## CURRICULUM VITAE

* **Name : Pranesh Bhimrao Murnal**
* **Date of Birth:** 15th July 1961
* **Field of specialization:** Structural Engineering (Earthquake Engineering)
* **Address for communication:**

 Dr. Pranesh Murnal

 Professor & Head, Dept. of Applied Mechanics

 Govt. College of Engineering, Osmanpura

 Aurangabad – 431005

 Maharashtra, India

 Email: pmurnal@yahoo.com

 **Tel:** (O) 0240-2366160

 Cell: 09970700044

* **Academic Qualifications:**

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| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | Degree | **University/****Institution** | **Percentage/ Grade** | **Year of passing** | **Specialization** |
| 1 | B. Tech. | Mysore University, KREC SurathkalINDIA | 84.83%, I Class with Distinction & III rank to University | 1984 | Civil Engineering |
| 2 | M. E. | Shivaji University, WCE, SangliINDIA | 76.4%, I Class with Distinction | 1991 | Structural Engineering |
| 3 | Ph.D. | IIT, BombayINDIA | - | 2000 | \*Earthquake Engineering |

**\***Title of the thesis: *VFPI: An Innovative Device for Aseismic Design*

* **Awards/Recognitions:**

The Ph.D. thesis has got the “***Innovative Potential of Students Project Award****”* at National level conferred by **Indian National Academy of Engineering, New Delhi** for the year 2001.

* **Experience:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name & Address of Employer** | **Post Held** | **Period of Service** | **Nature of Duties** |
| Secretary, Higher & Technical Education, Govt. of Maharashtra, Mumbai, (GCE, Aurangabad) | I/c Principal | 20-01-2017 till date | Overall administration of the institution |
| Secretary, Higher & Technical Education, Govt. of Maharashtra, Mumbai, (GCE, Aurangabad) | Professor of Applied Mechanics | 12-05-2011 till date | Overall administration of department, R & D work, consultancy, guidance to PG and UG students, etc. |
| Secretary, Higher & Technical Education, Govt. of Maharashtra, Mumbai, (GCE, Karad) | Professor & Head of Applied Mechanics | 23-8-2002 to 10-05-2011 | Overall administration of department, R & D work, consultancy, guidance to PG and UG students, etc. |
| Principal, TKIET, Warananagar Maharashtra | Assistant Professor & Head of Civil Engg. Dept. | 01-05-94 to 17-07-96 and 5-7-2000 to 22-8-2002 | In addition to the above, overall administration of the Dept., long-term planning of development work, etc. |
| Principal, TKIET, Warananagar Maharashtra | Assistant Professor | 01-08-91 to 22-8-2002 | In addition to the above, guiding seminars and projects, Promoting R&D work, Counselling, Lab development, etc. |
| Principal, TKIET, Warananagar Maharashtra | Lecturer | 20-12-84 to 31-7-91 (6 yr. And 7 Months) | Teaching, Lab-work, Designing Experiments, Preparation of teaching aids, Evaluation, etc. |

* **REASEARCH AND DEVELOPMENT**

**1. PUBLICATIONS**

**(a) Papers in International refereed Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No. | Author(s) | Year of Publication | Title of Paper | Complete Reference of Journal |
|  | Harshal Admane and P.B.Murnal | 2017 | Analysis of masonry structure: A review | International Journal of Scienece & Engineering development research, Vol 2, Issue 5, pp 59-64 |
| 1. | S.G.Joshi, I.D.Gupta, L.R.Pattanur, P.B.Murnal | 2014 | Investigating the effects of depth and impedence of foundation rock in earthquake analysis of gravity dams | *International Journal of Geotechnical Earthquake Engineering*, Vol 5 (2), 2014 |
| 2 | Jangave S.K. and Murnal P.B. | 2014 | Structural assessment of circular overhead water tank based on frame staging subjected to seismic loading | *International Journal of Emerging Technology and Advanced Engineering,*Vol 4(6), 2014, pp 145-151 |
| 3 | P.D.Kumbhar and P.B.Murnal | 2014 | A new mix design method for high performance concrete under tropical conditions | *Asian Journal of Civil Engineering,* Vol 15, No. 3, 2014 |
| 4 | Dhananjay Joshi and Pranesh Murnal | 2013 | Performance of flat slab structure using pushover analysis | *IOSR Journal of Mechanical and Civil Engineering,* Vol 7(6), 2013, pp 19-25 |
| 5. | Tejashree Gulve and Pranesh Murnal | 2013 | Feasibility of implemeting water tank as passive tuned mass damper | *International Journal of Innovative Technology and Exploring Engineering,* Vol 3 (3), 2013, pp 12-19 |
| 6. | P.D.Kumbhar and **Pranesh Murnal** | 2012 | “Assessment of Suitability of existing Mix Design Methods of Normal Concrete for Designing High Performance Concrete Mixes” | *International Journal of Civil and Structural Engineering (IJCSE),* August 2012, Vol.3, No.1, pp. 158-167 |
| 7. | P.D.Kumbhar, **Pranesh Murnal** and R.R. Patil | 2011 | Durability properties of high performance concrete | *International journal of Advances in Science & Technology,* September 2011Vol 3(3), 2011 |
| 8. | G.V. Mulgund, D.M. Patil, **Pranesh Murnal** and A.B.Kulkarni | 2011 | Effects of various parameters on performance of RC frame with infill | *International Journal of Industrial Engineering & Technology,* Vol 3, No. 2, 2011, pp-199-207 |
| 9 | G.V. Mulgund, D.M. Patil, **Pranesh Murnal** and A.B.Kulkarni | 2011 | Seismic behaviour of brick-infilled RC frames | *International journal of Applied Structural Engineering* |
| 10 | **Pranesh Murnal** and Ravi Sinha | 2004 | Earthquake resistant design of torsionally coupled structures using VFPI | *Journal of Structural Engineering,* American Society of Civil Engineers*,*  July2004, Vol 130 (7), 1041-1054 |
| 11 | **Pranesh Murnal** and Ravi Sinha  | 2004 | Aseismic design of structure-equipment systems using Variable Frequency Pendulum Isolator | *Nuclear Engineering and Design,* 2004, Vol. 231, 129-139 |
| 12 | **Pranesh Murnal** and Ravi Sinha | 2002 | Earthquake resistant design of structures using VFPI | *Journal of Structural Engineering,* American Society of Civil Engineers*,* July 2002, Vol. 128(7), 870-880 |
| 13 | **Pranesh Murnal** and Ravi Sinha | 2000 | VFPI: An isolation device for aseismic design | *Journal of Earthquake Engineering and Structural Dynamics*, Wiley, May 2000, Vol. 29, 603-627 |

**(b) Papers in National refereed Journals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No. | Author(s) | Year of Publication | Title of Paper | Complete Reference of Journal |
|  | Ashish Wani and P.B.Murnal | 2017 | Experimental study on effectiveness of TMD in reducing torsional motion under harmonic base motion | STM Journal of Structural Engg & Management, Vol 4, Issue 3  |
|  | Vaibhav Kothari and P.B.Murnal | 2015 | Seismic analysis of sakew bridges | Journal of Civil Engineering & Environment Technology, Vol 2, No. 10, pp 71-76 |
| 1 | P.D. Kumbhar, R.R.Patil and P.B.Murnal | 2014 | Effect of relative humidity and temperature on properties of M-80 grade high performance concrete | Civil Engineering & Construction Review, Vol 27(9), 2014 |
| 2. | Malu Girish and Murnal Pranesh | Accepted  | “Variable Coefficient of Friction: An effective VFPI parameter to control near-fault ground motion” | *ISET Journal of Earthquake Technology* (To be published in issue during 2016) |
| 3. | P.D. Kumbhar and **Pranesh Murnal** | 2012 (May) | Effect of relative humidity and temperature on properties of M80 grade high performance concrete | *Civil Engineering and Construction Review Civil Engineering And Construction Review,* May 2012, Vol.25, No.5, pp.142-146, |
| 4. | G.V. Mulgund, **Pranesh Murnal** and A.B.Kulkarni | Accepted | Behavior of Reinforced Concrete Structures with Masonry Infill walls | *Civil Engineering and Construction Review* |
| 5. | P.D. Kumbhar and **Pranesh Murnal**  | 2011 | Effect of Humidity and Temperature on Properties of High Performance Concrete | *National Building Materials & Construction World,* May 2011, 204-210 |

 **(c) Papers in International Conferences**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No. | Author(s) | Year of Publication | Title of Paper | Name and Place of Conference |
|  | Harshal Admane and P.B.Murnal | 2016 | Analysis of masonry structure: A review | International conference on "Advances in Civil Infrastructure and Development of Smart Cities", RIT, Islampur, 27-28 Feb, 2016  |
| 1. | P.B.Murnal and R.N. Chatorikar | 2015 | Impact Resistance of Steel fibre reinforced concrete | International Conference on Innovations in Structural Engineering, Department of Civil Engg., University College of Engg., Osmania University, Hyderabad, 14-16 December, 2015 |
| 2. | Malu Girish and Murnal Pranesh | 2012 | “Comparative study of sliding isolation system for low frequency ground motions” | *15th World Conference on Earthquake Engineering*, Lisbon, Portugal |
| 3. | Girish Malu and **Pranesh Murnal** | 2010 | Behavior of structure with VFPI during near-field ground motion | *Proceeding of International Conference on Innovative World of Structural Engineering*, Aurangabad, India, Vol. 1, 166-174 |
| 4. | Gopal Mulgund, Dhanraj Patil, **Pranesh Murnal** and A.B. Kulkarni | 2010 | Seismic assesement of masonry infill rc framed building with soft ground floor | *International Conference on Sustainable Built Environment*, Kandy, Sri Lanka, to be held during 13-14 December, 2010 |
| 5. | **Pranesh Murnal** and Girish Malu | 2007 | Selection of VFPI parameters for isolation effectiveness during near-field ground motion | *8th Pacific Conference on Earthquake Engineering,* 5-7, NTU, Singapore, Dec, 2007 |
| 6. | Ravi Sinha and **Pranesh Murnal** | 2003 | Earthquake resistant design of buildings using VFPI | *Second International Conference on Urban Safety of Megacities in Asia,* held at Tokyo, Japan, 30-31, Oct, 2003 |
| 7. | **Pranesh Murnal** and Ravi Sinha | 2001 | Aseismic design of tall structures using variable frequency pendulum isolator | *Eighth East Asia-Pacific Conference on Structural Engineering and Construction,* Singapore, held on Dec 5-7, 2001 |
| 8. | **Pranesh Murnal** and Ravi Sinha | 2001 | Vibration Control of primary-secondary systems using VFPI | *16th International Conference on Structural Mechanics in Reactor Technology,* International Association of Structural Mechanics in Reactor Technology, Washington DC, USA, Aug 2001 |
| 9. | Ravi Sinha and **Pranesh Murnal** | 2001 | Earthquake resistant design of torsionally coupled structures using VFPI | *Structures 2001 Conference: 2001 Structures Congress and Exposition Structural Engineering Odyssey,* American Society of Civil Engineers, Washington DC, USA, May2001 |
| 10. | **Pranesh Murnal** and Ravi Sinha | 2000 | Aseismic design of tall structures using variable frequency pendulum isolator | *12th World Conference On Earthquake Engineering*, Auckland, New Zealand, Feb 2000 |
| 11. | Ravi Sinha and **Pranesh Murnal** | 1999 | Behaviour of multi-degree-of-freedom shear structure isolated using VFPI | *8th Canadian Conference on Earthquake Engineering*, Canadian Association of Earthquake Engineering, Vancouver, BC, Canada, June 1999 |

 **(d) Papers in National Conferences**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No. | Author(s) | Year of Publication | Title of Paper | Name and Place of Conference |
| 1. | Pranesh Murnal and Girish Malu | 2014 | Performance Evaluation of VFPI SubjectedNear-Fault Ground Motion ThroughWavelet Excitation | SEC-2014, held at IIT Delhi during 22-24 December, 2014 |
| 2 | **Pranesh Murnal** | 2010 | Passive vibration control techniques | *National Conference on Civil Engineering for Infrastructural Developments held 30-31st August, 2010* |
| 3. | B. A. Konnur and **Pranesh Murnal** | 2008 | Application of seismic risk modelling for earthquake disaster management of lifeline structures | *Conference on Challenges and Applications of Mathematical Modelling Techniques in Building Science and Technology,* CBRI, Roorkee, 7-8, Feb, 2008 |
| 4. | **Pranesh Murnal**, Sandip Kotalwar, A. Ramrao, Singh U. P., and S. K. Sinha  | 2008 | Refinement of finite element model of a power plant by ambient vibration test using system identification | *SEC-2008, The Sixth Structural Engineering Convention, Chennai,* to be presented during 18-20, Dec, 2008 |
| 5. | Basavaraj Konnur and **Pranesh Murnal** | 2008 | Role of seismic hazard technique in earthquake disastermanagement of lifeline structures | *National Conference on Emerging Technologies in Civil Engineering ,* held at VVPCE, Ahmednagar, 28-29, Feb, 2008 |
| 6. | **Pranesh Murnal** and Kedar Kumbhojkar | 2008 | Effectiveness of base isolation for torsionally coupled asymmetric buildings | *National Conference on Emerging Technologies in Civil Engineering ,* held at VVPCE, Ahmednagar, 28-29, Feb, 2008 |
| 7. | B. A. Konnur and **Pranesh Murnal** | 2007 | Earthquake protection of infrastructures in cities | *National Conference on Emerging Technology and Development in Civil Engineering,* held at GCE, Amravati, 22-23, March, 2007 |
| 8. | **Pranesh Murnal** and Chetan Patil | 2006 | A seismic evaluation procedure for Indian Conditions | *13th Symposium on Earthquake Engineering,* IIT, Roorkee, 18-20, Dec, 2006**.** |
| 9. | P. D. Kumbhar and **Pranesh Murnal** | 2006 | Mix proportioning of high performance concrete | *National Conference on Concrete Technology, for the Future,* Kongu Engineering College, Perundurai, Erode, Tamilnadu, 21st and 22nd April 2006**,** pp.484-492 |
| 10. | Konnur B. A., Deshpande U. L., and **Pranesh Murnal** | 2006 | Earthquake disaster management for infrastructures in India | *National Conference on Role of Civil Engineers in Disaster Management,* held at BMSCOE, Bangalore, 2-4, Feb, 2006 |
| 11. | **Pranesh Murna**l | 2002 | Passive vibration control; an emerging trend in earthquake resistant design | *National Conference on Concrete and Concrete Structures,* held at GIT, Belgaum, 25-26, Oct, 2002 |
| 12 | **Pranesh Murnal** | 1995 | Seismic base isolation systems | *Proc. National Conf. On Civil Engg. Materials & Structures*, held at Hyderabad, 1995 |

**2. PATENTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl No** | **Title of patent** | **Inventors** | **Owned by** | **Patent Nos**  |
| 1. | A constant long period vibration-protective pendulum isolator for structures | Ravi Sinha and Murnal Pranesh | Indian Institute of Technology, Bombay, Powai, Mumbai | 197756 |
| 2. | A variable period vibration-protective pendulum isolator for structures  | Ravi Sinha and Murnal Pranesh | Indian Institute of Technology, Bombay, Powai, Mumbai | 197850 |

**3. RESEARCH GUIDANCE**

**(a) Ph.D. Guidance**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Name of Student** | **Year of Completion** | **Title of Thesis/Research Area** | **Co-Supervisors****(if any)** |
| 1. | Popat D. Kumbhar | 2012 | Mix proportioning of high performance concrete for Indian environment | - |
| 2. | Girish M. Malu | 2013 | Characterization of VFPI of VFPI isolated structures subjected to near-field and low-frequency earthquakes | - |
| 3. | Umesh L. Deshpande | Thesis Submitted | Seismic evaluation of existing asymmetric gravity-load designed reinforced concrete buildings in medium to high seismic regions of Maharashtra | - |
| 4. | Sharad G. Joshi | 2017 | Statistical Response Spectrum Superposition for Earthquake Analysis of Gravity Dams. | Dr. I. D. Gupta, Retd. Director, CWPRS, Pune |
| 5. | Mrs. Reshma Karad | Ongoing (registered in 2013) | Design guidelines for seismic design using VFPI | - |
| 6. | Pawar S.N. | Ongoing (registered in 2014) | Seismic behaviour of joints | - |

**(b) M.E. Guidance**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Name of Student** | **Year of Completion** | **Title of Dissertation** |
|  | Harshal Admane | 2016 | A study on behaviour of masonry arch-vault structure |
|  | Niranjan Muley | 2016 | Progressive collapse assessment of steel building using nonlinear dynamic analysis |
|  | Pathan Majaed | 2016 | Experimental investigation of effectiveness of combined TMD and base isolation system under harmonic loading |
|  | Vaibhav Kothari | 2015 | Seismic analysis of skew bridges |
|  | Nitin Chavan | 2015 | Seismic response of bridge with elastomeric bearing and isolator |
|  | Sameer Shaikh | 2015 | Seismic isolation at different levels in building |
|  | Nitesh Jogdand | 2015 | Seismic behaviour of precast building |
|  | Momin Anarkali | 2014 | Effect of opening in infill walls on structural behaviour of RC frame building |
|  | Tejashree Gulve | 2014 | Suitability of water tank as a tuned mass damper for buildings |
|  | Landge Deepak | 2014 | Behaviour of circular overhead water tank with shaft type staging subjected to seismic loading |
|  | Jangave Sneha | 2014 | Comparative study of different modelling systems of overhead circular water tank |
|  | Chetan Tare | 2012 | Soil structure interaction of base isolated building |
|  | Prashant Kore | 2012 | Seismic behaviour of flat slab systems |
|  | Jadhav Anand | 2011 | Seismic Pounding between adjacent building structures subjected to near-field ground motion  |
|  | Mujawar Sahil | 2011 | Compararive study of push-over analysis methods for estimating inelastic dynamic response of structures |
|  | Kate Gunavant | 2010 | Effect of addition of fly ash in high strength concrete on shrinkage characteristics |
|  | Kedar Baraswade | 2010 | Seismic evaluation and retrofitting of existing reinforced concrete buildings with open parking floor |
|  | Dhanashree Patil | 2010 | Reliability of pile foundation of low-rise structures in Karad city founded on expansive soils |
|  | Dhanraj Patil | 2010 | Comparative study of seismic behaviour of various steel braced frames |
|  | Mahesh More | 2010 | Estimation of response reduction factors using performance based approach for earthquake resistant design of buildings with shear walls |
|  | Gopal Dhanjode | 2010 | Performance of moment resistant steel framed buildings with different connections under earthquake loading |
|  | Dineshri Rajbhoj | 2010 | Dynamic behaviour of windmill foundation systems |
|  | Smita Gokhale | 2010 | Behaviour of GFRP-RC composite member under flexural loading |
|  | Vinayak J. Yadav | 2009 | Use of experience data for seismic qualification of power plant equipment |
|  | Amitkumar R. Gavali | 2009 | Estimation of response reduction factors using performance based approach for earthquake resistant design |
|  | Sandip Kotalwar | 2008 | Refinement of finite element model of a power plant by ambient vibration test using system identification approach |
|  | Nikin Meshram | 2008 | Quantification of structural configuration parameters on seismic evaluation of existing building |
|  | Suyog Dhongade | 2007 | Seismic qualification of power plant equipments using acceleration time-history compatible with site-response spectra |
|  | Kedar Kumbhojkar | 2007 | Effectiveness of base isolation for torsionally coupled asymmetric building |
|  | Giriraj Tawari | 2006 | Seismic performance of bridges using combination of modified elastomeric and friction bearings |
|  | Kishor Patil | 2006 | Behaviour of structure-equipment system of power house subjected to real earthquake |
|  | Sandeep Nimbalkar | 2006 | Seismic performance of high-rise buildings founded on soft soil considering soil-structure interaction |
|  | Chetan Patil | 2006 | Seismic evaluation of existing building |
|  | Nitesh Raut | 2006 | Seismic isolation of elevated water tank with shaft type staging |
|  | Vishwas Patil | 2005 | Behaviour of infilled frame under lateral load |
|  | Kadam B. M. | 2005 | Study of short retrofitted reinforced concrete column |
|  | Prashant Bajpai | 2005 | Analysis of raft foundation by finite element method |
|  | Sachin Selot | 2004 | Characterization of top soft storey for vibration control of regular multi-storeyed buildings |
|  | Umesh Gavas | 2004 | Improvement of earthquake resitance of bridges using elastomeric bearings |
|  | Pankaj Naikwadi  | 2004 | Critical assessment of RC frame using push-over analysis |
|  | Rajesh Shah | 2004 | Characterization of soft storey in multi-storey buildings |
|  | Rahul Dingane | 2004 | A comparative study on seismic performance of building with on-site detailing practices and codal provisions |
|  | Rajkuwar Jadhav | 2004 | Analysis and design of machine foundation with special reference to turbo-generator set |
|  | Aruna Varekar | 2004 | Effect of cyclic loading on polymer based SFRC beam-column joint |
|  | Amrita Kulkarni | 2004 | Experimental study of fibre-reinforced concrete using natural fibres |
|  | Sandip Sonawani | 2004 | Retrofitting of reinforced concrete members using polymer based cement concrete/mortar |
|  | P. D. Jadhav | 2004 | A comparative study on delayed vibration of concrete with and without use of retarder |
|  | Jitendra Rathod | 2003 | A comparative study of effect of coarse aggregate type on mechanical properties of high performance concrete |
|  | V. K. Pingale | 2003 | Behaviour and strength of reinforced concrete beams with circular openings in shear |
|  | Darshan Gaidhankar | 2003 | Dimensional effect on the flexural strength of reinforced concrete beams |

**4. SPONSORED RESEARCH**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year of Funding | Sponsoring Organisation | Title of Project | Amount of Grant | Co-Investigators (if any) |
| 2005 | Board of Research in Nuclear Sciences (BRNS) | Acquisition of earthquake experience data and acceleration response data of Structure, System and Equipment (SS&E) of Koyna dam Power Plant and validation of FEM models used for seismic qualification of SS&E. | Rs. 28.91 Lakhs | Shri. P. K. Deshpande |
| 2008 | All India Council for Technical Education | Mix proportioning of high strength concrete with crushed sand as fine aggregate | Rs. 5.40 Lakhs | Dr. S. S. Jamkar |

**Consultancy Projects**

|  |  |  |  |
| --- | --- | --- | --- |
| Period | Organisation | Nature of Projects | Co-Consultants (if any) |
| 2013-14 onwards | Paithan-Apegaon Development Corporation | Third Party Audit of various structures | Faculty from Civil & Applied Mech |
| 2011-12 | Contonment Board, Aurangabad | Supervision and third party inspection of overhead water tanks | Dr. R.S.Londhe |
| 2012 | PWD, Aurangabad | Structural Audit of District Court Building, Aurangabad | Dr. R.S.Londhe |
| 2012 | Jain Irrigation Systems Ltd., Jalgaon | Safety Checking of solar tracker system for Rajasthan | - |
| 2011 | Tapi Prestressed Products-JV, Ahmednagar | Structural Stability Assessment of pumping stations undee Ahmednagar Muncipal Corporation  | Dr. R.S.Londhe |
| 2008 | Relief and Rehabilitation Department, Government of Maharashtra | Damage survey of rural houses damaged during 4.8 magnitude earthquake of 17-09-08  | Shri. U. L. Deshpande |
| 2008 | Zilla Parishad, Satara | Quality checking of Zilla Parishad schools in Satara district through NDT built under Sarva Shiksha Abhiyan | 1. Shri. P. K. Deshpande
2. Shri. U. L. Deshpande
 |

**Note**: In addition to above major consultancy works many small consultancy works have been completed.

**5. COURSES CONDUCTED**

Conducted a **AICTE-sponsored two-week** faculty development programme on “Base isolation techniques for earthquake resistant design” at Government College of Engineering, Karad, during 27th November and 9th December 2006.

**6. OTHER CREDENTIALS**

* 1. Member of Buildings & Works Committee, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
	2. Worked as Dean (Academic)
	3. Visited Singapore and Japan for presenting technical papers
	4. Worked as member of BoS and Faculty in Shivaji University
	5. Resource person for UNDP-GoM Disaster management training programmes conducted all over Maharashtra
	6. Worked in various committees at State and National level for AICTE and UGC.
	7. Delivered many guest/invited lectures at various institutions and conferences.
	8. Attended many short term courses and training programmes
* **Membership of Professional Bodies**
1. Life member of Institution of Engineers (India)
2. Life member of Indian Society for Technical Education

 **Sd/-**

**-Pranesh Murnal**