Curriculum – Vitae

Name	**MANOJ KHANDELWAL**
Father's Name	Shri D.P. Khandelwal
Date of Birth	03rd Oct. 1977
Sex	Male
Present Address	Dept. of Mining Engg, College of Technology & Engineering, Maharana Pratap University of Agriculture & Technology, Udaipur – 313 001 (Rajasthan) INDIA
E-mail	mkhandelwal1@gmail.com; mkhandelwal@mpuat.ac.in
Mobile	+91 92144 67635

Academic Qualifications

Standard	Specialization	Year of Passing	College	University	CGPA / %age
Post Doc	Rock Mechanics	2009	Monash Univ, Australia	Monash Univ, Australia	–
Ph.D.	Rock Engg	2007	IIT Bombay	IIT Bombay	–
M. Tech	Rock Mechanics	2002	IIT, Varanasi	IIT, Varanasi	8.97/10.0 (80.42 %)
B.E.	Mining Engg	2000	C.T.A.E., Udaipur	R.A.U., Bikaner	63.13

Ph.D. Thesis: Evaluation and Prediction of Blast Induced Ground Vibration and Frequency for Surface Mine - A Neural Network Approach

Research Experience

Name of Post	Name of Organization	From	To	Nature of work
Assistant Professor	CTAE, MPUAT, Udaipur	22nd Aug 2007	Continue	To teach UG & PG students of Mining & Civil Engg, To carry out consultancy and research projects.
Endeavour Research Fellow	Monash Univ, Australia	08th Oct 2008	06th March 2009	To work on rock blasting and ANN.
Sr. Research Fellow (IIT Bombay)	CSIR, New Delhi	09th Aug. 2004	21st Aug 2007	Ph.D. work as well as work on CSIR-SRF project.
Sr. Research Fellow (CIMFR, Dhanbad)	CSIR, New Delhi	30th May 2003	08th Aug 2004	Field study, data analysis, report preparation, work on CSIR-SRF project
Project Fellow (S & T Project)	CIMFR, Dhanbad	08th Nov. 2002	29th May 2003	Field investigation & data analysis

AWARDS AND RECOGNITION

1. **Australia Awards Ambassador** by Australian High Commissioner to India, 2014.
2. Selected for the post of **Assistant Teaching Professor** by **Dept of Mining and Nuclear Engg, Missouri Univ of Science and Technology, USA**, 2013.
3. Selected for the post of **Associate Professor** by Polytechnic of Namibia, 2012.
4. **Project proposal reviewer,** National Center of Science and Technology Evaluation, Ministry of Education and Science, Astana, **Republic of Kazakhstan, 2012.**
5. Cited in the **Marquis Who's Who in the World, 31st Edition, 2013.**
6. **Member** – **Technical Program Committee** – The 2nd International Conference on Engineering Science and Technology (ASSE-EST 2014), October 31 to November 2, 2014, Qingdao, Shandong, China.
7. **Member** – **Technical Program Committee** – The 3rd International Conference on Geology and Geophysics (ICGG 2014), June, 13 – 15, 2014, Beijing, China.
8. **Keynote Speaker**: The 2nd International Conference on New Energy and Sustainable Development (NESD2013), Nov 29 – Dec 01, 2013, Sanya, China.
9. **Member** – **Organizing Committee** - International Conference on New Energy and Sustainable Development (NESD2013), June 14 – 16, 2013, Beijing, China.
10. **Member** – **Organizing Committee** – The 2nd International Conference on Geology and Geophysics (ICGG), Dec 03 – 05, 2013, Sanya, China.
11. **Young Mining Engineer of the Year Award** by **Mining Engineers' Association of India**, 2012.
12. **Editor-in-chief – Earth Resources**, SciKnow Publications, USA, Print ISSN: 2330-3301, Online ISSN: 2330-3328. http://www.sciknow.org/journals/show/id/er
13. **Expert Member** in **Journal of Rock Mechanics and Geotechnical Engineering**, Chinese Academy of Sciences, ISSN: 1674-7755. http://www.rockgeotech.org/experts/Manoj.asp
14. **Member – Editorial Board** – **Artificial Intelligence and Applications**, Scientific Online, http://www.scionlinepublishing.com/journals/AIA/editorials
15. **Member – Editorial Board** – **Journal of Environment and Human**, Scientific Online, http://www.scionlinepublishing.com/journals/EH/editorials.
16. **Member – Editorial Board** – **Journal of Geographic Structure and Earthquake,** Scientific Online, http://www.scipublish.com/journals/GSE/editorials.
17. **Member – Editorial Board** – **Journal of Environment & Agricultural Studies**, Zeal Scienza, http://zealscienza.com/zealscienza/index.php/editorial-board7.
18. **Member – Editorial Board** – **Advancement in Scientific and Engineering Research**, ASER, Scienceweb Publishing, http://www.sciencewebpublishing.net/aser/board.htm
19. **Member – Editorial Board** – **Advances in Information Mining**, BioInfo Publications, ISSN : 0975-3265 (Print), http://bioinfopublication.org/journal.php?opt=azjou&jouid=BPJ0000188&detail=editorial#
20. **Member – Editorial Board** – **Open Journal of Renewable Energy and Sustainable Development**, Scientific Online, http://www.scipublish.com/journals/RESD/editorials
21. **Member – Editorial Board** – **Open Transactions on Geosciences**, Scientific Online, http://www.scipublish.com/journals/GEOS/editorials
22. **Member – Editorial Board** – **Journal of Earth Science and Engineering**, David Publishing Company, USA, ISSN 2159-581X. http://davidpublishing.org/journals_info.asp?jId=560
23. **Member – Editorial Board** – **International Journal of Advanced Structures and Geotechnical Engineering**, ISSN: 2319-5347. http://www.basharesearch.com/IJASGE.htm

24. **Member – Editorial Board** – **International Journal of Information and Education Technology**, IROCS Journals. http://irocsjournals.org/irocs/journals/IJIET/editorial_board.php?JCode=IJIET
25. **Member – Editorial Board** – **International Journal of Geosciences Research**, Science Target, Ottawa, Canada, ISSN: 1929-2546. http://www.sciencetarget.com/site/index.php/editorial-board-ijgr
26. **Member – Editorial Board** – **Journal of Mining**, Hindawi Publishing Corporation, USA. http://www.hindawi.com/journals/jmin/editors/
27. **Member – Editorial Board**, **Journal of Mechanics and Industry Research**, SciKnow Publications, USA, Online ISSN: 2329-9428. http://www.sciknow.org/journals/show/id/jmir
28. **Member – Editorial Board** – **World Journal of Engineering and Physical Sciences**, World Science Research Journals. http://www.wsrjournals.org/journal/wjeps/editorialboard
29. **Member – Editorial Board** – **Research in Civil and Environmental Engineering,** Malaysia. http://www.jrcee.com/editor.php
30. **Member – Editorial Board** – **Merit Research Journal of Petroleum, Geology and Mining**, http://meritresearchjournals.org/pgm/editorial_board.htm
31. **Member – Editorial Board** – **Merit Research Journal of Engineering, Pure and Applied Sciences** (MRJEPAS). http://meritresearchjournals.org/epas/editorial_board.htm
32. **Member – Editorial Board** – ORN Journal of Geology and Mining Research. http://www.openresearchnetwork.org/ORNJGMR/editors
33. **Member – Editorial Board**, **Journal of Engineering Geology and Hydrogeology**, SciKnow Publications, USA. ISSN: 2333-9632, http://www.sciknow.org/journals/show/id/jegh
34. **Member – Editorial Board** – Journal of Environment and Agricultural Studies, Zeal Scienza Publications, http://zealscienza.com/zealscienza/index.php/editorial-board7
35. **Member – Review Board** – International **Journal of Research in Engineering and Technology**, Sun Publications, India, Print ISSN: 2321-7308, Online ISSN: 2319-1163. http://ijret.org/ReviewBoard.
36. **Board Member – International Association of Scientific Innovation and Research** – http://www.iasir.net/boardmembers.html
37. **Editor – Progress in Intelligent Computing and Applications,** Human and Sciences Publication, ISSN: 2287-4844 (Print), 2287-4852 (Online). http://www.humanpub.org/pica/global/editors.html?jname=PICA
38. **Editor – Time Journal of Engineering and Physical Sciences (TJEPS)**. http://www.timejournals.org/tjeps/board.htm
39. **Editor – Journal of Data Management and Computer Science, Apex Journal**. http://www.apexjournal.org/editorial.html
40. **Project proposal reviewer**, Ministry of Science and Technology, Govt. of India, 2012.
41. Felicitation by **Mining Engineers Association of India**, Rajasthan Chapter, 2012.
42. Nominated as an eminent professional among the **Top 100 Engineers of 2011** in the field of engineering by the **International Biographical Centre, Cambridge, England.**
43. Felicitation by **Mining Engineers Association of India**, Rajasthan Chapter, 2011.
44. Cited in the **Marquis Who's Who in the World, 28th Edition, 2010**.
45. **Fast Track Proposal for Young Scientist** by **Dept of Science and Technology**, Govt of India, 2010.
46. Felicitation by **Mining Engineers Association of India**, Rajasthan Chapter, 2010.
47. **Engineering Research Fellowship** by **Monash University**, Australia, 2010.
48. **Young Engineer Award** by **Intuition of Engineers (India)**, 2009.
49. Felicitation by **Mining Engineers Association of India**, Rajasthan Chapter, 2009.

50. **Endeavour Research Fellowship** from Department of Education, Employment and Workplace Relations, **Govt of Australia**, 2008.
51. **Young Scientist Award** by **Indian Science Congress Association**, 2006 (by the then honorable **President of India**).
52. **Senior Research Fellowship** of **Council of Scientific & Industrial Research**, Govt of India (2003-2007).
53. **GATE Fellowship** by **Ministry of Human Resource Development**, Govt of India (2000-2002).
54. **Chairman**, Cafet Innova Technical Society, Rajasthan Chapter (2008 – 10).
55. **International Reviewer**:

1. Applied Mathematical Modelling
2. Applied Soft Computing
3. Arabian Journal of Geosciences
4. Chemie der Erde / Geochemistry
5. Computer Communication & Collaboration
6. Computers and Concrete
7. Computers and Geosciences
8. Earth Sciences
9. Engineering with Computers
10. Environmental Earth Sciences
11. Environmental Monitoring & Assessment
12. Expert Systems with Applications
13. Fuel
14. Geophysics
15. Geotechnical and Geological Eng
16. Herald J of Geography and Regional Planning
17. Indian Mining & Engg Journal
18. Information Technology Research Journal
19. Int J of Advanced Manufacturing Tech
20. Int J of Bio-agricultural Science
21. Int J of Earth Sciences
22. Int J of Earth Sciences and Engineering
23. Int J of Energy Engineering
24. Int J of Geosciences
25. Int J of Geosciences Research
26. Int J of Mining Sc. & Tech
27. Int J of Physical Sciences
28. Int J of Rock Mech & Mining Sciences
29. Int J of Recycling of Organic Waste in Agriculture
30. Int Research Journal of Geology and Mining
31. J of Agricultural Research and Management
32. Journal of Earth Science Research
33. J of Environmental Research and Management
34. J of Geological Resource and Engineering
35. Journal of Hazardous Materials
36. Journal of Mining
37. Material Research
38. Natural Hazards
39. Open Research Network
40. Petroleum Science & Technology
41. Research in Civil and Environmental Engineering
42. Rock Mechanics and Rock Engg
43. Safety Science
44. Scientia Iranica
45. Shock Waves
46. The Journal of Solid Waste Tech and Mgmt
47. The Open Fuel & Energy Science Journal
48. Waste Management
49. Water
50. World Journal of Engg and Physical Sci

LIST OF PUBLICATIONS

JOURNALS

1. M. Saadat, **Manoj Khandelwal** & M. Monjezi, 2014, An ANN-based approach to predict blast-induced ground vibration of Gol-E-Gohar iron ore mine, Iran, ***Journal of Rock Mechanics and Geotechnical Engineering***, Chinese Academy of Sciences, 6(1), 67-76.
2. M. Monjezi, H.A. Mohamadi, B. Barati & **Manoj Khandelwal,** 2014, Application of Soft Computing in Predicting Rock Fragmentation to Reduce Environmental Blasting Side Effects, ***Arabian Journal of Geosciences***, Springer Publications, 7(2), 505-511 **[Impact Factor: 0.740]**.
3. M. Monjezi, S.M.H. Rizi, V.J. Majd & **Manoj Khandelwal**, 2014, Artificial Neural Network As A Tool For Backbreak Prediction, ***Geotechnical and Geological Engg,*** Springer Publications, 32(1), 21-30.

4. A.P. Singh, P.K. Gupta & **Manoj Khandelwal**, 2013, Prediction of sea water intrusion for mining activity in close precincts of sea shore, ***Springer plus,*** Springer Publications, 2(1), 1-10.
5. **Manoj Khandelwal** & T.N. Singh, 2013, Application of an Expert System to Predict Maximum Explosive Charge Used Per Delay in Surface Mining, ***Rock Mechanics and Rock Engg***, Springer Publications 46, 1551-1558 **[Impact Factor: 1.160]**.
6. A. Sayadi, M. Monjezi, N. Talebi & **Manoj Khandelwal**, 2013, A Comparative Study on the Application of Various Artificial Neural Networks for Simultaneous Prediction of Rock Fragmentation and Backbreak, ***Journal of Rock Mechanics and Geotechnical Engineering***, Chinese Academy of Sciences, 5(4), 318-324.
7. M. Monjezi, Z. Ahmadi, A.Y. Varjani & **Manoj Khandelwal**, 2013, Backbreak Prediction in the Chadormalu Iron Mine Using Artificial Neural Network, ***Neural Computing & Applications***, Springer Publications, 23(3-4), 1101-1107 **[Impact Factor: 1.168]**.
8. M. Monjezi, A. Mehrdanesh, A. Malek & **Manoj Khandelwal**, 2013, Evaluation of Effect of Blast Design Parameters on Flyrock using Artificial Neural Networks, ***Neural Computing & Applications***, Springer Publications, 23(2), 349-356 **[Impact Factor: 1. 168]**.
9. **Manoj Khandelwal** & P.G. Ranjith, 2013, Behaviour of Brittle Material in Multiple Loading Rates Under Uniaxial Compression, ***Geotechnical and Geological Engg,*** Springer Publications, 31(4), 1305-1315.
10. **Manoj Khandelwal**, 2013, Correlating P-Wave Velocity with the Physico-mechanical Properties of Different Rocks, ***Pure and Applied Geophysics,*** Springer Publications, 170(4), 507-514 **[Impact Factor: 1.617]**.
11. M. Monjezi, M. Hasanipanah & **Manoj Khandelwal**, 2013, Evaluation and prediction of blast-induced Ground Vibration at Shur River Dam, Iran, by Artificial Neural Network**,** ***Neural Computing & Applications***, Springer Publications, 22(7-8), 1637-1643 **[Impact Factor: 1. 168]**.
12. **Manoj Khandelwal,** P.G. Ranjith, Zhu Pan & J.G. Sanjayan, 2013, Effect of Strain Rate on Strength Properties of Low-Calcium Fly-Ash-Based Geopolymer Mortar under Dry Condition, ***Arabian Journal of Geosciences****,* Springer Publications 6(7), 2383-2389 **[Impact Factor: 0.740]**.
13. **Manoj Khandelwal** & M. Monjezi, 2013, Prediction of Flyrock in Open Pit Blasting Operations Using Machine Learning Method, ***Int J of Mining Science & Technology***, Elsevier Publications, 23(3), 313-316.
14. **Manoj Khandelwal** & M. Monjezi, 2013, Prediction of Backbreak in Open-Pit Blasting Operations Using the Machine Learning Method, ***Rock Mechanics and Rock Engg***, Springer Publications, 46, 389-396 **[Impact Factor: 1.160]**.
15. **Manoj Khandelwal**, 2012, Prediction of Safe Charge to Protect Surrounding Structures using Support Vector Machine, ***Geotechnical and Geological Engg,*** Springer Publications, 30(4), 859-867.
16. **Manoj Khandelwal**, 2012, Application of an Expert System for the Assessment of Blast Vibration, ***Geotechnical and Geological Engg,*** Springer Publications, 30(1), 205-217.
17. R. Rai, **Manoj Khandelwal** & A. Jaiswal, 2012, Application of Geogrids in Waste Dump Stability: A Numerical Modeling Approach, ***Environmental Earth Sciences,*** Springer Publications, 66(5), 1459-1465 **[Impact Factor: 1.145]**.
18. P.G. Ranjith & **Manoj Khandelwal**, 2012, Artificial Neural Network for Prediction of Air Flow in A Single Rock Joint, ***Neural Computing and Applications***, Springer Publications, 21(6), 1413-1422 **[Impact Factor: 1.168]**.
19. **Manoj Khandelwal**, 2012, Application of an Expert System to Predict Thermal Conductivity of Rocks, ***Neural Computing and Applications***, Springer Publications, 21(6), 1341-1347 **[Impact Factor: 1.168]**.
20. A. Bhatnagar & **Manoj Khandelwal**, 2012, An Intelligent Approach to Evaluate Drilling Performance, ***Neural Computing and Applications***, Springer Publications, 21(4), 763-770 **[Impact Factor: 1.168]**.
21. M. Monjezi, Z. Ahmadi & **Manoj Khandelwal**, 2012, Application of Neural Networks For the Prediction of Rock Fragmentation in Chadormalu Iron Mine, ***Archives of Mining Sciences*****,** Polish Academy of Sciences, 57(3), 787-798 **[Impact Factor: 0.319]**.

22. A. Paul, A.P. Singh, John L.P., A.K. Singh & **Manoj Khandelwal**, 2011, Validation of RMR-based Support Design using Roof Bolts by Numerical Modeling for Underground Coal Mine of Monnet Ispat, Raigarh, India – A Case Study, ***Arabian Journal of Geosciences,*** Springer Publications, 5(6), 1435-1448 **[Impact Factor: 0.740]**.

23. **Manoj Khandelwal**, 2011, Prediction of Thermal Conductivity of Rocks by Soft Computing, ***Int J of Earth Sciences,*** Springer Publications, 100 (6), 1383-1389 **[Impact Factor: 2.261]**.

24. M. Monjezi, S.M. Hesami & **Manoj Khandelwal**, 2011, Superiority of neural networks for pillar stress prediction in bord and pillar method, ***Arabian Journal of Geosciences,*** Springer Publications, 4(5-6), 845-853 **[Impact Factor: 0.740]**.

25. **Manoj Khandelwal**, 2011, Blast-Induced Ground Vibration Prediction Using Support Vector Machine, ***Engineering With Computers,*** Springer Publications, 27 (3), 193-200 **[Impact Factor: 0.600]**.

26. A. Bhatnagar, **Manoj Khandelwal** & K.U.M. Rao, 2011, Laboratory Investigations for the Role of Flushing Media in Diamond Drilling of Marble, ***Rock Mechanics and Rock Engg***, Springer Publications, 44 (3), 349-356 **[Impact Factor: 1.160]**.

27. **Manoj Khandelwal** & T.N. Singh, 2011, Predicting elastic properties of schistose rocks from unconfined strength using intelligent approach, ***Arabian Journal of Geosciences,*** Springer Publications, 4 (3-4), 435-442 **[Impact Factor: 0.740]**.

28. **Manoj Khandelwal** & P.K. Kankar, 2011, Prediction of blast-induced air overpressure using support vector machine, ***Arabian Journal of Geosciences,*** Springer Publications 4 (3-4), 427-433 **[Impact Factor: 0.740]**.

29. **Manoj Khandelwal**, D. Lalit Kumar & Y. Mohan, 2011, Application of Soft Computing to Predict Blast-Induced Ground Vibration, ***Engineering With Computers,*** Springer Publications, 27 (2), 117-125 **[Impact Factor: 0.600]**.

30. P.K. Sharma, **Manoj Khandelwal** & T.N. Singh, 2011, A Correlation between Schmidt Hammer Rebound Numbers with Impact Strength Index, Slake Durability Index and P-Wave Velocity, ***Int J of Earth Sciences,*** Springer Publications, 100 (1), 189 – 195 **[Impact Factor: 2.261]**.

31. B. Scott, P. G. Ranjtih, S. K. Choi & **Manoj Khandelwal**, 2010, A review on existing opencast coal mining methods within Australia, ***Journal of Mining Science***, Springer Publications, 46 (3), 280 – 297 **[Impact Factor: 0.223]**.

32. **Manoj Khandelwal** & T.N. Singh, 2010, Artificial Neural Networks as a Valuable Tool for Well Log Interpretation, ***Petroleum Science and Technology,*** Taylor and Francis Publications, 28 (14), 1381-1393 **[Impact Factor: 0.236]**.

33. A. Bhatnagar, **Manoj Khandelwal** & K.U.M. Rao, 2010, Enhancing Diamond Drilling Performance by the Addition of Non-Ionic Polymer to the Flushing Media, ***Mining Science & Technology***, Elsevier Publications, 20 (3), 400-405.

34. **Manoj Khandelwal** & P.G. Ranjith, 2010, Correlating Index Properties of Rocks with P-wave Measurements, ***Journal of Applied Geophysics***, Elsevier Publications, 71 (1), 1-5 **[Impact Factor: 1.327]**.

35. B. Scott, P. G. Ranjtih, S. K. Choi & **Manoj Khandelwal**, 2010, Geological and geotechnical aspects of underground coal mining methods within Australia, ***Environmental Earth Sciences***, Springer Publications, 60, 1007-1019 **[Impact Factor: 1.145]**.

36. **Manoj Khandelwal** & T.N. Singh, 2010, Prediction of Macerals Contents of Indian Coals from Proximate and Ultimate Analyses Using Artificial Neural Network, ***Fuel,*** Elsevier Publications, 89 (5), 1101-1109 **[Impact Factor: 3.357]**.

37. **Manoj Khandelwal**, 2010, Evaluation and Prediction of Blast Induced Ground Vibration using Support Vector Machine, ***International Journal of Rock Mechanics & Mining Sciences,*** Elsevier Publications, 47 (3), 509-516 **[Impact Factor: 1.200]**.

38. **Manoj Khandelwal**, P.K. Kankar & S.P. Harsha, 2010, Evaluation and prediction of blast induced ground vibration using support vector machine, ***Mining Science & Technology***, Elsevier Publications, 20 (1), 64-70.

39. P.K. Sharma, **Manoj Khandelwal,** T.N. Singh & R. Bali, 2009, Instability Evaluation of Amiyan Slide, Uttarakhand, ***Mining Engineers Journal,*** 11 (5), 22-26.

40. **Manoj Khandelwal** & T.N. Singh, 2009, Prediction of Blast Induced Ground Vibration using Artificial Neural Network, ***International Journal of Rock Mechanics & Mining Sciences,*** Elsevier Publications, 46, 1214-1222 **[Impact Factor: 1.200]**.

41. **Manoj Khandelwal** & T.N. Singh, 2009, Correlating Strength Properties of Coal Measure Rocks with P-wave Velocity, ***International Journal of Coal Geology,*** Elsevier Publications, 79, 55-60 **[Impact Factor: 2.976]**.

42. K. Sarkar, M. Sazid, **Manoj Khandelwal** & T.N. Singh, 2009, Stability Analysis of Soil Slope in Luhri Area, H.P., ***Mining Engineers Journal***, 10(6), 21-27.

43. S.S. Rathore, **Manoj Khandelwal** & C.P. Parihar, 2008, Improvements In Surface Mine Blasting For Safe And Economic Mine Working, ***Mining Engineers Journal***, 10 (2), 23-27.

44. **Manoj Khandelwal**, M. Monjezi, H. Dehghani & T.N. Singh, 2008, Stability Analysis of Dump Slope of A Surface Mine, ***Mining Engineers Journal***, 9(10), 21-24.

45. P.K. Sharma, **Manoj Khandelwal** & T.N. Singh, 2007, Variation on Physico-Mechanical Properties of Kota Stone under Different Watery Environments, ***Building and Environment,*** Elsevier Publications, 42, 4117-4123 **[Impact Factor: 2.430]**.

46. **Manoj Khandelwal** & T. N. Singh, 2007, Evaluation of Blast Induced Ground Vibration Predictors, ***Soil Dynamics and Earthquake Engg***, Elsevier Publications, 27 (2), 116-125 **[Impact Factor: 1.276]**.

47. T.N. Singh, P.K. Sharma & **Manoj Khandelwal**, 2007, Effect of pH on Physico-mechanical Properties of Marble, ***Bulletin of Engineering Geology and the Environment,*** Springer Publications, 66 (1), 81-87 **[Impact Factor: 0.617]**.

48. T.N. Singh & **Manoj Khandelwal**, 2007, Slope stability - A Major Concern for Coal Exploitation, ***Gondwana Geological Magazine***, 9, 127-135.

49. M. Monjezi, T.N. Singh, **Manoj Khandelwal**, S. Sinha, V. Singh & I. Hosseini, 2006, Prediction And Analysis of Blast Parameters using Artificial Neural Network, ***Noise and Vibration Worldwide,*** UK, 37 (5), 8-16.

50. **Manoj Khandelwal** & T.N. Singh, 2006, Prediction of Blast Induced Ground Vibrations and Frequency in Opencast Mine – A Neural Network Approach, ***Journal of Sound & Vibration,*** Elsevier Publications, 289, 711-725 **[Impact Factor: 1.613]**.

51. **Manoj Khandelwal** & T.N. Singh, 2005, Prediction of Blast Induced Air Overpressure in Opencast Mine, ***Noise and Vibration Worldwide****, UK,* 36 (2), 7-16.

52. P.K. Sharma, T.N. Singh, **Manoj Khandelwal** & M.R. Kumar, 2005, Reinforcement of Weak Slope – A Bioengineering Approach, ***The Indian Mineral Industry Journal,*** 1, 72-74.

53. **Manoj Khandelwal** & T.N. Singh, 2005, Prediction of Mine Water Quality by Physical Parameters, ***Journal of Scientific & Industrial Research****, New Delhi,* 64 (8), 564-570 **[Impact Factor: 0.505]**.

54. M.R. Kumar, T.N. Singh, **Manoj Khandelwal** & P.K. Sharma, 2005, Remote Sensing and Geographical Information Systems for Rock-Friendly Mining, ***SGAT Bulletin***, 6 (1), 35-46.

55. **Manoj Khandelwal**, T.N. Singh & S. Kumar, 2005, Prediction of Blast Induced Ground Vibration in Opencast Mine by Artificial Neural Network, ***The Indian Mining & Engg. Journal,*** 44 (7), 23-29.

56. **Manoj Khandelwal** & T.N. Singh, 2004, A Computational Approach to Failure Analysis of a Compound Slope, ***Mining Engineers Journal***, 6 (1), 11-15.

57. **Manoj Khandelwal**, M.P. Roy & P.K. Singh, 2004, Application of Artificial Neural Network in Mining Industry, ***The Indian Mining & Engg. Journal***, 43 (7), 19-23.

58. S. Singh, **Manoj Khandelwal** & T.N. Singh, 2004, Slope Protection through Rock Bolting, ***Journal of Engineering Geology***, 30 (1-4), 75-78.

59. **Manoj Khandelwal**, K. Ramchandar & T.N. Singh, 2002, Influence of NONEL on Shovel Cycle Time in Opencast Mine, ***Mining Engineers Journal***, 4 (1), 15-21.

60. T.N. Singh, **Manoj Khandelwal** & A.M. Bhimte, 2002, Condition Monitoring – A Tool of Meticulous Maintenance, ***The Indian Mining & Engg. Journal***, 41 (7), 38-39.
61. **Manoj Khandelwal** & T.N. Singh, 2001, Cast Blasting in Surface Mines, ***Mining Engineers Journal***, 3 (5), 15-20.
62. T.N. Singh, R.K. Pandey & **Manoj Khandelwal**, 2001, Haul Road Design in Surface Mines, ***The Indian Mining & Engg. Journal***, 40 (12), 54-58.

CONFERENCES

1. M. Sazid, T.N. Singh & **Manoj Khandelwal**, 2014, Numerical Assessment of Slope Stability Under Blast Loading, National Seminar on Problems of Mining Industry & Technological Advancements, March 7-8, 2014, Udaipur.
2. **Manoj Khandelwal**, 2014, Evaluation of Safe Explosive Charge in Surface Mines using Artificial Neural Network, Proceedings of the 6th International Conference on Agents and Artificial Intelligence, March, 6-8, 2014, France, 366-371, DOI: 10.5220/0004761703660371.
3. **Manoj Khandelwal** &T.N. Singh, 2013, Evaluation of Maximum Explosive Charge Used per Delay in Surface Mines, Nat Sem on Explosives and Blasting Techniques for Mining, Quarrying and Infrastructure Industry, NIT Surathkal, India, Sept 27-28.
4. **Manoj Khandelwal,** 2013, Prediction Of Safe Charge Of Explosive Using Artificial Neural Network, National Symposium on 'Present Technology and Safety Scenario in Mining & Allied Industries, IIT (BHU), Varanasi during 25-27 February, 2013.
5. **Manoj Khandelwal** & T.N. Singh, 2012, Applications of Artificial Neural Network for the Assessment of Blast-Induced Ground Vibration, International Conference on Geology of Mineral Deposits, Ulan-Ude, Russia, March 20-24, 2012.
6. **Manoj Khandelwal**, 2011, Soft Computing Approach to Evaluate and Predict Blast-Induced Ground Vibration, European Federation of Explosive Engineers, Lisbon, 18-20th Sept 2011.
7. **Manoj Khandelwal** & T.N. Singh, 2011, Blast Induced Ground Vibration Study of A Surface Mine – An Intelligent Approach, Nat Sem on Explosives and Blasting Techniques for Mining, Quarrying & Infrastructure Industry, NIT Surathkal, India, Feb 18-19, 221-228.
8. **Manoj Khandelwal** & S.S. Rathore, 2009, Blast Induced Ground Vibrations Study in Splittable Limestone Quarry – A Case Study, Nat Sem on Technological Advancement in Mining Industry, Udaipur, December 4-6th, 89-94.
9. **Manoj Khandelwal** & T.N. Singh, 2009, Prediction of Blast Induced Ground Vibration Using Intelligent Approach - A Case Study, 33rd Mines Safety Week, J.K. Cement Works, Nimbahera, 45-48.
10. **Manoj Khandelwal** & T.N. Singh, 2009, An Innovative Method for the Prediction of Blast Induced Ground Vibration, 35th Annual Conference Explosives and Blasting Technique, Denver, USA, February 8-11th.
11. **Manoj Khandelwal** & T.N. Singh, 2008, Assessment of Blast Induced Ground Vibration and Frequency using Artificial Neural Network, Nat Seminar-cum-Workshop on Recent Trends and Applications in Geo-Tech Engineering, 17-19th Jan, Punjab University.
12. T.N. Singh, P.K. Sharma & **Manoj Khandelwal**, 2006, Effect of Acidic Water on Physico-mechanical Properties of building Stone – A Case Study, 10th IAEG Congress, Nottingham, U.K, 6-10th Sep.
13. **Manoj Khandelwal**, T.N. Singh & P.K. Sharma, 2005, A Neural Network Approach for Prediction of Macerals of Gondwana Basin Coal by Proximate and Ultimate Analysis, Int. Conf. on PCGT-2005, Jhansi, India, 332-335.
14. T.N. Singh, **Manoj Khandelwal** & A.K. Verma, 2005, A Study of the Strength and Deformational Characteristics of Jointed Rockmass, IACMAG-2005, Italy, 19-24th June 191-198.
15. T.N. Singh & **Manoj Khandelwal**, 2005, Effect of pH on strength properties of the rock, International Conference on Geology, Geotechnology and Mineral Resources of Indochina (GEOINDO), Thailand, 28-30 Nov, 205-208.

16. **Manoj Khandelwal** & T.N. Singh, 2005, Study of macerals characteristics of Gondwana coal by physico-chemical properties – an intelligent approach, Int Seminar on Coal Science and Technology, New Delhi, April 12-13, pp. 434-448.
17. Rajesh Rai, **Manoj Khandelwal** & T.N. Singh, 2005, Role of Mine Management in Health and Safety of Miners, Nat Conf. MIN-ENV-2005, Udaipur, 30-34.
18. **Manoj Khandelwal** & T.N. Singh, 2005, Assessment of Blast Induced Ground Vibration – A Case Study, Nat. Conf. Recent Trends in Geotechnology, Pune, 12-13 Feb.
19. T.N. Singh, S. Singh & **Manoj Khandelwal**, 2002, A Computational Approach to Analyse Stability of Natural Compound Slopes of UttarKashi Region, India, 3rd Int. Conf. Landslides, Slope Stability and the Safety of Infra-structures, Singapore, 11-12th July.
20. **Manoj Khandelwal** & T.N. Singh, 2002, Reclamation of Waste Dump and its Management, Nat. Symp. Sustainable Mining Technology: Present & Future, Chennai, 313-321.
21. **Manoj Khandelwal** & T.N. Singh, 2002, Prediction of Waste Dump Stability – An Intelligent Approach, ENTMS, Bhubneswar, 38-45.
22. **Manoj Khandelwal**, T.N. Singh & S. Singh, 2002, Reinforcement of Rock Slope through Rock Bolting, IGC-2002, Allahabad, 486-489.
23. **Manoj Khandelwal**, Balkrishna & T.N. Singh, 2001, Environmental Impact Assessment and its Control Measures in Mining, ICIPACT, Hyderabad, India, 7-10th Dec, 820-828.
24. K. Ramchandar, **Manoj Khandelwal** & T.N. Singh, 2001, Impact of Mining on Environment and its Remedial Measures, ICIPACT, Hyderabad, India, 7-10th Dec, 837-843.
25. **Manoj Khandelwal**, 2001, Study on Effect of Blast Induced Ground Vibration, Nat. Student Sem. Technomine, Udaipur, 129-131.
26. A. Jaiswal, **Manoj Khandelwal**, R.K. Pandey & P. Rai, 2001, Wear Minimization in Marble Block Cutting – A Mathematical Approach, Nat Sem. Small-Scale Mining, Jodhpur, 187-193.
27. **Manoj Khandelwal**, T.N. Singh, Balkrishna & R.K. Pandey, 2001, Mining Tribology, Nat. Seminar on Oil & Lubricant, OLMI, Bhubaneshwar, 21-25.

BOOK

Soft Computing Approach to Evaluate and Predict Blast Vibrations, Lambert Academic Publishing, ISBN 978-3-8484-1875-6

INVITED LECTURE DELIVERED

1. Paper presented on “Study on Effect of Blast Induced Ground Vibration” at National Student Seminar on Technomine – 2001, Udaipur.
2. Paper presented on “Wear Minimization in Marble Block Cutting – A Mathematical Approach”, Nat Sem. Small-Scale Mining, 2001, Jodhpur
3. Paper presented on “Condition Monitoring – A Tool of Meticulous Maintenance” at OLMI – 2001, Bhubaneshwar.
4. Technex – 2003, All India student technical exhibition and seminar at IT, BHU.
5. Lecture delivered on “Blast Vibration Prediction and Control near a Civil Constructional Project” at IGC local chapter, Mumbai, 2004.
6. Lecture delivered on “Application of Artificial Neural Network in Rock Engineering” at Geology Dept., Kumaun University, Nainital, 2004.
7. Lecture delivered on “Prediction of Blast Induced Ground Vibration by Intelligent Approach” at ERSA, IIT Bombay, 2004.

8. Lecture delivered on "Blast induced Ground Vibration Prediction and its Impact" in One Day Technical update on Advances in Excavation Technology for Surface Mines and Civil Constructions, Organized by Govt. Polytechnic and Institute of Engineers, Goa, 2005.
9. ISCA Award Lecture delivered on "Evaluation and Prediction of Blast Induced Ground Vibration and Frequency in Surface Mines" at Hyderabad, 2006.
10. Lecture delivered on "Blast Induced Ground Vibrations Study in Splittable Limestone Quarry – A Case Study" in the 21st National Convention of Mining Engineers and National Seminar on Technological Advancements in Mining Industry, Udaipur, 4-6th Dec. 2009.
11. Lecture delivered on "Soft computing approach to evaluate and predict blast induced ground vibration in surface mines" at **Lakehead University, Canada**, 2012.

SEMINAR/ SYMPOSIA ATTENDED

1. National Seminar on Safety and Technology in Marble Mining and Processing in New Millennium, 2000, Udaipur.
2. National Student Seminar on Technomine – 2001, Udaipur.
3. National Seminar on Small Scale Mining, 2001, Jodhpur.
4. National Seminar on Rock Fragmentation, BHU, Varanasi, 2001.
5. National Seminar on OLMI – 2001, Bhubaneshwar.
6. Technology Exchange Programme (Instrumentation in Rock Mechanics) at Dept of Mining Engg, BHU, Varanasi, 2001.
7. Training Programme on "Computer Applications in Rock Blasting" at Central Mining Research Institute, Dhanbad, 2001.
8. Tecex – 2003, Central Mining Research Institute, Dhanbad, 2003.
9. National Conf on Recent Trends in Geotechnology, at University of Pune, 2005.
10. DST Training Program on Mathematical Modelling of Ground Water in Mining Areas at Central Mining Research Institute, Dhanbad, 2005.
11. One Day Technical update on Advances in Excavation Technology for Surface Mines and Civil Constructions, Organized by Govt. Polytechnic and Institute of Engineers, Goa, 2005.
12. Indian Science Congress, Hyderabad, 2006.
13. One Day Technical update on Advances in Excavation Technology for Surface Mines and Civil Constructions, Organized by Govt. Polytechnic and Institute of Engineers, Goa, 2006.
14. First Workshop cum Discussions for Determination of Threshold Value, Organized by Indian Bureau of Mines, Udaipur, 2007.
15. Seminar on Italian Technological Development in Machinery for Extracting and Processing Natural Stones, Udaipur, 2007.
16. Indian Engineering Congress, Udaipur, 2007.
17. National Workshop on Reduction of Waste Generation in Mining and Its Utilization, 18th May, 2008, MPUAT, Udaipur, 2008.
18. Short Term Course on Earthquake Risk Management for Rural and Urban Housing, Sponsored by NITTTR, Chandigarh, held at Udaipur, Aug 25-29th, 2008.
19. National Workshop on Environmental Issues in Small Mine Clusters, 22nd March, 2009, MPUAT, Udaipur.
20. 21st National Convention of Mining Engineers and National Seminar on Technological Advancements in Mining Industry, Dec 4-6th, 2009, Udaipur.
21. QIP Short Term Course on "Advances in Geotechnical Engg", April, 12-16, 2010, IIT Bombay.

22. National Seminar on Trackless Underground Mining, Rajpura-Dariba Mines, March, 12th, 2011.
23. Two week ISTE Workshop on Introduction to Research Methodology conducted by IIT Bombay under the NME-ICT, MHRD, Govt of India, 25th June, 2012 – 04th July, 2012.
24. Two weeks Short-term Course on Disaster Management and Sustainable Development conducted by NITTTR, Chandigarh at CTAE, Udaipur, 21st Aug – 03rd Sept, 2012.

PROJECTS & CONSULTANCY

1. **Application of neural network for study on effect of blast design parameters on blast induced ground vibration** funded by **Council of Scientific & Industrial Research, Govt. of India** (2003-2007).
2. **Evaluation of Physico-mechanical Properties of Rampur Hydro-electric Power Project** funded by Satluj Jal Vidyut Nigam Limited, Shimla (2006).
3. Scientific Blast vibration study at Mangal limestone mine, Jhalrapatan, Jhalawar (2008).
4. Project entitled "**Application of neural network for the prediction of blast induced ground vibration**" was sponsored by Dept of Education, Employment and Workplace Relations, **Govt. of Australia**, 2008-09 [06 months duration]**.**
5. **To establish the relation of rock strength parameters with blast induced ground vibration mechanism and its evaluation** funded by Dept of Science and Technology, **Govt. of India,** 2010 **[**3 years duration**]**.
6. Scientific Blast Vibration study of Gujarat Mineral Development Corporation, **Govt of Guajarat,** 2013 [06 months duration]**.**
7. **Evaluation of Physico-mechanical Properties of Matoon Mines,** Hindustan Zinc Ltd, 2013 [06 months duration].
8. **Evaluation of Physico-mechanical Properties of R.K. Marble Mines,** 2013 [06 months duration]

Membership of Professional Bodies

1. Life Member, Mining Engineers Association of India, Hyderabad.
2. Member, Indian Science Congress Association, Kolkata.
3. Life Member, ERSA, IIT Bombay.
4. Life Member, Mining Society, BHU, Varanasi.