

Prof. Dr. Solanki Jaydeepsingh

PhD, Civil, Specialization in Structural Engg., IIT Bombay

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Academic, Research and Administrative Experience	<p>Veermata Jijabai Technological Institute, Mumbai (Jan. 2008 to till date)</p> <p>Position held: Assistant Professor</p> <ul style="list-style-type: none"> ➤ Teaching to under-graduate and post-graduate students of civil and structural engineering department. Course taught till date are, <ul style="list-style-type: none"> • Applied mechanics, Mechanics of solids, Structural Analysis I and II, Advanced Structural Analysis, Design of Reinforced and Pre-Stressed Concrete Structures, Earthquake Engineering, Nonlinear Analysis at under-graduate level (B.Tech.) and • Structural Dynamics and Earthquake Engineering, Design of Pre-stressed Concrete Structure, Nonlinear Analysis, Advance design of concrete and steel structures, Advanced structural mechanics at post-graduate level (M.Tech.) ➤ Involved in industrial consultancy projects. ➤ Involved as expert member at various committees at State Government level ➤ Supervision to under-graduate dissertation, Master dissertations and PhD thesis. ➤ Conducted short term training for faculty developments programme (FDP). ➤ Involved in various activities at institute and department level. ➤ Involved in departmental material testing activities. <p>SSBT's College of Engineering and Technology Jalgaon</p> <p><u>Position Held:</u></p> <p>Lecturer (Dec. 1997 to July 2007)</p> <p>Senior Lecturer (Aug. 2007 to Dec. 2007)</p>
Research Experience	<p>Indian Institute of Technology Bombay, Mumbai (July 2010)</p> <ul style="list-style-type: none"> • Research in statistical characterization of expanded metal mesh
Publications	<p>Separate sheet attached with all details.</p>
Research Interest	<ul style="list-style-type: none"> • Application of FRPC in Civil Engineering • Concrete Technology • Structural Dynamics and Earthquake Engg. • Structural Health Monitoring
Education Details	<p>Doctor of Philosophy (Ph.D.) (Structural Engineering)- Indian Institute of Technology Bombay (2019).</p> <p>M.Tech. (Structural Engg.)- V.J.T.I. Mumbai (2007).</p> <p>B.E. Civil – SSVPS , North Maharashtra University, Jalgaon (1996).</p>
Consultancy /Testing undertaken	<ul style="list-style-type: none"> • Structural audit of varies RCC and steel structures. • Proof checking/vetting of structural design and drawing of varies residential, commercial and industrial structural. (Hoardings, Multi- level Electro-Mechanical Robotic car parking, Bridges, High Rise Buildings, culverts, sewage treatment plant, Retaining wall, OHE Mast pole, ESR etc.) • Testing of varies construction materials (bricks, steel, wood, tiles, plywood, concrete, paver blocks, manhole cover, etc.) • Concrete Mix Design (normal, self-compacting concrete)

Membership and License	<ul style="list-style-type: none"> Life time member of Indian Geotechnical Society (IGS). [1194] 	
Computer Skills	Languages	Fortran, Matlab, C++
	Engineering Software's	STAAD PRO, ABAQUS, ANSYS, Etab, SAFE
	Application Software	MS Office, Office 2007
Achievements	Felicitated for Excellence in teaching in course "Earth Quake Engg". 5 th Sept. 2024	
Personnel Details	Date of Birth : 31 st May 1971 Gender : Male Marital Status : Married	
Declaration and Signature	The information given above is true to the best of my knowledge and belief.	
	Place: Mumbai	Dr. Solanki Jaydeepsingh G.

Involvement in Major Administrative Activities at Institute/Department Level

- TEQIP II, Dept. Procurement Coordinator, Veermata Jijabai Technological Institute, from July 2014-16.
- M.Tech. Admission In-charge for full time MTech and MTech for Working Professionals

Involvement in Minor Administrative Activities at Institute/Department Level

- Department NAAC Coordinator, from the year 2023 till date
- Department NIRF coordinator, from the year 2023 till date.
- Department level NBA coordinator, from the year 2022
- Department Time-table coordinator, from the year 2018 till date.
- Department Exam coordinator, from the year 2018 till date.
- Faculty In-charge for Mtech structure, from 2021 till date
- Faculty In-charge for Mtech structures, for working Professionals from 2024 till date
- Faculty In-charge for the departmental Computational lab, from 2016 to 2022.
- Faculty In-charge for the departmental Concrete Technology laboratory, from 2022 till date.
- Department level faculty mentor for final year undergraduate student for academic year 2019-2022.
- Department level Mtech Syllabus Revision Coordinator from Sept. 2020 to August 2022
- Member of post graduate admission committee for the year 2015.
- Member of quality circle, structural dept., from years 2023
- Member of Academic Time Table from year 2023
- Member of dept. purchase committee from year 2024
- Dept. coordinator for drafting Technological University, VJTI

List of Publications

Research Publications:

Total Publications: 11

International Journals: 06, National Journals:01, International Conference: 03 National Conference:01

Publishing papers in International Journals

- J.G. Solanki and B. Ghulbhile (2010) "seismic performance of moment resistance frames without knee bracing" 14th symposium on earthquake engineering, indian institute of roorkee, 17-19 Dec pages 1054-1055.
- J. G. Solanki and G. Borkar (2012). "Evaluation of Indian Seismic Design Code Provision." Indian Society of Structural Engineers, 14 (3).
- Atul patil & J G Solanki, "Buckling Analysis of Cold Formed Steel Compression Members at Elevated Temperatures", International Journal of Modern Engineering Research (IJMER), Volume 4, Issue 11 (Version 3) - November 2014, pages 53-58
- Gaikar Vaibhav & J G Solanki, "Stress Analysis of Precast Prestressed Concrete Beams During Lifting", International Journal of Modern Engineering Research (IJMER), Vol. 4 | Iss.9, Sept. 2014, pages 61-68.
- Prasanna Joshi and J G Solanki, "Computational Modelling of Indian Standard Extended Endplate Moment Connection", International Journal of Advanced Technology in Engineering and Science Volume No.02, Issue No. 07, July 2014 ISSN (online): 2348 – 7550, pages 417-424.
- Vaibhav Dahiwelkar & J G Solanki, "Behaviour of Jacket Platform Subjected to Ship Impact" International Journal of Engineering Research and Technology in Engineering Volume No.04, Issue No. 08, August 2015 ISSN : 2278-0181, pages 343-345.
- J. G. Solanki and S. Ghosh, "Statistical characterization of expanded metal mesh strand, to propose correlation between properties of parent material and finish product EMM IOP Conference Series Materials Science and Engineering 652:012008 October 2019

Presenting papers / participating in International conference:

- M. Hussain and J G Solanki, (1999) "Environmental Aspect of Engg. Practice" in national conference at Pusa, 23-24th Nov. 1999
- J.G. Solanki and B. Ghulbhile (2010) "Seismic performance of moment resistance frames without knee bracing" 14th symposium on earthquake engineering, Indian Institute of Roorkee, 17-19 Dec 2010, pages 1045-1055.
- Ketki Tamhankar and J. G. Solanki (2014) " Development of Analytical Fragility Curves for G+11 RC Building" 15th Symposium on Earthquake Engineering, Indian Institute of Roorkee, 11-13 Dec 2014, pages 1049-1055.
- J. G. Solanki and S. Ghosh, "Statistical characterization of expanded metal mesh strand, to propose correlation between properties of parent material and finish product EMM" , 4th ICCEMS, Bangkok, Thailand, 17 to 19 May 2019
- Participated in International Geotechnical Engineering Conference on "Sustainability in Geotechnical Engineering practice and related urban issues held on 23-24 Sept. 2016, Mumbai, India.

- Participated in DFI India workshop and Conference on Deep Foundation Technologist for infrastructure development in India on 14-16 Nov.2013 at IIT Bombay
- Participated in National workshop on “Non Destructive Evaluation of structures “ 8th and 9th March 2013 jointly organized by ASTR, BARC and ISNT at BARC
- Participated in One Day Seminar and Panel Discussion on Geotechnical Infrastructure Engineering And Equipment Technology (GIEET-2014) on Saturday, 27th September 2014, Savitribai Phule Auditorium, Ground Floor, Main Building, VJTI, Mumbai

PhD Thesis Supervision

1. Bhushan Raishinghani. “Structural Health Monitoring of Long Span Bridges” (in progress)

Supervision of Master (MTech) Dissertations

Number of M.Tech Dissertations Guided :

Sr. No.	Name of Student	Dissertation Topic
Academic Year 2008-09		
	Shant Chitupe	Ultimate strength evaluation of rcc beam strengthened by fiber wrap.
	Pawar Lalit b.	Theoretical analysis & design of post-tension slab.
	Deshmukh Vinayak h.	Study and use of fiber wrap for strengthening of rcc slab.
Academic Year 2009-10		
	Gulbhile Balaji d	analysis of moment resisting frame with knee bracing
	Jadhav Mahendra	analysis of steel plate shear wall”
	Kiran Parmar	time history analysis of high rise steel building with rigid and semi – rigid connections
	Amol Patil	Analysis of structure subjected to blast load
Academic Year 2010-11		
	Rahul Kamble	analysis of steel plate shear wall
	Yadav Kamble	comparison of seismic performance of steel moment resisting frame & steel braced frame through incremental dynamic analysis & pushover analysis
	Pradip Nikam	Analysis of moment resisting frame with knee bracing
	Ashwin Gadhe	Experimental studies of fly ash bricks
	Bhavin Prajapati	Capacity base design of tall RCC Building
	Sushilkumar Gaikwad	Strengthening of RCC beam by using FRPC- some studies
	Pranay Wasnik	Lab manual on ANSYS software for structural problems
Academic Year 2011-12		
	Pallavi Vhella	performance of shear wall – diaphragm connection under cyclic loading
	Pipalia Vivek Rajesh	analysis of floor diaphragm in multi – storeyed reinforced concrete building
	Gaurav Borkar	limitations of Indian seismic design codes provisions

Academic Year 2012-13		
	Ramesh Mali	parametric study for lateral torsional buckling of cantilever and overhanging beams
	Ketki Tamhankar	Development of analytical fragility curves for G+11 storied building
Academic Year 2013-14		
	Prassana Joshi	Standardization of extended end plate moment connection.
	Atul Patil	Buckling Analysis of cold formed steel compression member at elevated temperatures
	Vaibhav Gaiker	Stress Analysis of Precast prestressed Beams during Transportation
Academic Year 2014-15		
	Vaibhav Daiwelkar	Behaviour of jacket platform under ship impact
	Pravinkumar Meshram	Fatigue analysis of multiplaner tubular joint used in offshore structures
Academic Year 2015-16		
	Ankur Kumar	To study the effect of uneven settlement on high-rise building
Academic Year 2017-18		
	Irnath hingmire	
	Sagar g sarda	
	Siddharth karde	
Academic Year 2020-21		
	Parag Sancheti	Use of Stainless steel as Reinforcement in Costal Region
	Pankaj Naik	Concrete filled steel tubular (CFST) Column in composite structures
	Vikrant Ambadekar	An Investigation Of Overstrength Factor And Ductility Factor Of Irregular Torsion Dominant Building
	Rajesh Singh	Repair And Rehabilitation Of Structures
	Shubham Develekar	Retrofitting of RC beams using CFRP
Academic Year 2021-22		
	Amrut Rameshkumar Bhatt	Evaluation Of Response Reduction Factor By Pushover Analysis On RCC Elevated Water Tanks
	Rajat Dinkar Bhoir	Analysis Of RCC Element Subjected To Corrosion Using Finite Element Approach
	Kailas Ramdas Parab	Analysis Of Torsional Effect On Tall Structure Using Cracked And Uncracked Sectional Properties With Torsional Irregularity
	Zunje Shubham Manohar	Reduction In Torsional Response Of A Multi Storied RCC Building, Subjected To Seismic Forces, Using Fluid Viscous Dampers
Academic Year 2022-23		
	Gauri Prakash Kadam	Comparative study of RC, PSC, and STEEL skew ridge girder on numerical model
	Sneha Pandurang Bhagat	Progressive collapse resistance by post tensioned concrete beam column assembly under middle column removal scenario
	Harshali sharad Suryawanshi	Seismic analysis of RC framed stepback and stepback-setback configuration on sloping ground.
	Ankita Vasudev Patharwat	3D Finite element analysis of circular footing of bridge pier supported on rock

Academic Year 2023-24		
	Aditya Pawar	Horizontal curve post tension bridge
	Adnan Shaik	Analyzing the performance, efficiency and design of post tensioned flat slab of commercial building in seismic zone-III
	Nishigandha Pawar	Analysis of uplift capacity of multistage horizontal Anchor Plate in cohesionless soil.
	Aniket Kasliwal	Structural analysis of piled raft foundation in soft soil for high rise structure.
	Vikramsingh Rathod	Seismic Analysis And Structural Evaluation Of Twisted Building Design.

Details of Experience of Working with International Bodies, Participation in Workshops, Seminars, and Conferences held Outside Country:			
SN	Activity	Place	Year
International Conferences: Attended/Presented the Research Papers			
1	4th ICCEMS,	Bangkok, Thailand,	17 to 19 May 2019
International Conferences: Attended/Presented the Research Papers by Co-Authors			
1	14th symposium on earthquake engineering, ,	Indian Institute of Roorkee	17-19 Dec 2010, pages 1045-1055.
2	15th Symposium on Earthquake Engineering,	Indian Institute of Roorkee,	11-13 Dec 2014, pages 1049-1055

Workshop/STTP/FDP Organized			
1	one week Faculty development program under TEQIP-II "Form Work and False Work Design"	VJTI Mumbai,	28 march to 1 st April 2013
2	Four week finishing school on "Soft Skill Development and Software Application in Structural Engineering" for UG and PG Structural Engineering Students from	VJTI Mumbai,	18 th May 2015 to 12 th June 2015, under TEQIP-II
Workshop/STTP/FDP Attended			
1	Participated in one week seminar on "Topics Related to Engg. Education"	COET Jalgaon	11-17 Aug. 1998
2	seminar on "Quality Engg. Education"	COET Jalgaon	26 th Dec. 1998
3	"Environmental Aspect of Engg. Practice" in national conference	Pusad,	23-24 th Nov. 1999
4	Participated in seminar on "Orientation Program For Engg. College Teachers"	COET Bambori Jalgaon	11 th to 13 th July 2003
5	AICTE ISTE Sponsored two week STTP on "Introduction to Office XP and Comp. Application"	GB Pant University	6-17Dec. 2004
6	Participated in QIP Sponsored one week SSTP on "Advance In Testing of Cement and Concrete"	IIT Kanpur,	13 th – 19 th Feb 2005
7	ISTE Approved one week STTP on "Analysis and Design of Earthquake Resistant structures"	Saraswati College of Engg. Kharghar	5 th Jan. to 9 th Jan. 2009

8	one week Faculty development program under TEQIP "Built People to Built Institute"	VJTI Mumbai	30 th Jan. 2009 to 21 st march 2009
9	One week STTP program under CE&QIP "Risk Assessment and Management in Geotechnical Engineering"	IIT Bombay	March 14-18, 2011
10	One week STTP program under AICTE QIP " Finite Element Method and Application in civil Engineering"	IIT Bombay	Aug. 16-20, 2011
11	one week STTP program under CE&QIP "Advance Foundation Engineering"	IIT Bombay.	June 20-24, 2011
12	one week Faculty development program under TEQIP-II "performance based design of structures"	VJTI Mumbai	22 nd to 26 th March 2012
13	two week ISTE work Shop on "Introduction to Research Methodologies"	IIT Bombay	25 th June to 4 th July 2012.
14	one week Faculty development program under TEQIP-II "Form Work and False Work Design"	VJTI Mumbai	28 march to 1 st April 2013
15	Participated in one week Faculty development program under TEQIP-II "Recent Trend in Finite Element Method and Introduction to Boundary Element and Mesh-free Method"	VJTI Mumbai,	18 th Feb. to 22 nd Feb. 2013.
16	TEQIP-II spon. PhD. colloquium for research squalor	VJTI & IIIE Mumbai	15 th and 16 th April 2013.
17	conference on deep Foundation Technologies For Infrastructure Development In India	Mumbai	Nov. 14-15-16, 2013
18	Two week Faculty development program under TEQIP-II "Resent trend in performance based design of structures"	VJTI Mumbai,	3 rd to 14 th June 2013.
19	Two days National workshop on "Non Destructive Evaluation of Structures",	Association of Structural Rehabilitation (ASTR) and Indian Society for Non Destructive Testing (ISNT)	8 th March 2013 and 9 th March 2013
20	one week Faculty development program under QIP " Geosynthetics: Manufacturing, Application and Analysis"	VJTI Mumbai	6 th Jan. to 10 th Jan. 2014.
21	one week FDP on "Matrix Method of Structural Analysis" organized by Structural Engineering Department, under QIP	VJTI, Mumbai	23 rd January to 28 th January 2018,
22	one week FDP on "Characterization and Analysis of Material" organized by, under TEQIP-III.	Textile Manufacturing Dept. VJTI, Mumbai	23 rd to 28 th December 2019
23	one week FDP on "Advanced Data Analysis and Decision Making" organized by Faculty Development Centre (Geo Informatics, Spatial Computing and Data Analytics) , sponsored by MHRD.	Department of Mechanical Engg. Production Engg.Computer Engg. Information Technology and MCA	30 th December 2019 - 03 rd January 2020