# **CURRICULUM VITAE**

# Dr. Nanasaheb Pandharinath Huse

M.Sc. Physics, NET, SET, Ph.D. Assistant Professor & Head, Department of Physics, NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar.

Email id: <u>drnphuse@ntvsgtpcollege.org</u>, <u>nphuse26@gmail.com</u> ORCID iD: <u>https://orcid.org/0000-0003-0719-885X</u> Contact No.: +91-9011947785 / +91-9049124481.



Citations: 228,

h-index: 09,

i10-index: 08

# CAREER OBJECTIVE

To pursue a challenging career in the field of research and development in Physical Sciences. Want to grow as a part of a progressive organization that gives scope to enhance knowledge, skills and helps to reach the pinnacle in this field with sheer determination, dedication and hard work.

## **FERSONAL DETAILS**

Date of Birth	: 26/10/1989.
<ul> <li>Nationality</li> </ul>	: Indian.
✤ Gender	: Male.
Category	: NT-D (VANJARI).
Marital Status	: Married.
Languages Known	: English, Hindi and Marathi.
Institutional Email	: <u>nphuse@ntvsgtpcollege.org</u>
Strengths	: Confident, good adaptability, organized and consistent.

# **EDUCATION**

- Completed Master of Science in Physics with Electronics specialization from Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- Qualified CSIR-UGC NET with All India Rank "AIR-96 LS" held in December 2014 conducted by Council of Scientific and Industrial Research, Human Resource Development Group.
- Qualified SET exam accredited by U.G.C. & conducted by Savitribai Phule Pune University state agency on 29 May 2016.
- Awarded Ph.D. degree on the topic entitled, "Growth and Development of Economic and Non-Toxic Nanostructural Cu<sub>2</sub>ZnSnS<sub>4</sub> (CZTS) Solar Cell" on May 05, 2018 under the guidance of Dr. Ramphal Sharma, Professor & Head, Department of Physics & Department of Nanotechnology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS-India).

## **EDUCATIONAL DETAILS**

Examination	amination Board / University		Percentage
Ph.D. (Physics)	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (MS) India.	05 May 2018	Awarded
UGC-SET (Physics)	Accredited by U.G.C. & Conducted by Savitribai Phule Pune University state Agency	Jan-2017	Qualified
CSIR-UGC NET (Physics)	Council of Scientific & Industrial Research, Human Resource Development Group, New Delhi.	March-2015	AIR 96-LS
PET (Physics)	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (MS) India.	Feb-2013	56.50
M.Sc. (Physics)	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (MS) India.	Jun-2012	73.92
B.Sc.	B.Sc. Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (MS) India. Jun-2010		64.24
HSC	HSC Maharashtra State Board of Secondary and Higher Secondary Education, Pune (MS) India. Jun-2007		62.00
SSC	Maharashtra State Board of Secondary and Higher Secondary Education, Pune (MS) India.	Jun-2005	68.53

## **4** <u>INSTRUMENTAL SKILLS</u>

- Synthesis of nanocrystalline thin films of semiconductors by wet chemical methods such as SILAR, Spin Coater and CBD technique.
- Synthesis of nanocrystalline thin films with the help of sophisticated instruments like Vacuum coating unit model no.:12A4D designed by Hind High Vacuum Co. (P) Ltd. Bangalore and Planar Magnetron RF/DC Sputtering unit model no.:12" MSPT designed by Hind High Vacuum Co. (P) Ltd. Bangalore.
- Handling of Solar Simulator: [160-9008] (SF300-AAA) Small Collimated Beam Solar Simulator and I-V Keithley 2400 Source Meter.
- Handling of Interface 1000 Potentiostat / Galvanostat / ZRA 06086 by Gamry Instruments.
- Handling of UV-VIS Perkin-Elmer Lambda-25 Spectrophotometer and Programmable Furnace.
- Handled Bruker AXS D8 ADVANCE X-ray Diffractometer.

Handling of four probes electrical resistivity set up and Hall Effect Measurement set up. Annealing Furnace of Hindustan Apparatus Mumbai.

## **COMPUTER KNOWLEDGE**

- **Solution** MS-CIT (MSBTE & MKCL) course completed with 74% in regular mode in July 2008.
- Can work in Computer programs like Microsoft Word, PowerPoint, Excel and Paint.
- Can also work in Origin 7.0 Professional, Diamond 3.2 version, WSxM 5.0 Develop 8.0, EndNote X3 program, ChemDraw Ultra 8.0 and DFT VASP MedeA software.

## **A RESEARCH INTEREST**

- A quality research in the field of nanostructural inorganic thin films for solar cell device fabrication by facile and low-cost chemical techniques.
- Nanostructural and nontoxic thin films of inorganic materials for cost-effective solar cells.

## **EXPERIENCE**

- Recognized as Research Guide of the Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon from 12-07-2022 for imparting instructions in the subject Physics for Ph.D. by Research under the faculty of Science and Technology.
- Working as an In-charge Head of the Department of Physics in NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar since 01 October 2017 to till date.
- Working as an Assistant Professor in Physics approved by North Maharashtra University, Jalgaon as a regular full-time faculty appointed by University committee as per UGC regulations in NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar since 10 August 2017 till date.
- Recognized as a Post Graduate Teacher of the K. B. C. North Maharashtra University, Jalgaon in the subject of Physics approved by University Research and Recognition committee as per UGC regulations in NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar from 16 October 2019 to till date.
- Worked as a Project Fellow in Major Research Project (MRP) of Department of Science and Technology (DST-SERB) sanctioned to Dr. Ramphal Sharma, Professor, Thin Film and Nanotechnology Laboratory, Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad since 25 September 2013 to 31 March 2017.
- Performed Experiment on Swift Heavy Ions (SHI) Irradiation on Structural and Optoelectronic Properties of Plasmonic Ag Nanoparticles doped CdS<sub>1-x</sub>Se<sub>x</sub>/Cu<sub>2</sub>S for Photovoltaic's at Inter-University Accelerator Centre (IUAC), New Delhi during the period 07-11-2014 to 25-11-2014.

- Two-years working experience as a Contributory Post-Graduate Teacher on CHB for Master's Program in Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for the academic years 2015-17.
- One year working experience as a Contributory Post-Graduate Teacher on CHB for Master's Program in Department of Nanotechnology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad in the academic year 2016-17.

Sr. No.	Name of the Student	Date of registration	Registration No.	Date of Award
1	Mr. Avinash Girdhar Patil	14-10-2022	KBCNMU/11/Ph.D./ Phy./1245/2020	Ongoing
2	Miss. Neha Prashant Chaware	14-10-2022	KBCNMU/11/Ph.D./ Phy./1255/2020	Ongoing
3	Miss. Rina Sunil Lohar	14-10-2022	KBCNMU/11/Ph.D./ Phy./1262/2020	Ongoing

## **k** Research students guided for Ph.D.

## **BOOK AUTHORED**

- Authored a Text book of F. Y. B. Sc. Physics syllabus of Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon as a co-author entitled, "Physics Practical", published jointly by Kumud and Vrunda Publications, Jalgaon, ISBN No.: 978-93-88834-01-8.
- Authored a Text book of S. Y. B. Sc. Physics syllabus of Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon as a co-author entitled, "Waves, Oscillations and Acoustics", published jointly by Kumud and Vrunda Publications, Jalgaon. ISBN No.: 978-93-88834-39-1.

## **EXPERT LECTURE DELIVERED**

- Delivered an Expert Lecture as a resource person in one week online certificate course in Renewable Energy on the topic of "Hydropower Energy" in Shri Shivaji Education Society, Amravati's Shri Shivaji Science & Arts College, Chikhali, Dist. Buldana, Maharashtra on 17 September 2021.
- Delivered an Expert Lecture on the topic of "Optical Fibre" for all first year students in Government Polytechnic, Ahemednagar on 05 March 2021.
- Delivered the Guest Lecture at the District level All India Students Science Conclave (Akhil Bhartiay Vidyarthi Vidnyan Melava) at Eklavya High School, Nandurbar on 07 August 2018.

#### **EXAMINATIONS DUTIES OF UNIVERSITY**

- Worked as a member of Flying Squads Committee for the examination conducted by the North Maharashtra University, Jalgaon in the second half of 2018 from 29-10-2018 to 31-10-2018.
- Worked as a member of question paper setting panel for M.Sc. Physics examination held in April/May 2019 and attended a meeting on 04 February 2019 in Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.
- Worked as a Chairman of question paper setting panel for M.Sc. Physics examination held in April/May 2020 and attended a meeting on 03 February 2020 in Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.
- Worked as a Chairman of question paper setting panel for M.Sc. Physics examination held in Jan/Feb 2021 and attended a meeting on 16 December 2020 in Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.
- Worked as an Internal and External examiner in semester end practical examinations of F.Y.B.Sc., S.Y.B.Sc. and T.Y.B.Sc. conducted by Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.
- Worked as a Junior Supervisor in semester end theory examinations conducted by Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.

#### **4** CONFERENCE/WORKSHOP/SEMINAR PARTICIPATED/PAPER PRESENTED

- Participated and presented a paper entitled, "Synthesis of Kesterite Cu<sub>2</sub>ZnSnS<sub>4</sub> Thin Film by Simple Chemical Bath Deposition to Study its Optoelectronic Properties" in one day International e-Conference on "Ethical and Quality Aspects in Nanoscience and Nanotechnology Research" (ICEQANNR-2020) organized by Department of Physics, Vasantrao Naik Art's, Commerce and Science College, Shahada in collaboration with Kavayitri Bhahinabai Chaudhari North Maharashtra University, Jalgaon on 20<sup>th</sup> June 2020.
- Actively participated and in two day "International Conference on Current Research in Applied and Fundamental Sciences 2021 (CRAFTS-2021)" held during October 5-7, 2018 organized by School of Science, Sandip University, Nashik in collaboration with Microbiologists Society, India held virtually on 12<sup>th</sup> and 13<sup>th</sup> July, 2021.
- Actively participated in "International Materials Science Conference-2021 (IMSC-2021)" funded by SAP-DRS-III, UGC, India organized by School of Physical Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, India on digital platform during 18-20<sup>th</sup> March 2021.
- Actively participated in online International Conference on "Smart Materials: Application to Devices-2021 (ICSMAD-2021)" jointly organized by Department of Physics and Department of Electronics, Kamla Nehru Mahavidyalaya, Nagpur held on 17-18<sup>th</sup> May, 2021.
- Actively participated and presented a scientific paper (poster) in "International

**Conference on Multifunctional Advanced Materials (ICMAM-2018)**" held during **October 5-7, 2018** organized by Kamla Nehru Mahavidyalaya, Nagpur, India held during October 05-07, 2018.

- Actively participated and presented a scientific paper (poster) in "8<sup>th</sup> International Conference on Advanced Materials Development & Performance (AMDP-2017)" organized by Department of Physics, Savitribai Phule Pune University, Pune, India held during July 11-15, 2017.
- Actively participated and presented a scientific paper (poster) in "International Conference on Technologically Advanced Materials (ICTAM) and Asian Meeting on Ferroelectricity (AMF10)" jointly organized by the Society for Technologically Advanced Materials of India (STAMI) and University of Delhi during November 7-11, 2016 at University of Delhi, New Delhi.
- Actively participated and presented a research paper in two days "International Conference on Condensed Matter and Applied Physics (ICC 2015)" organized by Government College, Bikaner during October 30-31, 2015.
- Actively participated and presented a research paper at "International Conference on Functional Materials & Microwaves (ICFMM-2015)" organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during December 28-30, 2015.
- Actively participated and presented a research paper in 61<sup>st</sup> DAE-Solid State Physics Symposium sponsored by Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India held at KIIT University, Bhubaneswar between 26 and 30 December 2016.
- Actively participated and presented a research paper in UGC sponsored National Conference on "Recent Development in Nanomaterials & Their Applications (NC-RDNMA 2016)" organized by Department of Electronics, G. T. P. College, Nandurbar on 5-6 February 2016.
- Actively participated in two days National Workshop on "Research papers and proposal writing" organized by Government College of Arts & Science, Aurangabad on 27<sup>th</sup> & 28<sup>th</sup> September 2013.
- Actively participated in two days National Seminar on "Electronic Sensors and its Applications" organized by Department of Electronics, Deogiri College, Aurangabad on 20<sup>th</sup> & 21<sup>st</sup> February 2015.
- Attended UGC-SAP two days "National Seminar on Materials Science, X-ray and Gamma Ray Spectroscopies" organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) held during March 29-30, 2017.
- Actively participated and also worked as a **member of committee** appointed by Chairman, Board of Studies, North Maharashtra University, Jalgaon for Paper wise modification of syllabus under CBCS system in the **Workshop** on **"Re-structuring the syllabus of F. Y. B. Sc. (Physics) as per CBCS pattern of UGC"** organized by C. H. C. Arts, S. G. P. Commerce and B. B. J. P. Science College, Taloda on 30<sup>th</sup> June 2018 on behalf of

North Maharashtra University, Jalgaon.

- Actively participated in the one day Workshop on "Choice Based Credit System" organized by NTVS's G. T. Patil Arts, Commerce and Science College, Nandurabar in collaboration with the Kavayitri Bahinabai Chaudhari North North Maharashtra University, Jalgaon held on 31 August 2018.
- Participated as a delegate and attended Main Conference and Parallel sessions at TechNext India 2017 Conference on 14-15 January 2017 jointly organized by Computer Society of India (CSI) and IIT Bombay at Victor Menezes Convention Centre, IIT Bombay, Powai, Mumbai.
- Actively participated in one-day Workshop on "Statistical Analysis (SSPS)" organized by Vivekanand Shikshan Sanstha's Vivekanand Arts, Sardar Dalipsingh Commerce & Science College, Aurangabad held on Sept. 11, 2014.
- Actively participated in One Day Author Workshop on "Scientific Writing & Publishing Scholarly Articles" jointly organized by Knowledge Resource center (University Library), Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and Springer on 4<sup>th</sup> November 2015.
- Attended one-day Familiarization workshop on "Opportunities in gas sensor research" organized by RUSA – Centre for Advanced Sensor Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) on December 3, 2016.
- Actively participated in two days National Seminar on "Media Ethics & Responsibility: Need for Introspection" organized by Department of Mass Communication & Journalism, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 15<sup>th</sup> & 16<sup>th</sup> September 2013.
- Participated in one day International Conference on "Clean Energy Conversion and Storage Technologies" organized organized by IQAC and Department of Physics, S. Z. S. P. Mandal's Shri Pancham Khemraj Mahavidyalaya, Sawantwadi, Dist- Sindhudurg on 30<sup>th</sup> April 2020.
- Participated in International Webinar on "Challenges of Covid-19 Pandemic for Indian Economy" organized by Malini Kishor Sanghavi College of Commerce and Economics, Mumbai, Maharashtra, India on 2<sup>nd</sup> May 2020.
- Participated in "International Webinar on Sustainable Chemistry, (IWSC-2021)" organized by Association of Chemistry Teachers (ACT), C/o Homi Bhabha Centre for Science Education (TIFR), Mumbai India on 18<sup>th</sup> March 2021.
- Attended an International E-Conference on "Strategies & Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to the World" organized by Government Vidarbha Institute of Science & Humanities, Amravati, Maharashtra, India on 15<sup>th</sup> to 17<sup>th</sup> May, 2020.
- Participated in one day International online workshop on "Nanomaterial synthesis is emerging facet of the world" organized by Late Pushpadevi Patil Arts and Science College, Risod on 20<sup>th</sup> May 2020.
- \* Attended E-International Symposium on Synthesis and Characterization of Smart

**Materials and Their Potential Applications (ISSCSMPA-2020)**, using CISCO Webex platform organized by University School of Basic and Applied Sciences, Guru Gobind Singh Indraprastha University, New Delhi, India during **14<sup>th</sup> to17<sup>th</sup> June, 2020**.

- Participated in an International Webinar on "Law & Social Transformation Post Covid-19" organized by IQAC, NTVS'S Gajmal Tulshiram Patil Arts, Commerce and Science College, Nandurbar, Maharashtra on 25<sup>th</sup> June 2020.
- Participated in one day International Webinar on "Role of Advance Materials for Optoelectronic Devices (RAM-OD-2020)" organized by VVM's S. G. Patil Arts, Science and Commerce College, Sakri, District: Dhule, Maharashtra, India on 12<sup>th</sup> July 2020.
- Participated and enriched its quality by his innovative and meaningful ideas in one day International e-Conference on "Recent Trends On Advanced Materials & Environment (RTAME) 2020" organized by Department of Chemistry, IQAC and Research & Development Cell on 05<sup>th</sup> August 2020 organized by DLS PG College, Bilaspur (Chhattisgarh).
- Successfully participated in International E-Conference on Multifunctional Advanced Materials (ICMAM-2020) on 7<sup>th</sup> August 2020 organized by Mahatma Gandhi Arts, Science & Late N. P. Commerce College, Armori, Dist- Gadchiroli, Maharashtra, India.
- Actively participated in International e-conference on "Merging continuous flow chemistry and supported catalysis for the synthesis of bioactive molecules" organized by IQAC & Chemistry Department, Mahatma Gandhi Vidyamandir's Arts, Science and Commerce College, Manmad on 21<sup>st</sup> September, 2021.
- Successfully completed "International short Course on Advanced Physics" (online) organized by Department of Physics, K. J. Somaiya College of Science & Commerce, Mumbai, India from 6<sup>th</sup> to 8<sup>th</sup> August, 2020.
- Participated in International Webinar on "Innovations in Materials for Energy & Environment" jointly organized by Maharashtra Academy of Sciences, Center for Materials for Electronic Technology and S.S.P. Mandal's C. T. Bora College, Shirur on 9<sup>th</sup> August 2020.
- Participated in International Webinar on "Role of Chemists in discovery of Drug and Vaccine for COVID-19" on the eve of Birth Centenary Celebrations of Former Prime Minister Sri. P. V. Narsimha Rao Garu, organized by the Department of Chemistry, University College of Science, Satavahana University, Karimnagar, Telangana, India, on 16<sup>th</sup> August, 2020.
- Participated in the one day online International Conference on "Zero Dimensional Materials" organized by Department of Physics, K.L.E. Society's P. C. Jabin Science College, Vidyanagar, Hubballi, Karnataka, India held on 27 August 2020.
- Participated in the One Day International Webinar entitled "Recent Scenario In Energy Generation and Storage Technologies" (IWRSEGST-2020) organized by Department of Physics, Dahiwadi College Dahiwadi and Internal Quality Assurance Cell (IQAC) on 5<sup>th</sup> September 2020.
- Participated in one day International Webinar on "Recent Development in Physics"

organized by Department of Physics, Rural Institute of Higher Studies, Bhograi, Balasore, Odisha, India held on **13 September 2020.** 

- Attended an International Web-Conference on "Advanced Nanostructured Materials for Energy Generation, Storage and Smart Applications" organized by Department of Physics, Agricultural Development Trust's Shardabai Pawar Mahila Arts, Commerce and Science College, Shardanagar, Baramati, Maharashtra, India held on 9<sup>th</sup> and 10<sup>th</sup> October 2020.
- Actively Participated in National e-Conference on "Impact of Covid-19 on Higher Education" organized by National Service Scheme Unit, G. T. Patil College, Nandurbar (MS) on 28 January 2021.
- Actively Participated in one day National Virtual Seminar on "Sustainable Development Goals (NSSDG-2023)" sponsored by Students Development Department, K. B. C. North Maharashtra University, Jalgaon and organized by Department of Physics and Geography, Vasantrao Naik Arts, Science and Commerce College, Shahada, Dist-Nandurbar (MS) on 14 March 2023.
- Successfully Participated in IP Awareness/Training program under "NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION" on March 01, 2023 jointly organized by Intellectual Property Office and MoE's Innovation Cell, India.
- Participated in the three day Multidisciplinary National Webinar on From Local to Global: The Revolutionary Changes in Technology, Culture and Literature jointly organized by S. S. V. P. Sanstha's L. K. Dr. P. R. Ghogrey Science College, Dhule and Khandesh Chapter of English Language Teachers' Association of India (ELTAI) on 1-3 May 2020.
- Successfully participated in IP Awareness/Training program under "NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION" on May 02, 2023 organized by Intellectual Property Office, India.
- Participated in the "National Webinar on 'Cryptography'" during September 10-12, 2021, organized by the Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon in collaboration with Indian Institute of Information Technology, Lucknow.
- Participated in the webinar on "Supercapacitors, Solar Cell Devices and Solar Thermal Technology", delivered by Professor Babasaheb R. Sankapal, Professor Hemachandra Gali, Physics Department, VNIT Nagpur and Dr. Sandeep S. Joshi, Mechanical Engineering Department, RCOEM, Nagpur organized by Physics Department and Solar Energy Research Center (SERC), RCOEM, Nagpur during 11-14<sup>th</sup> May 2020.
- Attended "Workshop on Curriculum Development in Physics at T.Y.B.Sc. (CBCS Pattern)" on the behalf of KBCNMU, Jalgaon at PSGVP Mandal's SIP Arts, GBP Science and STKVS Commerce College, Shahada, Dist - Nandurbar (M.S.) from 15<sup>th</sup> to 16<sup>th</sup> May 2020.
- Participated in two day National online workshop on "Nanomaterials for Human safety and Environment" organized by Department of Physics, K. M. E. Society's G. M. Momin Women's College, Risod on 15<sup>th</sup> and 16<sup>th</sup> May 2020.
- Participated in the National Level workshop on "Recent Trends and Opportunities in Physics (Online)" organized by the Department of Physics, School of Advanced Sciences,

VIT-AP University, Andhra, Pradesh, India on 10<sup>th</sup> and 17<sup>th</sup> April 2021.

- Participated in two day online National level workshop on "LMS e-Content Development" organized by the IQAC and Department of Computer Science Bhusaval College, Bhusaval on 16<sup>th</sup> and 17<sup>th</sup> May 2020.
- Actively participated in the National Conference on "Biomedical Instrumentation and It's Application" organized by Department of Electronics, Kamla Nehru Mahavidyalaya, Nagpur, Maharashtra, India on 21<sup>th</sup> May 2020.
- Actively participated in National e-Conference on "Recent trends in Chemical and Physical Sciences (NCRTCPS-21)" organized by Departments of Chemistry, Physics, Electronics, Mathematics and Computer Science of S.V.S's Dadasaheb Rawal College, Dondaicha on 1<sup>st</sup> September 2021.
- Actively participated in One Day Online National Workshop on "Role of IQAC in Assessment and Accreditation Process" organized by Internal Quality Assurance Cell of PSGVP Mandal's SIP Arts, GBP Science and STKVS Commerce College, Shahada, Dist -Nandurbar (M.S.) in collaboration with State Project Directorate, RUSA, Maharashtra and Joint Director, Higher Education, Jalgaon Region on 22<sup>nd</sup> May 2020.
- Participated in National Webinar on "Current issues in Intellectual Property Rights (IPR)" organized by NTVS's College of Law, Institute of Legal Education and Research, Nandurbar in collaboration with EdFly on 22<sup>nd</sup> May 2020.
- Participated in National level Webinar on "Nanoscience for 21<sup>st</sup> Century" organized by IQAC & Department of Chemistry, Shri. Anand College, Pathardi, Ahmednagar on 13<sup>th</sup> September, 2021, through online platform.
- Participated in the One Day Workshop on "Audit Courses" jointly organized by IQAC, Department of Biotechnology and Department of Physical Education & Sports (Under DBT Star College Scheme), PSGVPM's SIP Arts, GBP Science and STKVS Commerce College, Shahada, Dist- Nandurbar, on 5<sup>th</sup> May 2021.
- Participated in Online Workshop on "Sustainable Development in Chemical Processes" from 21<sup>st</sup> May 2020 to 23<sup>rd</sup> May 2020 organized by Chemical Engineering Department, K. K. Wagh Institute of Engineering Education & Research, Nashik.
- Participated in the Webinar on "Exam from Home & Evaluations from Home" organized by People Education Society's (Mumbai) Dr. Babasaheb Ambedkar College of Arts & Commerce, Nagsenvana, Aurangabad, Maharashtra on 27<sup>th</sup> May 2020.
- Attended an e-Seminar on "Latest Trends in Nano Material Synthesis, Advanced Microprocessors and Challenges" organized by Department of Electronics, Physics and Internal Quality Assurance Cell of S. S. V. P. Sanstha's L. K. Dr. P. R. Ghogrey Science College, Dhule on 9th & 10th June 2020.
- Participated in the National Level E-Conference on Digital Transformation in HEIs organized by Manjara Charitable Trust's Smt. Sushiladevi Deshmukh Mahila Mahavidyalaya, Latur, Maharshtra, India on 10<sup>th</sup> June 2020.
- Participated in the National Webinar on "COVID-19 and Digital Transformation" organized by NTVS'S Gajmal Tulshiram Patil Arts, Commerce and Science College,

Nandurbar, Maharashtra on **11<sup>th</sup> June 2020**.

- Participated in the Interactive Webinar on "Use and Practice of Data Science and Artificial Intelligence in Social Work" organized by Shri. Shivaji Education Society's Shri. Ramrao Sarnaik College of Social Work, Washim, Maharshtra, India on 13<sup>th</sup> June 2020 on online platform.
- Participated in National Online Seminar on "Applied Materials and Their Applications" jointly organized by Department of Physics and IQAC, Rayat Shikshan Sanstha's Rajarshi Chhatrapati Shahu College, Kolhapur, Maharshtra, India on 19<sup>th</sup> June 2020.
- Participated in Two Day's National Level Webinar on "Innovative Research in Computer Science & Paper Writing Skills" organized by Department of Computer Science, Smt. G. G. Khadse College, Muktainagar, on 22<sup>nd</sup> and 23<sup>rd</sup> June 2020.
- Attended an Online National Level Workshop for Faculty and Students on Need of innovation in Legal Field through Legal Startups organized by IQAC Nandurbar Taluka Vidhayak Samiti's College of Law, Institute of Legal Education and Research, Nandurbar (MS) in joint collaboration with ProBono, India on 12<sup>th</sup> November 2020.
- Participated in the National Webinar on "Education and Digital Era" organized by Department of Computer Science, School of Computational Sciences of Punyashlok Ahilyadevi Holkar Solapur University, Solapur (MS) on 28<sup>th</sup> August 2020.
- Participated in the Two Day National Level Webinar on "Introduction to the Basics of Seventh Edition APA Style" jointly organized by Department of Students Development, Dr. Homi Bhabha State University and the Department of Psychology, Elphinstone College, Mumbai held on November 27 & 28, 2020.
- Participated in One Day National Webinar on "National Education Policy 2020" organized by IQAC and Dept. of Social Sciences, VES's Sarvajanik Arts and Commerce College, Visarwadi, Tal. Navapur, Dist. Nandurbar (MS) on 4<sup>th</sup> September 2020.
- Participated in the National Webinar on "Recent Advances in Chemistry" organized by Department of Chemistry & IQAC, Government G. N. A. PG College, Bhatapara (C.G.) on 26<sup>th</sup> July 27, 2021.
- Actively participated in the National Webinar on FILM AND LITERATURE organized by the PG Dept. of English, G. T. Patil College, Nandurbar (M.S.) on 18 AUG 2021.
- Actively participated in One day National Workshop on "Intellectual Property Rights and Patent Filing" organized by NTVS's G. T. Patil Arts, Commerce and Science College, Nandurbar (M.S.) under IQAC on 3<sup>rd</sup> August 2021.
- Actively participated in One day National Workshop on "Entrepreneurship as a Career Choice" jointly conducted by KCIIL & KIEDC and NTVS's G. T. Patil Arts, Commerce and Science College, Nandurbar (M.S.) on 22 March 2022.
- Successfully completed National Level Quiz on NAAC organized by Department of Computer Engineering, P. V. P. P. College of Engineering, Mumbai, Maharashtra, India on 24-5-2020.

- Successfully completed the National Level Quiz on "Taxonomy of Learning" organized by the Department of Mechanical & Civil Engineering, AISSMS College of Engineering, Pune, Maharashtra, India.
- Successfully participated in E-Certificate Quiz on "Non-Conventional Source of Energy" organized by Department of Physics in collaboration with Internal Quality Assurance Cell (IQAC), Indira Gandhi Kala Mahavidyalaya, Ralegaon, Dist- Yavatmal, Maharashtra, India.
- Actively participated in "IPR Awareness Quiz" organized by Internal Quality Assurance Cell (IQAC) of PSGVPM's SIP Arts, GBP Science and STKVS Commerce College, Shahada, Dist- Nandurbar, Maharashtra, India.
- Successfully completed and secured 100% marks in the Quiz on "Research Methodology" organized by Department of Mathematics Keral Verma Subharti College of Science, Swami Vivekanand Subharti University, Meerut on 16 May 2020.
- Attended the "Online G. K. Exam on Maharashtra Day (1 May 2020)" organized by Student Development Department, JES Arts, Science & Commerce College, Nandurbar, Maharashtra, India.

# **COURSES/CERTIFICATES**

- Successfully completed Pre-Ph.D. Coursework in the subject of Physics during the first academic session of the year 2014-15 and obtained "A++" grade with 8.16 A.G.P. organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad in June 2014.
- Successfully completed two-course modules and secured "A" grade in material science in Ph.D. Teaching Program, Semester I (August 2015–December 2015) organized by Inter University Accelerator Centre, New Delhi during 14<sup>th</sup> September to 23<sup>rd</sup> October 2015.
- Actively participated in the "Training Programme on Awareness of SciFinder Database" organized by Knowledge Resource Centre (University Library) held at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, MS-India on 22<sup>nd</sup> July 2014.
- Actively participated in One Day Acquaintance programme-2015 on Awareness about facilities and Research opportunities at Inter University Accelerator Centre (IUAC), New Delhi organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS) India on 01 May 2015.
- Actively participated in the "Training Programme on Awareness of SCOPUS & Indian Citation Index" organized by Knowledge Resource Centre (University Library) held at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS) India on 22<sup>nd</sup> December 2016.
- Organization and Anchoring of Quiz competition and participation in various events in National Science Day Celebration held at Department of Physics, Dr. Babasaheb

Ambedkar Marathwada University, Aurangabad in Feb-2011.

- Participated and stood THIRD in Seminar Presentation competition on the occasion of National Science Day organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS) India in Feb-2011.
- Actively participated in "Open Day Celebrations 2015" organized by Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS) India during August 22-23, 2015.
- Six-month course in Environmental science with 90% marks conducted by Govt. College of Arts & Science, Aurangabad (MS) India.
- Actively participated in State Level Essay Competition held on 24 December 2002.
- Actively participated and stood second as a team in Cricket Competition organized by Government College of Arts & Science, Aurangabad (MS) India.
- Participated in various Quiz and Awareness certificate programs on Covid-19 Pandemic.

# <u>NATIONAL EVENTS ORGANIZED and EXAMINED</u>

- Successfully organized the Poster Presentation competition and Scientific Model Presentation competition on the occasion of National Science Day-2018 as a Coordinator and In-charge Head, at Department of Physics, NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar during 26-02-2018 to 28-02-2018.
- Successfully organized the Poster Presentation competition and Scientific Model Presentation competition on the occasion of National Science Day-2019 as a Coordinator and In-charge Head, at Department of Physics, NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar during 26-02-2019 to 28-02-2019.
- Functioned as an Examiner for the District level All India Students Science Conclave (Akhil Bhartiay Vidyarthi Vidnyan Melava) at Eklavya High School, Nandurbar on 07 August 2018.
- Successfully organized College level Article and Poem writing competition on the topic of Disadvantages of Social Media as a member of organizing Committee at NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar on 13 August 2018.

# **RESEARCH PAPERS PUBLISHED IN PEER-REVIEWED JOURNALS**

- 1) Characterization of Economic, Non-toxic Cu-ZnS Thin Film Grown by Facile Chemical Bath Deposition Method. Huse Nanasaheb\*, Patil Rohit and Sharma Ramphal. ES Materials & Manufacturing, 2023, 20, 839. Scopus indexed.
- Effect of Cd/S ratio on growth and physical properties of CdS thin films for photosensor application, Ibrahim MS Mohammed, Ghamdan MM Gubari, Nanasaheb P Huse, Avinash S Dive, Sung-Hwan Han, Ramphal Sharma, Journal of Material Science: Materials in

*Electronics* (Springer Publication), 31, 9989–9996 (2020). Thomson Reuter's SCI indexed (*Impact Factor:* 2.22)

- 3) Effect of thermal annealing on screen-printed CdTe thick films prepared from CdTe nanopowder obtained by chemical route, B. Y. Bagul, N. P. Huse and P. S. Sonawane, AIP (American Institute of Physics) Conference Proceedings, 2142, 080015 (2019) (Impact Factor: 0.4)
- 4) Thermal Annealing Improved Structural, Morphological, Optical and Electrical Properties of Cu<sub>2</sub>ZnSnS<sub>4</sub> thin film. Sandip V. Mahajan, Rajesh A. Joshi, Nanasaheb P. Huse, and Ramphal B. Sharma, *Review of Research Journal*, Volume 1, Issue I, March- 2019, 109-113. UGC Journal # 48514 (Impact Factor: 5.763)
- 5) In-situ Facile Chemical Bath Deposition of CuS Thin Film for Photosensor Application, Bhushan B. Chaudhari, Nanasaheb P. Huse; Nitin P. Huse; Ramphal B. Sharma; Journal of Applied Science and Computations, Page No: 2175-2180, VOLUME VI - ISSUE I - JANUARY - 2019-1, DOI:16.10089.JASC.2018.V6I1.453459.1500713. UGC Journal #41238 (Impact Factor: 5.8)
- 6) An experimental and theoretical study of Cu<sub>0.2</sub>Zn<sub>0.8</sub>S thin film grown by facile chemical bath deposition as an efficient photosensor, Ghamdan M. M. Gubari, Ibrahim Mohammed S. M., Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma, Journal of Electronic Materials, October 2018, Volume 47, Issue 10, pp 6128–6135. Thomson Reuter's SCI indexed (*Impact Factor:* 1.774)
- 7) Low cost nanostructure kesterite CZTS thin films for solar cells application, Sandip Mahajan, Elias Stathatos, Nanasaheb Huse, Ravikiran Birajdar, Alexandros Kalarakis, Ramphal Sharma, *Materials Letters Journal*, 210, 92–96 (2018). Thomson Reuter's SCI indexed (Impact Factor: 3.204)
- 8) Single step chemical growth of ZnMgS nanorod thin film and its DFT study, Avinash Dive, Ketan Gattu, Nanasaheb Huse, Devesh Upadhyay, D. M. Phase and Ramphal Sharma\*, Materials Science & Engineering B, 228, 91-95 (2018), Thomson Reuter's SCI indexed (Impact Factor: 4.706)
- 9) Facile, one step synthesis of non-toxic kesterite Cu<sub>2</sub>ZnSnS<sub>4</sub> nanoflakes thin film by chemical bath deposition for solar cell application, Nanasaheb P. Huse, Avinash S. Dive, Sandip V. Mahajan and Ramphal Sharma, Journal of Material Science: Materials in Electronics (Springer Publication), 29, 5649–5658 (2018). Thomson Reuter's SCI indexed (Impact Factor: 2.22)
- 10) Synthesis and Characterization of Structural, Morphological and Photosensor Properties of Cu<sub>0.1</sub>Zn<sub>0.9</sub>S Thin Film Prepared by a Facile Chemical Method, Ghamdan M. M. Gubari, Ibrahim Mohammed S. M., Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma. AIP (American Institute of Physics) Conference Proceedings, 1953, 100014, 1-4 (2018) (Impact Factor: 0.4)
- **11**) Synthesis and Photosensor study of as-grown CuZnO Thin Film by Facile Chemical Bath Deposition, Ghamdan M. M. Gubari, Ibrahim Mohammed S. M., Nanasaheb P. Huse,

Avinash S. Dive and Ramphal Sharma. *AIP (American Institute of Physics) Conference Proceedings*, 1953, 100072, 1-4 (2018) (*Impact Factor:* 0.4)

- 12) Investigation of Structural, Morphological and Optoelectronic Properties of CdS Quantum Dot Thin Film, Ibrahim Mohammed S. M., Ghamdan M. M. Gubari, Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma. AIP (American Institute of Physics) Conference Proceedings, 1953, 100073, 1-4 (2018) (Impact Factor: 0.4)
- 13) Structural and Optoelectronic Studies on Ag-CdS quantum dots, Ibrahim Mohammed S. M., Ghamdan M. M. Gubari, Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma. AIP (American Institute of Physics) Conference Proceedings, 1953, 100038, 1-4 (2018) (Impact Factor: 0.4)
- 14) An Experimental and Theoretical Study on Soft Chemically grown CuS Thin Film for Photosensor Application, Nanasaheb P. Huse, Avinash S. Dive, Ketan P. Gattu and Ramphal Sharma, *Materials Science in Semiconductor Processing Journal*, 67, 62-68 (2017), Thomson Reuter's SCI indexed (Impact Factor: 3.085)
- 15) Enhancement in the efficiency of crystalline Cu<sub>2</sub>ZnSnS<sub>4</sub> thin film solar cell by using various buffer layers, Sandip Mahajan, Dimitra Sygkridou, Elias Stathatos, Nanasaheb Huse, Alexandros Kalarakis and Ramphal Sharma, Superlattices and Microstructures Journal, 109, 240-248, (2017). Thomson Reuter's SCI indexed (Impact Factor: 2.12)
- 16) Theoretical and Experimental Investigations of Intermediate Bands in ZnS-Mg Nanocrystalline Thin Film Photosensor, Avinash S. Dive, Nanasaheb P. Huse, Ketan P. Gattu, Ravikiran B. Birajdar, Devesh R. Upadhyay and Ramphal Sharma, Journal of Materials Science: Materials in Electronics, 28:15161–15167 (2017). Thomson Reuter's SCI indexed (Impact Factor: 2.22)
- 17) Chemical Growth of Zno.8Mgo.2S One Dimensional Nanorod Thin films for Efficient Visible Light Photosensor, Avinash Dive, Nanasaheb Huse, Ketan Gattu and Ramphal Sharma\*, Sensors and Actuators A: Physical, 266, 36-45 (2017). Thomson Reuter's SCI indexed (Impact Factor: 2.904)
- 18) Effect of quantum confinement on photosensitivity in ZnS thin film grown by facile chemical bath deposition. Nanasaheb P. Huse, Avinash S. Dive, Deepak S. Upadhye, Sagar B. Bagul, Ketan P. Gattu and Ramphal Sharma. *Ferroelectrics Journal*, 2017, 519 (1), 1-8. Thomson Reuter's SCI indexed (*Impact Factor:* 0.728)
- 19) Growth of Nanocrystalline Zno.75Mgo.25S thin film by Solution Growth Technique and Their Characterization as a Window Layer for Solar cell. Avinash S. Dive, Nanasaheb P. Huse, Deepak S. Upadhye, Sagar B. Bagul, Ketan P. Gattu and Ramphal Sharma. Ferroelectrics Journal, 2017, 518 (1), 1-8. Thomson Reuter's SCI indexed (Impact Factor: 0.728)
- 20) Room temperature gas sensing properties of Polypyrrole-gold nanocomposite thin film. Sagar B. Bagul, Deepak S. Upadhye, Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma. Ferroelectrics Journal, 2017, 518 (1), 1-9. Thomson Reuter's SCI indexed (Impact Factor: 0.728)
- **21**) Room temperature ammonia sensing properties of nanostructured Polyaniline salt and Polyaniline base thin films. Deepak S. Upadhye, Sagar B. Bagul, Nanasaheb P. Huse,

Avinash S. Dive and Ramphal Sharma. *Ferroelectrics Journal*, **2017**, **518** (1), **1-8**. **Thomson Reuter's SCI indexed** (*Impact Factor:* 0.728)

- 22) Investigation on the Effect of Copper Doping on CdS<sub>1-x</sub>Se<sub>x</sub> Thin Films. Farha Y. Siddiqui, Shaheed U. Shaikh, Deepak S. Upadhye, Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma. Ferroelectrics Journal, 2017, 518 (1), 1-10. Thomson Reuter's SCI indexed (Impact Factor: 0.728)
- 23) One step synthesis of kesterite Cu<sub>2</sub>ZnSnS<sub>4</sub> thin film by simple and economic chemical bath deposition method, Nanasaheb P. Huse, Avinash S. Dive, Ketan P. Gattu and Ramphal Sharma, AIP (American Institute of Physics) Conference Proceedings, 18325, 080082, 1-3 (2017) (Impact Factor: 0.4)
- 24) A high visible light ZnMgS nanorod thin film photosensor by solution growth technique, Avinash S. Dive, Nanasaheb P. Huse, Ketan P. Gattu and Ramphal Sharma, AIP (American Institute of Physics) Conference Proceedings, 1832, 120007, 1-3 (2017) (Impact Factor: 0.4)
- 25) Bio-green synthesis of Fe doped SnO<sub>2</sub> nanoparticle thin film, Ketan P. Gattu, Kalyani Ghule, Nanasaheb P. Huse, Avinash S. Dive, Sagar B. Bagul, Renuka V. Digraskar, Ramphal Sharma and Anil V. Ghule, AIP (American Institute of Physics) Conference Proceedings, 1832, 050162, 1-3 (2017) (Impact Factor: 0.4)
- 26) Effect of HCl doping on optoelectrical and LPG sensing properties of nanostructured polyaniline thin films. D. S. Upadhye, N. P. Huse, R. Sharma, AIP (American Institute of Physics) Conference Proceedings, 1728, 020402, 1-4 (2016) (Impact Factor: 0.4)
- 27) An economic approach to fabricate photosensor based on nanostructured ZnO thin films. Nanasaheb Huse, Deepak Upadhye and Ramphal Sharma, AIP (American Institute of Physics) Conference Proceedings, 17285, 020410, 1-5 (2016) (Impact Factor: 0.4)
- 28) Study of Opto-Electronic Properties of Copper Sulphide Thin Film Grown by Chemical Bath Deposition Technique for Electronic Device Application. Huse Nanasaheb P., Upadhye Deepak S., Dive Avinash S., Sharma Ramphal, *Invertis Journal of Renewable Energy*, 6 (2) Pg: 74-78, Published: April 2016.
- 29) Optical, Electrical and Morphological Study of ZnS Thin Film Synthesized by Inexpensive Chemical Bath Deposition Technique. Nanasaheb P. Huse, Deepak S. Upadhye, Sandip V. Mahajan, Sagar B. Bagul, Avinash S. Dive, Ramphal Sharma, Bionano Frontier, 2015, 8 (3), 192-194.
- 30) Optoelectrical and Ammonia Gas Sensing Study of Polyaniline Thin Film. Deepak S. Upadhye, Nanasaheb P. Huse, Sagar B. Bagul, Avinash S. Dive, Ravikiran B. Birajdar, R. R. Kasar and Ramphal Sharma, *Bionano Frontier*, 2015, 8 (3), 195-197.
- 31) Growth, structural, optical and electrical properties of ZnO thin films deposited by chemical bath deposition technique. Avinash S Dive, Deepak S Upadhye, Nanasaheb P Huse, Sagar B Bagul, Ketan P Gattu, Ramphal Sharma, *Bionano Frontier*, 2015, 8 (3), 189-191.
- **32**) Growth and Ammonia Gas Sensing Study of Nanostructured Polypyrrole Thin Film. Sagar B. Bagul, Deepak S. Upadhye, **Nanasaheb P. Huse**, Avinash Dive, R. R. Kasar and Ramphal Sharma, *Bionano Frontier*, 2015, 8 (3), 198-200.

33) Enhancement of photosensor properties of nanocrystalline ZnO thin film by swift heavy ion irradiation. S. V. Mahajan, D. S. Upadhye, S. U. Shaikh, R. B. Birajadar, F. Y. Siddiqui, S. B. Bagul, N. P. Huse and R. B. Sharma, AIP (American Institute of Physics) Conference Proceedings, 1665, 080063, 1-3 (2015) (Impact Factor: 0.4)

## Research papers (Revisions submitted)

 Economic Synthesis of Zinc Oxide Thin Film by Solution Growth Technique and Study of its Optoelectronic Properties. Parag Patil, Ramphal Sharma and Nanasaheb Huse. Journal of Renewable Energies. (Manuscript id: JRE\_2022-0810 – R1)

## **WATER ORIENTATION/INDUCTION PROGRAMMES & REFRESHER COURSE**

- 1) Successfully completed a 4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" from June 26 July 24, 2020 and obtained A+ grade, organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Human Resource Development, Pandit Madan Mohan Malaviya National Mission on Teachers And Teaching (PMMMNMTT).
- 2) Successfully completed a UGC-SPONSORED Refresher Course in Computer Application (IDC) (Online Mode) from 26<sup>th</sup> May 2020 to 8<sup>th</sup> June, 2020 and obtained A+ grade organized by UGC-Human Resource Development Group, Devi Ahilya Vishwavidyalaya, Indore.
- 3) Successfully completed Two Week Interdisciplinary International Refresher Course on Academic Bank Credits (ABC) Scheme in higher Education, UGC Regulation,2021 (With reference to Blended Learning) from 7<sup>th</sup> July 2021 to 20<sup>th</sup> July, 2021 and obtained "A+" grade organized by Teaching Learning Centre, Ramanujan College (University of Delhi) Under the Aegis of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), Teaching Learning Centre, Ministry of Education in association with Center for Canadian Studies, South Campus (University of Delhi) and Indian Accounting Association, NCR Chapter.

## **FACULTY DEVELOPMENT PROGRAMMES/SHORT TERM COURSES**

- Participated in three day National Level Faculty Development Program on "Online College Management and Online Content Creation Tools", organized by Lala Lajpat Rai College of Commerce and Economics and University of Mumbai with North Storm Academy held during 30<sup>th</sup> April, 1<sup>st</sup> May & 2<sup>nd</sup> May 2020.
- Actively participated in two day National Level Faculty Development Programme on "Facilitation Techniques and Online Tools for College Teachers", organized by Microbiology Department in association with Internal Quality Assurance Cell (IQAC), S.

M. Joshi College Hadapsar, Pune-28 during 27th & 28th May 2020.

- Participated in Faculty Development Programme of "Five Days Online FDP on Green Energy and Renewable Energy for Physics and Electronics Teachers" conducted by Faculty Development Centre, UGC-HRDC, SSP University, Pune and the Tapi Valley Education Society's Dhanaji Nana Mahavidyalaya, Faizpur Dist-Jalgaon (MS) from 08/06/2020 to 12/06/2020 under the scheme of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT).
- Participated in Faculty Development Programme of "Nanomaterials Characterization Techniques and Results Analysis Methodology: Ideas, Innovations & Initiatives" conducted by Faculty Development Centre, UGC-HRDC, SSP University, Pune and S. N. Arts, D. J. Malpani Commerce and B. N. Sarda Science College, Sangamner from 27-31 July 2020 under the scheme of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT).
- Actively participated in the Department of Science and Technology sponsored Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI) workshop on Analytical Techniques held during 21<sup>st</sup> – 27<sup>th</sup> November 2022 at St. Aloysius' College (Autonomous), Jabalpur in association with IIT Gandhinagar.
- Participated in one week state level e-content short term course on "Use of Physics in Daily Life" organized by department of Physics, Shri Vyankatesh ASC College, Deulgaon Raja from 26<sup>th</sup> April 2020 to 02<sup>nd</sup> May 2020.
- Participated in the Online Short term course on "Nanotechnology for Electronic and Photonic Devices (NanoDev 2020)" organized by Department of Electronics and Communication Engineering Dept., Punjab Engineering College (Deemed to be University), Chandigarh supported by Technical Education Quality Improvement Programme (TEQIP)-III during 15-19 June 2020 (One Week).
- Participated in One week Online Short Term Training on Recent Progress in Material Science and Engineering (STTP-RPMSE) organized by Department of Applied Physics, Jabalpur Engineering College, Jabalpur, Madhya Pradesh, India during 24<sup>th</sup> - 28<sup>th</sup> August 2020.
- Participated in One Week Online Short Term Training Program on "Emerging Tools and Technologies in Material Science and Engineering" organized by Department of Applied Physics, Jabalpur Engineering College, Jabalpur, Madhya Pradesh, India during 21<sup>st</sup> - 25<sup>th</sup> September 2020.
- Participated in National level One Week Faculty Development Program on "Research Methodology" organized by Kamla Nehru Mahavidyalaya, Nagpur, India from 26<sup>th</sup> April to 1<sup>st</sup> May 2021.
- Actively participated in National Level Five Days Virtual FDP on NAAC (RAF) Revised
   Assessment and Accreditation Framework Organized by IQAC, Mungasaji Maharaj

Mahavidyalaya, Darwha in collaboration with **HRDC**, Sant Gadge Baba Amravati University, Amravati, Amolkchand Mahavidyalaya, Yavatmal and Phulsing Naik Mahavidyalaya, Pusad during 3<sup>rd</sup> to 7<sup>th</sup> August 2021.

- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Advancement in Material Processing Technologies" from 09/08/2021 to 13/08/2021 at Tapi Diploma Engineering College, Surat, Gujarat.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "THEORETICAL AND PRACTICAL ASPECTS IN APPLIED PHYSICS" from 24/09/2021 to 28/09/2021 at Radha Govind Group of Institutions Meerut, Uttar Pradesh.

#### **RESEARCH PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS (ISSN/ISBN)**

- Synthesis and Characterization of Cu<sub>2</sub>S Thin Films Prepared by Solution Growth Technique. Nanasaheb P. Huse, Deepak. S. Upadhye, Sandip V. Mahajan, Sagar B. Bagul, Avinash S. Dive and Ramphal Sharma in National Conference on Recent Development in Nanomaterials & Their Applications, Nandurbar (MS) India, BSPK Book Publishing Company (ISBN – 978-93-84198-42-8): 2016; pp 91-95.
- 2) Structural, Optical and Electrical Properties of Zinc Sulphide Thin Films Synthesized by Solution Growth Technique. Avinash S. Dive, Deepak S. Upadhye, Nanasaheb P. Huse, Sagar B. Bagul, Ketan P. Gattu, Ramphal Sharma, in National Conference on Recent Development in Nanomaterials & Their Applications, Nandurbar (MS) India, BSPK Book Publishing Company (ISBN – 978-93-84198-42-8): 2016; pp 61-65.
- 3) Optoelectronic properties of Polyaniline emeraldine base & salt thin film synthesized by chemical technique. Deepak S. Upadhye, Nanasaheb P. Huse, Sagar B. Bagul, Avinash S. Dive, Ravikiran B. Birajdar, R. R. Kasar and Ramphal Sharma, in National Conference on Recent Development in Nanomaterials & Their Applications, Nandurbar (MS) India, BSPK BSPK Book Publishing Company (ISBN 978-93-84198-42-8): 2016; pp 26.

#### **RESEARCH PAPERS PRESENTED IN AMDP 2017**

Research papers presented at 8<sup>th</sup> International Conference on Advanced Materials Development & Performance (AMDP 2017) held during July 11-15, 2017 at Department of Physics, Savitribai Phule Pune University, Pune.

- **1)** Study of Optoelectronic Properties of Kesterite Cu<sub>2</sub>ZnSnS<sub>4</sub> Thin Film Grown by Facile Solution Growth Technique, Nanasaheb P. Huse, Avinash S. Dive, Sandip V. Mahajan and Ramphal Sharma. Abstract No.: AB-141 (Manuscript id: MS-64).
- **2)** Effect of Annealing on Structural, Morphological, Optical and Electrical Properties of Cu<sub>2</sub>ZnSnS<sub>4</sub> Thin Film Grown by Chemical Route, Sandip V. Mahajan, Nanasaheb P. Huse and Ramphal Sharma. Abstract No.: AB-174 (Manuscript id: MS-128).

- **3)** Theoretical and Experimental Study of Bandgap Modification in Mg doped ZnS thin films, Avinash S. Dive, Nanasaheb P. Huse, Ketan P. Gattu and Ramphal Sharma. Abstract No.: AB-139 (Manuscript id: MS-105).
- **4)** A Facile Chemical Approach towards Synthesis of Cu<sub>0.2</sub>Zn<sub>0.8</sub>S Thin Film and Study of its Structural, Optical and Photosensor Properties, Ghamdan M. M. Gubari, Ibrahim Mohammed S. M., Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma. Abstract No.: AB-135 (Manuscript id: MS-17).
- 5) Effect of pH on Particle Size and Optoelectrical Properties of CdS Quantum Dots Thin Film Grown by Chemical Bath Deposition, Ibrahim Mohammed S. M., Ghamdan M. M. Gubari, Nanasaheb P. Huse, Avinash S. Dive and Ramphal Sharma. Abstract No.: AB-137 (Manuscript id: MS-61).
- 6) Effects of Finite Conductor Width Variation on Small Period Electromagnet Undulator Radiation, Vijay Huse, Bramh Prakash, Ramdas Huse, Nanasaheb Huse, G. Mishra. Abstract No.: AB-183 (Manuscript id: MS-4).

#### **RESEARCH PAPERS PRESENTED IN ICMAM-2018**

Research papers presented at **International Conference on Multifunctional Advanced Materials (ICMAM-2018)** held during **October 5-7, 2018** at Kamla Nehru Mahavidyalaya, Nagpur.

- 1) In-situ Synthesis and Study of Optoelectronic Properties of Kesterite Cu<sub>2</sub>ZnSnS<sub>4</sub> Thin Film Grown by Chemical Bath Deposition, Nanasaheb P. Huse and Ramphal Sharma. (Manuscript id: PP-109).
- 2) Economic Synthesis of Zinc Oxide Thin Film by Solution Growth Technique and Study of its Optoelectronic Properties, Parag R. Patil, Sandip B. Bari, Ramphal B. Sharma, and Nanasaheb P. Huse\*. (Manuscript id: PP-134).
- *3)* Study of Structural, Optical and Electrical Properties of Cu-ZnS Thin Film by Chemical Bath Deposition for Optoelectronic Devices, Rohit M. Patil, Rupali M. Patil, Ramphal B. Sharma and Nanasaheb P. Huse\*. (Manuscript id: PP-108).
- 4) Synthesis and Photosensing Study of Copper doped ZnO Thin Film by Economic Chemical Bath Deposition Method, Harshal P. Borse, Gayatri R. Patil, Ramphal B. Sharma and Nanasaheb P. Huse\*. (Manuscript id: PP-107).
- 5) In-situ Synthesis and Optoelectronic Study of Copper Sulphide Thin Film by Facile Chemical Bath Deposition, Bhushan B. Chaudhari, Rajnandini S. Sonwane, Ramphal B. Sharma and Nanasaheb P. Huse\*. (Manuscript id: PP-106).

## **4** AWARDS/HONOURS

Awarded First Prize in Poster Presentation in UGC sponsored National Conference on "Recent Development in Nanomaterials & Their Applications (NC-RDNMA 2016)" organized by Department of Electronics, G. T. Patil Art's, Commerce and Science College, Nandurbar held on 5-6 February 2016.

#### <u>CORRESPONDENCE ADDRESS</u>

## Dr. Nanasaheb Pandharinath Huse

Assistant Professor & Head, P. G. Department of Physics, NTVS's G. T. Patil Arts, Commerce & Science College, Nandurbar. (MS-India)– 425412. Webpage: https://scholar.google.co.in/citations?user=WYvtfTwAAAAJ&hl=en https://www.researchgate.net/profile/Dr Nanasaheb Huse https://www.scopus.com/authid/detail.uri?authorId=57190938873 https://orcid.org/0000-0003-0719-885X https://publons.com/researcher/1977019/dr-nanasaheb-p-huse/

#### **REFERENCES**

#### 1) Dr. Ramphal Sharma.

Professor & Head,

Department of Physics & Nanotechnology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad -431004. India. **E-mail: rps.phy@gmail.com** 

#### 3) Dr. R. P. Tandon.

Professor & Former Head, Department of Physics and Astrophysics, University of Delhi, Delhi-110007, India **Email: ram\_tandon@hotmail.com** 

#### 2) Dr. J. C. Vyas.

Retired Scientist from Technical Physics Division, Bhabha Atomic Research Centre, Mumbai- 400 085. India. **E-mail: j.c.vyas@gmail.com** 

# 4) Dr. Anil Vithal Ghule

Professor,

Department of Chemistry, Shivaji University, Kolhapur-416004. India **Email: anighule@gmail.com** 

#### **L** DECLARATION

I hereby declare that the information furnished above is correct to the best of my knowledge and belief.

Place: Nandurbar Date: 31/05/2023

Dr. Nanasaheb Pandharinath Huse