BIO-DATA



1.		Name			Dr. Nitesh	Prakash Y	'elve			
2.		Designation			Associate	Professor	and Dean (PG S	tudies)		
3.		Residential	Address	5	204, Amrut Kalash CHS, Plot No. 90, Sector 22,					
					Kamothe, Navi Mumbai - 410 209, Maharashtra, India					
4.		Date of birt	h		November	r 21, 1979	•			
5.		Total Exper	ience		18 Years					
	i.	Teaching			As a Lectu	rer = 07 Y	ears 03 Days			
		S				As an Assistant Professor (5th Pay + 6th Pay) = 07 Years 04 Months				
				09 Days			••			
					As an Asso	ciate Prof	fessor = 04 Year	s 07 Mont	:hs	
					As Dean (F	PG Studies	s) = 04 Years 06	Months 2	2 Days	
	ii.	Industrial			Nil					
6.		Qualificatio	ns							
		Exam	Year	Inst	titution/ Un	iversity	Branch/Specia	alization	Percentage/CGPI	
		Passed								
		Ph.D.	2012-	Indi	an Institute	of	Aerospace Engineering		9.75 / 10	
			2016	Tec	hnology (IIT) Bombay	(Aerospace Str	uctures)	(Course Work)	
					vai, Mumba	•				
				Mal	harashtra, Ir	ndia				
		M.Tech.	2006-		rmata Jijaba		Mechani		9.3 / 10 (First	
			2008		hnological II		Engineer	_	Class)	
					TI), Matunga	*	(Machine D	esign)		
					mbai, Maha	rashtra,				
				Indi						
		B.Tech.	1997-		Babasaheb .		Mechani		63.44 % (First	
			2001		hnological L	- 1	Engineer	ing	Class)	
					ere, Taluka:					
					ngaon, Distr					
				_	gad, Mahara	asntra,				
		A 33:4:1 4)1:6:-	Indi						
		Additional Chartered Er								
7.		Employmen			1					
, .		Employmen	Institut				Year	Г	esignation	
			mstru	1011			(From		esignation	
						,	To)			
		Fr. C. Rodri	gues Ins	titute	of	July 1	16, 2016 to	Dea	n (PG Studies)	
		Technology	_			-	ïll date		,	
		Maharasht								
		Fr. C. Rodri		titute	of	July 07, 2016 to		Associate Professor		
		Technology	_				ïll date			
		Maharasht								
		ivianarasht	ra, india							

Fr. C. Rodrigues Institute of	February 28, 2009 to	Assistant Professor	
Technology, Vashi, Navi Mumbai,	July 06, 2016		
Maharashtra, India	(07 Years 04 Months		
	09 Days)		
Fr. C. Rodrigues Institute of	January 10, 2003 to	Lecturer	
Technology, Vashi, Navi Mumbai,	February 27, 2009		
Maharashtra, India	(06 Years 01 Month		
	18 Days)		
Dr. Babasaheb Ambedkar	July 17, 2001 to	Lecturer	
Technological University,	May 31 2002		
Lonere, Taluka: Mangaon, District:	(10 Months 15 Days)		
Raigad, Maharashtra, India			

8. Undergraduate / Postgraduate Teaching Experience and Subjects Taught

Subjects Taught at UG level

Sr.No.	Name of Subject	Semester
1.	Engineering Mechanics	Semester I
2.	Engineering Drawing	Semester II
3.	Mechanical Engineering Measurements	Semester V
4.	Dynamics of Machinery	Semester V
5.	Mechanical Vibration	Semester VI
6.	Computer Aided Design and Computer	Semester VII
	Aided Manufacturing	

Subjects Taught at PG level

Sr.No.	Name of Subject	Semester
1.	Tribology	Semester I
2.	Mechanical Vibration	Semester I
3.	Composite Materials	Semester I and II
4.	Advanced Machine Design	Semester II

9. Research Experience

Senior Research Associate at Department of Systems Engineering and Engineering Management, City University of Hong Kong, 83 Tat Chee Avenue, Kowloon Tong, Hong Kong from April 15, 2019 to June 28, 2019

Postdoctoral Fellowship at Department of Systems Engineering and Engineering Management, City University of Hong Kong, 83 Tat Chee Avenue, Kowloon Tong, Hong Kong from May 22, 2017 to September 30, 2017

10. Research Funding / Consultancy Services:

Sr.No.	Name of the Company	Address	Product	Consulting Service	Consulting Fees	Period
1.	IIT Bombay	Powai,	Axial	Vibration	10,000/-	2016
		Mumbai	compressor	measurement		

Research Grants:

Sr.No.	Name of Funding Organization	Type of Grant	Amount (Rs.)	Year	Name of Research Project
1.	Mumbai University, India	'University Minor Research Grant'	40,000/-	2019- 2020	"Development of an IoT-enabled Lamb wave-based real-time damage detection system"
					(Co-PI) (Project No. 938)
2.	Mumbai University, India	'University Minor Research Grant'	60,000/-	2019- 2020	"Detection of damage in pipes using linear characteristics of ultrasonic guided waves"

echnic	ai Collaboration / La	ad Funding w	un maustries			
Technical Collaboration / Lab Funding with Industries						
	Vashi, India	J. dille			the sp	eed
11.	Fr. C. Rodrigues Institute of Tech,	'Research Grant'	75,000/-	2009	"Virtui	al mentation for
	Institute of Tech, Vashi, India	Grant'			contro	ol" (Co-PI)
10.	Fr. C. Rodrigues	'Research	85,000/-	2011	virtual tion" (No. 33	l instrumenta- (Co-PI) (Project
	omversity, mula	Research Grant'		2012	using of	closed loop ack control pt through
9.	Mumbai University, India	Grant' 'University Minor	15,000/-	2011-2012	"Spee	ct No. 335) d regulation of ng system by
8.	Mumbai University, India	'University Minor Research	32,000/-	2012- 2013	contro	ctive vibration ol of a cantilev beam" (PI)
	University, India	Minor Research Grant'	25,000,	2015	metall	lic plates using waves" (Co-PI)
7.	University, India Mumbai	Minor Research Grant'	50,000/-	2016	dama thin A using (Proje	age detection i luminium plate g wavelets" (PI ct No. 420) age detection i
6.	Mumbai	Grant' 'University	45,000/-	2015-	thin pl using I (Co-PI 593)	n monitoring of late structures Lamb waves") (Project No. nb wave based
5.	Mumbai University, India	'University Minor Research	30,000/-	2016- 2017	"A tim	ct No. A-33) ne reversal ge imaging od for structura
4.	Mumbai University, India	'University Minor Research Grant'	78,000/-	2017- 2018	situ no testing structo	o wave based in the contractive of thin plate ourse." (Co-PI)
3.	Mumbai University, India	'University Minor Research Grant'	50,000/-	2018–2019	effect impac compo (PI) (P	tigation of of ballistic t on laminated osite materials roject No. A-3
					840)) (Project No.

Sr.No.	Name of the Funding Organization	Type of Support	Amount (Rs.)	Year
1.	Rave Gears India Ltd., Mumbai	Sponsored R&D Project	1,50,000/-	2017-2019
		"In-situ condition monitoring of		
		gears" (PI)		

11. Professional Societies Fellowship / Membership

- Aeronautical Society of India (AeSI) [Membership No. M-19557, Since April 2014]
 - Executive Committee Member, AeSI Mumbai Branch, India
- Astronautical Society of India (ASI) [Membership No. LM 3036, Since August 2013]
- Condition Monitoring Society of India (CMSI) [Membership No. LM 1800326, Since June 2018]
- Indian Society for Technical Education (ISTE) [Membership No. LM 46478, Since, June 2005]
- Institute of Electrical and Electronics Engineers (IEEE) [Membership No. 93893711, Since December 2015]
 - Senior Member
- Institute of Smart Structures and Systems (ISSS) [Membership No. 246, Since June 2008]
- International Association of Engineers (IAENG) [Membership No. 101327, Since June 2008]
- The American Society of Mechanical Engineers (ASME) [Membership No. 102134761, Since September 2017]
- The Institution of Engineers (India) (IEI) [Membership No. F-1263664, Since February 2020]
 Fellow

12. Achievements / Awards / Position

- Received Indian Government Fellowship (QIP 2012-2016) for pursuing PhD at the Department of Aerospace Engineering of Indian Institute of Technology (IIT) Bombay, Mumbai (India)
- Received Award 'Excellence in PhD Thesis Work 2015-2017' from Indian Institute of Technology (IIT) Bombay (India)
- Received Fellowship (2017) for pursuing Postdoctoral Research at the Department of Systems Engineering and Engineering Management of City University of Hong Kong, Kowloon (Hong Kong)
- Received 'Best Faculty of the Year Award' (Category: Specific Innovations) from the Computer Society of India (CSI) TechNext India 2018

13. Projects guided in UG/PG level

At UG level:

- Online health monitoring of a gearbox (Mr. Mohammed Talha et al., 2020)
- Study of ballistic impact on composite materials (Mr. Aby Mathews et al., 2020)
- Development of real-time damage detection system for plates using ultrasonic guided waves (Tayyabali Chaugule et al., 2018)
- Nondestructive testing of thin plates using ultrasonic guided waves (Mr. Calvin Thomas et al., 2017)
- Design and refurbishment of an existing electromagnetic exciter (Mr. Sean Almeida et al., 2017)
- Virtual instrumentation for speed measurement and control of a shaft (Mr. Vinayak Patil et al., 2012)
- Virtual instrumentation for temperature control (Mr. Varun Bhomkar et al., 2012)
- Simulation of active vibration control of a cantilever beam by using optimal output feedback controller (Raj Nair et al., 2011)
- Design and fabrication of shrimp rover type of robot (Mr. Siddharth Dasgupta et al., 2011)
- Virtual instrumentation for speed measurement (Ms. Ruchita Harjai et al., 2011)
- Active vibration control of cantilever beam by using PID based output feedback controller (Mr. Ketan Tumane et al., 2010)
- Design and fabrication of suspension system for an all-terrain vehicle (Mr. Angad Wadhwa et al., 2010)
- Active vibration control of clamped-clamped beam by using optimal (LQR) controller (Mr. Sasmit Gokhale et al., 2009)
- Use of statistical methods for determination of values of geometrical parameters for known natural frequency (Mr. Himanshu Paretkar et al., 2009)
- Simulation of press fitting process of railway wheels (Mr. Inderjit Johal et al., 2008)
- Design and fabrication of vertical-horizontal surface traversing (VHST) robot (Mr. Amit Kulkarni et al., 2007)

Design and stress analysis of locomotive wheels (Mr. Swapnil Bambarkar et al., 2005)

At PG level:

- Evaluation of fracture toughness of pressure vessel steel through pre-cracked Charpy specimen using SHPB test setup (Ms. Sonal Chibire, 2020)
- Monitoring lateral misalignment and backlash in spur gears using proximity sensors (Mr. Mohammad Naseh Momin, 2019)
- Investigation of puncture resistance for steel plates at low impact velocities (Ms. Gayatri Dwivedi, 2019)
- Liquid level sensing using Lamb waves (Mr. Siddhesh Chavare, 2018)
- Damage detection of fixed-fixed I-Beam using Particle Swarm Optimization technique (Mr. Chirag Wani, 2018)
- Lamb wave based damage localization in an Aluminium plate using a minimum number of transducers (Mr. Nikhil Gorhe, 2018)
- Development of real-time damage detection system for plates using ultrasonic guided waves (Mr. Mandar Kothavade, 2017)
- Curve intersection method: A new Lamb wave based method for damage detection in thin plate structures (Mr. Pravin Das, 2017)
- Investigation of active vibration control of cantilever square plate (Mr. Deepak Tayade, 2017)
- Investigation of performance of different optimal controllers for active vibration control of beam structures (Mr. Deependra Singh, 2016)
- Investigation of performance of classical and optimal controllers in active vibration control of a cantilever beam (Mr. Gaurav Purohit, 2016)
- Damage detection in a cantilever beam using vibration-based methods (Ms. Veda Palwankar, 2016)
- Lamb wave based damage detection in thin metallic plates using Artificial Neural Network (Mr. Irfan Mulla, 2016)
- Lamb wave based damage localization using Genetic algorithm (Mr. Jackson Anthony, 2015)
- Damage detection in a thin Aluminium plate using Lamb wave based Time-Reversibility technique (Ms. Suvarna Rode, 2015)
- Design and fabrication of a setup to determine Helium permeability of fabrics used to make airships (Mr. Marvin Fernandes, 2014)
- Lamb wave based damage detection using Geodesic and Topo-Gradient algorithms (Mr. Faeez Masurkar, 2014)
- An investigation on effect of stiffness and damping of suspension system on riding comfort and stability of a car (Mr. Kamlesh Sasane, 2014)
- Design, fabrication, and flight testing of outdoor remotely controlled airship (Mr. Nawaj Motiwala, 2013)
- Analysis of crack propagation (Mr. Negarullah Khan, 2013)
- Lamb wave based damage detection in Aluminium plates (Mr. Nellisery Johnson, 2013)
- Active vibration control of a cantilever beam using Piezoelectric transducers (Mr. Shoaib Shaik, 2013)

PhD:

- Investigating the behaviour of composite materials in response to high-velocity ballistic impact (Mr. Yusuf Khan, In Progress)
- Structural health monitoring of pipes using ultrasonic guided waves (Ms. Suchita Kadam, In Progress)
- Investigating design of centrifugal pumps for pumping non-Newtonian fluids. (Guide, Ms. Samanwita Roy (Ms. Samanwita Roy, In Progress)

14. Short Term Training Programmes attended

 Faculty Development Program on "Performance of Engineering Structures Under Extreme Loading", Vignana Bharathi Institute of Technology, Hyderabad, India, June 08–13, 2020

- Workshop on "NAAC Assessment and Accreditation: A Step by Step Process", GATES Institute
 of Technology, Ananthapuramu, India, May 28–30, 2020
- Faculty Development Program on "Outcome Based Education: A Step Towards Excellence under Margdarshan Scheme of AICTE, New Delhi, Government College of Engineering, Karad India, May 11–15, 2020
- Workshop on "Patent Drafting and Processing with Importance of Trademark and Copyright" Hexacube, India, May 6–7, 2020
- Faculty Development Program on "Internet of Things (IoT)", Indian Institute of Information Technology, Nagpur, India, April 30–May 04, 2020
- Industrial Concepts Awareness Module on "Introduction to Reliability and Condition Monitoring" as part of Campus to Corporate Initiative, Fr. C. Rodrigues Institute of Technology Vashi, India, Apr. 20–23, 2020
- National Level Workshop on "Vibration and Noise Measurement using FFT Analyzer", R. H. Sapat College of Engineering, Management Studies and Research, Nashik, India, Jan. 30-31, 2016
- QIP Short Term Course on "Adaptive and Switched Systems" Indian Institute of Technology (IIT) Bombay, Mumbai, India, May 13-17, 2013
- QIP Short Term Course on "Finite Element Method and Applications in Civil Engineering"
 Indian Institute of Technology (IIT) Bombay, Mumbai, India, Jul. 02-06, 2012
- QIP Short Term Course on "Classical Control Systems Theory and Hands-on (CCS_10)" Indian Institute of Technology (IIT) Bombay, Mumbai, India, May10-15, 2010
- Training Sessions on "PRO-E Wildfire 5.0", Fr. C. Rodrigues Institute of Technology, Vashi, India, Feb. 19, 21 and Apr. 19-21, 2010
- Training Sessions on "Autodesk Inventor Professional 2008", Don Bosco Institute of Technology, Kurla, Mumbai, India, Jul. 29 - Aug. 01, 2008
- Symposium on "Quality Practices in FEM-CFD Procedures", Indian Institute of Science Bangalore, Bangalore, India, Oct. 5-6, 2007
- Workshop on "Micromachining and Microfabrication", Indian Institute of Science Bangalore, Bangalore, India, Oct. 4, 2007
- Workshop on "Nanotechnology", Indian Institute of Technology Bombay, Mumbai, India, Sept. 8-9, 2005
- Workshop on "Mechatronics", Fr. C. Rodrigues Institute of Technology, Vashi, India, Oct. 28-30, 2004
- Seminars on "E-Learning", "Language Processing Status and Prospects" and "Computer Networking", INFOVISION 2004, Fr. C. Rodrigues Institute of Technology, Vashi, India, Aug. 21, 2004
- Workshop on "Low Cost Automation", M. H. Saboo Siddik College of Engineering, Mumbai, India, Mar. 20, 2004

15. List of Journal Papers Published

- Faeez Masurkar, Kim Ming Ng, Peter Tse, and Nitesh P. Yelve, "Interrogating the health condition of rails using the narrowband Rayleigh waves emitted by an innovative design o non-contact laser transduction system", Structural Health Monitoring, 2020 https://doi.org/10.1177/1475921720967 600
- Peter Tse, Faeez Masurkar, and Nitesh P. Yelve, "Estimation of remaining useful life of fatigued plate specimens using Lamb wave-based nonlinearity parameters", Structura Control and Health Monitoring, Vol. 27(4), 2020, e2486
- Faeez Masurkar, Peter Tse, and Nitesh P. Yelve, "Theoretical and experimenta measurement of intrinsic and fatigue induced material nonlinearities using Lamb wave based nonlinearity parameters", Measurement, Vol. 151, 2020, 107148
- Kim Ming Ng, Faeez Masurkar, Peter Tse, and Nitesh P. Yelve, "Design of a new optica system to generate narrowband guided waves with an application to evaluating health statu of rail material", Optics Letters, Vol. 44(23), 2019, pp 5695–5698
- S. M. Khot, Nitesh P. Yelve, Praseed Kumar, Gaurav A. Purohit, and Deependra Singh "Experimental investigation of performances of different optimal controllers in active

- vibration control of a cantilever beam", ISSS Journal of Micro and Smart Systems, Vol. 8(2) 2019, pp 101–111
- Nitesh P. Yelve, Suvarna Rode, Pravin Das, and Pranav Khanolkar, "Some new algorithms fo locating a damage in thin plates using Lamb waves", Engineering Research Express, Vol. 1(1) 2019, pp 015027
- Yogesh S. Andhale, Faeez. A. Masurkar, and Nitesh. P. Yelve, "Localization of damages in plain and riveted aluminium specimens using Lamb waves", International Journal of Acoustics and Vibration, Vol. 24(1), 2019, pp 150–165
- Faeez Masurkar, Peter Tse, and Nitesh P. Yelve, "Investigating the critical aspects of evaluating the material nonlinearity in metal plates using Lamb waves: Theoretical and numerical approach", Applied Acoustics, Vol. 140, 2018, pp 301-314
- Nitesh P. Yelve, Peter W. Tse, and Faeez Masurkar, "Theoretical and experimenta evaluation of material nonlinearity in metal plates using Lamb waves", Structural Control and Health Monitoring, pp e2164, 2018, http://dx.doi.org/10.1002/stc.2164
- Faeez Masurkar, Peter Tse, and Nitesh P. Yelve, "Evaluation of inherent and dislocation induced material nonlinearity in metallic plates using Lamb waves", Applied Acoustics, Vol. 136, 2018, pp 76-85
- Suraj Nair, Viraj Karnik, Saurabh Kolte, Joel George, Nitesh P. Yelve, Khsirsagar Nanaji "Experimental investigation of vibration characteristics of Magneto-rheological fluid with single rotor system", *International Journal of Mechanical and Production Engineering*, Vol 5(7), 2017
- Faeez A. Masurkar and Nitesh P. Yelve, "Lamb wave based experimental and finite element simulation studies for damage detection in an Aluminium and a composite plate using Geodesic algorithm", International Journal of Acoustics and Vibration, Vol. 22(4), 2017, pp 413-421
- 13. Santosh J. Chauhan, **Nitesh P. Yelve**, Veda P. Palwankar, "Damage detection in cantilever beams using vibration based methods", *The e-Journal of Nondestructive Testing & Ultrasonics*, Vol. 22(6), 2017
- 14. Faeez A. Masurkar and **Nitesh P. Yelve**, "Locating a damage in an Aluminium plate using Lamb waves", *The e-Journal of Nondestructive Testing & Ultrasonics*, Vol. 22(6), 2017
- 15. Faeez A. Masurkar and **Nitesh P. Yelve**, "Optimizing location of damage within an enclosed area defined by an algorithm based on the Lamb wave response data", *Applied Acoustics*, Vol. 120, 2017, pp 98-110
- 16. **Nitesh P. Yelve**, Mira Mitra, and P. M. Mujumdar, "Locating delamination in a composite laminate using nonlinear response of Lamb waves", *The e-Journal of Nondestructive Testing & Ultrasonics*, Vol. 22(1), 2017
- 17. **Nitesh P. Yelve**, Mira Mitra, and P.M. Mujumdar, "Detection of delamination in composite laminates using Lamb wave based nonlinear method", *Composite Structures*, Vol. 159, 2017, pp 257-266
- 18. **Nitesh P. Yelve**, Mira Mitra, P.M. Mujumdar, and C. Ramadas, "A hybrid method based upon nonlinear Lamb wave response for locating a delamination in composite laminates", *Ultrasonics*, Vol. 70, 2016, pp 12-17
- Nitesh P. Yelve, Mira Mitra, and P.M. Mujumdar, "Detection of stiffener disbonding in a stiffened aluminium panel using nonlinear Lamb wave", Applied Acoustics, Vol. 89, 2015, pp 267-272
- Nitesh P. Yelve, Mira Mitra, and P. M. Mujumdar, "Detection of breathing damages in thin walled structures using Lamb wave based nonlinear technique", The e-Journal of Nondestructive Testing & Ultrasonics, Vol. 20(1), 2015
- Nitesh P. Yelve, Mira Mitra, and P.M. Mujumdar, "Higher harmonics induced in Lamb wave due to partial debonding of piezoelectric wafer transducers", NDT&E International, Vol. 63, 2014, pp 21-27
- 22. **Nitesh P. Yelve**, Mira Mitra, and Prasanna M. Mujumdar, "Spectral damage index for estimation of breathing crack depth in an aluminum plate using nonlinear Lamb wave", *Structural Control and Health Monitoring*, Vol. 21(5), 2014, pp 833-846

- 23. **Nitesh P. Yelve**, Mira Mitra, and Prasanna M. Mujumdar, "Eexperimental and finite element study for quantification of crack in an Aluminium plate using nonlinear Lamb wave", *The e-Journal of Nondestructive Testing & Ultrasonics*, Vol. 19(2), 2014
- 24. Negarullah Naseebullah Khan and **Nitesh P. Yelve**, "Analysis of crack propagation in thin metal sheet, three-point bend specimen, and double cantilever beam", *International Journal of Engineering and Advanced Technology*, Vol. 2(6), 2013
- 25. Nawaz I. Motiwala, Irshad Ahmed Khan, **Nitesh P. Yelve**, Balkrishna E. Narkhede, and Rajkumar S. Pant, "Conceptual approach for design, fabrication and testing of indoor remotely controlled airship", *Journal of Advanced Materials Research*, Vols. 690-693, 2013, pp 3390-3395
- S.M. Khot, Nitesh P. Yelve, and Ramya Iyer, "Extraction of system model from finite element model and simulation study of active vibration control" *Journal of Advances in* Vibration Engineering (currently known as Journal of Vibration Engineering & Technologies), Vol. 11(3), 2012, pp 259-280
- S.M. Khot, Nitesh P. Yelve, Rajat Tomar, Sameer Desai, and Vittal S., "Active vibration control of cantilever beam by using PID based output feedback controller", Journal of Vibration and Control, Vol. 18(3), 2012, pp 366-372
- 28. S.M. Khot and **Nitesh P. Yelve**, "Estimation of geometrical parameters of machine elements based on statistical methods to avoid resonance", *Journal of Vibration and Control*, Vol. 18(2), 2012, pp 366-372
- 29. S.M. Khot and **Nitesh P. Yelve**, "Modeling and response analysis of dynamic systems by using ANSYS[©] and MATLAB[©]", *Journal of Vibration and Control*, Vol. 17(6), 2011, pp 953-958
- Nitesh P. Yelve, Anil Naik, Shraddha Ramane, Prithviraj Daga, and Inderjit Johal, "Simulation of cold press fitting of railway wheel-set by using PRO-E and ANSYS", International Journal of Computer Applications in Engineering, Technology and Sciences, Vol. 2(1), 2009, pp 350-353
- S.M. Khot, Nitesh P. Yelve, and Pankaj S. Patil, "Simulation study of active vibration control
 of clamped-clamped beam by using two piezoelectric actuators", International Journal of
 Computer Applications in Engineering, Technology and Sciences, Vol. 2(1), 2009, pp 188193

List of Papers Published in National and International Conferences

- Sonal Chibire, Nitesh P. Yelve, and Vivek M. Chavan, "Evaluation of fracture toughness of pre-cracked steel specimen using split Hopkinson pressure bar", Proceedings of 3rd International Conference and Exhibition on Fatigue, Durability and Fracture Mechanics, Belagavi, India, Aug. 29_31, 2019
- Nitesh P. Yelve and Jackson A Mudaliar, "Localization of a damage in an Aluminium plate using Lamb wave based ultrasonic testing and Genetic algorithm", Proceedings of 3rd International Conference on Nascent Technologies in Engineering, Navi Mumbai, India, Jan. 4–5, 2019
- 3. **Nitesh P. Yelve** and Nikhil M. Gorhe, "Lamb wave based damage detection in aluminium plate using minimum number of transducers", *Proceedings of 3rd International Conference on Nascent Technologies in Engineering*, Navi Mumbai, India, Jan. 4–5, 2019
- Nitesh P. Yelve and Siddhesh B. Chavare, "Liquid level sensing using Lamb waves", Proceedings of 3rd International Conference on Nascent Technologies in Engineering, Navi Mumbai, India, Jan. 4–5, 2019
- Chirag G. Wani, Sanjay Rukhande, and Nitesh P. Yelve, "Vibration-based detection of damage in fixed-fixed I-beam using Particle Swarm Optimization", Proceedings of 3rd International Conference on Nascent Technologies in Engineering, Navi Mumbai, India, Jan. 4–5, 2019
- Suvarna Rode, Nitesh Yelve, Karthik Ramachandran, Mikhail Mascarenhas, Amey Kanikdale, and Tejas Yadav, "Damage detection in beam structures using guided waves", Proceedings of Conference and Exhibition on Non-Destructive Evaluation, Chennai, India, Dec. 14-16, 2017
- 7. Suvarna Rode, **Nitesh Yelve**, Pranav Khanolkar, Mayuresh Thube, Arun Thampy, and Calvin Thomas, "Development of a Lamb wave based algorithm for detecting a damage in thin

- plate structures", *Proceedings of 8th ISSS International Conference on Smart Materials, Structures and Systems*, Bangalore, India, July 5-7, 2017
- 8. Suraj Nair, Viraj Karnik, Saurabh Kolte, Joel George, **Nitesh P. Yelve**, Khsirsagar Nanaji, "Experimental investigation of vibration characteristics of Magneto-rheological fluid with single rotor system", *Proceedings of World Research Forum for Engineers and Researchers International Conference*, Pune, India, May 7, 2017, pp 54-59
- S. M. Khot, Nitesh P. Yelve, Praseed Kumar, Deependra Singh, and Gaurav A. Purohit, "Simulation study of active vibration control of beams supported at both ends using optimal controllers" *Proceedings of 2nd International Conference on Nascent Technologies* in Engineering, Navi Mumbai, India, Jan. 27-28, 2017
- 10. **Nitesh P. Yelve** and Irfan B. Mulla, "Locating damage in thin metallic plates usingLamb waves and artificial neural network", *Proceedings of 2nd International Conference on Nascent Technologies in Engineering*, Navi Mumbai, India, Jan. 27-28, 2017
- 11. S. M. Khot, **Nitesh P. Yelve**, Praseed Kumar, Gaurav A. Purohit, and Deependra Singh, "Implementation of H-infinity controller in experimental active vibration control of a cantilever beam", *Proceedings of 2nd International Conference on Nascent Technologies in Engineering*, Navi Mumbai, India, Jan. 27-28, 2017
- 12. Santosh J. Chauhan, **Nitesh P. Yelve**, Veda P. Palwankar, "Damage detection in cantilever beams using vibration based methods", *Proceedings of 26th National Seminar and Exhibition on Nondestructive Evaluation*, Thiruvananthapuram, India, Dec. 15-17, 2016
- 13. **Nitesh P. Yelve**, Mira Mitra, and P. M. Mujumdar, "Locating delamination in a composite laminate using nonlinear response of Lamb waves", *Proceedings of 8th International Symposium on NDT in Aerospace*, Bangalore, India, Nov. 3-5, 2016
- Faeez A. Masurkar and Nitesh P. Yelve, "Locating a damage in an aluminium plate using Lamb waves", Proceedings of 25th National Seminar and International Exhibition on Nondestructive Evaluation, Hyderabad, India, Nov. 26-28, 2015
- 15. **Nitesh P. Yelve** and Suvarna Rode, "Damage detection in a thin aluminium plate using Lamb wave based time reversibility technique", *Proceedings of 7th ISSS National Conference on MEMS, Smart Materials, Structures, and Systems*, Kochi, Kerala, India, Sept. 23-25, 2015
- Nitesh P. Yelve, Mira Mitra, and P. M. Mujumdar, "Detection of breathing damages in thin walled structures using Lamb wave based nonlinear technique", *Proceedings of 6th International Symposium on NDT in Aerospace*", Madrid, Spain, Nov. 12-14, 2014
- 17. Marvin A. F. Fernandes, **Nitesh P. Yelve**, and Rajkumar S. Pant, "Leak testing of envelopes of LTA systems", *Proceedings of National Conference on Advances in Aerial/Road Vehicle and its Applications*, Manipal, Karnataka, India, Jul. 18-19, 2014
- 18. **Nitesh P. Yelve**, Mira Mitra, and P. M. Mujumdar, "Detection of delamination in composite plates using Lamb wave based nonlinear technique", *Proceedings of 7th ISSS International Conference on Smart Materials, Structures, and Systems*, Bangalore, India, Jul. 8-11, 2014
- 19. Faeez A. Masurkar, **Nitesh P. Yelve**, and Mira Mitra, "Lamb wave based experimental and FE simulation studies for damage detection in metallic and composite plates using Geodesic algorithm", *Proceedings of* 7th *ISSS International Conference on Smart Materials, Structures, and Systems*, Bangalore, India, Jul. 8-11, 2014
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- 32. S.M. Khot, **Nitesh P. Yelve**, and Ramya Iyer, "Active vibration control of cantilever beam by using optimal (LQR) controller", *Proceedings of International Conference on Total Engineering, Analysis and Manufacturing Technologies*, Bangalore, India, Sept. 22-24, 2008
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- 41. Nilaj Deshmukh and **Nitesh P. Yelve**, "Investigation on feasibility of LPG as a fuel for motorcycle", *Proceedings of National Conference on Applications of Advanced Quality Methods in Engineering & Technology*, Erode, India, Feb. 23-24, 2006
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- 44. N. Venugopal, C.M. Choudhari, and **Nitesh P. Yelve**, "An investigation on vibration characteristics of visco-elastic materials by using Taguchi method, ANOVA and Factor Plots ", Proceedings of National Conference on Recent Advances in Manufacturing Technology, Chennai, India, Feb. 3, 2006
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- 46. N. Venugopal, C.M. Choudhari, and Nitesh P. Yelve, "An investigation on vibration characteristics of visco-elastic materials by using Taguchi method and ANOVA", Proceedings of National Conference on Recent Trends in Manufacturing, Kolhapur, India, Jan. 7-8, 2006, pp 90-94
- 47. C.M. Choudhari and **Nitesh P. Yelve**, "A futuristic study on harnessing wind energy", *Proceedings of International Conference on Wind Energy: Trends and Issues*, NITTTR Bhopal, India, Jan. 5-7, 2006, pp TP II/29-TP II/35
- 48. S.M. Khot, **Nitesh P. Yelve**, Jitendra K. Sardar, and Anil E. Magare, "Shape memory alloys: Smart material for the new millennium", *Proceedings of 1st National Conference on Recent Developments in Mechanical Engineering*, Pandharpur, India, Dec. 23-24, 2005, pp 340-343
- 49. Ashpak G. Sheikh and **Nitesh P. Yelve**, "Inlet air cooling for gas turbines", *Proceedings of* 1st National Conference on Recent Developments in Mechanical Engineering, Pandharpur, India, Dec. 23-24, 2005, pp 228-232
- 50. S.M. Khot, Jitendra K. Sardar, and **Nitesh P. Yelve**, "Analytical, experimental and FEM (ANSYS[®]) analysis of cantilever beams for first three modes", *Proceedings of 1st National Conference on Recent Developments in Mechanical Engineering*, Pandharpur, India, Dec. 23-24, 2005, pp 32-36
- 51. **Nitesh P. Yelve**, "Proton exchange membrane fuel cell technology for future cars: A case study", *Proceedings of National Conference on Advances in Mechanical Engineering*, Vasavi College of Engineering, Hyderabad, India, May 13-14, 2005, pp T191-T195

17. Books/Reports/General articles etc.:

Javad Rostami, Faeez Masurkar, Peter Tse, Nitesh P. Yelve, and Edison Z.Y. Hou, "An Adaptive wavelet library to detect surface defects in rail tracks using a laser ultrasonic system", In: P. Rizzo, A. Milazzo (eds) European Workshop on Structural Health Monitoring, Lecture Note in Civil Engineering, Vol. 127, Springer, Cham, 2021, pp 181–189

- Faeez Masurkar, Peter Tse, Nitesh P. Yelve, and Javad Rostami, "Development of Lamb and Rayleigh wave-based nonlinearity parameters for estimating the remnant life of fatigued plate structures", In: P. Rizzo, A. Milazzo (eds) European Workshop on Structural Health Monitoring, Lecture Notes in Civil Engineering, Vol. 127, Springer, Cham, 2021, pp 149–160
- Sonal Chibire, Nitesh P. Yelve, and V.M. Chavan, "Evaluation of fracture toughness of precracked steel specimen using Split Hopkinson Pressure Bar", In: S. Seetharamu, T. Jagadish, and R.R. Malagi (eds) Fatigue, Durability, and Fracture Mechanics, Lecture Notes in Mechanical Engineering, Springer, Singapore, 2021, pp 611–622

18. Invited Lectures in FDP/ STTP

- Delivered an Expert Lecture on 'IoT for Eliminating Rail Accidents' during the Short Term Training Programme on 'Machine Learning' held on Jan. 2-6, 2018 at Fr. C. Rodrigues Institute of Technology, Vashi, India
- Delivered Expert Lecture on 'CAD/CAM Technologies' during MSBTE and ISTE sponsored STTP on 'Emerging Trends in Robotics and Automation' held on Dec. 17-21, 2012 at A.R. Kalsekar Polytechnic, Panvel, India

19. International Conference Technical Program Committee Member / Reviewer International Conference Technical Program Committee Member:

- Convener, 3rd Symposium on Nascent Technologies in Aerospace Engineering and Aviation Systems (AAKASH 2020), Mumbai, India, July 27, 2020
- Convener, 2nd International Conference on "Computational Modelling, Simulation and Optimization" held on Jun. 27–29, 2019 at National University of Singapore, Singapore
- Convener, 2nd Symposium on Nascent Technologies in Aerospace Engineering and Aviation Systems (AAKASH 2019), Mumbai, India, March 30, 2019
- Chair, IEEE Technically Co-Sponsored 3rd Biennial International Conference on "Nascent Technologies in Engineering" to be held on Jan. 4-5, 2019 at Fr. C. Rodrigues Institute of Technology, Vashi, India
- Convener, International Conference on "Computational Modelling, Simulation, and Optimization" held on Jun. 22–24, 2018 at Asian Institute of Technology, Bangkok, Thailand
- Convener, Symposium on Nascent Technologies in Aerospace Engineering and Aviation Systems (AAKASH 2018), Navi Mumbai, India, March 24, 2018
- Honorary General Chair, International Conference on "Innovative Research in Engineering, Computers and Sciences" held on Jan. 19-20, 2018 at Goa, India
- Chaired IEEE Technically Cosponsored, 2nd Biennial International Conference on Nascent Technologies in Engineering (ICNTE 2017) held in 2017 in Mumbai, India
- Member of Editorial Board / Regional Editor of AES International Journals which include 02
 Print Journals and 10 E-Journals
- Member of Editorial / Advisory Board of International Journal of R&D in Engineering,
 Science, and Management

Reviewer:

National/International Funding Proposals

- Funding Scheme OPUS, National Science Centre, Poland, No. 391200, Panel ST8, 2018 Journals
- Advances in Mechanical Engineering (SAGE)
- Applied Acoustics (Elsevier)
- International Journal of Acoustics and Vibration (International Institute of Acoustics and Vibration)
- International Journal of Engineering (Materials and Energy Research Center)
- Journal of Computational Design and Engineering (Elsevier)
- Journal of Applied Physics (American Institute of Physics)
- Journal of Low Frequency Noise, Vibration, and Active Control (SAGE)
- Journal of Shock and Vibration (Hindawi)
- Journal of Systems and Control Engineering (SAGE)
- Journal of Vibration and Control (SAGE)
- Measurement (Elsevier)
- Materials Evaluation (The American Society for Nondestructive Testing)
- Mechanical Systems and Signal Processing (Elsevier)

- Micro and Nanosystems (Bentham Science)
- NDT&E International (Elsevier)
- Smart Structures and Systems (Techno Press)
- Structures (Elsevier)
- Ultrasonics (Elsevier)

Conferences

- 4th IEEE Technically Co-Sponsored Biennial International Conference on Nascen Technologies in Engineering (ICNTE 2019) to be held on Jan. 15–16, 2021, Navi Mumbai, India (Proceedings to be published in IEEE Xplore Digital Library)
- 3rd International Workshop on Materials Science and Mechanical Engineering (IWMSME2020), Apr. 18–20, 2020, Hangzhou, China (Proceedings published in IOI Conference Series: Materials Science and Engineering)
- 3rd IEEE Technically Co-Sponsored Biennial International Conference on Nascen Technologies in Engineering (ICNTE 2019), Jan. 4–5, 2019, Navi Mumbai, India (Proceeding published in IEEE Xplore Digital Library)
- 8th International Conference on Electronics, Communications and Networks (CECNet 2018)
 Nov. 16–19, 2018, Bangkok, Thailand (Proceedings published in SCI/EI indexed Journals)
- 2nd International Workshop on Materials Science and Mechanical Engineering (IWMSME2018), October 26–28, 2018, Qingdao, Shandong Province, China (Proceeding published in IOP Conference Series: Materials Science and Engineering)
- International Conference on Mechanical, Electrical, and Industrial Engineering, May 26–28 2018, Hangzhou, China (Proceedings published in Journal of Physics: Conference Series, IOI Publishing)
- 2nd IEEE Technically Co-Sponsored Biennial International Conference on Nascen Technologies in Engineering (ICNTE 2017), Jan. 27–28, 2017, Navi Mumbai, India (Proceeding published in IEEE Xplore Digital Library)
- International Conference on Materials, Manufacturing, and Design (ICMMD 2016), Dec. 26-27, 2016, Lonere, India in 2016 (Proceedings published by Springer-AtaIntis in the form o Book Chapter)
- 6th International conference on Electronics, Communications, and Networks (CECNet2016),
 Dec. 11–14, 2016, Macau, China (Proceedings published in SCI/EI indexed Journals)
- IEEE Technically Co-Sponsored Biennial International Conference on Nascent Technologies in the Engineering fields of Mechanical, Electrical, Electronics & Telecommunication, Compute and Information Technology (ICNTE 2015), Jan. 9–10, 2015, Navi Mumbai, India (Proceeding published in IEEE Xplore Digital Library)
- 4th International Conference on Electronics, Communications and Networks (CECNet 2014)
 Dec. 12–15, 2014, Beijing, China (Proceedings published by CRC Press / Balkema, Taylor & Francis Group)
- 13th International Carpathian Control Conference (ICCC 2012) under IEEE (IEEE Conference Record No. 19626), May 28–31, 2012, High Tatras, Slovak Republic (List of reviewers i available at DOI:10.1109/ CarpathianCC.2012.6228758)

20. Patents:

- Nitesh P. Yelve, Naseh Momin, and Mandar B. Kothavade, "Real-time monitoring of misalignments and backlash in gears using proximity sensors", Patent Application No. 201921025226, Filed on June 25, 2019, Published in the Patent Office Journal No. 01/202: Dated 01/01/2021, Page 579
- Mandar B. Kothavade and Nitesh P. Yelve, "Ultrasonic guided wave-based real-time damage detection system", Patent Application No. 201821018791, Filed on May 18, 2018, Published in the Patent Office Journal No. 47/2019 Dated 22/11/2019, Page 55287