



**Millie Pant**

**Associate Professor**

**Department of Applied Science and Engineering**

**Saharanpur Campus IIT Roorkee**

**Areas of interest:** Numerical Optimization, Operations Research, Soft Computing and Swarm Intelligence Techniques with applications to various engineering design problems, image processing, supply chain management.

**Work Experience:** Lecturer 2007 – 2009, IIT Roorkee

 Assistant Professor 2009 – 2012, IIT Roorkee

 Associate Professor 2012 – date, IIT Roorkee

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| Courses Taught (since 2007)EC 101 A – Computer Systems and Programming (8 semesters)PP 315 – Process Optimization (4 semesters)CE 201 - Computer Aided Graphics (4 semesters) MA 101 – Mathematics 1 (1 semester)MA 102 – Mathematics 2 (1 semester) IMA 01 – Advanced Engineering Mathematics (1 semester); IMA 11– Numerical Methods (1 semester) |
| Administrative Responsibilities* Warden – Indira Bhawan, Saharanpur campus, since April 2012
* Coordinator – NSS, Saharanpur Campus, since 2008
* Faculty coordinator, Cognizance, Annual Science Fest, 2013
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| Publications – 95 * Peer Reviewed International Journal Papers – 38
* National Journal Papers – 1
* International Conference Proceedings – 54
* Book Chapters – 2
 | PhD Thesis Supervision * 4 – awarded
* 1– submitted
* 4 – in progress

MTech Dissertations – 2 BTech Dissertations – 3 | Number of Sponsored Projects – 2 * As PI, Funding Agency: DST

Amount – Rs. 13, 97,000 ;Duration : 3 years* As Co-PI, Funding agency: MHRD

Amount: Rs. 20,000,000;Duration: 2 years  |
| Citations: 389; Cited Publications: 67; H-Index: 11 |
| Courses Conducted - 2 Coordinator, DST sponsored Short Term Course (STC) March 25 – 28, 2011. Co-coordinator, QIP sponsored STC on Genetic Algorithms, QIP IIT Roorkee, June 25 – 29, 2012. | **Workshops organized – 2** Coordinator, MHRD sponsored one day Workshop February, 16, 2010. Coordinator, MIR Labs, USA sponsored Machine Intelligence Research Lab Day, June 13, 2011.  | **Conferences – 3** Program Committee Chair for Soft Computing for Problem Solving (SOCPROS) 2011.Program Committee Chair for SOCPROS 2012, December 28 – 30, 2012. Program Committee Chair BICTA 2012, December 14 – 16, 2012. |
| Seminars given/ Invited talks (India)* Graphic Era University (GEU), Dehradoon.
* Meerut Institute of Engineering and Technology, Meerut.
* ABV-IIITM Gwalior.
* MANIT, Bhopal.
* National Institute of Hydrology, Roorkee
* NIT, Assam.
 | **Seminars given/** **Invited talks (Abroad)** * National University of Singapore (NUS), Singapore
* Liverpool Hope University, Liverpool, UK
* Brisbane Australia
* Zakopane Polland
 |
| MiscellaneousGuest Reviewer * IEEE Transactions on Evolutionary Computation
* Applied Soft Computing
* Applied Mathematics and Computation
* Neural Network Works
* Information science
 | **Associate editor:** International Journal of Swarm Intelligence, Inderscience**Guest Editor:** International Journal of Memetic Computing, SpringerEdited international conference proceedings – 1 International Conference on Soft Computing for Problem Solving (SocProS 2011) December 20-22, 2011 Advances in Intelligent and Soft Computing, Vol. 130, 131 |
| Industrial Collaboration – BILT, Yamuna Nagar |
| International Collaboration Prof A. Abraham – MIR Labs, USAProf A. Nagar – Liverpool Hope University, UKProf P. Siarry - Université Paris-Est Créteil Val-de-Marne, Paris, France |

**LIST OF RESEARCH PUBLICATIONS**

**Book Chapters (2)**

1. **Radha Thangaraj**, Thangaraj Chelliah, Millie Pant, Pascal Bouvry and Ajith Abraham, “Applications of Nature Inspired Algorithms for Electrical Engineering Optimization Problems”, Handbook of Optimization, Intelligent Systems Series, Springer Verlag, Germany, pp. 991-1024, 2012.
2. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “Performance Tuning of Particle Swarm Optimization: An Investigation and Empirical Analysis”, Foundations on Computational Intelligence, Vol. 3: Global Optimization: Theoretical Foundations and Applications, Studies in Computational Intelligence Series, Springer Verlag, Germany, ISBN: 978-3-642-01084-2, pp. 101 – 128, 2009.

**Peer Reviewed International Journal Papers (38)**

1. Musrrat Ali, [**Millie Pant**](http://www.informatik.uni-trier.de/~ley/pers/hd/p/Pant%3AMillie.html), [Ajith Abraham](http://www.informatik.uni-trier.de/~ley/pers/hd/a/Abraham%3AAjith.html): Unconventional initialization methods for differential evolution. [Applied Mathematics and Computation 219](http://www.informatik.uni-trier.de/~ley/db/journals/amc/amc219.html#AliPA13)(9): 4474-4494, 2013, **IF 1.338**
2. Thanga Raj, Radha Thangaraj, **Millie Pant,** Pascal Bouvry and Ajith Abraham, Design optimization of induction motors with differential evolution algorithms with an application in textile spinning, Journal of Applied Artificial Intelligence, pp. 809-831, Taylor and Francis, 2012. **IF 0.217**
3. Radha Thangaraj, **Millie Pant**, Pascal Bouvry and Ajith Abraham, [Solving Stochastic Programming Problems using Modified Differential Evolution Algorithms](http://www.softcomputing.net/logic2011b.pdf), [The Logic Journal](http://jigpal.oxfordjournals.org/), Oxford University Press, UK, 2012. IF **0.913**
4. Mussrat Ali, **Millie Pant** and Ajith Abraham, [Improving Differential Evolution Algorithm by Synergizing Different Improvement Mechanisms](http://www.softcomputing.net/acmtaas2011.pdf), ACM Transactions on Autonomous and Adaptive Systems, ACM Press, USA, Volume 7, Issue 2, Article 18, 2012. **SCIE**
5. Musrrat Ali, Millie Pant and Ajith Abraham, [A Simplex Differential Evolution Algorithm: Development and Applications](http://www.softcomputing.net/sage2012.pdf), Transactions of the Institute of Measurement and Control, Sage Publications UK, Volume 34, Issue 6, pp. 691-704,2012. **IF 0.692**
6. Musrrat. Ali, Patrick Siarry, **Millie. Pant,** [An efficient Differential Evolution based algorithm for solving multi-objective optimization problems](http://www.sciencedirect.com/science?_ob=GatewayURL&_method=citationSearch&_urlVersion=4&_origin=SDVIALERTHTML&_version=1&_piikey=S0377-2217%2811%2900853-8&md5=3cc35d804ab2c72628176a0f123290e3&graphAbs=y).  European Journal of Operations Research, Pages 404-416, 2011. **IF 2.158**
7. Tarun Kumar Sharma and **Millie Pant**, An Adaptive DE Algorithm for Solving Global Optimization Problems, International Journal of Engineering & Technoscience (IJETS), vol. 2(2), pp. 125 - 133, 2011. ISSN: 0976-9293, **2011.**
8. Tarun Kumar Sharma and **Millie Pant**, “Mixed DE-ABC Algorithm for Global Optimization Problems”, International Journal of Artificial Intelligence and Knowledge Discovery, vol. 1(1), pp. 58 - 63, 2011. e-ISSN: 2231-0312, **2011.**
9. Tarun Kumar Sharma and **Millie Pant**, Differential Operators Embedded Artificial Bee Colony Algorithm, International Journal of Applied Evolutionary Computation (IJAEC), vol. 2(3), pp. 1-14, 2011, ISSN 1942-3594, e-ISSN 1942-3608, **2011.**
10. Kusum Deep, Pinkey Chauhan, **Millie Pant,** Optimizing Machining Parameters Using A Novel Real Coded GA, International Journal of Applied Mathematics and Mechanics. Vol. 7, Issue:3; pp. 53-69**, 2011.**
11. Pinkey Chauhan, Kusum Deep, **Millie Pant**, Optimizing CNC turning process using Real Coded Genetic Algorithm and Differential Evolution, Online Publication: Transaction on Evolutionary algorithm and Continuous Optimization: ISSN: 2229-871, Global Journal of Technology and Optimization, Vol 2, pp- 157-165, June 2011. <http://www.gjto.org/PublishedVolumes.aspx>
12. Musrrat Ali, **Millie Pant,** Ajith Abraham and Vaclav Snasel, Differential Evolution Using Mixed Strategies in Competitive Environment, International Journal of Innovative Computing, Information and Control. **Accepted SCIE**
13. Musrrat Ali, **Millie Pant**, Improving the Performance of Differential Evolution Algorithm using Cauchy Mutation, Soft Computing, Vol. 15, pp. 991- 1007, (2011). **SCIE**
14. Musrrat Ali, **Millie Pant** and Ajith Abraham, Improved Differential Evolution Algorithm with Decentralization of Population, International Journal of Bio-Inspired Computation, Vol. 3(1), pp. 17- 30, **(2010).**
15. Musrrat Ali, **Millie Pant** and Atulya Nagar, Interpolated Differential Evolution for Global Optimisation Problems, [International Journal of Computing Science and Mathematics, Vol. 3(3), pp. 298 - 315](http://www.inderscience.com/browse/index.php?journalID=224&year=2010&vol=3&issue=3), **(2010).**
16. Musrrat Ali, **Millie Pant** and V. P. Singh, Two Modified Differential Evolution Algorithms and their Applications to Engineering Design Problems, World Journal of Modeling and Simulation, Vol. 6(1), pp. 72-80, (2010).
17. Musrrat Ali, **Millie Pant** and Ajith Abraham, Simplex Differential Evolution, International Journal Acta Polytechnica Hungarica , Vol. 6(5), pp. 95- 115, (2009). **SCIE**
18. **Millie Pant**, Musrrat Ali and V. P. Singh, Parent Centric Differential Evolution Algorithm for Global Optimization Problems, Opsearch Springer Vol. 46(2), pp. 153-168, (2009). **SCIE**
19. Musrrat Ali, **Millie Pant** and V. P. Singh, An Improved Differential Evolution Algorithm for Real Parameter Optimization Problems, International Journal of Recent Trends in Engineering, Vol. 1(5), pp. 63-65, (2009).
20. **Millie Pant,** Musrrat Ali and V. P. Singh, Modified Differential Evolution Algorithms for solving unconstrained global optimization problems, International Journal of Mathematical Modeling, Simulation and Applications (IJMMSA), Vol. 2(3), pp. 245-256, (2009).
21. Radha Thangaraj, **Millie Pant** and Ajith Abraham, “Modified Particle Swarm Optimization with Time Varying Velocity Vector”, Int. J. of Innovative Computing, Information and Control, 2011, Accepted for publication. **SCI IF 2.791**
22. Radha Thangaraj, **Millie Pant**, Thanga Raj C and Atulya K Nagar, “In-Situ Efficiency Determination of Induction Motor: A Comparative Study of Evolutionary Techniques”, Applied Artificial Intelligence an International Journal, Taylor and Francis, 2011, In Press. **IF 0.580**
23. Radha Thangaraj, **Millie Pant,** Ajith Abraham and Pascal Bouvry, “Particle Swarm Optimization: A Survey on Hybridization Perspectives”, Applied Mathematics and Computation, Elsevier Science, Vol. 217 (12), pp. 5208 – 5226, 2011. **IF 1.124**
24. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “DE-PSO: A New Hybrid Meta-Heuristic for solving Global Optimization Problems”, Int. Jnl. of New Mathematics and Natural Computation, World Scientific, Vol. 7 (3), pp. 1 – 19, 2011.
25. Radha Thangaraj, **Millie Pant** and Kusum Deep, “Optimal Coordination of Overcurrent Relays using Modified Differential Evolution Algorithms”, Engineering Applications of Artificial Intelligence, Elsevier Science, Vol. 23 (5), pp. 820 – 829, 2010. **IF 1.444**
26. Radha Thangaraj, **Millie Pant** and Ajith Abraham, “New Mutation Schemes for Differential Evolution Algorithm and their application to the Optimization of Directional Overcurrent Relay Settings”, Applied Mathematics and Computation, Elsevier Science, Vol. 216 (2), pp. 532 – 544, 2010. **IF 1.124**
27. Radha Thangaraj, **Millie Pant** and Atulya K. Nagar, “Quantum Mechanics Inspired Particle Swarm Optimization for Global Optimization”, Int. J. Artificial Intelligence and Soft Computing, Inderscience, Vol. 2 (1/2), pp. 144 – 160, 2010.
28. Radha Thangaraj, Thanga Raj C, **Millie Pant,** Ajith Abraham and Crina Grosan, “Optimal Gain-Tuning of PI Speed Controller in Induction Motor Drives Using Particle Swarm Optimization”, Logic Journal of the IGPL, Oxford Journals Press, 2010, In Press. doi:10.1093/jigpal/jzq031, **IF 0.326**
29. Radha Thangaraj, **Millie Pant** and Ajith Abraham, “Modified Differential Evolution Algorithm with Laplace Mutation”, Int. J. of Innovative Computing, Information and Control, 2010, Accepted for publication. **IF 2.791**
30. **Millie Pant**, Radha Thangaraj, Deepti Rani, Ajith Abraham and Dinesh K. Srivastava, “Estimation of Optimal Crop Plan Using Nature Inspired Metaheuristics”, World Journal of Modeling and Simulation, Vol. 6 (2), pp. 97 – 109, 2010.
31. **Millie Pant**, Radha Thangaraj, V. P. Singh and Ajith Abraham, “Particle Swarm Optimization Using Sobol Mutation”, Int. Journal of Simulation Systems, Science and Technology, Vol. 10 (3), pp. 91 – 96, 2009.
32. Radha Thangaraj, **Millie Pant** and Ajith Abraham, “Evolutionary Algorithms Based Speed Optimization of Servo Motor in Optical Disc Systems”, Int. J. of Computer Information Systems and Industrial Management Applications, 2010, Accepted for publication.
33. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “Low Discrepancy Initialized Particle Swarm Optimization for Solving Constrained Optimization Problems”, Special Issue on Swarm Intelligence: Foundations and Applications, Fundamenta Informaticae, IOS Press, Vol. 95 (4), pp. 511 – 531, 2009. **IF 0.715**
34. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Particle Swarm Optimization with Crossover Operator and its Engineering Applications”, Int. Journal of Computer Science, Vol. 36(2), pp. 112 – 121, 2009.
35. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Sobol Mutated Quantum Particle Swarm Optimization”, Int. Journal of Recent Trends in Engineering, Vol. 1(1), pp. 95 – 99, 2009.
36. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Optimization of Mechanical Design Problems using Improved Differential Evolution Algorithm”, Int. Journal of Recent Trends in Engineering, Vol. 1(5), pp. 21 – 25, 2009.
37. **Millie Pant**, Radha Thangaraj and V. P. Singh, “A New Diversity Based Particle Swarm Optimization using Gaussian Mutation”, Int. J. of Mathematical Modeling, Simulation and Applications, Vol. 1(1), pp. 47 – 60, 2008.
38. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Efficiency Optimization of Electric motors: A Comparative Study of Stochastic Algorithms”, World Journal of Modeling and Simulation, Vol. 4(2), pp.140 – 148, 2008.
39. **Millie Pant**, P. Sharma, T. Radha, R. S. Sangwan and U. Roy, “Nonlinear Optimization of Enzyme Kinetic Parameters”, Journal of Biological Sciences, Vol. 8(8), pp. 1322 – 1327, 2008.

**National Journal Paper (1)**

1. **Millie Pant**, Radha Thangaraj, Ajith Abraham and V. P. Singh, “Optimal Tuning of PI Speed Controller in PMSM: A Comparative Study of Evolutionary Algorithms”, Journal of Electrical Engineering, Vol. 2(1), pp. 36 – 43, 2008.

**Peer Reviewed International Conference Papers (35)**

1. Musrrat Ali, **Millie Pant**, Ajith Abraham and Vaclav Snasel, Modified Differential Evolution Algorithm for Parameter Estimation in Mathematical Models, 2010 IEEE International Conference on [Systems Man and Cybernetics (SMC), Istanbul Turkey, pp. 2767- 2772, (2010).](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=5629466)
2. Musrrat Ali, **Millie Pant** and V.P. Singh, Differential evolution using interpolated local search, International conference on contemporary computing (IC3, 2010), Proceeding in Springer, Noida India, pp. 94-106, (2010).
3. Musrrat Ali, **Millie Pant** and Atulya Nagar, Two local search strategies for Differential Evolution, [Bio-Inspired Computing: Theories and Applications (BIC-TA), 2010 IEEE Fifth International Conference, Liverpool UK, pp. 1429-1435, (2010).](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=5629467)
4. **Millie Pant**, Musrrat Ali and V. P. Singh, A New Differential Evolution Algorithm and Its Application to Real Life Problems, International Conference on Modeling and Engineering and Technological Problems (ICMETP) and the 9th Biennial National Conference of Indian Society of Industrial and Applied Mathematics (ISIAM). AIP Conference Proceedings, Agra India, Vol. 1146, pp. 177-185, (2009).
5. **Millie Pant**, Musrrat Ali and Ajith Abraham, Mixed Mutation Strategy Embedded Differential Evolution, IEEE congress on Evolutionary Computation (CEC 2009) Norway, pp. 1240-1246, (2009).
6. **Millie Pant**, Musrrat Ali and V. P. Singh, Differential Evolution using Quadratic Interpolation for Initializing the population, IEEE International Advance Computing Conference (IACC 2009), Patiala India, pp. 375-380, (2009).
7. Musrrat Ali, **Millie Pant** and V. P. Singh, A Modified Differential Evolution Algorithm with Cauchy Mutation for global optimization, International conference on contemporary computing (IC3, 2009), Proceeding in Springer, Noida India, pp. 127-137, (2009).
8. Musrrat Ali, **Millie Pant** and Ajith Abraham, A Modified Differential Evolution Algorithm and Its Application to Engineering Problems, International conference of soft computing and pattern recognition (SoCPaR-2009), Malaysia, pp. 196-201, (2009).
9. Musrrat Ali, **Millie Pant** and Ajith Abraham, Inserting Information Sharing Mechanism of PSO to Improve the Convergence of DE, world congress on nature and biological inspired computing (NaBIC-2009) Coimbatore India, pp. 282-287, (2009).
10. Musrrat Ali and **Millie Pant**, Modified Differential Evolution Algorithms for Global Optimization, world congress on nature and biological inspired computing (NaBIC-2009) Coimbatore India, pp. 1686-1689, (2009).
11. Musrrat Ali, **Millie Pant** and Ajith Abraham, A Hybrid Ant Colony Differential Evolution and its Application to Water Resources Problems, International Symposium on Biologically Inspired Computing and Applications (BICA-2009) Bhubaneswar, India, pp. 1133-1138, (2009).
12. **Millie Pant**, Musrrat Ali and V. P. Singh, Differential Evolution with Parent Centric Crossover, Second UKSIM European Symposium on Computer Modelling and Simulation Proceeding in IEEE, Liverpool UK, pp. 141-146, (2008).
13. Pinkey Chauhan, Kusum Deep, **Millie Pant**, Power Muation Embedded Modified PSO For Global Optimization Problems. Accepted for publication in International Conference on Swarm, Evolutionary and Memetic Computing, SRM University, Chennai, India, (Springer, LNCS Proceedings), Dec- 16-18, 2010
14. Kusum Deep, Pinkey Chauhan, **Millie Pant**, “Optimizing CNC Turning Process Using a Real Coded Genetic Algorithm”, Accepted for publication in “Fourth Global Conference on Power Control and Optimization (PCO-10)”**,** Kuching, Malaysia from December 2-4, 2010
15. Radha Thangaraj, **Millie Pant**, Ajith Abraham and Kusum Deep, “Differential Evolution Using a Localized Cauchy Mutation Operator”, IEEE Int. Conf. on Systems, Man and Cybernetics, Istanbul, Turkey, pp. 3710 – 3716, 2010.
16. Radha Thangaraj, **Millie Pant**, Pascal Bouvry and Ajith Abraham, "Evolutionary Algorithms for Solving Stochastic Programming Problems", Int. Conf. on Computational Intelligence Communication Networks (CICN 2010), India, IEEE Computer Society Press,2010, 628 - 632.
17. Radha Thangaraj, Thangaraj Chelliah, Pascal Bouvry, **Millie Pant** and Ajith Abraham, “Optimal Design of Induction Motor for a Spinning Machine Using Population Based Metaheuristics”, 9th Int. Conf. on Computer Information Systems and Industrial Management Applications (CISIM’10), Poland, IEEE Computer Society Press, 2010, pp. 341 - 346.
18. Radha Thangaraj, **Millie Pant**, Pascal Bouvry and Ajith Abraham, “Solving Multi Objective Stochastic Programming Problems Using Differential Evolution”, Int. Conf. on Swarm, Evolutionary and Memetic Computing, Lecturer Notes on Computer Science, Springer Verlag, 2010, pp. 54 - 61.
19. Radha Thangaraj, **Millie Pant** and Atulya K Nagar, “Maximization of Expected Target Damage Value Using Quantum Particle Swarm Optimization”, Int. Conf. on Developments in eSystems Engineering (DeSE’09), Abu Dhabi, UAE, IEEE Computer Society Press, pp. 329 – 334, 2009.
20. Radha Thangaraj, Millie Pant and Kusum Deep, “Initializing PSO with Probability Distributions and Low-discrepancy Sequences: The Comparative Results”, Bio Inspired Computing and Applications (BICA’09), India, IEEE Computer Society Press, 2009, pp. 1121 - 1126.
21. Radha Thangaraj, **Millie Pant** and Ajith Abraham, “Evolutionary Algorithms based Speed Optimization of Servo Motor in Optical Disc systems”, 8th Int. Conference on Computer Information Systems and Industrial Management Applications (CISIM’09), India, IEEE Computer Society Press, 2009, pp. 855 - 860.
22. Radha Thangaraj, **Millie Pant** and Ajith Abraham, “A New Diversity Guided Particle Swarm Optimization with Mutation”, World Congress on Nature and Biologically Inspired Computing (NaBIC’09), Special Session on Recent Advances in the Development of Particle Swarm Optimization for Global Optimization Problems, India, IEEE Computer Society Press, 2009, pp. 294 - 299.
23. Radha Thangaraj, **Millie Pant** and Ajith Abraham, “A Simple Adaptive Differential Evolution Algorithm”, World Congress on Nature and Biologically Inspired Computing (NaBIC’09), India, IEEE Computer Society Press, 2009, pp. 457 - 462.
24. Radha Thangaraj, **Millie Pant**, Ajith Abraham and Youakim Badr, “Hybrid Evolutionary Algorithm for Solving Global Optimization Problems”, HAIS’09: Lecture Notes in Computer Science: Hybrid Artificial Intelligent Systems, Springer Verlag, Germany, Vol. 5572, pp. 310 – 318, 2009.
25. **Millie Pant**, Radha Thangaraj, Ajith Abraham and C. Grosan, “Differential Evolution with Laplace Mutation Operator”, IEEE Congress on Evolutionary Computation (CEC’09), Norway, pp. 2841-2849, 2009.
26. **Millie Pant**, Radha Thangaraj and V. P. Singh, “The Economic Optimization of Pulp and Paper Making Processes Using Computational Intelligence”, Int. Conf. on Modeling of Engineering and Technical Problems (ICMETP’09), India, American Institute of Physics (AIP) Conf. Proc., Vol. 1146 (1), pp. 462 – 471.
27. **Millie Pant**, Radha Thangaraj and V. P. Singh, “A New Differential Evolution Algorithm for Solving Global Optimization Problems”, Int. Conf. on Advanced Computer Control (ICACC’09), Singapore, IEEE Computer Society Press, pp. 388 – 392, 2009.
28. Radha Thangaraj and **Millie Pant**, “Optimization of Directional Overcurrent Relay Setting by Differential Evolution Algorithm”, Int. Conf. on Power Systems (ICPS’09), IIT Kharagpur, 2009.
29. **Millie Pant**, Radha Thangaraj, Crina Grosan and Ajith Abraham, “Hybrid Differential Evolution – Particle Swarm Optimization Algorithm for Solving Global Optimization Problems”, 3rd IEEE Int. Conf. on Digital Information Management (ICDIM’08), UK, IEEE Computer Society Press, pp. 18 – 24, 2008.
30. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Speed Optimization of Servo Motor in Optical Disc Systems Using Particle Swarm Optimization”, POWERCON 2008 & 2008 IEEE Power India Conference, India, pp. 1 – 4, 2008.
31. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “Optimal Tuning of PI Speed Controller using Nature Inspired Heuristics”, 8th Int. Conf. on Intelligent Systems Design and Applications (ISDA’08), Taiwan, IEEE Computer Society Press, pp. 420 – 425, 2008.
32. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “Particle Swarm Optimization using Adaptive Mutation”, 19th Int. Conf. on Database and Expert Systems Application (ETID’08), Italy, IEEE Computer Society Press, pp. 519 – 523, 2008.
33. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “A New Quantum Behaved Particle Swarm Optimization”, ACM: SIGEVO Conference, Genetic and Evolutionary Computation Conference (GECCO’08), USA, 2008, pp. 87 - 94.
34. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “Particle Swarm Based Meta-heuristics for Function Optimization and Engineering Applications”, 8th Int. Conference on Computer Information Systems and Industrial Management Applications (CISIM’08), Ostrava, Czech Republic, IEEE Computer Society Press, pp. 84 - 90, 2008.
35. **Millie Pant**, Radha Thangaraj, Deepti Rani, Ajith Abraham and Dinesh K. Srivastava, “Estimation using Differential Evolution for Optimal Crop Plan”, HAIS’08: Lecture Notes in Computer Science: Hybrid Artificial Intelligent Systems, Springer Verlag, Germany, Vol. 5271, pp. 289 – 297, 2008.
36. **Millie Pant**, Radha Thangaraj, V. P. Singh and Ajith Abraham, “Particle Swarm Optimization Using Sobol Mutation”, Int. Conf. on Emerging Trends in Engineering and Technology (ICETET’08), India, IEEE Computer Society Press, pp. 367 – 372, 2008.
37. **Millie Pant**, Radha Thangaraj, Crina Grosan and Ajith Abraham, “Improved Particle Swarm Optimization with Low-discrepancy Sequences”, IEEE Congress on Evolutionary Computation (CEC’08), Hong Kong, pp. 3016 – 3023, 2008.
38. **Millie Pant,** Radha Thangaraj and Ajith Abraham, “Optimization of a Kraft Pulping System: Using Particle Swarm Optimization and Differential Evolution”, 2nd Asia Int. Conf. on Modeling and Simulation (AMS’08), Malaysia, IEEE Computer Society Press, USA, pp. 637 – 641, 2008.
39. **Millie Pant,** Radha Thangaraj and Ajith Abraham, “A New PSO Algorithm Incorporating Reproduction Operator for Solving Global Optimization Problems”, 7th International Conference on Hybrid Intelligent Systems (HIS’07), Kaiserslautern, Germany, IEEE Computer Society press, USA, ISBN 07695-2662-4, pp. 144-149, 2007.
40. **Millie Pant**, Radha Thangaraj and V. P. Singh, “A New Particle Swarm Optimization with Quadratic Interpolation”, Int. Conf. on Computational Intelligence and Multimedia Applications (ICCIMA’07), India, IEEE Computer Society Press, Vol. 1, pp. 55 – 60, 2007.
41. **Millie Pant**, Radha Thangaraj and V. P. Singh, “A Simple Diversity Guided Particle Swarm Optimization”, IEEE Congress on Evolutionary Computation (CEC’07), Singapore, pp. 3294 – 3299, 2007.
42. **Millie Pant**, Radha Thangaraj and Ajith Abraham, “A New PSO Algorithm with Crossover Operator for Global Optimization Problems”, HAIS’07: Advances in Soft computing Series, Springer Verlag, Germany, E. Corchado et al. (Eds.): Innovations in Hybrid Intelligent Systems, Vol. 44, pp. 215 - 222, 2007.
43. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Particle Swarm Optimization: Experimenting the Distributions of Random Numbers”, 3rd Indian Int. Conf. on Artificial Intelligence (IICAI’07), India, pp. 412 – 420, 2007.
44. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Particle Swarm Optimization using Low-discrepancy Van der Corput Sequence”, Int. Conf. on Recent Applications of Soft Computing In Engineering & Technology (RASIET’07), India, pp. 362 – 368, 2007.
45. **Millie Pant,** Radha Thangaraj and V. P. Singh, “A New Particle Swarm Optimization with Quadratic Crossover”, Int. Conf. on Advanced Computing and Communications (ADCOM’07), India, IEEE Computer Society Press, pp. 81 – 86, 2007.
46. **Millie Pant,** Radha Thangaraj and V. P. Singh, “Particle Swarm Optimization with Low-discrepancy Sequence”, Int. Conf. on Soft Computing an Intelligent Systems (ICSCIS’07), pp. 192 – 196, India, 2007.
47. **Millie Pant**, Radha Thangaraj and V. P. Singh, “A New Technique for Efficient Initialization Applied to Particle Swarm Optimization”, Int. Conf. on Computer Aided Engineering (CAE’07), India, pp.760 - 767, 2007.
48. **Millie Pant,** Radha Thangaraj and V. P. Singh, “Particle Swarm Optimization using Gaussian Inertia Weight”, Int. Conf. on Computational Intelligence and Multimedia Applications (ICCIMA’07), India, IEEE Computer Society Press, Vol. 1, pp. 97 – 102, 2007.

**National Conferences (3)**

1. **Millie Pant**, Radha Thangaraj and V. P. Singh, “A Comparison of Three Stochastic Algorithms for Solving Global Optimization Problems”, National Conference on Mathematical Modeling, Optimization and Their Application (OPTIMA’07), India, 2007.
2. **Millie** **Pant**, Radha Thangaraj and V. P. Singh, “Industrial Application of Particle Swarm Optimization: An Example of Pulp and Paper Industry”, 40th Annual Convention of ORSI, India, 2007.
3. **Millie Pant**, Radha Thangaraj and V. P. Singh, “Application of Particle Swarm Optimization in Electrical Engineering”, 11th Punjab National Congress, India, 2008.