Name of Faculty : Dr. Mahesh B. Shelar	
Designation : Assistant Professor	
Qualification : M.Sc., Ph.D.	
Specialization: Solid State Physics, Materials Science	
Official Email ID: mbshelar.dypcet@dypgroup.edu.in	
Courses Taught	• ***Applied Physics*** • ***Basic Electrical Engineering*** • ***Basics of Electronics (BE & CP)***
Roles and Responsibilities	• ***Associate Dean Academics, DYPCET*** • ***Member, NEP implementation Cell, DYPCET*** • ***Member, Academic Audit Committee, DYPCET*** • ***Program Coordinator, F. Y. B. Tech*** • ***IQAC Coordinator, F. Y. B. Tech*** • ***NAAC Coordinator, F. Y. B. Tech***

Research Contribution

	Research Publications: International Journals- 22
	No. of citations – 253 (by IRINS) h- index –07 **i-10 index -07**
1	Electrodeposited zinc oxide thin films: Nucleation and growth mechanism **Solar Energy Materials and Solar Cells, 91 (10) (2007)864-870** A.I. Inamdar, **M.B. Shelar**, P.S. Shinde, P.S. Patil*
2	Structural and electrical properties of nickel cadmium ferrites prepared through self propagating auto combustion method **Journal of Alloys and Compounds, 476 (1-2) (2009) 760-764** **M.B. Shelar,** S.S. Chougule, M.M. Mallapur, B.K. Chougule
3	Magneto electric effect in three phase y ($Ni_{0.5}Cu_{0.2}Zn_{0.3}Fe_2O_4$) + (1 − y) (50% $BaTiO_3$ + 50% PZT) ME composites **Journal of Alloys and Compounds, 479 (2009) 385-389** P.A. Jadhav, **M.B. Shelar**, B.K. Chougule
4	Synthesis and characterization of (y) $Ni_{1-x}Cd_xFe_2O_4$ and (1-y) $Ba_{0.8}Sr_{0.2}TiO_3$ Magnetoelectric composites prepared through combustion method

		Archives of Applied Science Research, 2 (1) (2010) 406-415 **M.B. Shelar**, P.A. Jadhav, B.K. Chougule* and V.R. Puri*
	5	Structural and dielectric behaviour of (y) $Ni_{1-x}Cd_xFe_2O_4$ and (1-y) $Ba_{0.8}Sr_{0.2}TiO_3$ ME composites prepared through self propagating auto combustion route **International Journal of Self propagating High Temperature Synthesis, 19(2) (2010) 102-109** **M.B. Shelar**, P.A.Jadhav and V.R. Puri*
	6	Chemical synthesis and studies on structural and magnetic properties of fine grained nickel cadmium ferrites **Journal of Magnetism and Magnetic Materials, 322 (2010) 3355 – 3358** **M. B. Shelar**, P.A. Jadhav, S.S. Chougule, D. R. Patil,Vijaya Puri and B.K. Chougule*
	7	Microwave studies of ferrite-ferroelectric composites prepared through self-propagating auto combustion route **Progress in Electromagnetic Research: C, 17 (2010) 55-65** **M.B. Shelar**, R.N. Jadhav and Vijaya Puri*
	8	Structural, electrical conduction and magnetoelectric properties of y $(Ni_{0.3}Cu_{0.4}Zn_{0.3}Fe_2O_4)$ + (1-y) [50% $BaTiO_3$ +50% PZT] ME composites **Physica B: Condensed Matter, 405 (3) (2010) 857-861** P.A. Jadhav, **M.B. Shelar**, S.S. Chougule, B.K. Chougule
	9	Synthesis and magnetoelectric properties of (y) $Ni_{0.3}Cu_{0.4}Zn_{0.3}Fe_2O_4$ + (1-y) [50 % $BaTiO_3$ + 50 % PZT] ME composites **Journal of Alloys and Compounds, 490(1-2)(2010) 195-199** P.A. Jadhav, **M.B. Shelar**, S.S. Chougule, B.K. Chougule
	10	Synthesis and property measurement of three phase ME composites **Archives of Applied Physics Research, 1(1) (2010) 92-99** P. A. Jadhav, **M. B. Shelar** and B. K. Chougule*
	11	Dielectric loss and magnetic behavior of ferrite-ferroelectric composites synthesized using SHS route **International Journal of Self propagating High Temperature Synthesis, 20(2) (2011) 128-133** **M.B. Shelar** and Vijaya Puri*
	12	Magnetic properties of nanocrystalline nickel zinc ferrites synthesized by SHS method **International Journal of Self propagating High Temperature Synthesis 20 (2) (2011) 118-123** H.V. Jamadar, **M.B. Shelar** andA.M. Shaikh*

	13	Ni0. 4CoxCd0. 6− xFe2O4 ferrites as prepared by auto combustion synthesis **International Journal of Self propagating High Temperature Synthesis, 21(3) (2012) 212-216** N.D. Patil, **M.B. Shelar** and Vijaya Puri*
	14	Role of concentration and temperature on well-aligned ZnO nanorod by Low-temperature wet chemical bath deposition method **Archives of Physics Research, 2012, 3 (5):401-406** G.R. Patil, **M.B.Shelar**
	15	Nanocrystalline ZnO Films Deposited by Spray Pyrolysis: Effect of Gas Flow **Rate International Journal of Self Propagating High Temperature Synthesis, 21 (3) 2012, 178–182** R.S. Gaikwad, **M.B. Shelar**
	16	Combustion synthesized ferrites and ferroelectrics for microwave applications **International Journal of Self Propagating High Temperature Synthesis, 22(2) 2013, 93-98** **M.B. Shelar** and Vijaya Puri
	17	Voltage stability Enhancement and power oscillation damping using static synchronous series compensator with SMES **Journal of Engineering And Technology Research, 1 (1) 2013), 94-99** A. A. Malgave , M.B. Shelar and A.M. Mulla*
	18	Enhancement of Power Quality by an application of DVR **Journal of Engineering And Technology Research,** Volume **1,** Year **2013,** Pages **65-71** A. B.Kumbhar, M.B.Shelar
	19	Magnetoelectric Composites yNi1−xCdxFe2O4 + (1 − y)Ba0.8Sr0.2TiO3 (x = 0.2, 0.4, 0.6; y = 0.15, 0.30, 0.45): Solution-Combustion Synthesis and Microwave Properties **International Journal of Self propagating High Temperature Synthesis, 27, (3) 2018, 167-173** **M.B. Shelar,** Vijaya Puri*, S.N. Yadav, R.M.Kurane, S.M.Patange
	20	Combustion-Synthesized Ni–Cd Ferrites and their Structural, Magnetic, and Microwave Absorbing Properties **International Journal of Self propagating High Temperature Synthesis 28 (2) 2019, 173-178** **M.B.Shelar** and S. N. Yadav
	21	Thin $Zn_{1-x}Mn_xO$ Films (x = 1–4 at %) by Chemical Bath Deposition: Influence of Dopant Concentration

		International Journal of Self propagating High Temperature Synthesis 30 (2) 2021, 100-105 G. R. Patil, **M. B. Shelar *,** N. J. Kambale, L. D. Kadam, V. S. Raut, and B. N. Pawar
	22	Studies on structural and magnetic properties of cobalt substituted nickel nano ferrites prepared by microwave assisted self propagating high temperature route, **Materials Today Proceedings,5 9 (1) ,2022,1196-1201** **M.B.Shelar,** S. M. Patange
		Research Reviewer Experience:

Journal Name	Post	Year
Journal of Hydrogen Energy (Elsevier)	**Reviewer**	March 2019- till date
Materials Today : Proceedings (Elsevier)	**Reviewer**	July 2020- till date
Progress in Electromagnetic Research (Springer link)	**Reviewer**	March 2018
Advances in Materials, Science Publishing Group	**Editorial Board Member**	March 2012 till date
Scientia Research Library	**Executive Editor**	November 2013 till date

FDP/Workshop Attended	**1**	Effect of Complexing agents on electrodeposited ZnO thin films. **M.B. Shelar**, P.S. Patil * National Seminar on Materials for Advanced Technologies (NASMAT), Department of Physics, Shivaji University, Kolhapur (2006).
	2	Studies on structural and electrical properties of nanostructured Ni-Cd ferrites by chemical route Raman Memorial Conference, Department of Physics, **Pune (2008).** **M. B. Shelar**, M.M. Mallapur, P.A. Jadhav, S.S. Chougule and B. K. Chougule*
	3	Attended the Workshop on Frontiers in Physics and Chemistry, **First Interdisciplinary Shivaji University (India) - Hanyang University (S. Korea)**Bilateral summit (**2007**), Department of Physics, Shivaji University, Kolhapur
	4	Attended one day workshop on ***LATEX*** organized by Ashokrao Mane Group of Institutions, Vathar tarf Vadgaon **(July 2012)**, Kolhapur (M.S, India)

	5	Attended one day workshop on "***Syllabus Setting of First Year Engineering Physics***" at J.J.Magdum College of Engineering, Jaysinghpur **(January 2013)**, Dist- Kolhapur (M.S.India)
	6	Participated in ***LEED college activity*** , Shivaji University, Kolhapur organized by Ashokrao Mane Group of Institutions, Vathar, Kolhapur on " One day Training program on Role of Teacher in Knowledge Management & Evaluation Process of NBA Accreditation on **24-02-2014,** (M.S.India)
	7	Successfully completed an **AICTE approved FDP(101x**) on Foundation Program in ICT for Education from **IIT Bombay** at RIT, Islampur from **3rd Aug.2017 to 7thSept.2017.** (M.S.India)
	8	Attended a Science Academies Lecture Workshop on " Recent Advances in Catalysis" held at Sanjay Ghodawat University, Kolhapur on **23rd and 24th February 2018,** (M.S.India)
	9	Participated in **International Conference on Materials and Environmental Science held on 7th- 8th December 2018** at Shivaji University, Kolhapur (M.S., India)
	10	Presented Poster in **International Conference on Physics of Materials and Materials Based Device Fabrication**, hosted by **Department of Physics, Shivaji University, Kolhapur** was held on **10th- 11th January, 2019**
	11	Attended AICTE Approved 07 days FDP on **FY Induction Program** at **IIT, Ropar, Punjab** from **02-08 July 2019**
	12	Presented Paper on at National Conference on "**Exploring New Dimensions in Teaching- Learning for Quality Education" on 8- 9th June, 2019** at K. K. Wagh Institute of Engineering Education and Research, Nashik, Maharashtra
	13	Successfully completed 5 days FDP on "**Universal Human Values for DEEKSHARAMBH (Student Induction Program)**" organized by NIT Patna during **21st to 25th September 2020**
	14	Successfully completed 5 days FDP on **"Outcome Based Education & NBA**" by K.B.P., Satara from **8th to 12th May 2021.**
	15	Successfully completed 5 days FDP on "**Electro spinning Nanofibers: Science, Technology and Applications** "by Indian Institute of Information Technology, Nagpur from **12th to 16th July 2021.**
	16	FDP on "Developing Effective Research Skills" from **09/08/2021** to **13/08/2021** at PES College of Engineering.

	17	Online Elementary FDP on "Renewable Energy – A future alternative" from **17/01/2022 to 21/01/2022** at Government Polytechnic Thane.
	18	FDP on Role of Assessment and Accreditation towards improving the Quality of Education and National Educational Policy implementation in Higher Educational Institutions from **8th to 10th February 2023** at Kamraj College of Engineering, **Chennai**
	19	International Faculty Development Programme on Advanced Functional Materials: Energy, Environment and Sustainable Development **from 28th Feb to 9th March 2023 at** Department of Pysics, SRM TRP Engg College, Tiruchirappali, Tamilnadu.
	20	National Webinar on Zn Stannate Modified Graphitic Carbon Nitride for the Photocatalytic Removal of Hexavalent Cr in H_2O by Dr. Damian C. Onwudiwe **on 6th March 2023**
	21	National Webinar on Magneto-caloric Materials : Magnetic Cooling for Green Refrigeration on **7th March 2023,** SRM TRP Engg College, Tiruchirappali, Tamilnadu.
Awards	1) Secured 1st rank in physics M.Sc. entrance (**96/100**) held at Shivaji University Kolhapur in **2004** and awarded 10,000/ merit scholarship. 2) Awarded **1st prize on Einstein's Day** for poster and oral presentation at **Shivaji university on Feb. 2006** during M.Sc. 3) Awarded **3rd prize** for poster presentation in **National seminar on physics and materials-based device fabrication** held on **Feb. 17- 2011.** 4) Received best **KRA (Key result Area) award** certificate with point scale 3.47 out of 5 for the Institutional growth and Development as per strategic Plan, RIT, Islampur in March 2019.	