

**Total Teaching Experience****> more than 30 Years**

	Period		Period in Years	Name of the Organisation
	From	To		
Professor Civil Engg Dept.	15 April 2013	till now.....	> 7yrs	National Institute of Technology Raipur
Head, Civil Engg Dept.	10.02.2016	29.08.2019	3.5 yrs	National Institute of Technology Raipur
Head, Department of Humanities and Society Science	22.10. 2020	till now.....	Presently	National Institute of Technology Raipur

**Academic Qualifications:**

Sr. No.	Degree Held	Name of the Institute/ University	Year of Award	Specialization
1	M. E.	Govt. Engg.College Jabalpur Rani Durgawati University, Jabalpur	1990	<b>Structural Engineering</b>
2	Ph. D.	<b>Indian Institute of Technology, Kharagpur (I.I.T. Kharagpur)</b>	2006	<b>Structural Engineering</b>

**Research Papers Published in International Journal**

1. Mohd Nasim, U.K. Dewangan, Shirish V. Deo, (2020) “*Autonomous healing in concrete by crystalline admixture: A review*” in Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.03.116>, (SCI)
2. Mohd Nasim, U.K. Dewangan, Shirish V. Deo, (2020) “*Effect of crystalline admixture, fly ash, and PVA fiber on self-healing capacity of concrete*” in Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2020.04.062>, (SCI)
3. R.B. Malathy, Govardhan Bhat, U.K. Dewangan, (2020) “[Generalized logic for modeling and obtaining harmonics estimation in shake table using LabVIEW with experimental validation](https://doi.org/10.1007/s42107-020-002550-g)” Asian journal of Civil Engineering, <https://doi.org/10.1007/s42107-020-002550-g>, Published 05 may 2020 (SCI)
4. Tiwari, M.K., Bajpai, S., Dewangan, U.K., Tamrakar, R.K. (2019) “*Seasonal assessment of surface water for selected traces in the vicinity of a thermal power plant*” Environmental Nanotechnology, Monitoring and Management, Open Access Volume 11, May 2019,

Article number 100200 (Scopus)

5. Tiwari, M.K., Bajpai, S., Dewangan, U.K., Tamrakar, R.K. (2019) ” *Mobility assessment of heavy metals with in the vicinity of a thermal power plant*” Environmental Nanotechnology, Monitoring and Management, Open Access Volume 11, May 2019, Article number 100200 (Scopus)
6. Manoj Kumar Tiwari, Samir Bajpai, U.K. Dewangan (2019), “Environmental issues in Thermal Power Plants – Review in Chhattisgarh Context”, J. Mater. Environ. Sci., ISSN : 2028-2508, 2019, Volume 10, Issue 11, Page 1123-1134. (Scopus)
7. Mohd Nasim, U.K. Dewangan, (2018) “*Autogenous Healing of concrete enhanced by using supplementary cementitious materials*” - A Review” International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE), ISSN(Online): 2456-1290, Volume 3 ,January 2018, pp. 409 -412
8. Mohd Nasim, U.K. Dewangan,(2018) “*Autonomous healing of concrete - A Review*” International Journal of Advances in Mechanical and Civil Engineering, ISSN: 2394-2827 Volume-5, Issue-1, Feb.-2018
9. Mohd Nasim, U.K. Dewangan, (2018) “*Self-healing capacity of various synthetic fibers*” - A Review”. International Journal of Recent Research Aspects ISSN: 2349-7688, Vol. 4, Issue 4, Dec 2017, pp. 402-405
10. Prateek Bhatia, U.K. Dewangan, (2018) “*Comparison of design capacity due to change in design stress strain curve of concrete and reinforcing steel*” International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE), ISSN(Online) 2456-1290, Volume 3,issue 1, January 2018, pp. 362-366.
11. U P Govind, U.K. Dewangan, (2018) “*Comparing the storey displacements of different types of building using linear dynamic analysis*” International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE), 2456-1290, Volume 3,issue 1, January 2018, pp. 481-483.
12. Tiwari, M.K., Bajpai, S., Dewangan, U.K. (2018) “*Mobility assessment of heavy metals with seasonal variation in an industrial region of Chhattisgarh*” Nature Environment and Pollution Technology 2018, 17(1), pp. 189-194 (Scopus)
13. Shalem Ernest, U.K. Dewangan, (2017) “*Tower truss damage detection using eigen frequency evaluation*” in Materials Today: Proceedings 4 (2017), 9723–9726 [Volume 4, Issue 9](#), Elsevier Ltd. ,. ISSN: 2214-7853 (SCI & Scopus), <https://doi.org/10.1016/j.matpr.2017.06.255>,

14. Thulasendra, G., Dewangan, U.K (2017) “*Comparative study of vibration based damage detection methodologies for structural health monitoring*”. International Journal of Civil Engineering and Technology, 2017 8(7), pp. 846-857, Article ID: IJCIET\_08\_07\_092, ISSN Print: 0976-6308 and ISSN Online: 0976-6316, (**Scopus**)
15. Thulasendra, G., Dewangan, U.K (2017) “*Effect of damaged member location on truss displacement performance*”. International Journal of Civil Engineering and Technology (IJCIET) Volume 8, Issue 6, June 2017, pp. 251-261, Article ID: IJCIET\_08\_06\_029, ISSN Print: 0976-6308, and ISSN Online: 0976-6316, (**Scopus**)
16. Mandal, R.R., Dewangan U.K (2017) “*Finite element modeling of beam with eight-noded brick element using MATLAB*”, International Journal of Civil Engineering and Technology (IJCIET), Volume 8, Issue 5, May 2017, 2017, 8(5), pp. 646–656, Article ID: IJCIET\_08\_05\_072, ISSN Print: 0976-6308 and ISSN Online: 0976-6316, **Scopus Indexed**
17. Tiwari, M.K., Bajpai, S., Dewangan, U.K (2017)“*Investigation of dominant leaching factors for release of CR from Indian fly ash*”. Pollution Research, 2017, 36(2), pp. 264-270.(**Scopus**), ISSN 0257–8050
18. Ernest. S., Dewangan U.K., (2016) “Comparison of Eigen frequency convergence criteria on a bridge structure” Journal of Chemical and Pharmaceutical Sciences, JCHPS Special Issue 2: August 2016, ISSN: 0974-2115, pp 69-74. (**Scopus Indexed**).
19. Ernest S., Dewangan. U.K.(2016) "*Structural Damage Predictions Based on Eigen Frequency Evaluation Techniques*" Materials Today, Elsevier" ISSN: 2214-7853 (**SCI & Scopus Indexed**)
20. Riyas Moideen, U.K., Dewangan U.K (2016) “*Comparative study of linear and geometric nonlinear load-deflection behavior of flexural steel members*”. **Indian Journal of Science and Technology**, Vol 9(18), DOI: 10.17485/ijst/2016/v9i18/88147, May 2016, ISSN (Print) : 0974-6846, ISSN (Online) : 0974-5645, (**Scopus**)
21. Arundas, P.H., Dewangan U.K. (2016) “Compressive Strength of concrete based on ultrasonic and Impact Echo Test”, Indian Journal of Science and Technology, Vol 9(23), DOI: 10.17485/ijst/2016/v9i23/94124, June 2016, ISSN (Print) : 0974-6846 9(23) (**Scopus**), ISSN (Online) : 0974-5645
22. Manoj Kumar Tiwari, Dr. Samir Bajpai, Dr Umesh. Kumar. Dewangan (2016) “Fly Ash Utilization: A brief review in Indian context”, International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395 -0056, p-ISSN: 2395-0072, Volume: 03 Issue: 04 | Apr-2016,

[www.irjet.net](http://www.irjet.net), pp. 949-956.

23. Manoj Kumar Tiwari, Dr. Samir Bajpai and Dr. Umesh Kumar Dewangan(2016) “Steel slag utilization —Overview in Indian perspective”, ISSN: 2320-5407, Int. J. Adv. Res. 4(8), 2232-2246, Aug 2016, Article DOI: 10.21474/IJAR01/1442, DOI URL: <http://dx.doi.org/10.21474/IJAR01/1442>.
24. MK Tiwari, S Bajpai, U.K. Dewangan (2016) “Air and leaching pollution scenario by Iron and Steel Plants, in Central India”, *Elixir Pollution 101 (2016) 43495-43501*.
25. 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 8(2015) pp 523-537, <http://www.elsevier.com/locate/jrras>, <http://dx.doi.org/10.1016/j.jrras.2015.06.003>, 1687-8507/Copyright © 2015 Science Direct
26. Manoj Kumar Tiwari, Dr. Samir Bajpai , Dr. U.K. Dewangan (2015) “An analytical study of heavy metal concentration in soil of an industrial region of Chhattisgarh, central, India, International Journal of Scientific and Research Publications, Volume 5, Issue 7, July 2015 1, ISSN 2250-3153, [www.ijsrp.org](http://www.ijsrp.org)
27. Manoj Kumar Tiwaria, Samir Bajpaia, U.K. Dewangan, Raunak Kumar Tamrakarb(2015), “Assessment of heavy metal concentrations in surface water sources in an industrial region of central India” Karbala International Journal of Mordern Science, 1, (2015), pp. 9-14, <http://dx.doi.org/10.1016/j.kijoms.2015.08.001>.
28. U.K. Dewangan & S.V. Barai(2012) “System identification with noisy data”, International Journal of Advanced Technology In Civil Engineering((IJATCE), ISSN: 2231 –5721, Volume-1, Issue-3, P. 163-168.
29. Umesh Kumar Dewangan (2012) “Structural parameter identification – a new concept”, *Int. J. Pure Appl. Sci. Technol.*, , ISSN 2229 – 6107, 10(1) (2012), pp. 1-9., [www.ijopaasat.in](http://www.ijopaasat.in)
30. Manoj Kumar Tiwari , Samir Bajpai, 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. Vol. 3, issue 4, Oct-Dec. 2012, Pp. 249-258.
31. 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.

32. 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, 7587- 7597.
  33. 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.
  34. 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.
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### **International Book Chapter Contribution**

1. Sahu R., Dewangan U.K. (2021) Effect of Shear Span to Depth Ratio in Strut-And-Tie Model on Deep Beam. In: Singh R.M., Sudheer K.P., Kurian B. (eds) Advances in Civil Engineering. Lecture Notes in Civil Engineering, vol 83. **Springer**, Singapore. [https://doi.org/10.1007/978-981-15-5644-9\\_70](https://doi.org/10.1007/978-981-15-5644-9_70).
2. Shalem Ernest, U.K. Dewangan (2020) "*Introspecting System Identification in Numerical Technique for Inverse Identification Process*", Recent Trends in Civil Engineering Publisher Selected *Proceeding of ICRTICE 2019, Lecture Notes in Civil Engineering (LNCE)*, ISSN: 2366-2557, indexed by Scopus and EI Compendex database, Link: <https://www.springer.com/series/15087>, **Springer Nature**.
3. Bhawna Patel, U.K. Dewangan (2020) "*Damage Detection Techniques to Identify the Unknown Damage Parameters from the Structural Response Data in Beam: A Review*", Recent Trends in Civil Engineering Publisher Selected *Proceeding of ICRTICE 2019, Lecture Notes in Civil Engineering (LNCE)*, ISSN: 2366-2557, indexed by Scopus and EI Compendex database, Link: <https://www.springer.com/series/15087>, **Springer Nature**.
4. Rahul Dhaker, U.K. Dewangan (2020) "T-Beam Bridge Girder Analysis Using Finite Element Modelling for IRC Loading , ", Recent Trends in Civil Engineering Publisher Selected *Proceeding of ICRTICE 2019, Lecture Notes in Civil Engineering (LNCE)*, ISSN: 2366-2557, indexed by Scopus and EI Compendex database, Link: <https://www.springer.com/series/15087>, **Springer Nature**.

5. R.B. Malathy, Govardhan Bhat, U.K. Dewangan, (2020) “Design and Development of Low-Cost Medium Size Shake Table for Vibration Analysis” Sustainable Practices in Civil Engineering, **Springer, Nature** Singapore Pte Ltd. 2020, Book Title *Sustainable Practices and Innovations in Civil Engineering*, S. Ramanagopal et al. (eds.), Lecture Notes in Civil Engineering 79, [https://doi.org/10.1007/978-981-15-5101-7\\_19](https://doi.org/10.1007/978-981-15-5101-7_19)

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## **Research papers published in International Conferences**

1. R.B. Malathy, Govardhan Bhatt, U.K. Dewangan (2020) Advanced Modeling of Single Degree of Freedom System for Earthquake Ground Motion using LabVIEW Software, international conference on advances in systems, control and computing, 2020.
2. R.B. Malathy, Govardhan Bhatt, U.K. Dewangan (2020) A Review on Design and Development of shake table to Simulate Seismic Response, International Conf. Recent Advancements in Civil Engineering-(RACE-2019)
3. Shalem Ernest, U.K. Dewangan (2019) “*Introspecting System Identification in Numerical Technique for Inverse Identification Process*”, Page no. 2, Paper no- 190) ICRTICE 2019, [Proceeding of International Conference on Recent Trends and Innovations in Civil Engineering 26 - 28 Sep 2019 Medi-Caps University, Indore, India](#)
4. Bhawna Patel, U.K. Dewangan (2019) “*Damage Detection Techniques to Identify the Unknown Damage Parameters from the Structural Response Data in Beam: A Review*”, Page no. 7,62, Paper no- 197) ICRTICE 2019, [Proceeding of International Conference on Recent Trends and Innovations in Civil Engineering 26 - 28 Sep 2019 Medi-Caps University, Indore, India](#)
5. Rahul Dhaker, U.K. Dewangan (2019) “*T-Beam Bridge Girder Analysis Using Finite Element Modelling for IRC Loading*”, Page no. 7,74, Paper no- 237) ICRTICE 2019, [Proceeding of International Conference on Recent Trends and Innovations in Civil Engineering 26 - 28 Sep 2019 Medi-Caps University, Indore, India](#)
6. Mohd Nasim, U.K. Dewangan, Shirish V. Deo, (2019) “*Effect of crystalline admixture, fly ash, and PVA fiber on self-healing capacity of concrete*” in [3rd International Conference on Innovative Technologies for Clean and Sustainable Development](#), 19–21 February 2020 Chandigarh, India
7. Mohd Nasim, U.K. Dewangan, Shirish V. Deo, (2019) “*Autonomous healing in concrete by*

*crystalline admixture: A review*” in [3rd International Conference on Innovative Technologies for Clean and Sustainable Development](#), (ICMMICE-18), 19–21 February 2020 Chandigarh, India.

8. Sahu R , U.K. Dewangan, (2019) “Effect of Shear Span to Depth Ratio in Strut-and-Tie Model on Deep Beam” ARICE 2019 Int. Conference, , [Advances in Civil Engineering](#) pp 879-893 | Also (Cite as Part of the [Lecture Notes in Civil Engineering](#) book series (LNCE, volume 83) Sahu R., Dewangan U.K. (2021) Effect of Shear Span to Depth Ratio in Strut-And-Tie Model on Deep Beam. In: Singh R.M., Sudheer K.P., Kurian B. (eds) Advances in Civil Engineering. Lecture Notes in Civil Engineering, vol 83. Springer, Singapore. [https://doi.org/10.1007/978-981-15-5644-9\\_70](https://doi.org/10.1007/978-981-15-5644-9_70))
9. Mohd Nasim, U.K. Dewangan, (2018) “*Autogenous Healing of concrete enhanced by using Supplementary cementitious materials*” - A Review in International Conference on Innovative Realms in Civil Engineering (IRICE-2018).
10. Mohd Nasim, U.K. Dewangan, (2018) “*Autonomous Healing of concrete – A Review*” in International Conference on Mechanical, Manufacturing, Industrial and civil Engineering (ICMMICE-18).
11. Mohd Nasim, U.K. Dewangan, (2018) “*Self-healing Capability of Various synthetic fibers- A Review*” in International Conference on Technology Innovations in Engineering and Management (ICTIEM-17).
12. Prateek Bhatia, U.K. Dewangan,(2018) “*Comparison of design capacity due to change in design stress strain curve of concrete and reinforcing steel*” in International Conference on Innovative Realms in Civil Engineering (IRICE-2018).
13. U P Govind, U.K. Dewangan, (2018) “*Comparing the Storey Displacements of Different Types of Building Using Linear Dynamic Analysis*” in International Conference on Innovative Realms in Civil Engineering (IRICE-2018).
14. Shalem Ernest, U.K. Dewangan (2017) “*Structural Health Monitoring of a Bridge Truss by Distributed Computing Technique: A Comparative Study on Filters*” International conference on Urbanisation challenges in emerging economics ASCE India Conference 2017, 12-14 Dec IIT Delhi, The Abstract id is 0078\_0116\_000453.
15. 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.
16. Shalem Ernest, U.K. Dewangan (2016) “*Comparison of eigen frequency convergence criteria on a bridge structure*” International Conference On Civil, Mechanical And Environmental Technologies (ICCMET 2016, 26-27, February 2016), Svs College Of Engineering, Coimbatore, Tamilnadu, India – 642109.
17. 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 (Icmeet 2016, 26-27, February 2016), SVS College Of Engineering, Coimbatore, Tamilnadu, India – 642109.

18. M. K.Tiwari, S. Bajpai, U.K. Dewangan ( 2014) “ Fly Ash Management: An Exploratory Study in Indian Context” Shaasrarth-2014 *International Conference On Advanced Research in Engineering and Technology on 23<sup>rd</sup> -24<sup>th</sup> March 2014, organized by Rungta Group of Istitution, Bhilai-Raipur, Chhattisgarh, India*
19. N. S L Mounica & U.K. Dewangan (2013)“ Soil Safe Bearing capacity Computation using MATLAB” International Conference Shastrarth (2013), 8-9 Feb. 2013, at Rungta College of Engg. Bhilai.
20. Rashmeet Kaur Khanuja & U.K. Dewangan (2013)“ Soil Classification Using MATLAB programming” International Conference Shastrarth (2013), 8-9 Feb. 2013, at Rungta College of Engg. Bhilai.
21. V. Yadav & U.K. Dewangan (2013)“ Planning & Analysis of a Green Building for Indian CitiesInternational Conference Shastrarth (2013), 8-9 Feb. 2013, at Rungta College of Engg. Bhilai.
22. Shubham Kherpande & U.K. Dewangan (2013)“ Oneway Slab Automation Using MATLAB Programming” International Conference Shastrarth (2013), 8-9 Feb. 2013, at Rungta College of Engg. Bhilai.
23. U.K. Dewangan and S. V. Barai (2011) “System Identification with Noisy Data”, *International Conference on Advances in Civil Engineering, (ICACE-2011), 17<sup>th</sup> and 18<sup>th</sup> December 2011, Bhubneshwar (India). pp. 21 - 26*
24. U.K. Dewangan and Shraadda Sharma (2009) “System Identification with Single Observation” *International Conference on Model of Engineering & Technological Problems (ICMETP) at 9<sup>th</sup> National Conference of Indian Society of Industrial & Applied Mathematics, BMAS Engineering College, www.siam-india.org , 14-16 Jan 2009.*
25. U.K. Dewangan and S V Barai 2004 “Theoretical and experimental study on structural damage prediction, Proceedings of *International Conference on Theoretical, Applied Computational and Experimental Mechanics (ICTACEM 2004)* (Editors – S K Bhattacharyya and Somnath Ghosh), held at Department of Aerospace Engineering, IIT Kharagpur during December 28-30, 2004, pp:55-58
26. U.K. Dewangan and Barai S V 2003 “Damage extent prediction using noisy static test data, *Structural Engineering Convention (SEC 2003) - An International Meet, held at IIT Kharagpur, India December 12-14, 2003, pp: 217-224.*

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### **Research papers published in National Conferences:**

1. Renu Sahu, U.K. Dewangan (2019) Design of Deep Beam by Strut and Tie Modelling An



- Overview, ISBN No: 978-81-923288-7-4, National Conference , All India Conference on New Age Skills, April 26th -27st, 2019, Chhatrapati Shivaji Institute of Technology, Durg (CG), India,491001.
2. Rahul Dhaker, Dr. U.K. Dewangan (2019) Effect of mesh refinement on finite element analysis of beam, Civil Engineering P 413-417, Paper ID 90, (Get Print P 421-425 as) per acrobat, National Conference , All India Conference on “New Age Skills” April 26th -27st, 2019, Chhatrapati Shivaji Institute of Technology, Durg (CG), India,491001, ISBN No: 978-81-923288-7-4
  3. Shalem Ernest. U.K. Dewangan 2015, “A Review on Structural Health Monitoring”, BITCON 2015, Feb 20-21 , Yr 2015 Proceedings of National Conference, PP 640-645.
  4. U.K. Dewangan (2014) “Innovative Technology for Flood Rescue Operation” 2014 *National Conference on “Recent Advancement in Science and Technology for Sustainable Development of Rural Areas in Chhattisgarh” 7<sup>th</sup>-8<sup>th</sup> March 2014, Paras 2014, Bhilai at Parthivi College of Engineering and Management Bhilai-3.*
  5. 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.
  6. 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.
  7. 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.
  8. M.K., 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 15<sup>th</sup> and 16<sup>th</sup> Oct 2011 at Raipur*, pp 128- 131.
  9. **U.K. Dewangan ( 2008)** “ System Identification” *National Conference on ETC-ID-2008, NIT Raipur*