

### Dr. Pratik Arvind Nagwade Assistant Professor

Assistant Professor Department of Chemistry, Shri Anand College, Pathardi. Ahmednagar, (MH), India. Pin code- 414102 Mobile: +91 9028037525 email- <u>pratik.nagawade@gmail.com</u>

Sr No	Description	Details
1	Name	Dr. Pratik Arvind Nagwade
2	Date of Birth	25/05/1988
3	Designation	Assistant Professor
4	Official address	Department of Chemistry, Shri Anand College Pathardi, Ahmednagar, 414102
5	Residential Address	240 A Vidya Colony, Shrikrushna Nagar, Nagar Kalyan Road, Nalegaon, Ahmednagar – 414 001.
6	Mobile no	9028037525
7	E-mail	pratik.nagawade@gmail.com pratiknagawade@shrianandcollege.com

#### 8. Educational Qualifications:

Qualification	University	Class / Grade	College	Year
S.S.C	Pune	First Class	B Firodiya Highschool, Ahmednagar	2003
H.S.C	Pune	First Class	New Arts, Sci. & Com. College Ahmednagar	2005
B.Sc	Pune	Distinction Chemistry	Ahmednagar College, Ahmednagar	2008
M.Sc.	Pune	A Grade	Dept.of Chemistry, S.P. Pune University.	2010
NET	CSIR	All In	dia Rank 033	2011
Ph.D.	Pune	-	Dept.of Chemistry, S.P. Pune University.	2017

\* Title of the thesis: Preparation, Photocatalytic and Rheological Behavior of Oxide Ceramics.

# 9. Teaching/ Industrial Experience:

Duration	Designation	Institution	Nature of Work	Experience
September 2011- May 2012	Research Fellow	Emcure Pharmaceutical, Pune	Validation Of Analytical Method	09 Months
June 2012- May2013	Assistant Professor	Nowrosjee Wadia College pune	Teaching to graduate and post graduate Students	1 Year
June 2013- July 2019	Assistant Professor	AISSMS's College of Engineering, Pune	Teaching to F.E Engineering Students	6 Year and 01 months
August 2019	Assistant Professor	Shri Anand College Pathardi, A.Nagar	Teaching to graduate and post graduate Students	Till date

# College / University work / Duties:

Sr. No	Nature of the Committee	Chairman / Member
1	Internal Quality Assurance Cell	Coordinator
2	Central Assessment of Paper	Member
3	Paper setting	Member
4	Squad / Vigilance	Member
5	PM USHA	Member
6	Academic Research committee	Member
7	NEP Syllabus reframing (M.Sc. I)	Member
8	NIRF ranking	Chairman
9	Academic Administrative Audit	Coordinator
10	NAAC Criteria VI	Chairman

Induction program/ Orientation/ Refresher/Faculty Development Program / short Term Courses attended:

- 1. **Online Refresher Course In Chemistry For Higher Education** conducted by Sri Guru Tegh Bahadur Khalsa College, University of Delhi on 16/02/202 under ARPIT scheme.
- Induction Programme for College Teachers conducted at IISER Pune from 30<sup>th</sup> October 2019 to 23<sup>rd</sup> September 2019 at IISER Pune conducted by the Centre of Excellence in Science and Mathematics Education (CoESME) at IISER Pune, under the aegis of MHRD's Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) Scheme.
- 3. **One Week National Online Faculty Development Program** on Research Methodology from 26<sup>th</sup> April to 1<sup>st</sup> May 2021, organized by Amar sewa mandal's Kamala Nehru Mahavidyalaya, Nagpur.
- 4. **One Week Faculty Development Programme** on "Open-Source Tools for Research" from June 08 June 14, 2020 organized by Teaching learning centre, Ramanujan College, University of Delhi under the aegis of MHRD's Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) Scheme.
- 5. **Two Week Faculty Development Programme** on "Advanced concepts for developing MOOCS" from July 02 July 17, 2020 organized by Teaching learning centre, Ramanujan College, University of Delhi under the aegis of MHRD's Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) Scheme.
- One Day Teachers workshop on "New Revised Syllabus of T.Y.B.Sc Chemistry SPPU " on 30 August 2021 Organized by Department of Chemistry, Prof. Ramkrushna More Arts, Commerce and Science College, Akurdi, Pune 411 044.
- 7. **One Day Techers workshop on** "S.Y.B.Sc. Chemistry Revised Syllabus implemented from June 2020, organized by Department of Chemistry, New Arts, Commerce and Science College, Parner and sponsored by Savitribai Phule Pune University, Pune on Wednesday, 26 August, 2020.

Other Relevant Information			
Sr No	Description	Details	
10	Subject of specialization	Analytical Chemistry	
11	M.Sc. PROJECT WORK	"Preparation, Characterization and Photocatalytic Activity of Doped TiO <sub>2</sub> Nano powders."	
		1) Solid - State Materials	
10	Area of research specialization	2) Photocatalysis	
12		3) Slip - casting	
		4) Nano materials	
	Course taught at B.Sc. level	1) Inorganic Chemistry	
		2) Analytical Chemistry	
13		3) Organic Chemistry	
		4) Introduction to Solid State of Matter	
		5) Organometallic and Inorganic Reaction Mechanism	
	M.Sc. Level	6) Inorganic Chemistry Practical's	
		7) Physical Chemistry Practical's	
14	Research Publications	Please see Enclosure I	
15	Fellow and membership	Life Member of Indian Council of Chemist	
16	Honors and achievements	"Best paper (poster) and Young Scientist Award" in National Conference on 'Frontiers in Physical, Chemical and Biological Sciences organized by Dept. of Chemistry, University of Pune.	

# List of publications

- Preparation techniques for zinc ferrites and their applications: A review S. N Pund, P. A. Nagwade, A. V. Nagawade, S. R. Thopate, A. V. Bagade Materials Today: Proceedings 60, 2194-2208
- 2. Synthesis and properties of cobalt substituted strontium cadmium W-type hexaferrites nanoparticles.

A. K. Nikumbh, S. B. Misal, D. V. Nighot, **P. A. Nagawade**, N. J. Karale, A. S. Deshpande, G. S. Gugale, A. V. Nagawade

Journal of Alloys and Compounds 683, 346-356

3. Ni-doped Mg-Zn nano-ferrites: Fabrication, characterization, and visible-lightdriven photocatalytic degradation of model textile dyes

A. V. Bagade, S.N. Pund, **P.A. Nagwade**, B. Kumar, S.U. Deshmukh, A.B. Kangare Catalysis Communications 181, 106719

4. Impact of Mg<sup>2+</sup> substitution on structural, magnetic and optical properties of Cu-Cd ferrites

A.V. Bagade, **P. A. Nagwade**, A. V. Nagawade, S.R. Thopate, V.U. Pandit, S.N. Pund Materials Today: Proceedings 53, 144-152

5. Effect of divalent/trivalent doping on structural, electrical and magnetic properties of spinel ferrite nanoparticles

M.B. Khanvilkar, A.K. Nikumbh, R.A. Pawar, N.J. Karale, **P.A. Nagwade**, D. V. Nighot, G. S. Gugale, M.D. Sangale, S. B. Misal, S.P. Panchgalle Engineered Science **22**, 850

6. Influence of Cu2+ substitution on structural and optical properties of Mg-Zn ferrite nanoparticles

S. N. Pund, **P.A. Nagwade**, A.V. Nagawade, A.V. Bagade Materials Today: Proceedings 49, 2382-2391

7. Synthesis, structural and electrical conduction of some dual doped semiconductor oxides nanoparticles for photocatalytic degradation of Victoria blue-B and Brilliant yellow under solar light irradiation.

N.J. Karale, A.K. Nikumbh, M.B. Khanvilkar, **P.A. Nagawade**, R.A. Pawar, D.V. Nighot, S. B. Misal & G. S. Gugale

Journal of Materials Science: Materials in Electronics 32, 4998-5034

8. Insights into 4,4'-Arylmethylene-Bis-1H-Pyrazol-5-Ols Scaffolds: Various
Synthetic Routes and Their Applications.
A.B. Kanagare, A. R. Yadav, A. P. Katariya, D. S. Bhagwat, A. K. Dhas, D. N.
Pansare, P. A. Nagwade, B. Kumar, J. N. Sangshetti, S. U. Deshmukh
Chemistry Select 8 (4)
9. A Review on Synthesis, Characterization and Applications of Cadmium Ferrite
and its Doped Variants
S. N. Pund A. V. BAGADE, P. A. NAGWADE, A. V. NAGAWADE
ORIENTAL JOURNAL OF CHEMISTRY 38 (1), 01-15
10. Galactomannan polysaccharide as a bio template for the synthesis of zinc oxide
nanoparticles with photocatalytic, antimicrobial and anticancer applications
A. Kahandal, S. Chaudhary, S. Methe, P. Nagwade, A. Sivaram, C.K. Tagad
International Journal of Biological Macromolecules 253, 126787
11. An investigation of the formation, the particulate properties and the rheological
behaviour of cerium vanadate and zirconium titanate prepared by dicarboxylate
coprecipitation method.
A. V. Nagawade, A. K. Nikumbh, N. J. Karale, M. B. Khanvilkar, A. S. Deshpande,
P.A. Nagwade
Bulletin of Materials Science 45 (2), 92
12. Structural, Electrical and Magnetic Properties of Substituted Pyrochlore Oxide
Nanoparticles Synthesized by the Co-Precipitation Method
G.S. Gugale M.B. Khanvilkar, A.K. Nikumbh, S.M. Patange, R.A. Pawar, N.J. Karale,
D.V. Nighot, <b>P.A. Nagwade</b> , M.D. Sangale
PHYSICS AND CHEMISTRY OF SOLID STATE 22 (2), 353-373
13. Review on advancements of pyranopyrazole: synthetic routes and their medicinal
applications
A. R. Yadav, A. P. Katariya, A. B. Kanagare, P.D. Patil, C.K. Tagad, S.A. Dake, P. A.
Nagwade, S. U. Deshmukh
Molecular Diversity, 1-48
14. Magnetic, morphological, and photocatalytic studies of Cu2+ doped Mg-Zn ferrite
nanoparticles
S. N. Pund, P. A. Nagwade, A. V. Nagawade, S. R. Thopate, A. V. Bagade
IOP Conference Series: Materials Science and Engineering 1291 (1), 012007

- 15. Light-induced Photocatalytic Degradation of Methylene Blue observed using Mg-Cu-Cd Ferrite Nanoparticles.
- A. V. Bagade, **P. A. Nagwade**, A. V. Nagawade, S. R. Thopate, S. N. Pund Oriental Journal of Chemistry 39 (2)

# 16. Preparation and Characterization of Nanosized Substituted Perovskite Compounds with Orthorhombic Structure

S. B. Misal, M. B. Khanvilkar, A. K. Nikumbh, R. A. Pawar, N. J. Karale, D. V. Nighot, R. C. Ambare, **P. A. Nagwade**, M. D. Sangale, G.S. Gugale PHYSICS AND CHEMISTRY OF SOLID STATE 22 (4(2021)), 664-686

#### **List of Conferences Attended**

- Synthesis, Characterization and Photocatalytic Behavior of doped TiO<sub>2</sub> and ZnO.
  P.A. Nagawade, N.J. Karale, A.S. Deshpande, and A.K. Nikumbh
  Proc. Indian Council of chemists, Nov. 2013, Dharwad (Karnatak state) P -252.
- 2. Synthesis, Characterization and Photocatalysis of Rare earth doped ZnO Nanoparticles.

P.A. Nagawade and A.K. Nikumbh.

Proc. 3rd. International Conference of Indian Council of Chemists, June 2014, Dubai

**3.** Synthesis Of substituted TiO<sub>2</sub> nanoparticles by coprecipitation process and their photocatalytic activity under visible light irradiation.

A.K. Nikumbh and P. A. Nagawade

Proc. National conference on "Frontier in Physical, Chemical and Biological Sciences", October 2013, Pune University, p- 207.

4. Soft chemical synthesis, characterization and photocatalytic performance of some pure and doped transition metal Molybdate and Tungstate nanoparticles.

P.A.Nagawade, N.J. Karale, G.S.Gugale, and A.K.Nikumbh

Proc. International Conf. on Functional Ecofriendly Smart Engineering Materials, Pune, March. 2016, P -61.

5.	Synthesis, characterization of divalent and trivalent metal ion doped bismuth oxide
	and its application for dye degradation using visible light.
	P.A.Nagawade, N.J. Karale, G.S.Gugale and A.K.Nikumbh
	XXXV Annual Conference of Indian Council of Chemistry, Nov 2016, Pune, p -33
6.	Optimization of the rheological properties of Silicon carbide slurries in ceramic
	processing application.
	P.A.Nagawade, A.S.Deshpande and A.K.Nikumbh
	XXXV Annual Conference of Indian Council of Chemist, Nov 2016, Pune, p – 91
7.	Influence of ammonium polyacrylate (Darvan) and Polyethyleneimine (PEI) on
	rheology of SiC suspension.
	P.A. Nagawade, A.S. Deshpande and A.K.Nikumbh
	Proc. 5th International Conference of Indian Council of Chemists, June 2017, Indonesia,
	Bali, p .17
8.	Influence of Cu Substitution on Structural and Optical Properties of Mg-Zn Ferrite $2^+$
	Nanoparticles
	S. N. Punda , P. A. Nagwade , A. V. Nagawadea , A. V. Bagade*
	Global Conference on Recent Advances in Sustainable Materials (GC-RASM 2021) held at
	A.J.
	Institute of Engineering & Technology, Karnataka, India during 29 - 30, July 2021.
	Materials Today: Proceedings, Volume 49, Part 5, 2022, Pages 2382-2391.
9.	Synthesis, Characterization and Electrical Properties of Halogen doped ZnO
	Nanoparticles.
	<b>Dr. P. A. Nagawade</b> * and Dr. A. K. Nikumbh
	36 <sup>th</sup> Annual Conference of the Indian Council of Chemist, Andhra University,
	Visakhapatnam on 26 <sup>th</sup> to 28 <sup>th</sup> December 2017.

C.K.Tagad and **P.A.Nagwade.** 

36th Annual Conference of the Indian Council of Chemist, Andhra University, Visakhapatnam on 26th to 28th December 2017.

11. Investigation of the formation, particle characteristics and Rheological properties of ceramic Cobalt Aluminate (CoAl2O4) synthesised using dicarboxylate coprecipitation method

A.V. Bagade, S.N. Pund, C.K.Tagad, P.A. Nagwade\*

International Symposium on Materials of the Millennium: Emerging Trends and Future

Prospects (MMETFP – 2021).	
Prospects (WWE1FF - 2021).	
	Dr. Pratik Arvir
	Nagwade Assista
	Professor