CURRICULUM–VITAE

DR. D.K. LOBIYAL

Professor
School of Computer & Systems Sciences
Jawaharlal Nehru University
New Delhi - 110 067. (INDIA)
Phone No. 91-11-26704774,
Mobile- 91-9868863883
Email: dkl@mail.jnu.ac.in, Lobiyal@gmail.com

Residential address

120 Uttarakhand, Jawaharlal Nehru University,
New Delhi - 110 067. (INDIA).
Phone no. 91-11-26741883.

Personal Details

- Date of Birth: April 16, 1968
- Nationality: Indian

Education

- Ph.D. (Comp. Sc.), Jawaharlal Nehru University, 1996.
- M.Tech. (Computer Science & Technology), Jawaharlal Nehru University, 1991.
- B.Tech. (Computer Science & Technology.), IET, Lucknow University, 1988.

Employment (Academic)

- Professor, SC&SS, JNU, New Delhi, 2010 - Present
- Associate Professor, SC&SS, JNU, New Delhi, 2004 - 2010
- Assistant Professor, SC&SS, JNU, New Delhi, 1997 – 2004.

Field of Teaching

- Data Communication and Computer Network
- Wireless Networks

Current Research Areas

- Wireless Sensor Networks
- Mobile ad-hoc Networks
- Natural Language Processing

Research Supervision

- Ph.D: Completed   20
                    Submitted   02
- M.Tech: Completed   50 (approx.)

Research Projects (Co-Investigator)

- *Resource Center for Indian Language Technology Solutions* funded by Ministry of Information Technology, 2000- 2003.
- *Position Based Power Efficient Data Communication in Wireless Networks,* funded by All India Council for Technical Education, 2001 – 2002.

Other Academic Activities
- Edited of the course material of IGNOU MCA Programme
  - TCP/IP Programming
  - Java Programming
- Served as member Computer Science syllabus design Committee, Uttaranchal Open University, Haldwani, Uttarakhand.
- Convener, National Conference on Methods and Models in Computing 2008, organized by the school
- Co-convener, National Conference on Methods and Models in Computing 2007, organized by the school
- Organizing Secretary, National Conference on Methods and Models in Computing 2006, organized by the school

Research Publications

Journals

[1] Ridhima Mehta and D.K. Lobiyal, "Cross-layer optimization using two-level dual decomposition in multi-flow ad-hoc networks", *Telecommunication Systems (Springer)*, DOI: 10.1007/s11235-017-0317-0. *April, 2017*

[2] Zaheeruddin, **D.K. Lobiyal**, Sunita and Prasad, "Ant based Pareto Optimal Solution for QoS aware Energy Efficient Multicast in Wireless Networks", *Applied Soft Computing (Elsevier), Vol. 55, 2017,pp72-81*

[3] Khalid Khan and **D.K. Lobiyal,** "Levenberg-Marquardt optimization method for overage and connectivity control in backbone based wireless networks", *International Journal of Communication Systems;* DOI: 10.1002/dac.3296; *February 2017*

[4] Omprakash Kaiwartya, Abdul Hanan Abdullah, Yue Cao, Ram Shringar Raw, Sushil Kumar, **D.K. Lobiyal**, Ismail Fauzi Isnin, Xiulei Liu, and Rajiv Ratn Shah "T-MQM: Testbed-Based Multi-Metric Quality Measurement of Sensor Deployment for Precision Agriculture-A Case Study", *IEEE Sensor Journal*, DOI 10.1109/JSEN.2016.2614748 (Available online)

[5] Ahmed Aliyu, Abdul Hanan Abdullah, Omprakash Kaiwartya, Yue Cao, Mohammed Joda Usman, Sushil Kumar, **D.K. Lobiyal**, and Loveleen Singh, "Cloud Computing in VANETs:

Layered Architecture, Element, Taxonomy and Challenges", *IETE Technical Review (Tailer and Francis)* (Available online),

[6] Khalid Khan and **D.K. Lobiyal**, "Bezeir Curve based Lupas (*p,q*) Analogoue of Bernstein Functions in CAGD",*Journal of Applied and Computation Mathematics(Elsevier)*, Vol. 317, pp. 458-477

[7] Zaheeruddin, **D.K. Lobiyal** and Sunita Prasad, "An Elitist Nondominated sorting genetic algorithm for QoS Multicat Routing in Wireless Networks", *Swarm and Evolutionary Computation, (Elsevier), Vol. 33, 2017, pp85-92*

[8] Shravan Kumar and **D.K. Lobiyal**, "Novel DV-Hop localization algorithm in WSNs", *Telecommunication Systems (springer),* doi:10.1007/s11235-016-0189-8, 2016

[9] Sanjoy Das and **D.K. Lobiyal**, "Evaluation of Message Dissemination Techniques in Vehicular Ad Hoc Networks using Node Movement in Real Map", *International Journal of Computer Network and Information Security*, Vol. 08, No. 05, 2016, pp.25-33

[10] Amira Youssef Fahoud and **D.K. Lobiyal**, "Performance Evaluation Of Mobile Wimax IEEE 802.16e For Hard Handover", *International Journal of Computer Networks & Communications (IJCNC)* Vol.8, No.5, 2016, DOI: 10.5121

[11] Anvesha Katti and **D K Lobiyal**, "Coverage Probability using EM waves for UWSN in Shadowing Environment", *International Journal of Computer Applications* 153(6):52-57, November 2016

[12] Indrani Das, **Daya K. Lobiyal** and C.P. Katti, "Multipath routing in mobile ad hoc network with probabilistic splitting of traffic", *Wireless Networks (Springer),*2015, 10.1007/s11276-015-1093-y

[13] Omprakash Kaiwartya, Sushil Kumar, **D. K. Lobiyal**, Pawan Kumar Tiwari, Abdul Hanan Abdullah, and Ahmed Nazar Hassan, "Multiobjective Dynamic Vehicle Routing Problem and Time Seed Based Solution Using Particle Swarm Optimization", *Journal of Sensors,* vol. 2015 (2015), (Article ID 189832).

[14] A.K. Giri, **D.K. Lobiyal**, and C.P. Katti, Optimization of Value of Parameters in Ad-hoc on Demand Multipath Distance Vector Routing Using Teaching-Learning Based Optimization, *Procedia Computer Science, Vol.* 12, No 57, 2015, pp.1332-1341

[15] Amita Jain and **D.K. Lobiyal**, "Fuzzy Hindi WordNet and Word Sense Disambiguation Using Fuzzy Graph Connectivity Measures", *ACM Transaction on Asian and Low-Resource Language Processing,* Volume 15 Issue 2, February 2016; pp 8.1-8.31

[16] Indrani Das, **Daya K. Lobiyal** and C.P. Katti, "Multipath routing in mobile ad hoc network with probabilistic splitting of traffic", *Wireless Networks (Springer),*2015, 10.1007/s11276-015-1093-y

[17] Omprakash Kaiwartya, Sushil Kumar, **D. K. Lobiyal**, Pawan Kumar Tiwari, Abdul Hanan Abdullah, and Ahmed Nazar Hassan, "Multiobjective Dynamic Vehicle Routing Problem and Time Seed Based Solution Using Particle Swarm Optimization", *Journal of Sensors,* vol. 2015 (2015), (Article ID 189832).

[18] A.K. Giri, **D.K. Lobiyal**, and C.P. Katti, Optimization of Value of Parameters in Ad-hoc on Demand Multipath Distance Vector Routing Using Teaching-Learning Based Optimization, *Procedia Computer Science, Vol.* 12, No 57, 2015, pp.1332-1341

[19] Adwitiya Sinha and **D.K. Lobiyal**, "Prediction Models for Energy Efficient Data Aggregation in Wireless Sensor Network", *Wireless Personal Communication, Springer*, DOI 10.1007/s11277-015-2690-x, May 2015

[20] Kumar Sagar and **D.K. Lobiyal,** "Probabilistic Intrusion Detection in Randomly Deployed Wireless Sensor Networks", *Wireless Personal Communication, Springer,* DOI 10.1007/s11277-015-2673-y, May 2015

[21] Puspendra Patel and **D.K. Lobiyal**, "A Simple but Effective Collision and Error Aware Adaptive Back-off Mechanism to Improve the Performance of IEEE 802.11 DCF in Error-Prone Environment", *Wireless Personal Communication, Springer*, vol. 77, no. 2, 2014 (DOI 10.1007/s11277-015-2460-9), March 2015

[22] Puspendra Patel and **D.K. Lobiyal**, "A Simple but Effective Contention Aware and Adaptive Back-off Mechanism for Improving the Performance of IEEE 802.11 DCF", *Wireless Personal Communication, Springer*, vol. 77, no. 2, 2014 (DOI 10.1007/s11277-015-2477-0), March 2015

[23] Ram Shringar Raw, **D. K. Lobiyal**, Sanjoy Das, and Sushil Kumar, "Analytical Evaluation of Directional-Location Aided Routing Protocol for VANETs", *Wireless Personal Communication, Springer*, vol. 77, no. 2, 2014 (DOI 10.1007/s11277-015-2320-7), March 2015

[24] Sohan Kumar Yadav, and **D. K. Lobiyal**, "Performance Evaluation of Power Efficient MAC Protocol for MANETs", *International Journal of Scientific & Engineering Research*, Volume 6, Issue 3, March-2015 494 ISSN 2229-5518, pp. 494-99

[25] A. N. Hassan, K. Gupta, O.Kaiwartya, S. Kumar, **D.K. Lobiyal**, P.K. Tiwari, and A.H. Abdullah, "Multi-objective Dynamic Vehicle Routing Problem and Time Seed based Solution using Particle Swarm Optimization", *Journal of Sensors*, Hindawi, 2014 (in Press).

[26] Omprakash Kaiwartya, Sushil Kumar, **D.K. Lobiyal**, Abdul Hanan Abdullah, Ahmed Nazar Hassan, "Performance Improvement in Geographic Routing for Vehicular Ad hoc Networks", *Sensors*, Vol. 14, Issue 12, MDPI AG, Basel, Switzerland, 2014.

[27] Amita Jain and **D.K. Lobiyal**, "A New Approach for Unsupervised Word Sense Disambiguation in Hindi Language using Graph Connectivity Measures", *International Journal of Artificial Intelligence and Soft Computing,* Vol. 4 No. 4; Inderscience Publishers, 2014, pp. 318-334

[28] Adwitiya Sinha and **D. K. Lobiyal**, "Probabilistic Data Aggregation in Information- based Clustered Sensor Network", *Wireless Personal Communication, Springer*, vol. 77, no. 2, 2014 (DOI 10.1007/s11277-013-1566-1)

[29] Upasana Dohare, **D.K. Lobiyal**, and Sushil Kumar "Energy Balanced Model for Lifetime Maximization in Randomly Distributed Wireless sensor networks", *Wireless Personal Communication, Springer*, DOI 10.1007/s11277-014-1759-2, April 2014

[30] Anil Kumar Sagar and **D.K. Lobiyal**, "Coverage and Lifetime Maximization of Wireless Sensor Network with Multi-objective Evolutionary Algorithm", *International Journal of Scientific & Engineering Research*, Volume 5, Issue 6, June 2014 pp. 1194 - 1203 (ISSN 2229-5518)

[31] Indrani Das, **D.K Lobiyal** and C.P Katti, "Effect of Node Mobility on AOMDV Protocol in MANET", *International Journal of Wireless & Mobile Networks, (IJWMN)* Vol. 6, No. 3, June 2014

[32] Indrani Das, **D.K Lobiyal**, and C.P Katti, "Effect of Mobility Models on the Performance of Multipath Routing Protocol in MANET", *International Journal of Computer Science & Information Technology*, Vol. 6 Issue 4, p149, 2014

[33] Sushil Kumar and D.K. Lobiyal, "Sensing Coverage Prediction for Wireless Sensor Networks in Shadowed and Multipath Environment", The Scientific World Journal, Hindawi Publishing, Volume 2013 (2013), Article ID 565419.

[34] Anil Kumar Sagar and **D.K. Lobiyal**, "Fault Tolerant Coverage and Connectivity in presence of Channel Randomness", The Scientific World Journal, Hindawi Publishing, 2013, ID 818135, http://dx.doi.org/10.1155/2014/818135

[35] Ram Shringar Raw and **D.K. Lobiyal**, "A Probabilistic Analysis of Boarder Node based MFR Routing Protocol for Vehicular Ad Hoc Network", *International Journal of Computer Application in Technology*, Vol. 51, No. 2, Inderscience, pp.87-96

[36] Shravan Kumar and **D.K. Lobiyal**, "Power Efficient Range free Localization Algorithm in WSN", *Wireless Network*, Springer, Vol. 19 No. 6, 2013

[37] Adwitiya Sinha and **D. K. Lobiyal**, "Performance Evaluation of Data Aggregation for Cluster-based Wireless Sensor Network," *Human-centric Computing and Information Sciences, Springer, pp. 1 – 26, 2013* doi:10.1186/2192-1962-3-13

[38] Sushil Kumar and **D.K. Lobiyal**, "Impact of Interference on Coverage in Wireless Sensor Networks", *Wireless Personal Communication, Springer,* DOI 10.1007/s11277-013-1314-6, July 14, 2013.

[39] Buddha Singh and **D.K. Lobiyal**, "MAC-Layer Retransmission Algorithm for Maximizing Throughput in Wireless Sensor Network", *Wireless Personal Communication*, Springer, published online on April 09, 2013. DOI: 10.1007/s11277-013-1162-4.

[40] Adwitiya Sinha and **D.K. Lobiyal**, "A multi-level Strategy for Energy Efficient Data Aggregation in Wireless Sensor Networks", *Wireless Personal Communications,* Springer, vol. 69, No. 4, 2013. DOI: 10.1007/s11277-013-1093-0

[41] Sanjay Das and **D.K. Lobiyal**, "Effect of Mobility Models on the Performance of LAR Protocol for Vehicular Ad Hoc Network", *Wireless Personal Communications*, Springer Online: *DOI 10.1007/s11277-013-0999-x.*

[42] Shrawan Kumar and **D.K. Lobiyal**, "An Advanced DV-Hop Localization Algorithm for Wireless Sensor Network", *Wireless Personal Communication*, Springer (online: DOI 10.1007/s11277-012-0880-3)

[43] Yaser Mahmood A. Hamid and **D.K. Lobiyal**, "An Adaptive Energy Conserving Protocol for IEEE 802.11b based Ad Hoc Networks" *Transaction of Communication,* Vol. 11, Issue 09, 2012, WSEAS, pp. 342-356.

[44] Buddha Singh and **D.K. Lobiyal**, "An energy-efficient adaptive clustering algorithm with load balancing for wireless sensor network", *International Journal of Sensor Network*, Inderscience Publishers vol. 12, No. 1, pp. 37-52. 2012.

[45] Buddha Singh and **D.K. Lobiyal**, "Traffic-Aware Density-Based Sleep Scheduling and Energy Modeling for Two Dimensional Gaussian Distributed Wireless Sensor Network", *Wireless Personal Communication*, Springer (online: DOI 10.1007/s11277-012-0754-8), 2012.

[46] Buddha Singh and **D.K. Lobiyal**, "A novel energy-aware cluster head selection based on particle swarm optimization for wireless sensor networks", *Human-centric Computing and Information Sciences*, Springer (open access), vol. 2:13, 2012. DOI:10.1186/2192-1962-2-13.

[47] Shravan Kumar and **D.K. Lobiyal**, "Novel DV-Hop Localization Algorithm for Wireless Sensor Networks", *International Journal of Wireless and Mobile Computing* (IJWMC), Volume 2, Issue 2, 2012,.IGI publishers.

[48] Sanjay Das and **D.K. Lobiyal**, "Effect of Realistic Vehicular Traces on the Performance of Broadcasting Techniques in Vehicular Ad Hoc Networks", *Research Journal of Applied Sciences, Engineering and Technology*, vol. 4, issue 18, pp. 3439-3500, Maxwell Science Organization, UK, 2012.

[49] Sanjoy Das and **D.K Lobiyal**, "Performance Analysis of Broadcasting Methods in Geocast Region for Vehicular Ad Hoc Networks" in *International Journal of Scientific and Engineering research*, (IJSER), Vol. 3, Issue 4, 2012, pp 1-6

[50] Rishipal Singh and **D.K. Lobiyal**, "Review of Contention Based MAC Protocols for Ad Hoc Networks", *International Journal of Advanced Engineering Sciences and Technologies*, 12(2) pp.74-90.

[51] Ram Shringar Raw and **D.K. Lobiyal**, "Throughput and Delay Analysis of Next-HOP Forwarding Method for Non-Linear Vehicular AD Hoc Networks", *International Journal on Ad Hoc Networking Systems,* Vol. 2, No. 2, 2012, pp.33 - 44.

[52] Sohan Kumar Yadav and **D.K. Lobiyal**, "Performance Analysis of Improved Autonomous Power Control MAC Protocol (IAPCMP) for MANET", *International Journal on AdHoc Networking Systems* Vol. 2 No.4, 2012, pp.17 - 27

[53] Ramchand V., and **D.K. Lobiyal**, "Throughput Analysis of Power control B-MAC protocol". *International Journal of Wireless, Mobile Networks.* AIRCC, Vol. 4, Issue 3, 2012, pp.155-167.

[54] Arun Kumar and **D.K. Lobiyal**, "Link Failure Distortion Optimization for the Video Transmission over Mobile Ad Hoc Network", in *International Journal of Scientific and Engineering research* , (IJSER), Vol. 3, Issue 5, 2012, pp. 1-4**.**

[55] Sanjoy Das and **D.K Lobiyal, "**Analysis of Neighbour and Isolated Node of Intersection Area Based Geocasting Protocol (IBGP) for Vehicular Ad hoc Networks", *International Journal of Wireless & Mobile Networks (IJWMN)* Vol. 4, No. 1, 2012, pp. 263-274.

[56] Nidhi and **D.K Lobiyal,** "Performance Evaluation of Realistic VANET using Traffic Light Scenario", *International Journal of Wireless & Mobile Networks (IJWMN)* Vol. 4, No. 1, 2012, pp. 237-249.

[57] Sanjoy Das and **D.K Lobiyal**, "Adaptive Triangle Based Geocast Protocol for Vehicular Ad Hoc Network", IERI Communications Letters, vol. 1, no. 1, 2012, pp. 8-15

[58] Sushil Kumar and **D.K. Lobiyal**, "Probabilistic Sensing Coverage for Wireless Sensor Networks", IERI Communications Letters, vol. 1, no. 1, 2012, pp. 16-24

[59] Ram Shringar Raw and **D. K. Lobiyal** "Evaluation of Next-Hop Forwarding Method for Non-Linear Vehicular Ad Hoc Networks using Greedy Forwarding", *IERI Communications Letters*, vol. 1, no. 1, 2012, pp. 25-32

[60] Ramchand V. and **D.K. Lobiyal**, "An Analytical model for Energy Consumption in Y-MAC Protocol", International *Journal of Computer Science Issues* (IJCSI) Vol. 9 Issue 1 No.1 January 2012

[61] Ramchand V. and **D.K. Lobiyal,** "Z-MAC an Analytical model for wireless sensor networks" *International journal of Ad hoc, Sensor & Ubiqutious Computing* (IJASUC), Vol.2, No.4, December 2011

[62] Sanjoy Das and **D.K Lobiyal,** "An Analytical Analysis Of Neighbour And Isolated Node For Geocast Routing In Vanet", *International Journal on Ad Hoc Networking Systems* (IJANS), Vol. 1, No. 2, 2011, pp. 39 - 50.

[63] Rishipal Singh and **D.K. Lobiyal**, "Delay Analysis of IEEE 802.11 DCF with Modified Binary Exponential Back-off", *International Journal of Wireless & Mobile Networks (IJWMN)* Vol. 3, No. 3, 2011, pp 151-161.

[64] Yaser Mahmood A. Hamid and **D.K. Lobiyal**, "COMPOW Based PCM Protocol for Multi-Hop MANET", *International Journal of Computers and Applications*, ACTA Press, Vol. 33, Issue 2, DOI: 10.2316/Journal.202.2011.2.202-2590

[65] Yaser Mahmood A. Hamid and **D.K. Lobiyal**, "Improved Power Control MAC Protocol for wireless Ad Hoc Networks" *WSEAS Transaction on Communication*, Vol. 10, Issue 1, 2011, USA, pp.1-11.

[66] Rishi Pal Singh and **D.K. Lobiyal**, "Throughput Analysis of Receiver Initiated Collision Avoidance in Mobile Ad hoc Networks", *International Journal of Computer Applications,* vol. 16, no. 6, 2011, pp.48-52

[67] Adwitya Sinha **and D.K. Lobiyal, "**A Dynamic Aggregation Protocol for Energy Efficient Data Fusion in Wireless Sensor Network", *International Journal of Computer Applications,* vol. 16, no. 3, 2011, pp. 32-38

[68] R.S. Raw and **D.K. Lobiyal,** "E-DIR: A Directional Routing Protocol for VANETs in a City Traffic Environment" in *International Journal of Information and Communication Technology*, Inderscience Publishers, Vol. 3 No. 2, pp. 242-257

[69] Rishi Pal Singh and **D.K. Lobiyal**, "Throughput and Delay Analysis of IEEE802.11 for Mobile Ad hoc Networks", *International Journal of Next Generation Computing (IJNGC).* Korea , volume 1, Number 3, November, 2010, pp. 12-20

[70] Ramchand V and **D.K. Lobiyal**, "An Analytical Model for Power Control T-MAC Protocol", *International Journal of Computer Applications*, Volume 12– No.1, December 2010, pp 13-18.

[71] Arun Kumar and **D.K. Lobiyal**, "An Enhanced Efficient Broadcasting scheme for Video-on-Demand System in Mobile Ad Hoc Networks", *International Journal of Power, Control, Signal And Computation(IJPCSC)* Vol. 2.No.4, 2010.

[72] Rishi Pal Singh and **D.K. Lobiyal**, "Throughput Analysis of IEEE802.11 for Mobile Ad hoc Networks", *International Journal of Mobile Computing and Multimedia Communications (IJMCMC)*, Vol.2 no. 3, 2010, pp 61-70.

[73] A.K Mishra and **D.K Lobiyal**, "Prediction of miRNAs in Bombyx moori through Computational Approaches", *International Journal of Computer Theory and Engineering* (IACSIT),vol. 2, No. 2, 2010, pp. 258-263.

[74] Khaled Ahmed Abood Omer, **D. K. Lobiyal**: Performance evaluation of location update schemes for MANET. *Int. Arab J. Inf. Technology*. 6(3): 274-282 (2009).

[75] Stojmenovic, A. P. Ruhil, and **D. K. Lobiyal**, "Voronoi Diagram and Convex Hull Based Geocasting and Routing in Wireless Networks", in *Wireless Communication and Mobile Computing (WCMC),* special issue on Ad Hoc Networks, John Wiley, Vol.6 No.2, 2006. pp. 247-258.

[76] Khaled Ahmed Abood Omer, **D. K. Lobiyal**, " Performance evaluation of location update scheme in Mobile Ad Hoc Networks", *International Arab Journal for Information Technology*, Vol.2, No.3 July 2005.

[77] Khaled Ahmed Abood Omer, and **D. K. Lobiyal**, "Efficient Grid Location Service Scheme for MANET", *Univ. Aden Journal of Natural and Applied Science*, Vol. 10, No. 1, pp.109-116 April 2006.

[78] A.P. Ruhil, and **D. K. Lobiyal**, "Effect of Location Update Scheme on the Performance of Position based Routing Protocols in Mobile Ad Hoc Network*", IETE Journal of Research, special issue on Link and Mobility Management for Wireless and Satellite Communication Networks*, Vol. 52, No. 2 & 3 2006, pp. 169-176.

[79] Khaled Ahmed Abood Omer, **D. K. Lobiyal**, "Efficient Grid Location Service Scheme for MANET", *IETE Journal of Research, special issue on Link and Mobility Management for Wireless and Satellite Communication Networks*, Vol. 52, No. 2 & 3 2006, pp. 177-186.

[80] Anand Prakash Ruhil, **D.K. Lobiyal**, G.V. Singh, S.V.N. Rao, "Sensor Network for Real Time Applications in Dairying", Indian Dairyman, June 2002, Vol. 54, No.6

Conferences

[1] Harshvardhan and **D.K. Lobiyal**, "Coupling Strength and Seizures", in the proceedings of ICIT 16 (Dec. 2016)

[2] Anvesha Katti and **D.K. Lobiyal**, "Sensor node deployment and coverage prediction for underwater sensor networks", In the proceedings of *INDIACom 16 (IEEE Explore)*, pp. 3018-3022.

[3] Rajesh Kumar Yadav, Daya Gupta and D.K. Lobiyal, "Energy efficient reactive protocol for data aggregation in Wireless Sensor Network", *INDIACom 16 (IEEE Explore)*, pp. 2921-2925.

[4] Anvesha Katti and **D.K. Lobiyal**, "Coverage of Underwater Sensor Networks in Shadowing Environment", In the proceedings of International conference on Communication and Computing Systems (ICCCS) September 2016.

[5] Rohini Sharma and **D.K. Lobiyal**, "Proficiency Analysis of AODV, DSR and TORA Ad-hoc Routing Protocols for Energy Holes Problem in Wireless Sensor Networks", April (ICRTC, 2015), *Procedia Computer Science* 2015

[6] Rohini Sharma and **D.K. Lobiyal,** "Region Based Energy Balanced Inter-cluster communication Protocol for Sensor networks", NCCCIP, 2015.

[7] Rohini Sharma and **D.K. Lobiyal, "** Proficiency Energy Based Analysis of Ad-hoc Routing Protocols in Wireless Sensor Networks", ICACEA, 2015

[8] Amira Youssef Fahoud and **D.K. Lobiyal**, "Comparative Analysis of WiMAX Performance through Mobility Mode and Fixed Mode using Qualnet Simulator", International Conference on Computing, Communication and Automation (ICCCA2015), ISBN:978-1-4799-8890-7/15, pp. 1308-1313.

[9] Vajenti Mala and **D.K. Lobiyal**, "Concepts Extraction for Medical Documents using Ontology", *International Conference on Advances in Computer Engineering and Applications (ICACEA), 2015* 978-1-4673-6911-4/15, pp. 773-777

[10] A.K. Giri, **D.K. Lobiyal** and C.P. Katti, "Optimization of Value of Parameters in Ad-hoc on Demand Multipath Distance Vector Routing Using Teaching-Learning Based Optimization", International Conference on Recent Trends in Computing 2015 (ICRTC-2015), Volume 57, 2015, Pages 1332–1341.

[11] Amita Jain and **D.K. Lobiyal**, "Unsupervised Hindi Word Sense Disambiguation based on network Agglomeration", Proceedings of IndiaCom, March 12-13. 2015 (To appear in IEEE Explorer)

[12] Rohini Sharma and **D.K. Lobiyal**, "Proficiency Analysis of AODV, DSR and TORA Ad-hoc Routing Protocols for Energy Holes Problem in Wireless Sensor Networks", (ICRTC, 2015), Procedia Computer Science 2015

[13] Savita Singh and **D.K. Lobiyal**, "Location Information and Inter-Contact based Routing approach for Delay Tolerant Networks", (ICRTC, 2015), Procedia Computer Science 2015

[14] Anil Kumar Giri, D.K. Lobiyal, and C.P. Katti, "Optimization of Value Parameters in A-hoc On Demand Multipath Distance Vector Routing using Teaching-Learning Based Optimization", Procedia Computer Science 2015.

[15] Rohini Sharma and **D.K. Lobiyal**, "Energy Based Proficiency Analysis of Ad-hoc Routing Protocols in Wireless Sensor Networks", *International Conference on Advances in Computer Engineering and Applications (ICACEA),* 2015

[16] Anil Kumar Giri, **D. K. Lobiyal** and C. P. Katti, "Parameter Value Optimization of Ad-hoc On Demand Multipath Distance Vector Routing using Particle Swarm", in *Procedia Computer Science*, International Conference on Information and Communication Technologies (ICICT 2014), India.

[17] Indrani Das, **D.K Lobiyal** and C.P Katti, "Effect of Mobility Models on the Performance of Multipath Routing Protocol in MANET ", in the Proceedings of *Sixth International Conference on Wireless & Mobile Networks (WiMoN-2014),* May 24~25, 2014, Delhi, India, pp. 149-155

[18] Amita Jain aad **D.K. Lobiyal**, "A New Method for Updating Word Senses in Hindi WordNet" in the Proceeding of *International Conference on Issues and Challenges in Intelligent Computing Techniques,February 7-8, 2014, Gaziabad India, pp.* 666-671.

[19] Anil Kumar Sagar and **D.K. lobiyal**. "A Multi-Objective Optimization Approach for Lifetime and Coverage problem in Wireless Sensor Network", *International Conference on Advance Computing, Networking and Informatics*, Raipur, 12-14 June 2013

[20] Shrawan Kumar **and D.K. Lobiyal**, "*Virtual Anchor Node-based Localization Using Dominating Set in WSN*" WASET, International Conference 2012, April 14-15 Italy

[21] Sushil Kumar **D.K. Lobiyal**, "Connectivity Enhancement in Randomly Distributed Wireless Sensor Network Using Cooperative Cluster Transmission", Proceedings of *International Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing*, Kottayam, Kerla 22-23 March 2013. (IEEE DOI: 10.1109/iMac4s.2013.6526482)

[22] Sushil Kumar **D.K. Lobiyal**, "Linear Order Sensor Network Deployment for Coverage Analysis Based on TBM Theory" Proceedings of IEEE 3rd International Advance Computing Conference (IACC), 2013. (IEEE DOI: 10.1109/IAdCC.2013.6514259)

[23] Sunita Prasad, Zaheeruddin and **D.K. Lobiyal**, "Minimum Energy Multicast in Static Wireless Ad Hoc Networks using Swam Intelligence", Proceedings of IEEE 3rd International Advance Computing Conference (IACC), 2013, pp. 512 -515.

[24] Sunita Prasad, Zaheeruddin and **D.K. Lobiyal**, "Multiobjective Multicast Routing in Wireless Ad Hoc Networks – An Ant Colony Approach", Proceedings of IEEE 3rd International Advance Computing Conference (IACC), 2013, pp 1008-1011.

[25] Sohan Kumar Yadav and **D.K. Lobiyal**, "Power Efficient MAC Protocol for mobile Ad hoc networks", *International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine), January 11-12, 2013. To appear in LNICST*

[26] Kumar Chanchal and **D.K Lobiyal**, NTTM: Novel Transmission Time based Mechanism to Detect Wormhole Attacks" *International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine), January 11-12, 2013. To appear in LNICST*

[27] Anil Kumar Sagar and **D.K. Lobiyal**, "Mobility based Energy Efficient Coverage Hole Maintenance for WSN", *International Conference on Heterogeneous Networking for*

Quality, Reliability, Security and Robustness (QShine), January 11-12, 2013. To appear in LNICST

[28] Buddha Singh and **D.K. Lobiyal**, "Energy Aware Cluster Head Selection using Particle Swarm Optimization and Analysis of Packet Retransmissions in Wireless Sensor Network", Proceedings of C3IT, Elsevier, Conference Communication 2012.Vol. 4, pp 171-176.

[29] Ram Shringar Raw, **D. K. Lobiyal**, and Sanjoy Das, "An Analytical Approach to Position-Based Routing Protocol for Vehicular Ad Hoc Networks", SNDS (LNCS) 2012: pp.147-156

[30] Sohan Kumar Yadav and **D.K. Lobiyal**, "Improved Autonomous Power Control MAC Protocol for MANET", (3rd International Workshop on Ad Hoc, Sensor and Ubiquitous Computing, July 13-15, 2012, Chennai, India), *Advances in Intelligent Systems and Computing*, Springer, Vol. 178, 2013, pp 553-562

[31] Ramchand V., and **D.K. Lobiyal**, "An Analytical model for Power control B-MAC protocol". *International conference on wireless, Mobile Network and applications (May 25-27, 2012)*, Advances in Computer Science Engg. & Application, Spriger Verlag, Volume 167/2012, pp. 551-558, DOI: 10.1007/978-3-642-30111-7_52

[32] Sanjoy Das and **D .K. Lobiyal**, "Intersection area based geocasting protocol (IBGP) for Vehicular Ad hoc Networks", in proceedings of CCSIT 2012, Part III, (ed. By N. Meghanathan et al.) LNICST 86, pp. 387–396, 2012. Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST), Springer-Verlag Berlin Heidelberg, 2012.

[33] Nidhi and **D .K. Lobiyal**, "Performance Evaluation of VANET using Realistic Vehicular Mobility", in proceedings of CCSIT 2012, (ed. By N. Meghanathan et al.), Part I, LNICST 84, pp. 477–489, 2012. Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST), Springer-Verlag Berlin Heidelberg, 2012.

[34] Ram Shringar Raw and **D. K. Lobiyal** "Throughput Analysis of Next-Hop Forwarding Method for Non-Linear Vehicular Ad Hoc Networks", in proceedings of CCSIT 2012, (ed. By N. Meghanathan et al.), Part II, LNICST 85, pp. 525–534, 2012. Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST), Springer-Verlag Berlin Heidelberg, 2012.

[35] Upasana Dohare, **D.K. Lobiyal** and Sushil Kumar, "Game Theoretic Model For Selfish Node Avoidance in Ad Hoc Networks" " in proceedings of CCSIT 2012, (ed. By N. Meghanathan et al.), Part I, LNICST 84, pp. 465–476, 2012. *Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST), Springer-Verlag Berlin Heidelberg*, 2012.

[36] Sunita Prasad, Zaheeruddin and **D.K. Lobiyal**, "A Novel Ant Colony Algorithm For Multicast Routing In Wireless Ad Hoc Networks", *Proceedings of The Second International Conference on Computer Science, Engineering and Applications (CCSEA-2012)*, pp. 309 -317

[37] Aruna Pathak, Zaheeruddin and **D.K. Lobiyal**, "Maximization the Lifetime of Wireless Sensor Network by Minimizing Energy Hole Problem with Exponential Node Distribution and Hybrid Routing", in Proceedings of *Students Conference on Engineering and Systems, Allahabad*, 2012, (IEEE Explore)

[38] Aruna Pathak, Zaheeruddin, **D.K. Lobiyal** and Manoj Kr. Tiwari, "Improvement of Lifetime of Wireless Sensor Network by Jointly Effort of Exponential Node Distribution and Mixed Routing", in Proceedings of International Conference on Communication Systems and Network Technologies, (CSNT), Rajkot, Gujart, May 11-12, 2012; http://doi.ieeecomputersociety.org/10.1109/CSNT.2012.75

[39] Sanjoy Das and **D.K. Lobiyal**, "Analysis of Next Hop Selection for Geocasting in VANET", *(CCSEIT-2011,* 23 to 25 September), LNCS in Communications in Computer and Information Science (CCIS), Vol. 204, Part 1, pp.326-335. 2011.

[40] Sanjoy Das and **D.K. Lobiyal**, "A Performance Analysis of LAR protocol for Vehicular Ad Hoc Networks in City Scenarios", in proceedings of ACE2011, August 25-26, 2011. pp 162-166

[41] Adwitya Sinha and **D.K. Lobiyal**, "An Entropic Approach to Data Aggregation with Divergence Measure based Clustering in Sensor Network", in proceedings of ACC2011, Springer, July 24-25, 2011, pp. 132-142.

[42] Ram Shringar Raw and **D.K. Lobiyal**, "Improved Position-Based Routing in Vehicular Ad hoc Networks using P-DIR Method", ACC2011, in proceedings of ACC2011, July 24-25, 2011, pp. 654-663.

[43] Buddha Singh and **D.K. Lobiyal**, **"**A MAC Approach for Dynamic Power Control In Wireless Sensor Networks", in *IEEE Symposium on Computers & Informatics*, March 20-22, 2011

[44] Arun Kumar, and **D.K. Lobiyal**, "An Enhance Efficient Broadcasting Scheme for Video-on-Demand System in Mobile Ad Hoc networks", in proceedings of International Conference on Communication Control and Computing Technology (ICCCCT'10), October 7- 9, 2010.

[45] Ram Shringar Raw and **D.K. Lobiyal**, "B-MFR Routing Protocol for Vehicular Ad hoc Network", in Proceedings of International Conference on Networking and Information Technology (ICNIT), Philippines, June 11-12, 2010

[46] Ram Shringar Raw and **D.K. Lobiyal**, "VANET: Position-Based Routing in Urban Environment - A Technical Review" in Proceedings of 3rd International Conference on Transport Science and Technology Congress (TRANSTEC 2010), New Delhi.

[47] Prashant Singh and **D.K. Lobiyal**, "DSR with Link Prediction using Pareto Distribution" To appear in the Proceedings of International Conference on Networking and Information Technology (ICNIT), Philippines, June 11-12, 2010.

[48] Rishi Pal Singh and **D.K. Lobiyal**, "Performance Modeling of Slotted MACA-BI MAC protocol for Mobile Ad hoc Network", in the ICCIT2009, in ACM proceeding, pp. 860-862.

[49] Prashant Singh and **D.K. Lobiyal**, "Scalability of Routing in MANET" in *Proceedings of Second International Conference on Communication Software and Networks (ICCSN)* 2010, pp. 325-328

[50] A.K Mishra and **D.K Lobiyal**, "Apis Mellifera Pre-miRNA Prediction using Decision Tree based Classifier", in proceedings International Conference on Computer and Automation Engineering, (ICCAE 2009) March 6-9, 2009 Thailand. pp.123-126

[51] A.K. Mishra and **D.K. Lobiyal**, "Exploring dominating features from Apis Mellifera pre-miRNA", in the proceedings International Conference on Advanced Computer Theory and Engineering (ICACTE 2008). pp. 363-367

[52] Yaser Mahmood A.Hamid and **D. K. Lobiyal**, "An Adaptive Energy Efficient MAC protocol for wireless Ad Hoc Networks", In Proc. 4th IEEE International Conference of

Wireless Communications, Networking and Mobile Computing, WiCOM'08, Dalian, China, 12-14 Oct. 2008.

[53] Yaser Mahmood A.Hamid and **D. K. Lobiyal**, "Effect of the Carrier Sensing Range on the Performance of the Mobile Ad Hoc Networks", In Proc. of 3rd Innovative Conference on Embedded systems, Mobile Communication and Computing, ICEMC[2], Bangalore, August 11-14, 2008.

[54] Yaser Mahmood A.Hamid and **D. K. Lobiyal**, " IPCM/COMPOW: An Efficient Power Saving Scheme for Multi-Hop Wireless Ad Hoc Networks", In Proc. of International Conference on Wireless Networks, ICWN'08-WORLDCOMP'08, Las Vegas, Nevada, USA, July 14-17, 2008. pp 452-458

[55] Khaled Ahmed Abood Omer, and **D. K. Lobiyal**, "Analytical Model of Grid Location Update Schemes for MANET", in proceedings of 1st International Conference on Digital Communications and Computer Applications (DCCA2007), pp. 395-402, March 19-22, 2007 Jordon.

[56] Yaser Mahmood A.Hamid and **D. K. Lobiyal**, "Effect of Power Control Schemes on the Interference in Ad Hoc Networks", In Proc. of National Conference on Methods and Models in Computing, NCM2C, New Delhi, Dec. 18-19, 2006, pp. 209-214

[57] A.P. Ruhil, **D.K. Lobiyal**, and I. Stojmenovic, "Position Based Gradient Routing in Mobile Ad Hoc Networks", Goutam Chakraborty (Eds.), ICDCIT 2005, *Lecture Notes in Computer Science* 3816, Springer-Verlag, Berlin Heidelberg 2005, pp.39-49.

[58] A.P. Ruhil, **D.K. Lobiyal**, and I. Stojmenovic, "Dominating Sets based Position Routing in Mobile Ad Hoc Networks", in Proceedings of 7th IEEE International Conference on Personal Wireless Communication (ICPWC-2005), New Delhi, January 23-25, 2005, pp.57-61.

[59] A.P. Ruhil, **D.K. Lobiyal**, and I. Stojmenovic, "Performance Evaluation of Geocasting Protocols in Mobile Ad Hoc Networks", in Proceedings of 11th National Conference on Communication (NCC-2005), Indian Institute of Technology, Kharagpur, India, January 28-30, 2005, pp.46-50.

[60] Khaled Ahmed Abood Omer, and **D. K. Lobiyal**, " Efficient Grid location update scheme in Mobile Ad Hoc Networks", G. Das and V. P. Gulati (Eds.): CIT 2004, LNCS Vol. 3356, Springer-Verlag, Berlin Heidelberg 2004, pp. 137-146.

[61] Khaled Ahmed Abood Omer, and **D. K. Lobiyal**, "Distance Based Quorum update scheme in Mobile Ad Hoc Networks", in Proceedings of World Congress on Lateral Computing (WCLC), Bangalore, Inida Dec. 2004.

[62] Khaled Ahmed Abood Omer, and **D. K. Lobiyal**, "Efficient Home agent location update scheme in Mobile Ad Hoc Networks", in proceedings of 2nd IEEE-GCC conference, Bahrain, November 23-25, 2004.

[63] Satish Chand, **D.K. Lobiyal** and Hari Om, Enhanced Polyharmonic Broadcasting Scheme for Popular Videos, in Proceedings of Eighth IEEE International Symposium on Consumer Electronics, Reading, UK, Sept0 1-3, 2004, pp. 370-374.

[64] S.K. Varshney, **D.K. Lobiyal** and G.V. Singh,"Morphology of Hindi Words", 1991, CSI, New Delhi.

[65] **D.K. Lobiyal** and G.V. Singh, "A Computational Grammar for Hindi", International Computer Congress, Hyderabad, Tata-Mc Graw Hill, New Delhi, 1993. pp.528-537.

[66] G.V. Singh and **D.K.Lobiyal**, "A Computational Grammar for Hindi Verb Phrase", International Conference on Expert Systems for Development, Bangkok, Thailand, (IEEE Comp. Society), 1993.

[67] G.V. Singh and **D.K. Lobiyal**, "A Computational Grammar for Hindi: Simple Sentences and Beyond", Natural Language Processing in Pacific Rim, Japan, 1993, pp. 358 - 361.

[68] G.V. Singh and **D.K. Lobiyal**, "Base Grammar Rules for Hindi", Proceedings of Akshara '94, CSI, New Delhi, 1994, pp. 347 – 360.

[69] **D.K. Lobiyal** and G.V. Singh, "A Rule Based Natural Language Parser: An Object Oriented Approach", Proceedings of Symposium on Machine Aids for Translation and Communication, 96, April 11-12, 1996, New Delhi..

[70] Archana Singhal, **D.K.Lobiyal** and G.V.Singh, "Rule Based Natural Language Parallel Parser", Proceedings of the International Conference on Knowledge Based Computer Systems - 98, Dec. 14-18, 1998, Mumbai, pp 191-201.

[71] **D.K. Lobiyal**, Jugal Kishore and G.V. Singh, "IP Address Filtering to Control Congestion", Proceeding of the International Conference and Congress on Federation for Information & Documentation, INSDOC, 1998, New Delhi, pp IV 24-30.

[72] K. Suryanarayan and **D.K. Lobiyal**, "An On-Line Database for Ancient Indian Sciences", Proceedings of the International Conference on New Perspectives on Vedic and Ancient Indian Civilization, World Association for Vedic Studies, Los Angeles, August 7-9, 1998.

[73] Zaheeruddin, **D.K. Lobiyal** & G.V. Singh, "Database Technology and its Future Prospects", CSI Communication, July, 2000, pp. 18 -23.

Book Chapter

A.K Mishra and **D.K Lobiyal,** "miRNA prediction using computational approach" in Advances in Experimental and Medical Biology. 2011; 696:75-82. PMID: 21431548, [PubMed], Springer Verlag, 2011.

Talks Delivered outside JNU

[1] *Wireless Sensor Networks (Invited Talk),* Deaprtment of Computer Science, Atma Ram Sanatan Dharm College, University of Delhi, March 22, 2017-03-24

[2] *Wireless Sensor Networks (Invited Talk),* Department of Computer Science and Engineering, Madan Mohan Malviya University of Technology, Gorakhpur, UP, March 17, 2017.

[3] *IoT and Wireless Sensor Networks (Keynote Address),* 2nd IEEE International symposium on Internet of Things: Smart Innovation and Usages (from 28 Feb to 01 March 2017), on Feb. 28, 2017.

[4] *Wireless Sensor Networks (Invited Talk),* Deaprtment of Computer Science, ABS Engineering College, Gaziabad Feb.06, 2017.

[5] *Wireless Sensor Networks (Invited Talk),* Deaprtment of Computer Science, Ram Lal Anand College, University of Delhi, January 24, 2017

[6] *Wireless Sensor Networks (Invited Talk),* Department of Computer Science and Application, Dr. Harisingh Gour University, Sagar, MP, January 04, 2017.

[7] *API System,* Refresher Course in Human Resource Development Centre, Dr. Harisingh Gour University, Sagar, January 04, 2017.

[8] *Wireless Sensor Networks (Invited Talk),* International Conference on Computing and Systems, Dronacharya college of Engineering, Gurgaon, Haryana, Sept 10, 2016.

[9] *API System,* Orientation Course in Human Resource Development Centre, JNU, September 02, 2016

[10] *Natural Language Processing: Future of Indian language(Invited talk),* Mahatma Gandhi International Hindi University, Wardha, August 18, 2016

[11]   *API System,* Orientation Course in Human Resource Development Centre, JNU, August 11, 2016

[12]   *Research Methodology in CS,* faculty Development Programme, Bhartiya Vidyapeeth Institute of Technology and Management, July 29, 2016.

[13]   *Simulation of Computer network,* Engineering College, Bareilly, July 12, 2016

[14]   *Wireless Sensor Networks,* National Conference on Recent Trends in Computer Science, JMI, New Delhi, March 30, 2016.

[15] *Wireless Networks,* in FDP at Galgotia Engineering College, Greater Noida, Feb. 23, 2016.

[16] *Wireless Network,* in FDP at AKGE College, Gaziabad, Up, Dec. 07, 2016

[17] *Mobile Cellular Communication,* Orientation Course, Human Resource Development Centre, JNU, November. 19, 2015

[18] *IT in India present and Future Prospects,* South East Asian Students, JNU, Nov. 02, 2015

[19] *Wireless Sensor Networks*, in FDP in Computer Science at IFTM, Moradabad, Oct. 26, 2015

[20] *Wireless Sensor Networks,* Keynote Address, in conference on Electronics Devices, Circuits and Communication, Krishi Sanskriti and Guhati University Oct. 08, 2015.

[21] *Wireless Sensor Networks*, in Electronics Department, GBU, Noida, Sept. 19, 2015

[22] *Wireless Sensor Networks*, Refresher Course (CS) Human Resource Development Centre, JNU, Sept. 07, 2015

[23] *Vehicular Ad Hoc Network,* Keynote lecture in MECIT-15, Krishi Sanskriti, JNU, May 17, 2015

[24] *Wireless Sensor Networks,* Keynote Address, at NCCCIP in NERIST, Nirjuli, Arunachal Pradesh May 02, 2015.

[25] *Hindi Fuzzy WordNet,* Workshop on NLP, at AKEG College, Gaziabad, UP January 31, 2015,

[26] *Wireless Sensor Networks,* K.M. Modi Institute of Technology, Modi Nagar, UP, April 17, 2015.

[27] *Citation Analysis and Impact Factor,* FDP at Bharti Vidyapeeth Institute of Technology and Manageent, Paschami Vihar, New Delhi, July 24, 2014.

[28] *Wireless Sensor Network* in the Deptt. Of Computer Science, SSJ Campus Almora, Kumaon University Nainital, Uttarakhand, on 25th April 2014

[29] *Natutral Language Processing* in the Deptt. Of Computer Science, SSJ Campus Almora, Kumaon University Nainital, Uttarakhand, on 25th April 2014

[30] *Wireless Sensor Network* in the Deptt. Of Computer Science, L.N. Modi Institute of Technology, Gaziabad, on 21th April 2014

[31] *Wireless Sensor Network* in the Refresher Course at Academic Staff College, JNU, New Delhi, on 6th August 2013

[32] *Two lectures on Wireless Communication* at Consortium of Education Communication (CEC) on Vyas Channel from August 1st and 2nd 2013

[33] *Four Lectures on Wireless Networks* at Consortium of Education Communication (CEC) at EDUSAT channel from September 10-13, 2013

[34] *Wireless Sensor Network*, at International Conference on "Advancements in Computing Sciences, Information Techniques & Emerging E-Learning Technologies" (ACSITEET– 2013) **On** 5th October, 2013, Organized by "Krishi Sanskriti" at Jawaharlal Nehru University, New Delhi – 110067.

[35] *Wireless Sensor Network* at JIMS Vasant Kunj, New Delhi on October 18, 2013

[36] *Research areas in Wireless Sensor Network*, at Indira Gandhi Delhi Technical

University for Women(IGDTUW), Delhi, on October 25, 2013

[37] *Wireless Sensor Network*, (for Ph.D. students) at School of Computer and Information Sciences, IGNOU, New Delhi, on December 10, 2013

[38] *Computational capability,* Motivational lecture for XII students *of UP*, Under *Inspire programme* at RKGIT Gaziabad on January 24, 2014

[39] *Introduction to Natural Language Processing*, at Department of Computational Linguistics, Mahtama Gandhi Antrashtriya Hindi Vishwavidyalya, Wardha, March 20, 2013

[40] *Advances in Natural Language Processing*, at Department of Computational Linguistics, Mahtama Gandhi Antrashtriya Hindi Vishwavidyalya, Wardha, March 21, 2013

[41] *Vehicular Ad Hoc Network*, Galgotia Engineering College, Greater Noida, UP, February 26, 2013.

[42] *Research Methodology in Computer Science*, in FDP programme at Bharti Vidyapeeth Institute of Computer Application and Management, Paschami Vihar, New Delhi, February 27, 2013

[43] *How to write Synopsis*, in FDP programme at Bharti Vidyapeeth Institute of Computer Application and Management, Paschami Vihar, New Delhi, February 27, 2013.

[44] *Equal Opportunity and Social Inclusion*, Jamia Hamdard University, New Delhi, February 21, 2013.

[45] *Wireless Sensor Networks*, Invited talk in 9th International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine) 2013 at Gautam Buddha University, Greater Noida, January 11, 2013

[46] *Wireless Sensor Network*, Academic Staff College, JNU, August 01, 2013.

[47] *Workshop* on *Mobile Ad Hoc Network*, in the Department of IT, Ajay Kumar Garg Engineering College, Gaziabad UP, August 24-25, 2012.

[48] *Workshop* on *Modelling and Simulation* in Deptt. Of Computer Application, G.B. Pant Engineering College, Ghurdauri, Pauri Garhwal, Uttarakhand, April 5-7, 2012

[49] *Mobile Ad Hoc Network*, Faculty Development Prograame at Ambedkar Institute of Technology, Gita Colony, new Delhi, Jan. 11, 2012.

[50] Mobile *Ad Hoc Networks*, Academic Staff College, JNU, September 09, 2011

[51] Routing *and Research Issues in Mobile Ad hoc Network*, at *Krishna Institute of Engineering and Technology*, Gaziabad, on April 22, 2011

[52] *Wireless Communication* in Faculty Development Programme at *Krishna Institute of Engineering and Technology*, Gaziabad, May 16, 2011

[53] *Wireless Ad* Hoc *Network* in Faculty Development Programme at *Krishna Institute of Engineering and Technology*, Gaziabad, May 16, 2011

[54] Green *Computing: A Wireless Perspective*, in One Week Short Term Course in Green Computing at *Deenbadhu Chhotu Ram University*, Murthal, Panipat, Haryana, May 19, 2011

[55] *Security in Mobile Ad hoc Network,* Girls Polytechnic, AMU, Feb., 05, 2011

[56] *Mobile Ad Hoc Networks*, Academic Staff College, JNU, September 01, 2010

[57] *Vehicular Ad Hoc Networks,* Academic Staff College, JNU, September 14, 2010

[58] *Mobile Ad hoc Networks***,** South Campus, Delhi University, October 19, 2010

[59] *Wireless Sensor Networks & Its Applications to Animal Life,* National Dairy Research Institute, Karnal, Haryana, December 11, 2010

[60] *Energy Conservation in Ad Hoc Networks* at MCA Department, Krishna Institute of Engineering and Technology, Gaziabad, UP on November 16, 2009

[61] *Mobile Ad Hoc Networks* in Refresher Course in Computer Science at Academic Staff College, University of Delhi on November 20, 2009.

[62] *Power Control in Ad Hoc Networks* in Refresher Course in Computer Science at Academic Staff College, University of Delhi on November 20, 2009.

[63] *2-D Structure Prediction using NLP Techniques* in Workshop on Bioinformatics Application in Agriculture Research at Agriculture Research Institute, ICAR Delhi on December 22, 2009.

[64] *Performance of Data link Layer Protocol* to the participants of Faculty Development Programme on Innovative and Effective Teaching Methodology for Computer Network" conduct by Ajay Kumar Garg Engineering College, UP Technical University, Noida Gaziabad, January 19, 2010.

[65] *Mobile Ad Hoc Networks* at Computer Science department in ASD College, University of Delhi on February 15, 2010.

[66] *Energy Conservation in Mobile Ad Hoc Networks* at Anand Engineering College, Agra in February 07, 2008

[67] *Energy Conservation in Mobile Ad Hoc Networks* at IP University Delhi in December 28, 2008.

[68] *Secondary Structure Prediction Using NLP techniques* at Aditya Institute of Technology (Polytechnic), Vasant Kunj New Delhi, May 2008

[69] *Modelling and Simulation*, Baba Badshah Gulam Shah University, Rajouri, Jammu kashmir, on October 6–8, 2006

[70] *Mobile Ad Hoc Network,* Baba Badshah Gulam Shah University, Rajouri, Jammu kashmir, on October 6–8, 2006

[71] *Modelling and Simulation* at G.B. Pant Engineering College, Gurdauri, Pauri Garwal, Uttrakhand, December 25-26, 2006.

[72] *Probabilistic Grammar for Bioinformatics* att NDRI, Kranal, Haryana, April 2005

[73] *Computer Networks and Network Programming*, at *Kantipur City College, Poorvanchal University, Nepal*, June 21 – July 23, 2004

[74] *OSI and TCP/IP Model* at University Polytechnic, Jamia Millia Islamia, New Delhi, December 2004.

Administration

1. Director, Internal Quality Assurance Cell (IQAC), Feb. 2016- onwards

2. Chief Advisor Placement Cell, JNU 2013- Feb. 2016

3. Advisor Equal opportunity Office March 2005 - March 2007

4. Liaison Officer (SC/ST/PH) since April 2009 – Nov. 2016

5. Warden, Brahmaputra Hostel, from 1998 – Jan. 2016

6. Acting Provost, Poorvanchal Khand, From July 2008 – April 2009

7. Placement Coordinator of School of Computer and Systems Sciences JNU, from 2003 – March 2011

Conferences Organized

1. General-Chair, International Conference on Signals, Networking, Computing and Systems, Feb 25-27, 2016, Organized by the School of Computer and Systems Sciences.

2. Convener, National Conference on Methods and Models in Computing 2008, organized by the school.

3. Co-convener, National Conference on Methods and Models in Computing 2007, organized by the school.

4. Organizing Secretary, National Conference on Methods and Models in Computing 2006, organized by the school.

Other Professional Activities

1. Elected Member, Executive Council, JNU, from August 2008 up to August 20l0

2. Member (As a warden), JNU Court, 1998-2004, 2006-2008, and 2008-2010

3. Member, Academic Council, JNU 1998-2004 and 2006-2008

4. Observer (as JNUTA President),   Academic Council, JNU 2008-2010

5. Member, Alumni Affairs and Placement, JNU from April 2008 – November 2012

6. In-charge – Students Lab from 2003 onwards

7. In-charge School Library from Oct. 2008 – September 2009

8. President Faculty Club, JNU 2008-2010

9. President, Jawaharlal Nehru University Teachers Association (JNUTA) 2010-11

10. President, Jawaharlal Nehru University Teachers Association (JNUTA) 2011-12

Membership of Professional Bodies

1. Member, Computer Society of India (CSI)
   (Currently Student Coordinator, Region I)

2. Fellow, Institution of Electronics and Telecommunication Engineers, India

3. Member, Institution of Electrical, Electronics Engineers.