



AISSMS

COLLEGE OF ENGINEERING

ज्ञानम् सकलजनहिताय
Accredited by NAAC with "A+" Grade



Department of First Year Engineering

Faculty Profile

Prof. (Dr) Deepak V Nighot

PhD (Chemistry)

Associate Professor

✉ dvnight@aiissmscoe.com

drdeepaknighot@gmail.com

☎ (020) 26058587; Extn: 1707

🔗 <https://scholar.google.com/citations?user=99CVyZ0AAAAJ&hl=en>

🔗 www.linkedin.com/in/deepak-drdeepaknighot-6aa871111



Research Areas / Areas of Interest

Electrothermal Analysis, Electromagnetic materials, Solid state Chemistry, Material science

Personal Details

Date of Birth : 23/11/1971

Domicile: Maharashtra

Gender : Male

Blood Group: O+ve

Contact Details: 3rd Floor, Flat No - 10, Shri Swami Samarth, Survey No:

148/1/A/1/2, Pashan-Sus Road, P:ashan, Pune – 411 021

Academic Background

S. NO.	Qualification	Specialization	University	Class/Grade	Year of Passing
1	Ph.D.	Chemistry	Pune	--	July 2011
2	B. Ed.	Science	Pune	1 st	June 1995
3	M.Sc.	Organic Chemistry	Pune	1 st	June 1994
4	B.Sc.	Chemistry	Pune	1 st with Distn	June 1992

Work Experience

S. No.	Type of Experience	Years	Months
1	Teaching	24	00
2	Research	12	
3	Industry	--	--
4.	Others	--	--
Total		24	1

Subjects / Courses Taught

S. No.	Subject	UG/PG	Class (FE/SE)	No of times Subject Taught
1	Engineering Chemistry	UG	FE (Common)	From the Beginning
2	Organic & Inorganic Chemistry	UG	SE (Chemical)	04
3	Engineering chemistry I	UG	SE (Chemical)	01
4	Industrial Chemistry I	UG	SE (Chemical)	01

Research Publications

	National	International	State	SCI/ Scopus Indexed	UGC Approved
Journals		12		Yes	Yes
Conferences	09	09	02		Yes

Publication Details (Journals)

S. No	Document Details	Authors	Year	Source Details	ISBN/ ISSN	Publisher
1	Thermal Decomposition Study of Mixed Metal Y-Ba-Cu Oxalate and Tartarates Coprecipitation Leading to Superconducting $YBa_2Cu_3O_{7-\delta}$.	D. V. Nighot & et.al.	2013	Bionao-frontier, Vol.6 (4) 191-193	ISSN (Print) 0974-0678 (Online) 2320-9593	International Society of Science and Technology, Mumbai
2	The Study of Aspirin and Copper (ii) Aspirinate by Using Small Scale Approaches	D. V. Nighot & et.al.	2013	Weekly Science International Research Journal 1 (14), 53-58	ISSN No : 2321-7871	Bridge Center, Buzau, Romania
3	Structural, electrical, magnetic and dielectric properties of rare-earth	D. V. Nighot & et.al.	2014	J. Magn. Magn. Material, 355 201-209	ISSN: 0304-8853	Elsevier

	substituted cobalt ferrites nanoparticles synthesized by co-precipitation method					
4	Synthesis and properties of cobalt substituted strontium cadmium W- type hexaferrites nanoparticles.	D. V. Nighot & et.al.	2016	J. Alloys and Compd., 683 ,346 – 356	ISSN: 0925-8388	Elsevier
5	Chemical synthesis and characterization of nano-sized rare-earth ruthenium pyrochlore compounds $\text{Ln}_2\text{Ru}_2\text{O}_7$ (Ln= rare earth)	D. V. Nighot & et.al.	2017	Bulletin of Materials Science, 40 (7) ,1335 – 1345	Electronic ISSN 0973-7669 Print ISSN 0250-4707	Springer Co-publication with Indian Academy of Sciences, Bangalore, India
6	Synthesis and physicochemical properties of doped nano oxides-dilute magnetic semiconductors	D. V. Nighot & et.al.	2019	Journal of Materials Science: Materials in electronics, 30 (14) 13217 – 13229	Electronic ISSN 1573-482X Print ISSN 0957-4522	Springer

7	Structural, Electrical and Magnetic Properties of Substituted Pyrochlore Oxide Nanoparticles Synthesized by the Co-Precipitation Method	D. V. Nighot & et.al.	2021	1729-4428 (print), 2309-8589 (online)	Physics and Chemistry of Solid State.Vol. 22 (2) (2021) 353-371	Vasyl Stefanyk Precarpathian National University
8	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	D. V. Nighot & et.al.	2021	10854-021-05237-6	J Mater Sci: Mater Electron Vol. 32 (2021) 4998–5034	Springer Nature
9	Electrical and Magnetic Properties of Cd _{1-x} Fe _{2-x} CoxBi _{0.3} O ₄ Nanoparticles Synthesized by Chemical Co-precipitation Technique	D. V. Nighot & et.al.	2021	ISSN: 2455-6211	Int. J Res Edu Sci Methods Vol. 9 (3) (2021) 2455-6211	IJARESM publication
10	Extraction of bioethanol from waste pomegranate fruits as a potential feedstock and its blending effects on a performance of a single cylinder SI engine.	D. V. Nighot & et.al.	2021	ISSN: 1364-0321	Renewable and Sustainable Energy Reviews 148 (2021) 111383	Elsevier
11	Preparation and Characterization of Nanosized Substituted Perovskite Compounds with Orthorhombic Structure.	D. V. Nighot & et.al.	2021	ISSN 1729-4428 (Print); ISSN 2309-8589 (Online)	Physics and Chemistry of Solid State 22 (4) (2021), 664-686	Vasyl Stefanyk Precarpathian National University
12	Investigation on Solid State Pyrolytic Decomposition of Bimetallic Fumarate and Tartrate Precursors of Co (II), Ni (II) and Zn (II) with Manganese	D. V. Nighot & et.al.	2022	ISSN: 2214-7853	Material Today: Proceedings 49 (2022) 1351 – 1359	Elsevier

13	Effect of Divalent/Trivalent Doping on Structural, Electrical and Magnetic Properties of Spinel Ferrite Nanoparticles	D. V. Nighot & et.al.	2023	ISSN: 2576-988X (Print) ISSN: 2576-9898 (Online)	Engineered Science, 22 (2023) 850	Engineered Science publisher

Publication Details (Conferences)

S. No	Document Details	Authors	Year	Conference Details	Organised by
1	Chemical synthesis and characterization of nanosized pyrochlore oxides, $\text{Ln}_2\text{Zr}_2\text{O}_7$	D. V. Nighot & et.al.	December, 2004	49 th DAE. Solid State Physics Symposium, 295	Guru Nanak Dev University, Amritsar
2	The formation, structural, electrical and dielectric properties of transition metal stannates	D. V. Nighot & et.al.	December, 2005	24 th National conference of Indian Council of Chemists AO36, P.195	Birla Institute of Technology, Mesra, Ranchi (Jharkhand)
3	A Novel Chemical Preparation of Nanocrystalline $\text{CoRExFe}_{2-x}\text{O}_4$	D. V. Nighot & et.al.	January, 2007	International Conf. on Emerging Trends in Chemical	Department of Chemistry, University of Mumbai, Mumbai

	Powders (RE = Rare Earths)			Sciences, P-26	
4	Simple chemical route for the preparation of anatase TiO ₂ nanoparticles	D. V. Nighot & et.al.	February, 2007	International Symposium on Recent development in Chemistry, OP.5	Department of Chemistry, University of Pune, Pune
5	Thermal and electrical studies of alkaline-earth-zirconyl tartarates	D. V. Nighot & et.al.	March, 2008	National seminar on "Advances in Chemistry", OP-7	Department of Chemistry, University of Pune, Pune
6	Synthesis and characterization of ruthenium pyrochlore oxide	D. V. Nighot & et.al.	March, 2009	National seminar on "Recent trends in Chemistry", P-32	Department of Chemistry, University of Pune, Pune
7	Preparation and study of physical properties of metal ruthenate nanoparticles	D. V. Nighot & et.al.	January, 2010	International Conf. on Emerging Trends in Chemistry P. 87	Department of Chemistry, University of Pune, Pune
8	Studies on thermal decomposition of transition metal (II)-manganese tartarate	D. V. Nighot & et.al.	June, 2011	International Conference on Global Challenges - The Role of Chemistry in giving their solutions P.124	Indian Council of Chemists at Bangkok

	complexes in the solid state				
9	Thermolysis of mixed metal dicarboxylato complexes in the solid state	D. V. Nighot & et.al.	June, 2012	2 nd International Conference on Trends in Chemical Sciences Going Beyond Frontiers P.132	Indian Council of Chemists at Kuala Lumpur (Malaysia)
10	Direct current electrical conductivity study of the thermal decomposition of copper (II) monohydrate and Zn (II) oxalate hydrate.	D. V. Nighot & et.al.	November, 2012	2 nd International Conference on Emerging Trends in Chemical Sciences P.127	School of Chemical sciences, Solapur University, Solapur (Maharashtra)
11	Synthesis, characterization and electrothermal analysis of rare-earth zirconyl fumarate	D. V. Nighot & et.al.	November, 2013	32 nd Indian council. Chem P-60	Department of Studies in Chemistry, karnatak University, Dharwad
12	Studies on thermal decomposition of strontium-iron and barium- iron	D. V. Nighot & et.al.	April, 2014	Research Conference (BCUD, Pune) Innovation – 2014 P 79	PDEA'S, Baburao Ghopal College, Sangavi, Pune

	tartarate in the solid state.				
13	Synthesis, Characterization and photocatalysis of rare-earth doped ZnO nanoparticles	D. V. Nighot & et.al.	June, 2014	3rd International Conference on Chemistry for sustainable development: Indian perspective P.39	Indian Council of Chemists at Dubai
14	Study of structural and electrical conduction behavior of Ru-based pyrochlores	D. V. Nighot & et.al.	December, 2014	National Conf. on Advances in Chemical Sciences with special Reference to Molecular Spectroscopy, Material Sciences & Organic Electronics (NCACS-2014), P. 14	Department of Chemistry, F. C. College, Pune
15	Study of electrical and magnetic properties of rare-earth substituted pyrochlore oxides	D. V. Nighot & et.al.	January, 2015	National Conf. on Frontiers in Chemical and material Sciences P. 101	Department of Chemistry, Shivaji University, Kolhapur

16	Synthesis and characterization of M- and W-types Nano-ferrites	D. V. Nighot & et.al.	July, 2015	Regional Research Conference for Engineering Teachers (BCUD, SPPU Pune) Innovation – 2015 P 77	Padmashree Dr. D. Y. Patil IEMR, Akurdi, Pune
17	Preparation and study of physical properties of rare-earth substituted pyrochlore oxides	D. V. Nighot & et.al.	March, 2016	International Conf. on Functional Eco-friendly Smart Emerging Materials, P. 61	PDEA'S, Baburao Ghopal College, Sangavi, Pune
18	Synthesis and characterization of nanocrystalline substituted ferrites by co-precipitation technique	D. V. Nighot & et.al.	June, 2017	5 th International Current Concepts in Chemistry	Indian Council of Chemists at Bali (Indonesia)
19	Synthesis and characterization of Pr ³⁺ substituted cobalt ferrite nanoparticles prepared by co-precipitation method	D. V. Nighot & et.al.	December, 2017	36 th National conference of Indian Council of Chemists P.80	School of Chemistry, Andhra University, Visakhapatnam (A.P.)

20	Synthesis and thermal decomposition study of some rare-earth zirconyl tartrates leading to pyrochlore type nano-oxides	D. V. Nighot & et.al.	June, 2019	6 th international conference of Indian Council of Chemists, PP 24, P.33 - 36	Indian Council of Chemists at Paris (France)
21	Investigation on Solid State Pyrolytic Decomposition of Bimetallic Fumarate and Tartrate Precursors of Co (II), Ni (II) and Zn (II) with Manganese	D. V. Nighot & et.al.	July 2021	Global Conference on Recent Advancements in Sustainable Materials (GC-RASM 2021)	AJ Institute of Engineering and Technology, Mangalore, Karnataka, India
22	Impact of Codoped on Structural, Electrical and Magnetic Properties of M-Type Strontium Hexaferrite Nanoparticles Synthesized by	D. V. Nighot & et.al.	November 2021	Third International Conference on Recent Advances in Materials and Manufacturing (ICRAMM 2021)	Department of Mechanical Engineering, D. Y. Patil College of Engineering and Technology, Kolhapur, Maharashtra, India

	Soft Chemical Route				

PhD / ME / BE Student Guided for Project

Level	Ph.D.	M.E. (PG)	B.E. (UG)
No. of Student guided	-	-	02

Professional Memberships

Professional Body	Level (National/ International)	Type (Fellow/Life/Annual)	Membership No.
Indian Society for Technical Education	National	Life Member	LM /29694
Indian Council of Chemist	National	Life Member	LF/1021
Marathi Vidnyan Parishad	Pune Division	Life Member	-

Patents / IPR Filed / Granted

S. No	Investigator Details	Title	Year	Status (Filed/Granted)	Details
1					

Books Published

S. No	Title	Name of the Publisher	ISBN/ISSN Number
	A Text Book of Chemistry I D. V. Nighot and et. al. (For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering, 2004)	Nirali Prakashan, Pune	
	A Text Book of Chemistry II D. V. Nighot and et. al. (For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering, 2004)	Nirali Prakashan, Pune	
	Practical Handbook of Chemistry I D. V. Nighot and et. al. (For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering, 2004)	Nirali Prakashan, Pune	
	Practical Handbook of Chemistry II (For Second year degree course in Chemical, Polymer, Petroleum and Petrochemical Engineering, 2004)	Nirali Prakashan, Pune	
	A Text Book of Engineering Chemistry D. V. Nighot and et. al. (For First year degree course in Engineering, 2012)	Nirali Prakashan, Pune	ISBN: 978-93-82448-12-9
	A Text Book of Engineering Chemistry (Revised Edition)	Nirali Prakashan, Pune	ISBN: 978-93-82448-12-9

	D. V. Nighot and et. al. (For First year degree course in Engineering, 2015 Pattern)		
	A Text Book of Engineering Chemistry D. V. Nighot and et. al. (For First year degree course in Engineering, 2019)	Nirali Prakashan, Pune	ISBN: 978-93-89406-58-0
	SLM Book on Inorganic Chemistry-I for MSc. [Chemistry] edited by Dr. Deepak V Nighot for School of Architecture, Science and Technology, Yashwantrao Chavan Maharashtra Open University Nashik (ISBN: 978-93-95855-13-6 Published on 27 th September 2022)		

Research Grants Received

S. No	Program	Duration	Funding Agency	Grant Amount
1.	Research Proposal	2013-15	BCUD, SPPU, Pune	INR2.0 Lacs

Details of Workshop / STTP / FDP / Seminar / Conferences Organized

S. No	Title	Type	Duration	Level (State/National/International)	Sponsoring Agency
01					

Contribution as Resource Person

S. No.	Place/ Organization	Topic	Level(National/Int/ State/Regional)	Date
--------	---------------------	-------	-------------------------------------	------

--	--	--	--	--

Details of Workshop / STTP / FDP Attended

S. N	Title	Type	Duration	Organizer	Sponsoring Agency
1	Making Teaching – Learning Process Effective	FDP	20 th to 25 th Dec.1999	AISSMS, College of Engineering, Pune	ISTE & Engineering Education Foundation, Pune
2	Total Quality Management in Engineering Education	FDP	15 th to 27 th May 2000	AISSMS, College of Engineering, Pune	ISTE
3	Towards Institutional Competitiveness at	National Level Seminar	9 th to 10 th April, 2004	Symbiosis Institute of Business and Management, Pune	AICTE
4	Recent Trends in Catalysis	Distric Level Seminar	16 th Dec. 2008	Waghire College, Saswad, Pune	QIP, University of Pune, Pune
5	Synthesis and Characterization of Glass/Glass-ceramics (IWSSCGGC-2010)	International workshop and Symposium	7 th to 10 th July, 2010	Yashada MD Center, Pune	MRSI & C-MET, Pune
6	Nanoscience and Technology: Frontiers in Science and Technology	National Level Seminar	7 th to 9 th Feb. 2011	Department of Chemistry and Physics, Baburaoji Gholap College, Sangvi, Pune	UGC
7	Next Two Decades of Chemical Sciences & Technology”	Work shop	23 rd September, 2011	National Chemical Laboratory	MAS, Dept of Chemistry, Uni. Pune & NCL, Pune
8	Emerging Trends in Material Science	National level seminar	18 th October, 2011	S. P. College, Pune	MRSI, Pune Chapter

9	Syllabus Implementation – Engineering Chemistry for First Year Engineering” at	Workshop	30 th July,2012	D. Y. Patil College of Engineering, Akurdi, Pune	University of Pune, Pune
10	Staff Development Program	SDP	25 th to 27 th July 2016	AISSMS, College of Engineering, Pune	AISSM Society, Pune
11	35 th Annual National Conference	National Conference	22 nd to 24 th December, 2016	Haribhai V Desai College, Pune	Indian Council of Chemists
12	Academic and Administrative Audits through ICT	National level seminar	7 th & 8 th January, 2017	PDEA's B. G. College, Sangavi, Pune	BCUD, Savitribai Phule Pune University, Pune
13	Nanotechnology and its Applications for Sustainable Development in Chemical Industries	33 rd National Convention	10 th September, 2017	AISSMS, College of Engineering, Pune	IEI, Pune Local Centre, Pune
14	Virtual Labs	Workshop	4 th August, 2017	PVG's , College of Engineering & technology, Pune	MHRD, Govt of India
15	Inspiring Teachers Strengthening Generations:”Leapfrogging to Future Ready Higher Education”	3rd National Teacher Congress	4 th to 6 th January, 2019	MIT World Peace University, Pune	MIT World Peace University, Pune
16	Environment and Green Technology for Sustainable Development	National Seminar	18 – 19 th January, 2019	AISSMS College of Engineering, Pune	AISSM Society, Pune
17	Examination Reforms	Online FDP	29 th April to 2 nd May 2020	Institutional Development Cell, AICTE	AICTE
18	Outcome Based Education: A Step Towards Excellence	Online FDP	11 th to 15 th May 2020	Government College of Engineering, Karad	Margdarshan Scheme of AICTE, New Delhi
19	Promoting Quality Culture in Technical Institutions ”	Online FDP	25 th to 29 th May 2020.	AISSMS, Engineering College of	UGC Paramarsh Scheme

				Engineering, Pune	
20	A Smart and Sustainable World in Concrete and Structures	Online FDP	4 th to 8 th June 2020	Department of Civil, AISSMS, Engineering College of Engineering, Pune	UltraTech Cement Limited, Pune
21	SciLab	Online FDP	8 th to 14 th June 2020	Department of Civil, AISSMS, Engineering College of Engineering, Pune	Spoken Tutorial Project, IIT Bombay
22	Future Materials: Nanocomposites	Online FDP	15 th to 21 th June 2020	Department of Mechanical, Engineering College of Engineering, Pune	Bharati Vidyapeeth (Deemed to be University)
23	Research in Energy Technologies	Online FDP	6 th to 10 th July 2020	Department of Mechanical, Engineering College of Engineering, Pune	Bharati Vidyapeeth (Deemed to be University)
24	Sophisticated Analytical Instruments: Principles and Applications to Chemical and Material Sciences	Online FDP	21 st to 25 th July 2020	Sinhgad College of Engineering, Pune	Sinhgad College of Engineering, Pune
25	Alternate Fuels: Biofuels	Online FDP	21 st - 25 th September 2020	Atal FDP, AICTE	Atal FDP, AICTE

26	Novel Materials	Online FDP	5 th – 9 th October 2020	Atal FDP, AICTE	Atal FDP, AICTE
27	Accelerating Innovation in Material Science: Surface Characterization	Online FDP	18 th to 22 nd May, 2021	BMS Institute of Technology & Management, Yelahanka, Bengaluru	BMS Institute of Technology & Management, Yelahanka, Bengaluru
28	Cyber Crime during Coronavirus Era: Prevention & Protection	National Webinar	4 th May 2020	S.S.P. Mandal's C T Bora College, Shirur, Pune	S.S.P. Mandal's C T Bora College, Shirur, Pune
29	Basic Fundamentals of Spectroscopy, applications of UV and FTIR Spectroscopy and accessories	National Webinar	28 th May 2020	K M C College, Khopoli on	K M C College, Khopoli on
30	Recent Advances in Chemical Science	National Webinar	25 th & 26 th June 2020.	JB Institute of Engineering and Technology (UGC Autonomous) , Hyderabad, Telangana	JB Institute of Engineering and Technology (UGC Autonomous) , Hyderabad, Telangana
31	W4: Assessment of Cos, POs and PSOs	National Webinar	21 st July, 2020	NITTTR Bhopal	NITTTR Bhopal
32	W7 : Information required for student performance	National Webinar	6 th August 2020	NITTTR Bhopal	NITTTR Bhopal
33	New Education Policy 2020: The Way Forward	National Webinar	17 th August 2020	IQAC	SPPU, Pune
29	W-9: "Continuous Improvement, Institutional Governance & Support Systems"	National Webinar	18 th August 2020	NITTTR Bhopal	NITTTR Bhopal

30	W11 on "Planning required during the visit and post-visit activities"	National Webinar	25th August 2020	NITTTR Bhopal	NITTTR Bhopal
31	W12 on "Action plan to prepare Institute for accreditation"	National Webinar	27 th August 2020	NITTTR Bhopal	NITTTR Bhopal
32	Innovations in Materials for Energy and Environment	National Webinar	29 th August 2020	C-MET	C-MET & C T Bora College, Shirur
33	Strategies and framework for Autonomy	National Webinar	15 th October 2020	NITTTR Bhopal	NITTTR Bhopal
	Lateral Thinking - How to generate revolutionary ideas	National Webinar	19 th October 2020	MHRD Innovation cell	MHRD Innovation cell
34	'My Journey to Brain	National Webinar	31 st October 2020	Department of E & TC Engineering	AISSMS College of Engineering, Pune

Major Professional Responsibilities Handled

S. No.	Role and Responsibilities
1	Member - Local Management Committee : 2005 to 2010
2	Incharge- College Magazine (Shivdarpan 2003 to 2006) : 2003 to 2006
3	Chairman- Printing and Publicity Committee (Shivanjali 2003 to 2006) : 2003 to 2006
4	Assistant Director- SE – CAP (University of Pune Theory Examination) : May 2007
5	Chairman- Prize Distribution Committee (Shivanjali 2008) : March 2008
6	Member- Anti-Ragging Committee : July 2009 to June 2016
7	Chairman- Prize Distribution Committee (Shivanjali 2010) : March 2010
8	Departmental Subject Coordinator (Engineering Chemistry) : June 2012 to May 2013
9	Incharge- Cultural Activities : August 2012 to Dec. 2015

10	Member - FE Admission Committee	: Every Year
11	Coordinator- Department First Year Engineering	: June 2013 to May 2016
12	Member Secretary: Grievance Redressal Committee	: June 2012 to June 2017
13	Member- Grievance Redressal Committee	: February 2016 to June 2017
14	College Examination Officer (CEO)	: June 2016 onwards
15	Member IQAC	: Jan 2021 onwards
16	Member- Grievance Redressal Committee	: February 2022 onwards
17	Head, First Year Engineering	: July 2022 onwards

Awards Received

S. No.	Awards

Declaration: I hereby declare that all the statement made above are correct to the best of my knowledge and belief.

Dr Deepak V Nighot