

Dr. Ashish Prabhakar Yengantiwar

Personal Details:-

Name	Yengantiwar	Ashish	Prabhakar
	<i>SURNAME</i>	<i>FIRST NAME</i>	<i>MIDDLE NAME</i>
Department	Physics		
Designation	Assistant Professor		
Qualification(s)	Post -Doc, Ph. D., M.Sc. (Physics)		
Certification(s)/Professional Courses/Exams	SET		
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Member of:-

College Committees	Other Committees
NSS Program Officer from academic year 2017 onwards	Coordinator for UGC LIFE Program from academic year 2018 onwards

Research Done:

Ph.D. (Physics) – Department of Physics, University of Pune (Thesis title: Growth of Zinc Oxide Based Nanostructures: Optoelectronics and Hydrophobic Properties)
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Area of Interest in Research:

Materials for optoelectronics Applications, Nanomaterials for Energy and Environment, Water Splitting/ Hydrogen generation, Study of Soft matters.
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Research publications:

Yengantiwar, Ashish , Palanivel, Soundarrajan; Panikar, Archana ; Ma, Yanxiao; Pan, Shanlin; Gupta, Arunava, Direct Liquid Injection Chemical Vapor Deposition of Molybdenum Doped Bismuth Vanadate Photoelectrodes for Efficient Solar Water Splitting, Journal of physical chemistry C 121 (11), 5914–5924, 2017

Dastan, D., Leila Panahi, S., Yengantiwar, A.P. , Banpurkar, A.G., Morphological and Electrical Studies of Titania Powder and Films Grown by Aqueous Solution Method <i>Advanced Science Letters</i> 22 (4) 950-953, 2016
Arif Sheikh [#] , Ashish Yengantiwar[#] , Meenal Deo, Sarika Kelkar, Satishchandra Ogale, “Near-Field Plasmonic Functionalization of Light Harvesting Oxide-Oxide Heterojunction for Efficient Solar Photoelectrochemical Water Splitting: The case of the Au NP / ZnFe ₂ O ₄ / ZnO system” <i>Small</i> , 2013 , 9, No. 12, pg.2091–2096. [#] <i>equal contribution</i> .
Subas Muduli, Onkar Game, Vivek Dhas, Ashish Yengantiwar and Satishchandra Ogale, “Shape preserving chemical transformation of ZnO mesostructures into anatase TiO ₂ mesostructures for optoelectronic applications” <i>Energy & Environmental Science</i> , 2011, 4, 2835-2839.
Meenal Deo, Sarfraz Mujawar, Onkar Game, Ashish Yengantiwar , Arun Banpurkar, Sneha Kulkarni, Jyoti Jog and Satishchandra Ogale, “Strong Photo-Response in a Flip-Chip Nanowire p-Cu ₂ O/n-ZnO Junction” <i>Nanoscale</i> , 2011, 3, 4706-4712.
Lily Mandal, Meenal Deo, Ashish Yengantiwar , Arun Banpurkar, Jyoti Jog and Satishchandra Ogale, A Quasi-Liquid Iontronic –Electronic Light-Harvesting Hybrid Photodetector with Giant Response” <i>Advanced Materials</i> , 2012, 24, 3686–3691.
Meenal Deo, Deodatta Shinde, Ashish Yengantiwar , Jyoti Jog, Beatrice Hannover, Xavier Sauvage, Mahendra More and Satishchandra Ogale, “Cu ₂ O/ZnO Hetero-nanobrush: Hierarchical assembly, Field Emission and Photocatalytic Properties” <i>Journal of materials chemistry</i> , 2012, 22, 17055–17062.
Ashish Yengantiwar and Arun Banpurkar, “ZnO Nanorods Array Configuration for Ultraviolet Light Sensing” Proceedings of national conference on advances in electronics and its interdisciplinary applications (NCAEIA-2014) ISBN 978-93-5174-783-3, page 319-322.
Ashish Yengantiwar and Arun Banpurkar, “Electrical Properties of ZnO Nanostructured Device Configuration under Ambient Temperature and Humidity Environments”, Proceedings of national conference on advances in Chemical Sciences with Special Reference to Molecular Spectroscopy, Material Science & Organic Electronics (NCACS-2014), ISBN 978-93-5196-222-9 page 1-6.
Ashish Yengantiwar , Ramakant Sharma, Onkar Game and Arun Banpurkar, “Growth of Aligned ZnO Nanorods Array on ITO for Dye Sensitized Solar Cell” <i>Current Applied Physics</i> 11, 2011 pg. S113-S116.

Seminars and Workshops Attended (selected): -

Participation in Orientation/ Refresher/ Short-term Courses:

1. “**General Orientation Programme**” sponsored by UGC held at UGC-ASC from 12th January to 8th February 2009.
2. UGC sponsored “**Refresher Course in Physics**” held at the Department of Physics

<p>University of Pune, Pune from 16th November to 6th December 2010.</p> <p>3. Completed the “Refresher course in Nano-sciences” held at Kerala University Thiruvananthapuram, Kerala during the period from 11th November 2014 to 1st December 2014.</p> <p>4. “Short Course on Flexible Electronics” organized by National Centre for Flexible Electronics held at Indian Institute of Technology Kanpur (IITK), during the period from 2nd July 2018 to 7th July 2018.</p>
<p><u>Selected Research paper presented in International/National Conferences/Symposia/Workshops:</u></p> <p>Participated and presented a poster entitled “Efficient water reduction from CuFeO₂ thin films by chemical vapor deposition” in Advances in Catalysis for Energy and Environment “CACEE-2018” Conference on from January 10- 12, 2018 at Tata Institute of Fundamental Research (TIFR) Mumbai.</p>
<p>Presented a poster entitled “Chemically synthesized pure and Sr- doped CuBi₂O₄ for photoelectrochemical application ” in the International Conference on Nanotechnology for Human Welfare (ICNHW-2018) organized by Department of Physics, Haribhai V. Desai College, Pune-02 in association with College of Engineering, Pune and Microbiologists Society India, on 1 – 3 February 2018</p>
<p>Participated in “2017 MRS Spring Meeting & Exhibit” from April 17- 21, 2017 at Phoenix, Arizona, USA.</p>
<p>Poster entitled “Growth of aligned ZnO nanorods array on ITO for DSSC” in International Conference “TUMRS-ICEM 2010” at KINTEX, Seoul, South Korea from 22 to 27 August, 2010.</p>
<p>Poster entitled “Fabrication of UV photoswitchable ZnO nanorod based varistor on interdigitated Cu-electrode” in the “Science day” at National Chemical Laboratory, Pune from 24 to 25 February, 2011.</p>
<p>Poster entitled “Zinc Oxide (ZnO) Nanorods Based Ultraviolet Photo-switchable Device Configuration” presented in International Conference of Materials for Advanced Technology (ICMAT 2013), held at Suntec, Singapore during June 30-July 5, 2013.</p>
<p>Poster entitled “Growth of ZnO-Cu₂O Multiscale Hetero-nanostructures for Superhydrophobicity and Droplet Bouncing” presented in “2013 MRS Fall Meeting” at Boston, Massachusetts, USA, from 1 - 6 December, 2013.</p>
<p>No. of International conference/workshop/symposium participated: 15</p> <p>No. of National conference/workshop/symposium participated: 20</p> <p>No. of State & regional conference/workshop participated: 15</p>

Patent:

Patent title	Name of Applicant(s)	Patent No.	Grant	Agency / country	Status
Shape Preserving Chemical Transformation of Zno- Mesostructures into Anatase TiO ₂ . Mesostructures for Optoelectronic Application	Subas Muduli, Onkar Game, Vivek Dhas, Ashish Yengantiwar , Abhik Banerjee, and Satishchandra Ogale	US9290392B2	22 nd March 2016	US patent	Grant

Seminars and Workshops Organized (selected): -

Course Coordinator in Intercollegiate Poster competition based on theme "Magical Nanoworld" organized for undergraduate science students from all interdisciplinary subjects held at Fergusson College, Pune on Feb 9, 2016 supported by Department of Biotechnology (DBT), Govt. of India (30 th year of celebration)
Organizing Secretary for the National Conference on Advanced Materials and Applications (NCAMA-2016) held at Department of Physics, Fergusson College with the support from BCUD, Savitribai Phule Pune University and Department of Biotechnology (DBT), Govt. of India (30th year of celebration) on 4th & 5th March 2016. Total 108 Abstracts has been received, out of which 21 oral and 87 posters have been presented in this conference. Also 34 full length papers are published in the Proceedings of National Conference on Advanced Materials and Applications (NCAMA-2016).
Course Coordinator for Introduction to Nanomaterials and Nanoscience (Workshop) 'Hands on training program' sponsored DBT-STAR-College Scheme Govt. India, on 18 Dec 2014- 26 Dec 2014.
National conference on Ancient Science and Technology: Retrospection and Aspiration (ASTRA-2015) worked as Member of local organizing committee, January 10-11, 2015
Member of local organizing committee for Regional Conference for Pune University College Teachers organized by BCUD, University of Pune and Fergusson College, Pune on 17- 18th June 2015.
Workshop on Revision of M.Sc.-I, Physics Syllabus (credit system) with BCUD, University of Pune on 5th March 2013.

Other Accomplishments:-

2016-2017- One-year post-doctoral Raman Fellowship at University of Alabama, Tuscaloosa, USA sponsored by UGC, New-Delhi, Govt. of India.
2014–Visiting Fellowship at Jawaharlal Nehru Centre for Advanced and Scientific Research (JNCASR), Bangalore (3 months)
2011 -2013-UGC Teacher Fellowship for Ph.D. degree (2 years)

Recognition & Affiliation: -

1. M. Phil. (by Research) of Savitribai Phule Pune University, Pune
2. Permanent Post-Graduate Teacher of Savitribai Phule Pune University, Pune

Professional membership:

Life member: IPA, MRSI, IAPT

Annual member: RSC (London), MRS (USA), MRS (Singapore)

Research Projects:

Sr. No.	Project Title	Funding Agency	Sanctioned Amount (Rs.) and Duration
1.	Deposition & Characterizations of hydrophobic and hydrophilic thin films	BCUD, University of Pune	2.5 lakhs and 2009-2012
2.	Deposition of metal oxides nanostructures for optoelectronics applications	University Grant Commission College with Potential for Excellence (UGC-CPE)	Rs. 8,000 2013-2014
3.	Deposition of Zinc Oxide nanostructures for optoelectronics applications	BCUD, Savitribai Phule Pune University	2.6 lakhs and 2013 -2015
4.	Photosensors based on metal –oxide nanostructures on flexible substrates	University Grant Commission College with Potential for Excellence (UGC-CPE)	Rs.20,000 and 2014-2015

5.	Theme based poster on Topic “Energy based devices from Nanomaterials”	University Grant Commission College with Potential for Excellence (UGC-CPE)	Rs. 5,000 2014-15
6	Hand on experiment on short duration course “Introduction to Nanomaterials and Nano-science”	DBT STAR College Scheme	Rs. 2 lakhs 2014-15
7	MINI PROJECT entitled “DC Electrowetting of Dielectric Materials”	under MAST program for UG students under ‘College of Excellence’ (CE) 2017-18.	Rs. 3000
8	SHORT TERM RESEARCH PROJECT entitled “Study of CuFeO ₂ photocathode thin films for hydrogen fuel”	under STAR program “College of Excellence” (CE) 2017-18	Rs. 24,000