Dr. Ajay Pandurangji Shelorkar

Assistant Professor Department of Civil Engineering MVPS, s KBT College of Engineering Udoji Maratha Campus Gangapur Road Nashik 422013



Research and Teaching Interest:

Ultra-high performance High fibre reinforced concrete Analysis and Design Earthquake resistance building Analysis and Design of steel structures Microstructural evaluation of concrete

Scopus ID: 57202968591		Google Scholar: H Index:02		
		i10-Index:01		
ORCID: No: https://orcid.org/0000-		Research Gate: www.researchgate.net/profile/Ajay-		
0002-5715-1307		Shelorkar-2		
Web of Science Researcher ID:		J-6703-2015		
Publications: Total: 32 Journals:20		Conferences:12		
Personal information:				
Date of birth	18 December 1973			
Present address:	102, Saivishwa	Saivishwa Apartment, Plot No.28		
resent address.	Bhawanjalinagar Gangapur road Nashik-422013			
Email:	shelorkar@gmail.com, shelorkar.ajay@kbtcoe.org			
Mobile Number:	+91-9822935983			

Education Qualification:

Qualification	Institution	Board/ University	Year of Passing	%	Class
Ph.D.	KKWIEER, Nashik	SPPU, Pune	2021	-	Awarded
M.E	KKWIEER, Nashik	SPPU, Pune	2021	A grade	First
B.E.	VYWS COE Badnera Amravati	SGBAU, Amravati	1996	66.07	First
DCRE	Dr. P. D. Poly Amravati	DTE Bombay	1993	64	First

Patent Awarded: -

1. Patent: - Construction operation, monitoring, maintenance planning and future risk prediction of bigger constructions using Artificial Intelligence based Internet of things Patent No: 2021105481 (Granted)

Grants and Projects undertaken:

1. Received 5 00 lack grant for construction of parking shed from SPPU Pune

Consultancy project undertaken

- 1. Structural condition assessment of various public and residential building in Nashik
- 2. Consultancy in Geotechnical Engineering

Summary of Experience:

Sr.No.	Name of the Institute	Post Held	From	То	Total
1	MVPS,s KBT College of Engineering	Assistant Professor	01/01/2013	Till Date	07 years 06 Month
2	NDMVPS KBT College of Engineering	Lecturer on Sr.Scale	01/07/2009	31/12/2012	03 years 05Month
3	NDMVPS KBT College of Engineering	Lecturer	01/02/2008	30/06/2009	01 Years 05 Month
4	Anuradha Engineering college chikhali	Lecturer	25/06/2007	31/01/2008	07 Month
5	Shri Sant gadgebaba polytechnic Bhusawal	Lecturer	02/06/1997	30/04/1999	01 Years 10 Month
6	Lamit Dhamangaon	Lecturer	01/08/1996	31/03/1997	07 Month

Professional Experience:

Sr.No.	Name of the Institute	Post Held	From	То	Total
1	Saurabh construction	Site Incharge	23/10/2001	24/06/2007	05 Years 08 Month

Reviewer of International Journals

- 1. Certified academic reviewer from PUBLON Academy
- 2. Journals of Civil Engineering Infrastructures -An International Journal
- 3. Journal of Buildings and Sustainability
- **4.** Iranian Journal of Energy and Environment (IJEE), previously called Iranica Journal of Energy and Environment (IJEE)

Honours and Awards:

1. International Conference on Civil Engineering, Architecture and Sustainable Infrastructure. ICCEASI 2021 – Virtual Conference"- ICCEASI Committee Member

Book Chapters:

1. Utilization of Artificial Sand in High strength Concrete (ISBN:978-620-4-21093-3)

Courses Undertaken:

1. NPTEL Online certification course on Design of steel structure

Teaching Experience (Subject Thought):

- **1.** F.E. -Basic Civil and Environmental Engineering, Engineering Mechanics, Environmental studies -II
- 2. S.E.-Building construction and built Environment, Geotechnical Engineering
- 3. T.E.-Advanced Surveying, Foundation Engineering, Structural Design-I
- 4. B.E.-Earthquake Engineering (Ele.II), Structural Design-III

Membership in Professional Organizations:

- 1. The Indian Society for Technical Education-Life Member (LM 60701)
- 2. Association of structural rehabilitations (Astr) M-A00302
- **3.** Teaching and Education Research Association (TERA) Membership ID: TERA-M-192003
- 4. Institute of Engineering Research and Publication Membership ID:PM5179288
- 5. International Association of Engineers Membership ID: (IAENG) 237486
- **6.** Institute of Engineers India M-1728770
- 7. Association of Consulting Civil Engineers (India) Membership ID:5512-L

Computer Skills:

- 1. Auto-CAD
- 2. STAAD-PRO

Seminars /Workshops/Conference/Camps organized:

- Organized One Week Online Faculty Development Program on Advances in Concrete Construction and Techniques in Association with Indian Institute of Engineers Local Chapter Nashik, Department of Civil Engineering, MVPS's K.B.T. College of Engineering, Nashik from 10/08/2021 to 15/08/2021
- **2.** Organized three days Entrepreneurship Awareness Camp in association with MCED Nashik from 05/11/2020 to 07/11/20
- **3.** Two week ISTE Main Workshop on "Engineering Mechanics, 26th November 2013 to 06th December 2013" Under the National Mission on Education through ICT (MHRD, Govt. of India), conducted by Indian Institute of Technology at N.D.M.V.P. Samaj's K.B.T. College of Engineering, Nashik.

Faculty development programs (STTP/workshops/QIP) attended:

- **1.** One week AICTE-ISTE Approved orientation/Refresher Program Repair ,Rehabilitation, and retrofitting of RCC structures, ADCET ,Ashta,Maharashtra from,20 Jan.2022 -27 Jan 2022.
- **2.** One week AICTE Training and Learning (ATAL) Academy Online FDP on "Earthquake analysis Design using latest Civil Engineering Software "at Coimbatore Institute of Technology from 18/10/2021 to 22/10/2021.
- **3.** Five days Online Faculty Development Program on Advances in Civil Engineering Research-ACER2021, Matsuri Engineering College, Saidabad, Hyderabad, Telangana from 25/10/2021 to 29/10/2021.
- **4.** Three Days Workshop on Implementation and execution of Third Year Civil Engineering 2019 Pattern Syllabus" Anantrao Pawar College of Engineering and Research, Pune from, Jan 13-Jan 15,2022.
- **5.** One week AICTE-ISTE Approved orientation/Refresher Program Recent Advances in Civil Engineering, Jyothy Institute of Technology,Begaluru,Karnataka, from,29 Dec.2021 -04 Jan 2022.
- **6.** One Week Online Faculty Development Program on Innovative Teaching Pedogogy in the Technical Institutions, MVPS's K.B.T. College of Engineering, Nashik from 01/06/2020 to 05/06/2020
- 7. One Week Online Faculty Development Program on Transforming Education-The Google Classroom way, Achi Institute of Management and Entrepreneurial Development, Annanagar Chennai from 01/06/2020 to 07/06/2020
- **8.** One Week Online Faculty Development Program on A Smart and Sustainable World in Concrete and Structures, Department of Civil Engineering, AISSMS College of Engineering, Pune in association with UltraTech Cement Limited, Pune from 04/06/2020 to 08/06/2020
- 9. One Week Online Faculty Development Programme (FDP) on Python 3 organised by the University Department of Mathematics, TMBU, UNIVERSITY DEPARTMENT OF MATHEMATICS Tilka Manjhi Bhagalpur University, Bhagalpur from 08/06/2020 to 14/06/2020

- **10.** International Level Faculty Development Programme on GATEWAY TO INNOVATION, TMBU, Chandulal Sheth College of Science, Khed-Ratnagiri, Maharashtra, India from 22/06/2020 to 26/06/2020
- **11.** One Week Online Faculty Development Programme (FDP) on on Advances in water resources management Organized by Govt.College of Engineering A'bad AICTE from 23/11/20 to 27/11/20
- **12.** One week AICTE sponsored STTP on Role of Teacher: To Boost Moral values, Ethics in Engineering Education System Organized by Department of Electronics & Telecommunication Engineering MVPS's, KBT College of Engineering, Nashik from 17/12/20 to 23/12/20
- **13.** One week AICTE Training And Learning (ATAL) Academy Online FDP on "Earthquake Engineering" at Govt.College of Engineering Pune from 04/01/2021 to 08/01/2021.
- **14.** One week AICTE-ISTE approved Orientation/Refresher Programme on "Improving Excellence in Teaching" held organized by Anantrao Pawar College of Engineering & Research, Parvati, Pune, Maharashtra from 08.02.2021 to 13.02.2021
- **15.** Short Term Training Program (PhaseIII) on Sustainable Materials & Resilient Buildings and Philosophy, Design, Implementation, Performance sponsored by AICTE and organized by Department of Civil Engineering, Kakatiya Institute of Technology & Science, Warangal, during 15 th 20 th February 2021. The participant obtained grade 'A+' in the Comprehensive exam.
- **16.** One week AICTE-ISTE approved Orientation/Refresher Programme on "Innovation in Concrete Technology" held during 12.02.2021 to 18.02.2021 organized by Yashwantrao Bhonsale Polytechnic College, Savantwadi, Sindhudurg Maharashtra
- **17.** One Week Online Faculty Development Program on Advances in Civil Engineering Department of Civil Engineering, Nagpur Institute of Technology, Nagpur In association with Institution of Engineers (India), Nagpur26/05/2020 to 30/05/2020
- **18.** One Week Online Faculty Development Program on "Advanced Trends in Engineering" SKN SINGHAD College of Engineering, Pandharpur 23/05/2020 to 27/05/2020
- **19.** One Week Online Faculty Development Program on "Advanced Optimization Tools and Techniques for Researcher and Engineers" Department of Mechanical Engineering, Nagpur Institute of Technology, Nagpur In association with Institution of Engineers (India), Nagpur from 19/05/2020 to 23/05/2020
- **20.** One Week Online Faculty Development Program on "HTML and Exp EYES software" Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Government of India, and remotely organised by Department of physics of S.V.P. College, Bhabhua, Bihar from 14/05/2020 to 18/05/2020
- **21.** Two Weeks International Faculty Development Program on Emerging Trends in Industry 4.0" JSPM's Rajarshi Shahu College of Engineering from 18/05/2020 to 29/05/2020
- **22.** Two week ISTE STTP on "Introduction to Structural Engineering, 30th November 2015 to 09th January, 2016" Under the National Mission on Education through ICT

- (MHRD, Govt. of India), conducted by Indian Institute of Technology Kharagpur at N.D.M.V.P. Samaj's K.B.T. College of Engineering, Nashik.
- **23.** Two week ISTE STTP on "Fluid Mechanics, 20th May 2014 to 30th May,2014" Under the National Mission on Education through ICT (MHRD, Govt. of India), conducted by Indian Institute of Technology Kharagpur at N.D.M.V.P. Samaj's K.B.T. College 0f Engineering, Nashik.
- **24.** One week ISTE Workshop on "Engineering Mechanics" conducted by Indian Institute of Technology, Bombay from 16th September to 20th September 2013 at IIT, Bombay.
- 25. Two week ISTE Main Workshop on "Engineering Mechanics, 26th November 2013 to 06th December 2013" Under the National Mission on Education through ICT (MHRD, Govt. of India), conducted by Indian Institute of Technology at N.D.M.V.P. Samaj's K.B.T. College of Engineering, Nashik.
- 26. One day Workshop on "Engineering Mechanics" (2012 Course) organized by Akhil Bharatiya Maratha Shikshan Parishad's College Engineering of Studies Research, Parvati, Pune, in association with Board of (Civil Engineering), University of Pune on 21th January, 2013.
- **27.** Two Day's ISTE Workshop on "Akash for Education" conducted by Indian Institute of Technology, Bombay from 10thNovember to 11th November ,2012 at N.D.M.V.P. Samaj's K.B.T. College of Engineering, Nashik.
- **28.** One day Workshop on "Finite Element Method using ANSYS & MATLAB" conducted by IFS ACADEMY at N.D.M.V.P. Samaj's K.B.T. College Of Engineering, Nashik on 24th February, 2012.
- **29.** Two Day state level workshop on "Surveying and Cartography" organised by the Department of Geography & University of Pune(under QIP) at KTHM Science College, Nashik on 15th January to 16th January (As a Resource Person)
- **30.** One day Workshop on "Online and Theory Examination of Engineering Mechanics" organized by Sinhgad College of Engineering ,Pune,in association with Board of Studies (Civil Engineering),University of Pune on 09th March, 2010.
- **31.** One day Workshop on "Advance Surveying" organized by VIIT, Kondhwa (Bk)Pune-48,in association with Board of Studies (Civil Engineering),University of Pune on 24th July, 2010.
- **32.** One week ISTE Mission 10X Workshop conducted at N.D.M.V.P. Samaj's K.B.T. College of Engineering, Nashik from 18th May to 22nd May 2009.
- **33.** Two Day's ISTE Workshop on" In House Induction Training Programme for Teachers" organised by the Department of Computer Science at Anuradha Engineering College ,Chikhli on 25th October to 26th October 2007.
- **34.** One day Workshop on "TE Civil Syllabus Revision(Pattern 2012)" organized by MIT COLLEGE OF ENGINEERING, Kothrud, Pune, on Monday, 9th June, 2014.

Journal Publication list:

- 1. Shelorkar, Ajay P., and Jadhao Pradip D. "Strength and toughness prediction of slurry infiltrated fibrous concrete using multilinear regression" Advances in Concrete Construction, Volume 13, Issue 2, February 2022, pp.123-132
- 2. Shelorkar, Ajay P. "Assessment of Water Permeability Test on Polypropylene based Self-Compacted Fibre Reinforced Concrete (PSCFRC)" IOP Conference Series: Materials Science and Engineering, **1197** 012080, pp.1-10
- 3. Shelorkar, Ajay P. "Slurry Infiltrated Fibrous Concrete (SIFCON) -A Review" International Journal of Research Publication and Reviews Vol (2) Issue (8) (2021) Page 780-787
- 4. Shelorkar, Ajay P., and. Jadhao Pradip D. "Application of Ultra High Performance Fibre Reinforced Concrete on Earthquake Resistant Structure" International Journal of Engineering Applied Sciences and Technology, Volume 6, Issue 4, August 2021, pp. 246-249
- 5. Bargat Komal., and Shelorkar, Ajay P. "Development, Implementation and Comparison of Mobile Application with Traditional Method for Scheduling on Construction Site- Project Masterplan" International Research Journal of Engineering and Technology (IRJET), Vol. 08, No.:09, 2021, pp. 1118-1128
- 6. Patil. Maheshwari, and Shelorkar, Ajay P. "Analysis of Construction Industry Psychology after Pandemic Using Contemporaneous Activities Record Case Study Of Nasik City" International Research Journal of Engineering and Technology (IRJET), Vol. 08, No.:09, 2021, pp. 1070-1076
- 7. Bargat Komal., and Shelorkar, Ajay P. "Development of Mobile Application For Critical Implementation of Schedule and Management of Resources" Journal of Education: Rabindra Bharati University Vol: XXIII, No.: 11, 2021, pp. 106-120
- 8. Patil. Maheshwari, and Shelorkar, Ajay P. "Analysis of Labours Psychology In Construction Industry of Nasik City After Covid 19 Pandemic Situation" Journal of Education: Rabindra Bharati University Vol: XXIII, No.: 11, 2021, pp. 29-36
- 9. Yadav, M and Shelorkar Ajay P "Analysis of the Factors Causing Disputes in Construction Projects using One -Way Anova" International Journal of Engineering Research & Technology (IJERT) Volume 10, Issue 5, May 2021, pp. 361-364
- 10. Padghan Ashvini and Shelorkar Ajay P "A Critical Literature Review on Wireless Safety Device for Manhole Cleaners" International Research Journal of Engineering and Technology (IRJET) Volume 7, Issue 7, July 2020, pp. 4486-4490
- 11. Shelorkar, Ajay P., and Jadhao Pradip D. "Residual strength and microstructural identification of slurry infiltrated fibrous concrete (SIFCON) at elevated temperature" Indian Concrete Journals (ICJ) Volume 93, Issue 8, August 2019, pp. 67-77
- 12. Shelorkar, Ajay P., and. Jadhao Pradip D. "Effects of Steel Slag on Durability Properties of Slurry Infiltrated Fibrous Concrete" International Journal of Engineering and Advanced Technology (IJEAT) Volume 8, Issue 6, August 2019, pp. 143-148
- 13. Shelorkar, Ajay P., and Jadhao Pradip D. "Durability assessment of slurry infiltrated fiber concrete by using various pozzolanic materials" Indian Concrete Journals (ICJ) Volume 92, Issue 4, April 2018, pp. 56-61

- 14. Shelorkar, Ajay P., and Jadhao Pradip D. "Determination of Mechanical Properties of Slurry Infiltrated Steel Fiber Concrete Using Fly Ash and Metakaolin" International Journal of Engineering and Technology (IJET) Volume 7, Issue 4.5, 2018, pp. 262-267
- 15. Shelorkar, Ajay P., and et.al., "Evaluation of Durability of Ultra High Performance Fibre Reinforced Concrete (UHPFRC) Through Extreme Temperature" International Journal of Computer Sciences and Engineering, Vol. 5, Issue 10, Oct 2017, (IJCSE), pp.105-109
- 16. Shelorkar, Ajay P., and et.al., "Determination of Mechanical Strength for High Grade Concrete by Partial Replacement of Artificial Sand" International Journal of Innovative Research in Science, Engineering and TechnologyVol.3, Issue 5 May 2014, (IJIRSET, ISSN(Online):2319-8753
- 17. Shelorkar, Ajay P., and Jadhao Pradip D. "Comparison of Suitable Pozzolanic Material for High grade concrete" International Journal of Engineering and Innovative Technology (IJEIT) Volume 3, Issue 6, December 2013
- 18. Shelorkar, Ajay P., and et.al., "experimental investigation on steel fibre reinforced concrete using metakaolin" IJSCER ISSN:2319-6009 Vol.2, No.2, May2013
- 19. Shelorkar, Ajay P., and. Jadhao Pradip D. "Strength Appraisal of High-Grade Concrete by using High Reactive Metakaolin" International Journal of Innovative Research in Science, Engineering and TechnologyVol.2, Issue 3 March 2013, (IJIRSET, ISSN(Online)):2319-8753
- 20. Shelorkar, Ajay P., and Jadhao Pradip D. "Determination of durability of Metakaolin Blend High Grade Concrete by using Water Permeability Test" IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684 Volume 5, Issue 2 (Jan. -Feb. 2013), PP 35-39

Conference Papers and Posters:

- 1. Shelorkar, Ajay P. "Assessment of Water Permeability Test on Polypropylene based Self-Compacted Fibre Reinforced Concrete (PSCFRC)" International Conference on Advances in Civil Engineering (ICACE-2021) during 25-26 June, 2021 at K L Deemed to be University.
- Bargat Komal., and Shelorkar, Ajay P. "Assessment of "Covid-19" Impact in Infrastructure on Construction Growth in Nashik City" IEEE TECHNICAL KNOCKDOWN-2021 (TKD-21) ISBN No. 978-81-992245-3-6 SIT, Lonavala, Pune, India, May 30, 2021
- 3. Patil. Maheshwari, and Shelorkar, Ajay P. "Analysis of Construction Industry after Covid 19 Pandemic Situation" International Virtual Conference on Innovation in Concrete and Construction 2021, Sona College of Technology, Salem, TN, India, June 25, 2021
- 4. Patil. Maheshwari, and Shelorkar, Ajay P. "Analysis of Labours Psychology in Construction Industry of Nasik City After Covid 19 Pandemic Situation" Online International Conference On "Computing for Sustainable Development in Civil Engineering" (ICCSDC 2021), St. Martin's Engineering College, Dhulapally, Secunderabad, India, June 24, 2021 ISBN No: 978-81-952677-8-1

- 5. Bargat Komal, and Shelorkar, Ajay P. "Use of Mobile Application for Scheduling of Construction Activity" International Virtual Conference on Innovation in Concrete and Construction 2021, Sona College of Technology, Salem, TN, India, June 25, 2021
- 6. Bargat Komal, and Shelorkar, Ajay P. "Development of Mobile Application For Critical Implementation of Schedule and Management of Resources" Online International Conference On "Computing for Sustainable Development in Civil Engineering" (ICCSDC 2021), St. Martin's Engineering College, Dhulapally, Secunderabad, India, June 24, 2021 ISBN No: 978-81-952677-8-1
- 7. Yadav Mangisha., and Shelorkar, Ajay P. "Analysis of the factors causing disputes in Nashik Construction Company" IEEE TECHNICAL KNOCKDOWN-2021 (TKD-21) ISBN No. 978-81-992245-3-6 SIT, Lonavala, Pune, India, May 30, 2021
- 8. Patil. Maheshwari, and Shelorkar, Ajay P. "Factors Affecting Suppliers Selection In Construction Industry of Nasik City" IEEE TECHNICAL KNOCKDOWN-2021 (TKD-21) ISBN No. 978-81-992245-3-6 SIT, Lonavala, Pune, India, May 30, 2021
- 9. Patil Krishna A., Shelorkar, Ajay P., Shimpi Swaroop S. and Patil Ankita S. "Wireless Detection of Corrosive Salts in Concrete Using RFID Sensors" International Web Conference on Smart Engineering Technologies-2020 (IWCSET 2020) RAMCO INSTITUTE OF TECHNOLOGY, Rajapalayam, India, June 26, 2020
- 10. Shelorkar, Ajay P., and Jadhao Pradip D. "Statistical analysis of Ultra-High Performance Fibre Reinforced Concrete (UHPFRC) Using Regression Analysis and Artificial Neural Network" International Conference on Advances in Construction Technology and Management 2021, Pune, India, March 12 13, 2021
- 11. Shelorkar, Ajay P., and Jadhao Pradip D. "Statistical analysis for effect of mix-parameters on properties of Slurry Infiltrated Fiber Concrete Using Various Pozzolanic Materials" SEC18: Proceedings of the 11th Structural Engineering Convention -2018 Jadavpur University, Kolkata, India, December 19 21, 2018
- 12. Shelorkar, Ajay P., and Jadhao Pradip D. "Sorptivity of Slurry Infiltrated Fiber Concrete Containing Fly Ash and Metakaolin" UKIERI Concrete Congress Concrete: The Global Builder 5 8 March 2019 Jalandhar Punjab India

Curricular/Co-curricular/Extra-curricular activities (Such as Lecture Delivered)

- 1. Worked as a Coordinator of College magazine Abhivyakti 2011
- 2. Worked as a Editor in Chief of College magazine Abhivyakti from 2012 to till date

Administrative Responsibilities:

- 1. Working as Lab Incharge of Strength of Material (Material Testing) laboratory from 08/09/2020 to till date.
- 2. Working as In charge of Paver Block Plant From 2020 to till date
- 3. Worked TE Class Coordinator from 2010 to till date
- 4. Worked as an External Senior Supervisor at SVIT Chincholi from 14/11/2019 to 30/11/2019
- 5. Worked TE Assistant CAP (Centralised Assessment Procedure) director for May2018
- 6. Worked as a project coordinator for academic year 2016-17

- 7. Worked as a Departmental training and placement coordinator (DPC) from 2016 to 2018
- 8. Worked as Departmental ED (Entrepreneurship Development) Cell Coordinator from 2017to till date
- 9. Worked TE Seminar Coordinator from 2017
- 10. Worked as a NSS (National Service Scheme) Co ordinator during 2009
- 11. worked as Lab Incharge of Geotechnical Engineering laboratory from 01/02/2008 to 08/09/2020

Career Aspirations:

- 1. Writing Research Proposal and patent.
- 2. Organizing a faculty development program.
- 3. Enriching research culture among students.