

List of Publications

Journals

1. **Abhishek Kumar**, Bablesh Kumar Jha, Rakesh Kumar Misra, and Devender Singh. “**A New Current Injection Based Power flow Formulation.**” *Electric Power Components and Systems*, ***Accepted for Publication***. (ISSN: 1532-5016) (**SCI Expanded, IF-1.06**)
2. **Abhishek Kumar**, Bablesh Kumar Jha, Dharmendra Kumar Dheer, Rakesh Kumar Misra, and Devender Singh. “**A Nested-Iterative Newton-Raphson based Power Flow Formulation for Droop-based Islanded Microgrids.**” *Electric Power Systems Research*. (ISSN: 0378-7796) (**SCI Expanded, IF-3.022**)
3. **Abhishek Kumar**, Bablesh Kumar Jha, Rakesh Kumar Misra, and Devender Singh. “**Novel Current Injection based Newton-Raphson Power flow algorithm for droop-based Islanded Microgrids.**” *IET Generation, Transmission, & Distribution*. (ISSN:1350-2360) (**SCI, IF-3.229**)
4. **Abhishek Kumar**, Rakesh Kumar Misra, Devender Singh, Sujeet Mishra, and Swagatam Das. “**The Spherical Search Algorithm for Bound-constrained Global Optimization Problems.**” *Applied Soft Computing*. (ISSN: 1568-4946) (**SCI Expanded, IF-4.873**).
5. **Abhishek Kumar**, Bablesh Kumar Jha, Dharmendra Kumar Dheer, Rakesh Kumar Misra, and Devender Singh. “**A Nested Backward/Forward Sweep Algorithm for Power Flow Analysis of Droop Regulated Islanded Microgrids.**” *IET Generation, Transmission, & Distribution*, 13.14(2019). (ISSN:1350-2360) (**SCI, IF-3.229**)

6. **Abhishek Kumar**, Guohua Wo, Mostafa Ali, Rammohan Mallipeddi, Ponnuthurai Suganthan and Swagatam Das. “**A Test-suite of Non-Convex Constrained Optimization Problems from the Real-World and Some Baseline Results.**” *Swarm and Evolutionary Computation*. (ISSN: 2210-6502), (**SCI Expanded, IF:6.330**).
7. Bablesh Kumar Jha, **Abhishek Kumar**, Dharmendra Kumar Dheer, Devender Singh and Rakesh Kumar Misra. “**A modied current injection load flow method under different load model of EV for distribution system.**” *International Transactions on Electrical Energy Systems*, accepted for publication. (ISSN:2050-7038), (**SCI Expanded, IF: 1.314**).
8. Bablesh Kumar Jha, **Abhishek Kumar**, Devender Singh, and Rakesh Kumar Misra. “**Coordinated effect of PHEVs with DGs on distribution network.**” *International Transactions on Electrical Energy Systems*: 2019; 29:e2800. (ISSN:2050-7038) (**SCI Expanded, IF-1.314**).
9. Tarun Maini, **Abhishek Kumar**, Rakesh Kumar Misra, and Devender Singh. “**Intelligent Fuzzy Rough Set Based Feature Selection using Swarm algorithms with improved initialization.**” *Journal of Intelligent and Fuzzy Systems (JIFS)*, Accepted for publication (in April 2019), in press. (ISSN: 1875-8967) (**SCI Expanded, IF-1.637**).
10. Bablesh Kumar Jha, Amit Singh, **Abhishek Kumar**, Dharmendra Kumar Dheer, Devender Singh and Rakesh Kumar Misra. “**Day ahead scheduling of PHEVs and D-BESSs in presence of DGs in distribution system.**” *IET Electrical Systems in Transportation*. (ISSN:2042-9738), (**ESCI**).
11. Tarun Maini, Rakesh Kumar Misra, Devender Singh, and **Abhishek Kumar**. “**Rough Set Based Feature Selection Using Swarm Algorithms with Improved Initialization.**” *Journal of Computational and Theoretical Nanoscience* 15, no. 6-7 (2018): 2350-2354. (ISSN 1546-1963) (**Scopus indexed**)
12. Sujeet Mishra, **Abhishek Kumar**, Rakesh Kumar Misra, and Devender Singh. “**Feeder Phase Balancing using Single Phase Distributed Generations Considering Voltage Dependency of Loads.**” *Journal of Advanced Research in Dynamical and Control Systems*. (ISSN: 1943-023X) (**Scopus indexed**)

Book Chapters

1. Sujeet Mishra, **Abhishek Kumar**, Devender Singh, and Rakesh Kumar Misra. **“Butterfly Optimizer for Placement and Sizing of Distributed Generation for Feeder Phase Balancing.”** In Computational Intelligence: Theories, Applications and Future Directions-Volume II, pp. 519-530. Advances in Intelligent Systems and Computing, vol 799. Springer, Singapore, 2019. (ISSN:978-981-13-1135-2) (**SCOPUS indexed**)
2. **Abhishek Kumar**, Tarun Maini, Rakesh Kumar Misra, and Devender Singh. **“Butterfly Constrained Optimizer for Constrained Optimization Problems.”** In Computational Intelligence: Theories, Applications and Future Directions-Volume II, pp. 477-486. Advances in Intelligent Systems and Computing, vol 799. Springer, Singapore, 2019.(ISSN:978-981-13-1135-2) (**SCOPUS indexed**)
3. Tarun Maini, **Abhishek Kumar**, Rakesh Kumar Misra, and Devender Singh. **“Fuzzy Rough Set-Based Feature Selection with Improved Seed Population in PSO and IDS.”** In Computational Intelligence: Theories, Applications and Future Directions-Volume II, pp. 137-149. Advances in Intelligent Systems and Computing, vol 799. Springer, Singapore, 2019. (ISSN:978-981-13-1135-2) (**SCOPUS indexed**)

International Conferences

1. **Abhishek Kumar**, Rakesh Kumar Misra, Devender Singh and Swagatam Das. **“Testing A Multi-Operator based Differential Evolution Algorithm on the 100-Digit Challenge for Single Objective Numerical Optimization.”** 2019 IEEE Congress on Evolutionary Computation (CEC). IEEE, 2019, (**Fifth Rank out of 26 in competition of IEEE CEC-2019**).
2. **Abhishek Kumar**, Rakesh Kumar Misra, and Devender Singh. **“Improving the local search capability of effective butterfly optimizer using covariance matrix adapted retreat phase.”** In 2017 IEEE Congress on Evolutionary Computation (CEC), pp. 1835-1842. IEEE, 2017. (**Winner of competition of IEEE CEC-2017**)

3. Tarun Maini, **Abhishek Kumar**, Rakesh Kumar Misra, and Devender Singh. “**Rough set based feature selection using swarm intelligence with distributed sampled initialization.**” In 2017 6th International Conference on Computer Applications In Electrical Engineering-Recent Advances (CERA), pp. 92-97. IEEE, 2017.
4. Tarun Maini, **Abhishek Kumar**, Rakesh Kumar Misra and Devender Singh, “**Feature selection with intelligent dynamic swarm and fuzzy rough set,**” 2017 International Conference on Computing, Communication and Automation (ICCCA), Greater Noida, 2017, pp. 384-388.
5. **Abhishek Kumar**, Rakesh Kumar Misra, and Devender Singh. “**Butterfly Optimizer.**” In 2015 IEEE Workshop on Computational Intelligence: Theories, Applications and Future Directions (WCI), pp. 1-6. IEEE, 2015.