MATLAB PROJECTS

POWER SYSTEMS:

1. Simulink Model for Economic Analysis and Environmental Impacts of a PV with Diesel-Battery System for Remote Villages.
2. Enhancement of Voltage Quality in Isolated Power Systems.
3. Power Quality Improvement in Conventional Electronic Load Controller for an Isolated Power Generation.
4. Optimum Control of Selective and Total Harmonic Distortion in Current and Voltage under Non sinusoidal Conditions.
5. A control strategy for a three-level UPQC.
6. Power quality analysis of traction supply system with high speed train.
7. HVDC control system based on fuzzified input perceptron.
8. Power Upgrading of transmission line by combining AC-DC transmission control and analysis of UPFC.
9. Simulation of Unified Series-Shunt Compensator for Power Quality Improvement.
10. Three-Leg VSC and a Transformer Based Three-Phase Four-Wire DSTATCOM for Distribution.

POWER ELECTRONICS:

11. A 24 Pulse AC-DC converter employing a pulse doubling technique for vector controlled induction motor drives.

12. Power factor correction using a series active filter.

13. Power Factor Correction of Linear and Non-linear Loads Employing a Single Phase Active Power Filter Based on a Full-Bridge Current Source Inverter Controlled Through the Sensor of the AC Mains Current.

14. Reduced rating VSC with a Zig-Zag transformer for current compensation in a three phase four wire distributed system.

15. Eighteen-pulse AC-DC converter for harmonic mitigation in vector controller induction motor drive.

16. A New concept of multi level STATCOM based on cascade topology.

17. Design and implementation of a shunt active power filter with reduced DC link voltage.

18. MATLAB based simulation of TCSC FACTS controller.

19. A Novel method of load compensation under unbalanced and distorted voltages.

20. Analysis and implementation of thyristor based STATCOM.

21. Transient stability analysis with PSS using SVC.

22. A Three phase switch two level PWM rectifier.

23. A Modular Fuel Cell, Modular DC–DC Converter Concept for High Performance and Enhanced Reliability.---2009

24. Hybrid cascaded multilevel inverter with PWM control method.

25. A new concept of multilevel statcom based on cascade topology.

26. A Low-Cost Inverter for Domestic Fuel Cell Applications.

27. Optimal Placement of Shunt Connected Facts Device in a Series Compensated Long Transmission Line.

28. A Parallel-Connected Single Phase Power Factor Correction Approach with Improved Efficiency.

ELECTRICAL MACHINES:

29. Sensor less speed estimation of induction motor in a direct torque control system.

30. Direct torque control of a three phase induction motor using hybrid PI/FUZZY controller.

31. A FUZZY logic controller for synchronous machine.

32. MATLAB/SIMULINK implementation for reducing the motor derating and torque pulsation of induction motor using matrix converter.

33. Direct Power Control for three-phase PWM rectifier with active filtering function.

34. Direct torque control of five-phase induction motor using space vector modulation with harmonics elimination and optimal switching sequence.

35. Simulink implementation of induction machine model– a modular approach

36. An Integrated Hybrid Power Supply for Distributed Generation Applications Fed by Non conventional Energy Sources.

37. Induction generator and ac/dc/ac converter model for wind energy conversion.

38. Matlab / Simulink Implementation for Reducing the Motor Derating and Torque Pulsation of Induction Motor using Matrix Converter.

39. Design and implementation of a shunt active power filter with reduced dc link voltage.

40. DTC-SVM Scheme for Induction Motors Fed with a Three-level Inverter.

41. Transient Fault Response of Grid Connected Wind Electric Generators.