

# UMESH KUMAR DEWANGAN

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**UMESH KUMAR DEWANGAN**

**Professor & Head Civil Engineering Department**

<b>Career Objective</b>	Serving as a part of Society as an expert of an Institute where my technical knowledge and skills are serve for the purpose for the betterment of the country as a human being, and to further enhanced, in turn contributing to the growth of the institute, Nation.																	
<b>Professional experience</b>	<p><b>Total Teaching Experience (as Faculty) = 25 Years(regular)</b></p> <p><b>National Institute of Technology, Raipur (from 2006)</b></p> <p><b>Institute Profile:</b> The Institute is institute of national importance with deemed university status. It has a vision to contribute to society by research and creating good engineers.</p> <p>March 2006 onwards:</p> <table border="1"><thead><tr><th rowspan="2">Sr.No.</th><th rowspan="2">Position Held / Designation</th><th colspan="2">Period</th><th rowspan="2">Period in Years</th></tr><tr><th>From</th><th>To</th></tr></thead><tbody><tr><td>1</td><td><b>Associate Professor in Civil Engg Dept.</b></td><td>Jan 2001</td><td>April 2013</td><td>13 Yrs.</td></tr><tr><td>2</td><td><b>Professor</b></td><td>April 2013</td><td>till now</td><td>~~ 3 Yrs</td></tr></tbody></table>	Sr.No.	Position Held / Designation	Period		Period in Years	From	To	1	<b>Associate Professor in Civil Engg Dept.</b>	Jan 2001	April 2013	13 Yrs.	2	<b>Professor</b>	April 2013	till now	~~ 3 Yrs
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	<p><b>Designation: Professor</b></p> <p><b>Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• Teaching Structural Analysis II, Advanced Reinforced Concrete Design, Finite Element Method, Computer Application in Civil Engg.</li> <li>• Supervising Researchers on their research / PhD work</li> <li>• Member DAC/DGC</li> <li>• Member Senate</li> <li>• Head of the Department of Civil Engineering</li> <li>• Professor In Charge for NSS activity.</li> <li>• Member of various committee like Testing /Consultancy, Eclectika, building</li> <li>• Expert lectures in Subject Area.</li> <li>• Member PMGSY, State Technical Agency at NIT Raipur</li> </ul>																				
<p><b>Summary of qualifications</b></p>	<p><b>Academic Qualifications:</b></p> <table border="1" data-bbox="568 949 1399 1469"> <thead> <tr> <th data-bbox="568 949 703 1099">Sr.No.</th> <th data-bbox="703 949 847 1099">Degree Held</th> <th data-bbox="847 949 1038 1099">Name of the University / Institute</th> <th data-bbox="1038 949 1177 1099">Year of Award</th> <th data-bbox="1177 949 1399 1099">Specialization</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 1099 703 1173">1</td> <td data-bbox="703 1099 847 1173">B. E.</td> <td data-bbox="847 1099 1038 1173"></td> <td data-bbox="1038 1099 1177 1173"></td> <td data-bbox="1177 1099 1399 1173">Civil Engineering</td> </tr> <tr> <td data-bbox="568 1173 703 1247">2</td> <td data-bbox="703 1173 847 1247">M. E.</td> <td data-bbox="847 1173 1038 1247"></td> <td data-bbox="1038 1173 1177 1247"></td> <td data-bbox="1177 1173 1399 1247">Structural Engineering</td> </tr> <tr> <td data-bbox="568 1247 703 1469">3</td> <td data-bbox="703 1247 847 1469">Ph. D.</td> <td data-bbox="847 1247 1038 1469">Indian Institute of Technology, Kharagpur (I.I.T. Kharagpur)</td> <td data-bbox="1038 1247 1177 1469">2006</td> <td data-bbox="1177 1247 1399 1469">Structural Engineering</td> </tr> </tbody> </table>	Sr.No.	Degree Held	Name of the University / Institute	Year of Award	Specialization	1	B. E.			Civil Engineering	2	M. E.			Structural Engineering	3	Ph. D.	Indian Institute of Technology, Kharagpur (I.I.T. Kharagpur)	2006	Structural Engineering
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<p><b>Research Interest</b></p>	<p>Structural Damage Detection, Health Monitoring, System Identification, Finite Element, Computational Mechanics, MATLAB</p>																				
<p><b>Research Contribution</b></p>	<p><b>International Journal - Published Papers</b></p> <ol style="list-style-type: none"> <li>1. P. H. Arundas and U. K. Dewangan (2016) <i>“Prediction of Crack Locations using Non Destructive Tests”</i>, Indian Journal of Science and Technology, Vol 9(34), DOI: 10.17485/ijst/2016/v9i34/95491, September 2016 (Scopus Indexed)</li> <li>2. P. H. Arundas and U. K. Dewangan (2016) <i>“Health Monitoring using the Frequency Response under</i></li> </ol>																				

	<p><i>Compressive Load</i>”, Indian Journal of Science and Technology, Vol 9(35), DOI: 10.17485/ijst/2016/v9i35/97734, September 2016 (Scopus Indexed)</p> <p>3. Shalem Ernest and U.K.Dewangan(2016) “<i>Comparison of eigen frequency convergence criteria on a bridge structure</i>”, JCHPS Special Issue 2: August 2016, ISSN: 0974-2115 pp 69-74 (Scopus Indexed)</p> <p>4. K. K. Riyas Moideen and U. K. Dewangan (2016) “<i>Effect of Material Nonlinearity on Deflection of Beams and Frames</i>” Indian Journal of Science and Technology, Vol 9(28), DOI: 10.17485/ijst/2016/v9i28/92375, July 2016(Scopus Indexed)</p> <p>5. P. H. Arundas and U. K. Dewangan (2016) “<i>Compressive Strength of Concrete based on Ultrasonic and Impact Echo Test</i>”, Indian Journal of Science and Technology, Vol 9(23), DOI: 10.17485/ijst/2016/v9i23/94124, June 2016. (Scopus Indexed)</p> <p>6. K. K. Riyas Moideen and U. K. Dewangan (2016) “<i>Comparative Study of Linear and Geometric Nonlinear Load-Deflection Behaviour of Flexural Steel Members</i>”, Indian Journal of Science and Technology, Vol 9(18), DOI: 10.17485/ijst/2016/v9i18/88147, May 2016. (Scopus Indexed)</p> <p>7. Shalem Ernest, U. K. Dewangan (2016) “<i>Structural Damage Predictions Based on Eigen Frequency Evaluation Techniques</i>” International Journal Of Applied Engineering Research” ISSN 0973-4562 (Scopus Indexed)</p> <p>8. Manoj Kumar Tiwari ,Dr. Samir Bajpai, Dr.U.K.Dewangan(2015) “<i>An Analytical Study of Heavy Metal Concentration in Soil of an Industrial Region of Chhattisgarh, central, India,</i>” International Journal of Scientific and Research Publications, Volume 5, Issue 7, July 2015 1, ISSN 2250-3153, <a href="http://www.ijsrp.org">www.ijsrp.org</a></p> <p>9. Shalem Ernest and U. K. Dewangan (2015) “<i>Identification of Structural System: Recent Trends and Challenges</i>”. International Journal of Structural Engineering and Analysis, Vol. 1: Issue 1, <a href="http://www.journalspub.com">www.journalspub.com</a>, P 1-8.</p> <p>10. Manoj Kumar Tiwari, Samir Bajpai, U.K. Dewangan,</p>
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Raunak Kumar Tamrakar (2015) “*Assessment of heavy metal concentrations in surface water sources in an industrial region of central India*” *Karbala International Journal of Modern Science* 1 (2015) 9-14.(SCI Indexed)

11. Manoj Kumar Tiwari, Samir Bajpai, U.K. Dewangan, Raunak Kumar Tamrakar (2015) “*Suitability of leaching test methods for fly ash and slag: A review*”, *Journal of Radiation Research and Applied Sciences*, JRRAS170\_proof 2 July 2015 1/14 Science Direct. (SCI Indexed)
12. Manoj Kumar Tiwari, Dr. Samir Bajpai, Dr. U. K. Dewangan (2012) “*Prediction of Industrial Solid Waste with ANFIS Model and its comparison with ANN Model- A Case Study of Durg-Bhilai Twin City India*”, ISSN: 2277-3754, *Int. J. of Engg. & Innovative Tech. (IJEIT)* V.2/6, Dec. 2012, P. 192 -201.
13. Manoj Kumar Tiwari, Dr. Samir Bajpai, Dr. U. K. Dewangan(2012)“*A Review on fly ash generation, its composition and Environmental Impact for Durg - Bhilai Twin City industrial Region*” *Research J.Engineering and Tech.* 3(4): Oct Dec 2012, ISSN 0976-2973, P314-318, [www.anvpublication.org](http://www.anvpublication.org)
14. Umesh Kumar Dewangan (2012) “*Structural Parameter Identification – A New Concept*”- *Int. J. Pure Appl. Sci. Technology.*,10(1) (2012), pp. 1-9
15. U. K. Dewangan (2011) *Structural Damage Existence Prediction with Few Measurements International Journal of Engineering Science and Technology (IJEST)*,, ISSN : 0975-5462 Vol. 3 No.10 October 2011 P 7587- 7597.
16. U. K. Dewangan and S. V. Barai (2012) “*System Identification With Noisy Data- System Identification With Noisy Data*” *International Journal of Advanced Technology In Civil Engineering*, ISSN: 2231 –5721, Volume-1, Issue-2, 2012.
17. U. K. Dewangan (2011) “*Development of A Structural Health Monitoring System*”, *International Journal of Research In I Management and Engineering( IJRIME)*, Vol 1 Issue 4, ISSN -2249-1619, Pp 184- 194.
18. U. K. Dewangan (2011) “*Element Location In System Identification*”, *Indian Journal of Applied Research*, Vol 1 Issue 3, December, ISSN -2249-555x, Pp 89- 91

### International Conferences

1. Shalem Ernest, U. K. Dewangan (2016) “*Comparison of eigen frequency convergence criteria on a bridge structure*” International Conference On Civil, Mechanical And Environmental Technologies (ICCMEET 2016, 26-27, February 2016), Svs College Of Engineering, Coimbatore, Tamilnadu, India – 642109
2. Shalem Ernest, U. K. Dewangan (2016) “*Structural Damage Predictions Based on Eigen Frequency Evaluation Techniques* ” International Conference on Recent Trends in Engineering and Material Sciences (March 17-19, 2016), ICEMS 2016 Jaipur National University, Jaipur The Abstract id is 1-IC-1892
3. Riyas Moideen, U.K.Dewangan (2016) “*Comparative Study of Linear and Nonlinear Deflection of Building Frame for Lateral Seismic Loads*” International Conference On Civil, Mechanical And Environmental Technologies (Iccmeet 2016, 26-27, February 2016), Svs College Of Engineering, Coimbatore, Tamilnadu, India – 642109
4. N S L Mounica & U. K. Dewangan (2013) “*Soil Safe Bearing capacity Computation using MATLAB*” International Conference Shastrarth (2013), 8-9 Feb. 2013, at RCET, Bhilai. Students Presented ( B Tech Students)
5. Rashmeet Kaur Khanuja & U.K. Dewangan (2013) “*Soil Classification Using MATLAB programming* ” International Conference Shastrarth (2013), 8-9 Feb. 2013, RCET, Bhilai. Students Presented ( B Tech Students)
6. Shubham Kherpande & U. K. Dewangan “*One way Slab Automation Using MATLAB Programming*” International Conference Shastrarth (2013), 8-9 Feb. 2013, RCET, Bhilai. Students Presented ( B Tech Students)
7. V. Yadav & U. K. Dewangan(2013) “*Planning & Analysis of a Green Building for Indian Cities*” International Conference Shastrarth (2013), 8-9 Feb. 2013, at RCET, Bhilai. Students Presented ( B Tech Students)
8. U. K. Dewangan and S. V. Barai (2011) “*System Identification with Noisy Data*”, International

Conference on Advances in Civil Engineering, (ICACE-2011), 17th and 18th December 2011, Bhubneshwar (India). pp. 21 – 26

### **National Conferences**

1. Shalem Ernest, U. K. Dewangan (2015) “*A Review on Structural Health Monitoring*”, BITCON 2015, National Level Conference at BIT Durg.
2. Yogesh Nirmalkar, Nitin Naik, Saurabh Singh and Dr. U. K. Dewangan (2012) “*Effect of storey height on cost optimization for a g+3 commercial office building – a case study*” National Conference on the Role of Science and Technology for Sustainable development of Chhattisgarh, Shri Shankaracharya Technical Campus, Bhilai, pp 29-32, Students Presented ( B Tech Students)
3. Patel Yogesh, Rick Bask and Dr. U. K. Dewangan (2012)“*Planning and analysis of a Green Building*”, National Conference on the Role of Science and Technology for Sustainable development of Chhattisgarh”, Shri Shankaracharya Technical Campus, Bhilai, pp 53-57 Students Presented (with B Tech Students)
4. Bhavesh Swarnkar, Ankit Jain, S. V. Deo, and Dr. U. K. Dewangan (2012) “*A Comparative Study Of Concrete Mix Design Using British DoE Method, ACI Method and IS Code Method,*” National Conference on the Role of Science and Technology for Sustainable development of Chhattisgarh, Shri Shankaracharya Technical Campus, Bhilai, pp 53-57, Students Presented (with B Tech Students)
5. M.K. Tiwari, Bajpai S. and Dewangan U.K. (2011) “*Durg Bhilai Twin City: Population Growth and Environmental Problems*”, National Convention on Integrated Development of Towns as Growth Centers on 15th and 16th Oct 2011 at Raipur, pp 128- 131.

<b>Invited Guest Lectures</b>	<p>1. “Earthquake Resistant Construction Techniques and Safe Construction Practices” Two Days expert lecture at Govt. Engg. College Jagdalpur 21st - 22nd March 2015 Jagdalpur, Bastar.</p> <p>2. “Earthquake Resistant Construction Techniques and Safe Construction Practices” Expert lecture at Govt. Engg. College Bilaspur, 12th March 2015</p>
<b>Professional Contribution</b>	<p><b>Developed New Laboratory Courses:</b></p> <ol style="list-style-type: none"> <li>1. Computer application in Civil Engineering Lab (MATLAB Application)</li> <li>2. Finite Element Applications in Civil Engg Using the MATLAB code</li> </ol> <ul style="list-style-type: none"> <li>• Structural Design experience of various RCC structures.</li> <li>• Completed consultancy and testing worth more than Rs. 50 lac.</li> <li>• Member interview committee for SSC, Faculty appointment by CSVTU Technical University.</li> </ul>
<b>Membership of Professional Societies</b>	<ul style="list-style-type: none"> <li>• Associate member of The Institution of Engineers</li> <li>• Life member of ISTE</li> </ul>
<b>Professional Strengths</b>	<ul style="list-style-type: none"> <li>• Teaching experience of 25 years.</li> <li>• MATLAB base Programming, other software</li> <li>• Finite Element Technique.</li> <li>• Enquiry committee member for field incidents</li> <li>• Member interview committee for SSC, Faculty appointment by CSVTU Technical University</li> </ul>