technology 8-10 March 2012, Bachupally, Hyderabad.

97) Rapid Synthesis and Characterization of Microwave –Assisted $MoBi_2S_5$ Thin Film
N. B. Pawar, S. P. Patil, R. M. Mane, V. V. Kondalkar and **P. N. Bhosale*.**
DAE-BRNS, 4th Interdisciplinary Symposium on Materials Chemistry (ISMC-2012), 11^{th} -15^{th} Dec. 2012, Bhabha Research Centre, Mumbai.

98) Simple Chemical Method for Porous Network of $MoBiCuSe_4$ Nanoflakes and its Photoresponse Property.
S. D. Kharade, M. M. Salunkhe, R. R. Kharade, V. B. Ghanwat, S. S. Mohite, and **P. N. Bhosale*.**
DAE-BRNS 4^{th} Interdisciplinary Symposium on Materials Chemistry (ISMC-2012), held at Bhabha Atomic Research Center, Mumbai, during December 11-15, 2012.

99) Room Temperature Growth of Bi_2Se_3 Nanospheres and Nanopetels by Arrested Precipitation Technique.
S. D. Kharade**,** N. B. Pawar, V. B. Ghanwat, V. V. Kondalkar, S. P. Patil, **P. N. Bhosale*.**
National Conference on Recent Trends in Nanotechnology, organized by Vivekanand College, Kolhapur, India, held on 14^{th} and 15^{th} Dec. 2012.

100) Surfactant Assisted Synthesis of Nanocrystalline Wo3 Thin Films and Their Electrochromic properties

R. R. Kharade, S. V. Patil, S. R. Mane, S. S. Mohite, R. M. Mane, S. M. Patil, **P. N. Bhosale*.**
National Conference on Recent Trends in Nanotechnology, organized by Vivekanand College, Kolhapur, India, held on 14th and 15th Dec. 2012.

101) Synthesis and Characterization of Ternary CuInSe2 Mixed Metal Chalcogenide Thin Films
J. M. Mane, R. M. Mane, S. V. Patil, V. B. Ghanwat, S. D. Kharade, N. B. Pawar, P. B. Patil, V. V. Kondalkar, R. R. Kharade, M. M. Salunkhe, **P. N. Bhosale*.**
National Conference on Recent Trends in Nanotechnology, organized by Vivekanand College, Kolhapur, India, held on 14th and 15th Dec. 2012.

102) Synthesis and characterization of novel $MoBiGaSe_5$ thin films by vacuum deposition technique.
S. P. Patil, S. S. Mali, R. M. Mane, R. R. Kharade, V. B. Ghanwat, V. V. Kondalkar and **P. N. Bhoasale*.**
IUPAC- Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-12) 21-25 November 2012, at Le-Meridian Hotel, Coimbture, Tamilnadu.

103) Chemosynthesis of ZnO nanorods and its photoelectrochemical property
S. B. Pawar, S. A. Pawar, P. S. Patil, **P. N. Bhosale*.**
IUPAC- Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-12) 21-25 November 2012, at Le-Meridian Hotel, Coimbture, Tamilnadu.

104) Annealing Effect on the Structural and Electrical Properties of n-type $MoBi_2(Se_{0.5}Te_{0.5})_5$ Thin Film
M. M. Salunkhe, N. B. Pawar, S. D. Kharade, S. M. Patil, S. S. Mohite, **P. N. Bhosale*.**
IUPAC- Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-12) 21-25 November 2012, at Le-Meridian Hotel, Coimbture, Tamilnadu.

105) Syntheis of CuS thin film by Arrested Precipitation Technique
N. B. Pawar, S. D. Kharade, R. M. Mane, M. M. Salunkhe, V. B. Ghanwat and **P. N. Bhosale*.**
National Conference on Recent Trends in Nanotechnology (NCRTNT-2012), organized by Vivekanand College, Kolhapur, India, held on 14th – 15th Dec. 2012.

106) Photoactivity of Hydrothermally Grown Cadmium Selenide Microshperes
Sachin A. Pawar, D. S. Patil, S. B. Pawar, A. S. Chougule, U. T. Pawar, **P. N. Bhosale**, P. S. Patil

Dept. Of Physics, Shivaji University, Kolhapur, NSPM-MDF-2013, 04-05 Jan 2013

107) Synthesis and Characterization of $MoBiCuSe_4$ Nanoflakes-assembled Microflowers via a Simple Chemical Method.
S. D. Kharade, N. B. Pawar, R. M. Mane, S. S. Mohite, **P. N. Bhosale*.**
National Conference on Chemistry of Chalcogens (NC3-2013) organized by Department of Applied Chemistry, at Defence Institute of Advanced Technology (DIAT) Pune on 14th and 15th January 2013.

108) Morphology Tuning in Mixed Metal Chalcogenide Nanostructures Deposited by Physical Route
S. S. Mohite, R. R. Kharade, S. S. Mali, S. D. Kharade, V. B. Ghanwat, **P. N. Bhosale*.**
National Conference on Chemistry of Chalcogens (NC3-2013) organized by Department of Applied Chemistry, at Defence Institute of Advanced Technology (DIAT) Pune on 14th and 15th January 2013.

109) Facile Single Phase, Crystalline Cu_3Se_2 Thin Films and Effect of Indium Doping: Chemosynthesis and Characterization.
V. B. Ghanwat, S. D. Kharade, S. B. Pawar, M. M. Salunkhe, P. B. Patil, S. S. Mohite, S. M. Patil and **P. N. Bhosale***.
National conference on current Research in chemical science(CRCS-2013), Department of Chemistry, Shivaji University, Kolhapur. Held on January 22nd & 23rd , 2013.

110) Mesoporous Anatase TiO_2 Thin Film with Highly Nanocrystalline framework for Efficient Photolectrochemical Conversion
V. V. Kondalkar, N. B. Pawar, R. R. Kharade, R. M. Mane, K. V. Khot and **P. N. Bhosale*.**
National conference on current Research in chemical science(CRCS-2013), Department of Chemistry, Shivaji University, Kolhapur. Held on January 22nd & 23rd , 2013.

111) Effect of Ga doping on electrical properties of chemically deposited $MoBi_2Se_5$ thin films.
S. V. Patil, R. M. Mane R. R. Kharade, M. M. Salunkhe, N. B. Pawar, S. D. Kharade and **P. N. Bhosale*.**
National Conference on Current Research in Chemical Sciences (CRCS-2013) on 22-23 January 2013 at Dept. of Chemistry, Shivaji University, Kolhapur.

112) Ag nanoparticles embedded WO_3 thin films for smart window application and its colorimetric analysis.

R. R. Kharade, S. S. Mali, S. V. Patil**,** S. R. Mane , S. S. Mohite, R. M. Mane , S. M. Patil and **P. N. Bhosale*.**
10th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai held on 28th- 30th Jan. 2013.

113) Size Quantization effect of Indium doped MoBi2Se5 Mixed Metal Chalcogenide Thin films for Solar cell Applications.
P. N. Bhosale*, R. M. Mane, V. V. Kondalkar, S. R. Mane and N. B. Pawar.
10th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai held on 28th- 30th Jan. 2013.

114) Synthesis and characterization of $MoBi_2S_5$ thin films by vacuum deposition technique
N. B. pawar, S. D. Kharade, V. V. Kondalkar, R. M. Mane, S. V. Patil and **P. N. Bhosale*.**
10th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai held on 28th- 30th Jan. 2013.

115) Facile Chemosynthesis of p-type $MoBiCuSe_4$ Thin Film for Heterojunction Solar Cell
S. D. Kharade, N. B. Pawar, V. B. Ghanwat, S. P. Patil, S. S. Mohite, **P. N. Bhosale*.**
10th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai held on 28th- 30th Jan. 2013.

116) Effect of Sintering Temperature on structural properties of nanocrystalline Tl_3 (PM_{012} O_{40}) thin films
S. R. Mane, R. M. Mane ,S. N. Gawale, M. M. Salunkhe and **P. N. Bhosale**
10th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai held on 28th- 30th Jan. 2013.

117) Chemosynthesis of new quaternary $MoBiInTe_5$ nanocrystalline thin films
M. M. Salunkhe , S. B. Pawar, S. M. Patil, R. M. Mane**,** S. R. Mane**,** and **P. N. Bhosale*.**
10th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai held on 28th- 30th Jan. 2013.

118) Hydrothermal synthesis of CdSe microspheres

Sachin A. Pawar, D. S. Patil, S. B. Pawar, T. S. Bhat, P. P. Waifalkar, S. H. Pisal, **P. N. Bhosale**, P. S. Patil
International Conference on Recent Trends in Applied Physics & Materials Science Govt. College of Engg. & Techn. Bikaner, Rajasthan, INDIA.

119) Chemosynthesis of PbS thin film by SILAR technique
Sarita B. Pawar, S. A. Pawar, P. S. Patil, **P. N. Bhosale**
International Conference on Recent Trends in Applied Physics & Materials Science Govt. College of Engg. & Techn. Bikaner, Rajasthan, INDIA.

120) Electrochromic Properties and Surfactant Assisted Synthesis of Nanocrystalline WO_3 Thin Films
R. R. Kharade, M. M. Salunkhe, S. D. Kharade, N. B. Pawar, V. V. Kondalkar, V. B. Ghanwat, **P. N. Bhosale*.**
24th Annaul General Meeting (AGM) Materials Research Society of India (MRSI), Indira Gandhi Centre for Atomic Research, Kalpakkam. 11-13, Feb. 2013.

121) Effect of Ga doping on optostructural properties of chemically deposited $MoBi_2Se_5$ thin films.
S. V. Patil and **P. N. Bhosale***
National Conference on Advances in Chemical Sciences (ACS-2013) on 1-2 March 2013 at Dept. of Chemistry, M. D. University, Rohatak (Haryana).

122) Influence of Surfactants on Optostructural, Morphological and Photoelectrochemical Properties of $MoBiInS_5$ Thin Films
N. B. Pawar, S. D. Kharade, R. M. Mane, P. B. Patil and **P. N. Bhosale***.
National Conference on Frontiers in Chemical and Biological Sciences, 23rd-24th Sept. 2013, PDVP Mahavidyalaya, Tasgaon.

123) Effect of Copper Content on Optostructural, Morphological and Photoelectrochemical Properties of $MoBi_{2-x}Cu_xSe_4$ Thin Films
S. D. Kharade, N. B. Pawar, P. B. Patil and **P. N. Bhosale***.
National Conference on Frontiers in Chemical and Biological Sciences, 23rd-24th Sept. 2013, PDVP Mahavidyalaya, Tasgaon.

124) Morphology Tailored Synthesis of 3D Hierarchical TiO_2 Nanorods by Simple Hydrothermal Route
Pallavi Patil, Vijay Kondalkar, Neha Desai, Chaitali Bagade and **P. N. Bhosale*.**
Yashavantrao Chavan institute of science, Satara 10-12 oct. 2013 Emerging trends And Techniques in Chemistry.

125) Photoelectrochemical Performance of $Mo_xBi_{(3-x)}Se_5$thin films
S. V. Patil, R. M. Mane, R. R. Kharade, S. S. Mali, P. S. Patil and **P. N. Bhosale**

2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

126) Vacuum Annealing Effect on Opto-structural and Morphological Properties of Evaporated $MoBiCuSe_4$ Chalcopyrite Thin Films
S. S. Mohite, S. S. Mali, R. R. Kharade, D. G. Kanase, P. S. Patil, **P. N. Bhosale***
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

127) Rapid Microwave Synthesis of $MoBi_2S_5$ Nanoflowers and its Photoelectrochemical Performance
N. B. Pawar, S. D. Kharade, N. D. Desai, C. S. Bagade, S. V. Patil, **P. N. Bhosale***
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

128) Electrochromic Performance of $WO_3/Ag/MoO_3$ Multilayer Thin Films as Cathodic Electrochromic Material
R. R. Kharade, S. S. Mali, S. P. Patil, S. R. Mane, P. S. Patil, **P. N. Bhosale.**
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

129) Electrochemical Photovoltaic (ECPV) Characteristics of Sb(III) doped $Bi_2(Te_{1-x}Se_x)_3$ Thin Films
S. M. Patil, S. R. Mane, S. S. Mali, P. S. Patil and **P. N. Bhosale.**
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

130) Comparative Study of Nanostructured of Bi2Se3 Thin Films Grown Using Different Chelating Agents
S. D. Kharade, V. V. Kondalkar, V. B. Ghanwat, R. M. Mane, R. R. Kharade, S. M. Patil and **P. N. Bhosale.**
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

131) Sulphate-assisted Synthesis of Hexagonal WO_3 Nanowire Assemblies with Electrochromic properties
V. V. Kondalkar, N. B. Pawar, S. D. Kharade, S. V. Patil, P. S. Patil, Sipra Choudhury, **P. N. Bhosale.**

2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

132) Room temperature synthesis of interlocked PbS nanocubes
K. V. Khot, S. S. Mali, P. B. Patil, H. K. Park , P. S. Patil, C. K. Hong, J. H. Kim, J. Y. Heo and **P. N. Bhosale.**
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

133) Synthesis, Morphology and Growth Mechanism of TiO_2 Nanoflowers via Hydrothermal Route
Pallavi Patil, Vijay Kondalkar, Rohini Kharade, Nita Pawar, Rahul Mane, P. S. Patil and **P. N. Bhosale.**
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

134) Microwave assisted synthesis of nanocrystalline Cu_3SbSe_4 Thin films and their characterization
V. B. Ghanwat, S. D. Kharade, S. S. Mali, K. V. Khot, R. M. Mane, P. B. Patil, C. K. Hong, P. S. Patil and **P. N. Bhosale**
2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

135) Self assembled 3D Hierarchical TiO_2 Microflowers: Synthesis and Characterization
Pallavi Patil, Vijay Kondalkar, Neha Desai, Rohini Kharade, P. S. Patil and **P. N. Bhosale**
National Symposium on Current Trends in Chemical and Nanosciences, (CTCNS-2014) Dept. of Chemistry, SUK 17th – 18th Jan., 2014.

136) Effect of Surfactants on Optostructural, Morphological and Photoelectrochemical Properties of Chemically Deposited $MoBiInS_5$ Thin Films
N. B. Pawar, S. M. Patil, S. V. Patil, V. V. Kondalkar, M. M. Salunkhe and **P. N. Bhosale**
National Symposium on Current Trends in Chemical and Nanosciences, (CTCNS-2014) Dept. of Chemistry, SUK 17th – 18th Jan., 2014.

137) Effect of Copper Content on Optostructural, Morphological and Photoelectrochemical Properties of $MoBi_{2-x}Cu_xSe_4$ Thin Films
S. D. Kharade, V. B. Ghanwat, S. V. Patil, C. S. Bagade and **P. N. Bhosale**

National Symposium on Current Trends in Chemical and Nanosciences, (CTCNS-2014) Dept. of Chemistry, SUK 17th – 18th Jan., 2014.

138) Microwave assisted synthesis, characterization and thermoelectric properties of nanocrystalline $CuSbSe_2$ thin films.
V. B. Ghanwat, S. D. Kharade, N. B. Pawar, S. S. Mali, R. M. Mane, K. V. Khot, C. K. Hong, P. S. Patil and **P. N. Bhosale**
National Symposium on Current Trends in Chemical and Nanosciences, (CTCNS-2014) Dept. of Chemistry, SUK 17th – 18th Jan., 2014.

139) Hybrid Physico-Chemical Synthesis and Electrochromic Performance of WO_3/MoO_3Thin Films
Rohini R. Kharade**,** S.S. Mali, S.P. Patil, S.S. Mohite, R.M. Mane, V.V. Kondalkar, P.S. Patil and **P. N. Bhosale**
Eleventh ISEAC International Discussion Meet on Electrochemistry and its applications. 20th to 25th February 2014

140) Hydrothermal Synthesis of Nanostructured WO_3Thin Films for Electrochromic Application.
V. V. Kondalkar, R. R. Kharade, R.M. Mane, P.B. Patil P.S. Patil, Sipra Choudhury and **P. N. Bhosale**
Eleventh ISEAC International Discussion Meet on Electrochemistry and its applications. 20th to 25th February 2014

141) Thermoelectric properties of nanocrystalline Cu_3SbSe_4 thin films deposited by Arrested Precipitation Technique.
V. B. Ghanwat, P. B. Patil, N. D. Desai and **P. N. Bhosale.**
Frontiers in Chemical Sciences (FCS-2014), Solapur University, Solapur 30th June 2014

142) Engineering the novel morphology of CdSSe thin films via self organized aqueous method for its photoelectrochemical application.
K. V. Khot, R. M. Mane, **P. N. Bhosale.**
UGC (WRO) Sponcered National Seminar on Recent trends in Analytical Chemistry (RTAC-2014). Art, Commerce and Science college, Sateral, 30th to 31st August 2014.

143) Synthesis and Characterization of ternary $CdZnSe_2$ chalcogenide thin film by Arrested Precipitation Technique.
C. S. Bagade, V. B. Ghanwat, S. D. Kharade, **P. N. Bhosale.**
UGC (WRO) Sponcered National Seminar on Recent trends in Analytical Chemistry (RTAC-2014). Art, Commerce and Science college, Sateral, 30th to 31st August 2014.

144) Surfactant-mediated Growth of Nanostructured MoBiInSe5 Thin Films via Arrested Precipitation Technique.
N. B. Pawar, V. V. Kondalkar, V. B. Ghanwat, P. B. Patil, **P. N. Bhosale.**
3rd International Conference NANOCON 014. Bharti Vidyapeeth Deemed University Pune, 14th to 15th October 2014.

145) Controlled Electrochemical Polymerization Strategies for Electroactive Polyaniline Thin Films.
Rohini R. Kharade, S. S. Mali, P. B. Patil, K. V. Khot, V. B. Ghanwat, V. V. Kondalkar, **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

146) Effect of Tl^+ Intercalation on Electrochromic behavior of Tungsten Hetero-polyoxometallate Polymeric Thin Films.
S. R. Mane, Rohini R. Kharade, R. M. Mane, P. S. Patil, **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

147) Facile synthesis of $CuInSe_2$ thin films via self-organized APT: photoelectrochemical solar cell applications.
J. M. Mane, R. M. Mane, S. R. Mane, V. V. Kondalkar, V. B. Ghanvat, D. B. Shinde, K. V. Khot and **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

148) Synthesis of 'Sea urchin' like microstructure h-MoO_3 by Chemical Bath Deposition.
N. D. Desai, V. V. Kondalkar, P. B. Patil, R. M. Mane, R. R. Kharade, **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

149) Synthesis of Bismuth Telluride Thin Film for Thermoelectric Application via Electrodeposition Technique.
P. B. Patil, K. V. Khot, V. V. Kondalkar, V. B. Ghanwat, R. M. Mane and **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

150) Rapid formation of ternary $CdZnSe_2$ chalcogenide thin film by microwave assisted chemical bath deposition.
C. S. Bagade, V. B. Ghanwat, S. D. Kharade ,K. V. Khot, R. R. Kharade, N. D. Desai, **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

151) Novel-approach for invention of nubbly-like Cd(SSe) thin film: Photoelectrochemical solar cell application.
K. V. Khot, P. B. Patil, R. R. Kharade, R. M. Mane and **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

152) Enhanced Electrochromic Performance of Nickel Oxide Thin Film: Synthesis via Electrodeposition Technique.
V. V.Kondalkar, P. B.Patil, K. V. Khot R. R. Kharade, R. M. Mane, P. S. Patil, S. Choudhury, **P. N. Bhosale.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

153) Fabrication of Dye Sensitized Solar Cells using Tagetes Erecta Flower Dye Extract as a Photosensitizer.
R. H. Mane, S. H. Mane, B. J. Walekar, P. S. Patil, **P. N. Bhosale**, S. R. Mane**.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

154) Synthesis and Characterization of 3, 4-Dihydropyrimidine-2(1H)-one (DHPM) Derivatives Doped Acrylic Polymers for Thin Film Coatings.
B. J. Walekar, R. H. Mane, S. N. Nadaf, N. J. Valekar, **P. N. Bhosale**, S. R. Mane**.**
Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

155) Chemosynthesis of MoBiInS5 Porous Nanonoodles and its Photoelectrochemical Performance.
N. B. Pawar, **P. N. Bhosale**.
National Conference on Recent Trends in Interdisciplinary Research in Materials Science 26th – 27th Dec. 2014 Organized by AnnasahebDange College of Engineering and Technology, Ashta.

156) Electrochromism in Organic-Inorganic materials and their applications.
Rohini R. Kharade and **P. N. Bhosale.**
National Conference on Recent Trends in Interdisciplinary Research in Materials Science 26th – 27th Dec. 2014 Organized by AnnasahebDange College of Engineering and Technology, Ashta.

157) Single step hydrothermal synthesis of hierarchical TiO_2 microflowers with radially assembled nanorods for enchanced photovoltaic preformance.
P. B. Patil, V. V. Kondalkar, K. V. Khot, V. B. Ghanwat, R. M. Mane, **P .N. Bhosale.**
National Confernce on "Frontier in Chemical and Material Science". (FCMS-2015), Department of Chemistry, SUK. (16^{th} to 17^{th} Jan., 2015).

158) Rapid synthesis of unique Cd(SSe) thin films via newly fabricated arrested precipitation technique and its photoelectrochemical performance.
K. V. Khot, S. S. Mali, P. B. Patil, V. B. Ghanwat, R. M. Mane, C. K. Hong**, P. N. Bhosale.**
National Confernce on "Frontier in Chemical and Material Science". (FCMS-2015), Department of Chemistry, SUK. (16^{th} to 17^{th} Jan., 2015).

159) Optostructral properties of chemically grown nanocrystalline $CdZnSe_2$ thin Films.
C. S. Bagade, V. B. Ghanwat, S. D. Kharade, K. V. Khot, **P. N. Bhosale.**
National Confernce on "Frontier in Chemical and Material Science". (FCMS-2015), Department of Chemistry, SUK. (16^{th} to 17^{th} Jan., 2015).

160) Synthesis of nanocrystalline Bi2Se3 thin films by arrested precipitation technique.
N. D. Desai, S. D. Kharade, C. S. Bagade, **P. N. Bhosale.**
National Confernce on "Frontier in Chemical and Material Science". (FCMS-2015), Department of Chemistry, SUK. (16^{th} to 17^{th} Jan., 2015).

161) Synthesis and characterization of impurity-I, impurity-III, impurity-V, impurity-VIII and development of UPLC-TOF mass spectroscopy, reverse phase-stability indicating method for Omperazole related substances by applying quality by design (QbD) concept.
S. B. Jadhav, C. K. Kumar, R. Bandichhor, **P. N. Bhosale.**
National Confernce on "Frontier in Chemical and Material Science". (FCMS-2015), Department of Chemistry, SUK. (16^{th} to 17^{th} Jan., 2015).

162) Potentiodynamic electrodepositiopn of ployaniline thin films for smart electrochromic device.
R. R. Kharade, S. S. Mali, S. M. Patil, **P. N. Bhosale.**

National Confernce on "Frontier in Chemical and Material Science". (FCMS-2015), Department of Chemistry, SUK. (16th to 17th Jan., 2015).

163) Synthesis and characterizations and thermoelectric properties of Cu_3SbSe_4 thin films prepared by arrested precipitation technique.
V. B. Ghanwat, S. S. Mali, C. S. Bagade, K. V. Khot, S. D. Kharade, R. R. Kharade, R. M. Mane, P. S. Patil, **P. N. Bhosale**.
International Conference on Green Chemitry Catlysis, Energy and Environment, (ICGC-2015), Department of Chemistry, Goa University, Goa. (22th to 24th Jan., 2015).

164) Combined Model of nucleation and growth of MoBiCuSe4 thin films for photovoltaic application.
S. S. Mohite, R. R. Kharade, S. S. Mali, C. K. Hong, D. G. Kanse, P. S. Patil, **P. N. Bhosale**.
International Conference on Green Chemitry Catlysis, Energy and Environment, (ICGC-2015), Department of Chemistry, Goa University, Goa. (22th to 24th Jan., 2015).

165) Highly efficinct $WO_3/Ag/MoO_3$ for electrochromic device application.
R. R. Kharade, S. S. Mali, S. M. Patil, **P. N. Bhosale.**
International Conference on Green Chemitry Catlysis, Energy and Environment, (ICGC-2015), Department of Chemistry, Goa University, Goa. (22th to 24th Jan., 2015).

166) Comparative Study of ECPV characteristics of dye and without dye sensitized Sb doped $Bi_2(Te_{1-x}Se_x)_3$ mixed metal chalcogenide thin films.
S. M. Patil, S. S. Mali, P. S. Patil, **P. N. Bhosale.**
International Conference on Green Chemitry Catlysis, Energy and Environment, (ICGC-2015), Department of Chemistry, Goa University, Goa. (22th to 24th Jan., 2015).

167) Photoelectrochemical performance of MoBiInSe5 mixed metal chalcogenide thin films.
R. M. Mane, S. S. Mali,V. B. Ghanwat, V. V. Kondalkar, K. V. Khot, S. R. Mane, D. B. Shinde, P. S. Patil and **P. N. Bhosale.**
4th International Conference on Materials Processing and Characterization (ICMPC-2015), 14-15th March 2015 GRIET, Hyderabad, India

168) Hierarchial Nanostructed TMO'S &MTMO'S Synthesis, Characterisation and Applications.
P.N. Bhosale and S. S. Mali, The Korean Society of Industrial and Engineering Chemistry,29 April-1 May 2015,BEXCO,BUSAN.

169) Photoelectrochemical Performance of Bi2Se3 thin films: Effect of

Substrate
N. D. Desai, V. B. Ghanwata, K. V. Khota, S.S. Mali, C.K. Hong**, P. N. Bhosale**
National Seminar of Application of Chemical and Material Science for Sustainable Development, Department of Chemistry, Shivaji University, Kolhapur (20 Feb.2016).

170) A chemical approach for synthesis of photoactive $Cd_{1-x}Zn_xSe$ thin films via arrested precipitation technique and its solar cell application
C. S. Bagade, V.B.Ghanwat, K. V. Khot, P. B .Patil, S. D. Kharade, N. D. Desai and **P .N. Bhosale**
National Seminar of Application of Chemical and Material Science for Sustainable Development, Department of Chemistry, Shivaji University, Kolhapur (20 Feb.2016).

171) Effect of Substrate on the Morphology of Nanostructured Bi_2Se_3 Thin Films and their Photoelectrochemical Performance
N.D.Desai, V.B. Ghanwat**, P.N.Bhosale**
International Conference on New horizons in Synthetic and material Chemistry (ICSMC-2015), Department of Chemistry, Mumbai University, Mumbai (26-28 Nov. 2015).

172) Single step fabrication of quaternary $Cu_2Cd(SSe)_2$ thin films via arrested precipitation technique and their solar cell performance
K. V. Khot, S.S. Mali, V. B. Ghanwat, P. B. Patil, C. S. Bagade, N.D. Desai, S. K Jagdale, D. B. Shinde, R. M. Mane and **P. N. Bhosale**
National Seminar of Application of Chemical and Material Science for Sustainable Development, Department of Chemistry, Shivaji University, Kolhapur (20 Feb.2016).

173) Natural Dye Sensitized TiO_2 Nanoflowers: A step towards harvesting renewable energy
N. D. Desai, K.V.Khot, S.S. Patil, S.V. Patil, S.R.Mane, P.N.Bhosale
International Conference on 'Go Green', C.T.Bora College Shirur, 12-13 Jan 2017.

174) Nanostructured CICSSe thin films synthesized via a Chemical Route For Solar cell applications
K.V.Khot, T.D.Dongle, N.B.Pawar, S.D. Kharade, **N.D. Desai**, S.S. Patil, M.P. Joshi, S.R. Mane, P.N.Bhosale
International Conference on 'Go Green', C.T. Bora College Shirur, 12-13 Jan 2017.

175) Novel Single Step Hydrothermal Synthesis of ZnSe Nanospheres for photoelectrochemical Cell applications.
S.S. Patil, **N.D. Desai**, S.D.Kharade, M.P. Joshi, K.V. Khot, P.N. Bhosale
International Conference on 'Go Green', C. T. Bora College Shirur, 12-13 Jan 2017.

176) Synthesis and Characterization of Cu_3Se_2 thin films via a self organized Arrested precipitation technique
M.P. Joshi, S.D. Kharade, **N.D. Desai**, S.S. Patil, K.V. Khot, P.N. Bhosale
International Conference on 'Go Green', C.T.Bora College Shirur, 12-13 Jan 2017.

177) Porous Nanonoodles Structured $MoBiInS_5$ Thin Film as Electrode for Photoelectrochemical Solar Cells
N.B.Pawar, S.D.Kharade,K.V.Khot, P.N.Bhosale
International Conference on 'Go Green', C. T. Bora College Shirur, 12-13 Jan 2017.

178) Green Approach to Synthesize Nanostructured Bi2Se3 thin Films:Chelating effect
S.D.Kharade, N.B.Pawar, M.P.Joshi, P.N.Bhosale
International Conference on 'Go Green', C. T. Bora College Shirur, 12-13 Jan 2017.

179) Surfactant assisted room temperature synthesis of Bi2Se3 Thin Films For Solar Cell Applications
N.D. Desai, V.B. Ghanwat, S.S. Patil, M.P. Joshi, P.N.Bhosale
National Conference On Frontier Areas In Chemical Sciences (FACS-2017), Department of Chemistry, Y.C. Institute of Science, Satara, 27-28 Jan 2017.

180) Thermoelectric Properties of In(III) Doped Copper Antimony Selenide Thin Films Deposited by Microwave Assisted Technique

V.B. Ghanwat, C.S. Bagade, **N.D. Desai**, K.V. Khot, S.M. Patil, M.P. Joshi, S.S. Patil, P.N. Bhosale

National Conference On Frontier Areas In Chemical Sciences (FACS-2017), Department of Chemistry, Y.C. Institute of Science, Satara, 27-28 Jan 2017.

181) Morphological Tuning of TiO_2 Thin Films Synthesised Via Hydrothermal Route For Solar Energy Harvesting

Neha D.Desai[1], Monika P.Joshi[1], Satish S.Patil[1], Tukaram D.Dongle[2], Popatrao N.Bhosale[1*]

National Conference on Innovative Research In Chemical Sciences (IRCS-2017) Department of Chemistry,Shivaji University, Kolhapur.

182) Surfactant Mediated Synthesis of TiO_2 Thin Films For photoelectrochemical Solar Cell Applications

Akshay S. Belgave[1], Prajakta T.Bhandage[1], Neha D.Desai[1], Popatrao N.Bhosale[1*]

National Conference on Innovative Research In Chemical Sciences (IRCS-2017) Department of Chemistry,Shivaji University, Kolhapur.

183) Enhancement of power conversion efficiency of CZTS thin films via arrested precipitation technique for solar cell

Chaitali S. Bagade,[a] Vishvanath B. Ghanwat[a] , Suvarta D. Kharade [a], Edward Van Keuren[b] and Popatrao N. Bhosale*[a]

National Conference on Innovative Research In Chemical Sciences (IRCS-2017) Department of Chemistry,Shivaji University, Kolhapur.

184) Facile synthesis and characterization of Cu(SSe) thin film by arrested precipitation technique

M. P. Joshi*[a], S. D. Kharade[a], N. D. Desai[a], S. S. Patil[a], P. N. Bhosale*[a]

National Conference on Innovative Research In Chemical Sciences (IRCS-2017) Department of Chemistry,Shivaji University, Kolhapur.

185) Optostructural, morphological and photoelectrochemical properties of ZnSe thin film grown by single step hydrothermal method
S.S. Patil, N.D.Desai, S.D. Kharade, M.P.Joshi, K.V.Khot, P.N.Bhosale
National Conference on Innovative Research In Chemical Sciences (IRCS-2017) Department of Chemistry,Shivaji University, Kolhapur.

186) Reduced grapheme oxide incorporated hydrothermally synthesized TiO2 thin films for Photoelectrochemical Applications
S.D.Kharade, N.D.Desai, P.A.Kadam, A.A.Sayyad, V.V.Sardesai, P.N.Bhosale
National Conference on Innovative Research In Chemical Sciences (IRCS-2017) Department of Chemistry,Shivaji University, Kolhapur.

D – List of National and International Conference / Symposia / Workshop / Seminars Attended.

1) Nuclear Physics and Solid State Physics Symposium. Dec. 27-31, 1982, Banarus Hindu University, Varanasi.
2) International Workshop on Physics of Semiconductor Devices. Dec. 5-10, 1983. National Physical Laboratory, New Delhi.
3) National Symposium on 'Emersing Trends in Surfaces, Interfaces and Thin Films; Oct. 16-18, 1983. Department of Physics, University of Poona (India).
4) 2nd all India Conference on Thin Film State Phenomenon. Feb. 1-4, 1984, Indian Institute of Technology, Madras.
5) National Symposium on 'Photovoltaic Materials and Devices; May 10-11, 1984 National Physical Laboratory, New Delhi.
6) Symposium on Solid State Electrochemistry and Electrophysics. 31st August 1st Sep. 1984. Central Electrochemical Research Institute, Karaikudi (India).
7) National Solar Energy Convention, 1985, 10-14, 1985. Bhopal (India)
8) National Symposium on Thin Film Science and Technology. Jan. 9-11, 1985. Indian Institute of Science,(IISc) Banglore.

9) National Seminars on Solid State Physics, Feb. 14-17, 1985 Indian Association for the Cultivation of Sciences (IACS) Jadhavpur, Calcutta.

10) National Conference on Photon- Induced Processes in Chemical and Biological Systems. Feb. 14-16, 1985. Banarus Hindu University, Varanasi.

11) Workshop on Solid State Energy Conversion. May 20-30, 1985. Department of Physics, Shivaji University, Kolhapur.

12) 3rd International workshop on the Physics of Semiconductor Devices. Nov. 27 to Dec. 2, 1985. Indian Institute of Technology, (IIT) Madras.

13) A Symposium on teaching of Modern Concepts in Chemistry. March 29, 1987, Satara.

14) National Workshop on Energy Resources through Photoelectrochemical Routes. May 21-22, 1987, Department of Physics, Shivaji University, Kolhapur-416004

15) National Seminars on Solar Energy and Rural Development. May 29-31, 1987, Department of Physics, Shivaji University, Kolhapur-416004

16) National Seminar on Bimass Energy. Indian Photobiology Society, Kolhapur 25th March 1989, Department of Physics, Shivaji University, Kolhapur-416004.

17) National Seminar on Bio-organic Materials. 24-25 Feb. 1995, Department of Chemistry, Shivaji University, Kolhapur-416004

18) National Conference on Applications of Solvent Extraction in Chemistry and Industry. 6-8 March, 1996, Department of Chemistry, Shivaji University, Kolhapur-416004

19) Seventh National Convention/ Conference of Electrochemists. 18-20 Nov. 1996 Department of Physics, Shivaji University, Kolhapur-416004

20) Indian Council of Chemists 15th National Conference. 24-26 Oct. 1996. Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Auragabad.

21) 34th Annual Convention of Chemists. 17-20 Dec. 1997. Dr. Babasaheb Ambedkar Biomedical Research Centre, Department of Chemistry, University of Delhi, Delhi.

22) Indian Council of Chemists 16th National Conference. 28-31 Dec. 1997. Department of Chemistry, Mangalore University, Mangalore.

23) 35th Annual Convention of Chemists, 4-7 Nov. 1998. Department of Chemistry, Karnataka University, Dharwad.

24) Nuclear and Radiochemistry Symposium. 19-22, Jan. 1999. Bhabha Atomic Research Centre, Mumbai.

25) National Seminar on Recent Trends in Material Science (NSRTMS-99) 25-27 Nov. 1999. Department of Physics, Sri. Venkateswara University, Tirupati.

26) 10th International Workshop on Physics of Semiconductor Devices (IWPSD-1999). IIT & SPL New Delhi (1999)

27) 18th Indian council of Chemists, 27-29 Dec. 1999, Department of Chemistry, N. M. University, Jalgaon.

28) International Conference on Electrochemical Power systems (ICEPS 2000) Chennai (9-10 Nov.2000)

29) INDO-Japanese Workshop on Micro-System Technology, Solid State Physics, Laborary, Delhi (23-25 Nov.2000)

30) Material and Semiconductor Technologies in Electronic Research (MSTER-2001) 11-15 Dec. 2001. IIT, New Delhi.

31) National Conference on Recent Advances in Material Science (NCMS-2000) 29-30Sept. 2000. Nehru Memorial College, Puthanampatti, Tiruchirappalli, Tamil Nadu, India.

32) 11th International workshop on the Physics of Semiconductor Devices(IWPSD-2001) Dec.11-15, 2001 IIT, New Delhi.

33) 20th Conference of Indian Council of Chemists, Department of Chemistry, Mysore University, Mysore. 22-24 Dec. 2001.

34) Seventh International Symposium on Advances in Electrochemical Science and Technology (ISAEST-2002) 27-29 Nov. 2002 IIT, Chennai, India

35) International Workshop on Preparation and Characterisation of Technologically Important Single Crystal. 26-28 Feb. 2001. NPL New Delhi.

36) National Symposium on Science and Vacuum Technology and Thin Films. 5-7 Sept. 2001. IISc, Bangalore.

37) National Conference on Materials and Semiconductor Technologies in Electronic Research (MASTER- 2000) 9-10NOV. 2000. G. B. Pant University of Agriculture & Technology, Panthnagar, U. P. India.

38) National Seminar on Physics of Materials for Electronic and Optoelectronic Devices. 25-27 Feb. 2002, Jai Narayan Vyas University, Jodhpur, Rajasthan, India.

39) *National Seminar on Advanced Materials (NSAM) Gorkhapur, Mar. 15, 2002.*

40) A One- Day Workshop on Patent Awareness

Shivaji University, Kolhapur Dec. 13,

41) *12th International Workshop on Physics of Semiconductor Devices.* .(IWPSD 2003) Indian Institute of Technology Madras, Chennai, Dec.16-20, 2003

42) National Workshop on Solid State Sensors: Theory and Applications

Shivaji University, Kolhapur, June. 16 -28, 2003.

43) National Seminar on Science and Technology of Thin Films Rajarshi Shahu Mahavidyalaya, Latur (M. S.)India October16-17,2004

44) International Conference on Electrochemical Power Systems Viceroy Hotel, Hyderabad, December 20-21, 2004 (CECRI)

45) Resource Person in "Training Workshop of B. Sc. III on New Syllabus in Chemistry" Yashavantrao Chvan Institute of Science, Satara. 1st –3rd Sept. 2005

46) National Seminar on Materials for Advanced Technologies. Dept. Of Physics, Shivaji University, Kolhapur. January 23-25, 2006

47) National Conference on Recent Trends in Chemistry, Mangalwedha Dist. Solapur. 3rd & 4th May 2006.

48) Eighth International symposium on Advances in Electrochemical Science and Technology (ISAEST-8), National Institute of Oceanography (NIO), Goa, (India),28-30 Nov., 2006

49) Indian Council of Chemists, Birala College, Kalyan (W), (India), 27-29 Dec., 2006.

50) International conference on advanced materials and applications (ICAMA-2007), November 15-17,2007, Shivaji University, Kolhapur.

51) National Seminar on New Horizons in Physics (NS-NHP-07), Satara (India), 20-21 January, 2007.

52) Materials Research Society of India, NPL, Delhi (India), 10-12 Feb., 2007

53) DAE Solid State Physics Symposium, 27-31 Dec 2007, Mysore.

54) Workshop on Frontiers in Physics and Chemistry Vision to 21st Century First Interdisciplinary, Shivaji University (India) – Hanyang University (S. Korea) Bilateral Summit. January-8-10, 2007 Department of Physics, Shivaji University, Kolhapur-416004

55) International Conference on Nanomaterials and Applications (ICNAMA- 9-11 Dec. 2008)

56) International workshop on Nanotechnology and Advanced Functional Materials. July9-11,2009 National Chemical Laboratory,Pune.

57) National Conference On Commercialization of Renewable Energ Technology(Cret-2009) 21st-23rd Oct.2009.D.Y.Patil University Kolhapur.

58) 8th National conference on Solid state Ionics: Materials for novel devices, Dec. 7-9, 2009, HS Gour University, Sagar, M P.

59) UGC-SAP National Seminar on Advanced Synthetic Methodologies and Functional Materials Dec. 23rd and 24th, 2009, Shivaji University Kolhapur.

60) 21st AGM of MRSI: Advanced Ceramic Materials: monoliths to composites, Feb. 9-11, 2010, Sardar Patel University, Vallabh Vidyanagar, Gujarat.

61) International conference on Recent Trends in Materials and Characterization (RETMAC-2010), 14, 15 Feb. 2010, National Institute of Technology Karnataka Surathkal, India.

62) International conference on Advances in Electron Microscopy and Related Techniques & XXXI Annual Meeting of EMSI-2010 Mar 8-10, 2010 BARC Mumbai.

63) National Seminar on Advanced Materials-2010 (NSAM), March 19-20, 2010, Dept. of Physics, Shivaji University, Kolhapur.

64) Ninth interatonal Symposium on Advaced Electrochemical science & technology, (ISAEST-9),2-4, 2010,Hotel Green Park,Chennai.

65) National Seminar on Advanced in Synthetic Mythologies & New Materials-(ASMNM-2011), 21-22 Jan. 2011, Department of Chemistry, Shivaji University, Kolhapur.

66) International Conference on Supramolecular Chemistry and Nanomaterials, 13-15 Feb, 2011, Department of Chemistry, Mumbai University, Mumbai.

67) International Conference on Nanomaterials and Nanotechnology (ICNANO) 18-21 Dec. 2011, University of Delhi, Delhi 2011

68) International conference on Physics of Materials and Materials Based Fabrication (ICPM-MDF) 18-21 Jan 2012, Department of Physics, Shivaji University

69) National Seminar on Recent Advances in Synthetic Chemistry and Nanomaterials (RASCN) 21-22 Jan 2012, Department of Chemistry, Shivaji University, Kolhapur.

70) International Conference on Materials Processing and Characterization (ICPMC) Gokaraju Rangaraju Institute of Engineering and Technology 8-10 March 2012, Bachupally, Hyderabad.

71) IUPAC- Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-12) 21-25 November 2012, at Le-Meridian Hotel.

72) National Conference on Chemistry of Chalcogens (NC3-2013) organized by Department of Applied Chemistry, at Defence Institute of Advanced Technology (DIAT) Pune on 14th and 15th January 2013.

73) National Conference on Recent Trends in Nanotechnology (NCRTNT-2012), organized by Vivekanand College, Kolhapur, India, held on 14th – 15th Dec. 2012.

74) International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai heled on 28th- 30th Jan. 2013.

75) National conference on current Research in chemical science(CRCS-2013), Department of Chemistry, Shivaji University, Kolhapur. Held on January 22nd & 23rd, 2013.

76) 10th International Society Advancement of Electrochemical Science and Technology (iSAEST-10) Symposium, Hotel Green Park, Chennai held on 28th- 30th Jan. 2013.

77) 24th Annaul General Meeting (AGM) Materials Research Society of India (MRSI), Indira Gandhi Centre for Atomic Research, Kalpakkam. 11-13, Feb. 2013.

78) National Conference on Advances in Chemical Sciences (ACS-2013) on 1-2 March 2013 at Dept. of Chemistry, M. D. University, Rohatak (Haryana).

79) National Conference on Frontiers in Chemical and Biological Sciences, 23rd-24th Sept. 2013, PDVP Mahavidyalaya, Tasgaon.

80) Yashavantrao Chavan institute of Science, Satara 10-12 oct. 2013 Emerging trends And Techniques in Chemistry.

81) 2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Dept. of Physics, Shivaji University, Kolhapur. 13th – 15th Jan 2014.

82) National Symposium on Current Trends in Chemical and Nanosciences, (CTCNS-2014) Dept. of Chemistry, SUK 17th – 18th Jan., 2014.

83) Eleventh ISEAC International Discussion Meet on Electrochemistry and its applications. 20th to 25th February 2014

84) Frontiers in Chemical Sciences (FCS-2014), Solapur University, Solapur 30th June 2014

85) UGC (WRO) Sponcered National Seminar on Recent trends in Analytical Chemistry (RTAC-2014). Art, Commerce and Science college, Sateral, 30th to 31st August 2014.

86) 3rd International Conference NANOCON 014. Bharti Vidyapeeth Deemed University Pune, 14th to 15th October 2014.

87) Third International Conference on Polymer Processing and Characterization (ICPPC 2014). Mahatma Gandhi University, Kottayam, Kerala, 11th to 13th October 2014.

88) National Conference on “Aspect of Economical and Practical Appliations of Non-conventional Energy Sources in India”. (12 Dec., 2014), Shikashanmaharshi Dr. Bapuji Salunkhe Mahavidyalaya, Miraj.

89) National Conference on “Recent Trends in Interdispilinary Research in Material Science” (NCRTIRMS-2014), Department of Mechanical and Civil Enginnering, Annasaheb Dange College of Engineering and Technology, Asta. (26th to 27th Dec., 2014).

90) National Confernce on “Frontier in Chemical and Material Science”. (FCMS-2015), Department of Chemistry, Shivaji Univesity Kolhapur. (16th to 17th Jan., 2015).

91) International Conference on Green Chemitry Catlysis, Energy and Environment, (ICGC-2015), Department of Chemistry, Goa University, Goa. (22th to 24th Jan., 2015).

92) "Review of Progress in Nanoscience"
Department of Chemistry, New Arts, Commerce and Science College Ahmednagar. 13th to 14th Feb 2015.

93) The Korean Society of Industrial and Engineering Chemistry, 29 April-1 May 2015,BEXCO, BUSAN.

94) International Conference On Nanomaterials And Nanotechnology, KSR Campus Tiruchengode, India, 7th to 10th December 2015.

95) International Conference on New horizons in Synthetic and material Chemistry (ICSMC-2015), Department of Chemistry, Mumbai University, Mumbai (26-28 Nov. 2015).

96) National Seminar of Application of Chemical and Material Science for Sustainable Development, Department of Chemistry, Shivaji University, Kolhapur (20 Feb.2016).

97) International Conference on 'Go Green', C. T. Bora College Shirur, 12-13 Jan 2017.

98) National Seminar on Emerging Trends in Chemical Sciences (ETCS-2017) Padmashri Vikhe Patil, College of Arts, Science and Commerce, Pravaranagar, Loni. (20 Jan 2017)

99) National Conference On Frontier Areas In Chemical Sciences (FACS-2017), Department of Chemistry, Y.C. Institute of Science, Satara, 27-28 Jan 2017.

100) National Conference on Innovative Research In Chemical Sciences (IRCS-2017), Department of Chemistry, Shivaji University, Kolhapur (1,2 Feb 2017)