

CURRICULUM VITAE

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Senior Member, IEEE

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Personal Information:

Date of Birth: 9 March, 1965

Marital Status: Married with 1 children

Nationality: Iranian

Educational Qualifications:

PhD: from Tarbiat Modares University, Tehran, Iran, 1999.

Specialized in Power Systems,
Thesis title: “Robust Controller *Design for SVC in Industrial Network*”,
Supervisor: Prof. Mehrdad Abedi
Advisors: Prof. Hossein Seifi and Prof. Ali Khaki Sedigh.

MSc: from Tarbiat Modares University, Tehran, Iran, 1993.

Specialized in Power System Dynamic,
Thesis title: "A study of small signal stability in Power System"
Supervisor: Prof. Hossein Seifi.
Advisors: Prof. Mohsen Parsa Moghaddam.

BSc: Amirkabir University of Technology, Tehran, Iran, 1990.

Specialized in Shaded Pole Motor: Analysis and Design.

EMPLOYMENT

ACADEMIC POSITIONS:

From 1999 to 2010: *Assistant Professor of Electrical and Computer Engineering Department at University of Kashan, Kashan, Iran.*

From 2010-2015: *Associate Professor of Electrical and Computer Engineering Department at University of Kashan, Kashan, Iran.*

From 2016 to Present: *Full Professor of Electrical and Computer Engineering Department at University of Kashan, Kashan, Iran.*

TEACHING SUBJECTS

UNDERGRADUATE

1. Electric circuits (I, II)
2. Electric machines III
3. Special electric machines
4. Linear control systems
5. Power system analysis (I, II)

6. Industrial electronic

POSTGRADUATE

1. Power system dynamics (I, II)
2. Power generation, operation and control
3. Reactive power control
4. Generalized theory of electrical machines

ADIMINISTRATIVE FUNCTIONS (ACADEMICS)

1. *Head of Electrical Engineering Department at the University of Kashan.*
2. *Vice-dean of engineering faculty at the University of Kashan.*
3. *University Education Manager at the University of Kashan.*
4. *Dean of Faculty of Engineering at the University of Kashan.*
5. *Dean of Faculty of Electrical and Computer Engineering at the University of Kashan*

PROFESSIONAL SOCIETY INVOLVEMENTS

PROFESSIONAL SOCIETY MEMBERSHIPS:

1. *Senior Member IEEE and its affiliate Societies of Power and Energy.*
2. *Member of Control and Instrumentation Society of Iran.*

Reviewer of Journals

I have acted as a reviewer of papers for several journals, some of which include::

1. IEEE Transactions on Power System
2. IEEE Transactions on Power Electronics
3. IEEE Transactions on Industrial Electronics
4. IET Proc. Generation, Transmission and Distribution

5. IET Electric Power Application
6. IET Power Electronics
7. International Journal of Electrical Power and Energy Systems (IJEPES)
8. Electric Power Systems Research (EPSR)
9. Simulation Modeling Practice and Theory (SIMPAT)
10. Energy Conversion and Management
11. European Transactions on Electrical Power- International Transactions on Electrical Energy Systems (ETEP)
12. Electric Power Components and Systems

PUBLISHED JOURNAL PAPERS

1. H Mahvash, SA Taher, M Shahidehpour, "[Fractional order control scheme in pitch control loop of synchronous generator wind turbine type 4 at high wind speed operation in a microgrid](#)", AIP Journal of Renewable and Sustainable Energy, 2019.
2. H Mahvash, SA Taher, M Rahimi, M Shahidehpour, "[Enhancement of DFIG performance at high wind speed using fractional order PI controller in pitch compensation loop](#)", International Journal of Electrical Power & Energy Systems 104, 259-268, 2019.
3. Mojtaba Yavari, Sayyed Hossein Edjtahed, Seyed Abbas Taher, "[A non-linear controller design for UPQC in distribution systems](#)", Alexandria engineering journal 57 (4), 3387-3404, 2018.
4. Seyed Abbas Taher, Hosein Tahami Fard, Ehsan Bolor Kashani, "[New switching approach for DVR using one cycle control method](#)", Ain Shams Engineering Journal, 9 (4), 2227-2254, 2018.
5. Navid Kariminejad, Seyed Abbas Taher, Mohammad Shahidehpour, Koresh Khateri, "[A hierarchical governor/turbine and electric vehicles optimal control framework for primary frequency support in power systems](#)", IEEE Transactions on Smart Grid 9 (6), 6702-6712, 2018.
6. S Falahati, SA Taher, M Shahidehpour, "[Grid secondary frequency control by optimized fuzzy control of electric vehicles](#)", IEEE Transactions on Smart Grid 9 (6), 5613-5621, 2018.
7. Seyed Abbas Taher, Zahra Dehghani Arani, Mohsen Rahimi, Mohammad

- Shahidehpour, "[A new approach using combination of sliding mode control and feedback linearization for enhancing fault ride through capability of DFIG-based WT](#)", International Transactions on Electrical Energy Systems, 28 (10), e2613, 2018.
8. MJK Pour, SA Taher, M Shahidehpour, "[Back-electromotive force analysis of permanent magnet micromotor using applicational 3D analytical model](#)", IET Science, Measurement & Technology 12 (5), 634-639, 2018.
 9. H Mahvash, SA Taher, M Rahimi, M Shahidehpour, "[DFIG performance improvement in grid connected mode by using fractional order \[PI\] controller](#)", International Journal of Electrical Power & Energy Systems 96, 398-411, 2018.
 10. SA Taher, ZD Arani, M Rahimi, M Shahidehpour, "[Model predictive fuzzy control for enhancing FRT capability of DFIG-based WT in real-time simulation environment](#)", Springer-Energy Systems, 1-21, 2017.
 11. H Mahvash, SA Taher, M Rahimi, "[A new approach for power quality improvement of DFIG based wind farms connected to weak utility grid](#)", Ain Shams Engineering Journal 8 (3), 415-430, 2017.
 12. Zahra Dehghani Arani, Seyed Abbas Taher, Amir Ghasemi, Mohammad Shahidehpour, "[Application of Multi-Resonator notch frequency control for tracking the frequency in low inertia microgrids under distorted grid conditions](#)", IEEE Transactions on Smart Grid, 2017.
 13. Hossein Mahvash, Seyed Abbas Taher, Mohsen Rahimi, Mohammad Shahidehpour, "[A new approach for mitigating blade passing effects and power quality improvement of grid-connected DFIG wind turbine](#)", Journal of Renewable and Sustainable Energy 9 (4), 043304, 2017.
 14. Mostafa Jafari, Seyed Abbas Taher, "[Thermal survey of core losses in permanent magnet micro-motor](#)", Energy 123, 579-584, 2017.
 15. S FALAHATI, SA TAHER, M HAJIAKBARI, "[DESIGN OF FUZZY-PID CONTROLLER OPTIMIZED BY IMPERIALIST COMPETITIVE ALGORITHM TO CONTROL OF AVR SYSTEM](#)", JOURNAL OF SOFT COMPUTING AND INFORMATION TECHNOLOGY (JSCIT) 5 (40075), 66-75, 2017.
 16. H Mahvash, SA Taher, "[A look-up table based approach for fault ride-through capability enhancement of a grid connected DFIG wind turbine](#)", Sustainable Energy, Grids and Networks, Sustainable Energy, Grids and Networks 10, 128-140, 2017.
 17. S Falahati, SA Taher, M Shahidehpour, "[Smart Deregulated Grid Frequency Control in Presence of Renewable Energy Resources by EVs Charging Control](#)", IEEE Trans. Smart Grid, 2016.
 18. S Falahati, SA Taher, M Shahidehpour, "[A new smart charging method for EVs for frequency control of smart grid](#)", International Journal of Electrical Power & Energy Systems 83, 458-469, 2016.

19. SA Taher, M Zolfaghari, C Cho, M Abedi, M Shahidehpour, "[A New Approach for Soft Synchronization of Microgrid Using Robust Control Theory](#)", IEEE Transactions on Power Delivery, 2016.
20. S Falahati, SA Taher, M Shahidehpour, "[Grid frequency control with electric vehicles by using of an optimized fuzzy controller](#)," Applied Energy 178, 918-928, 2016.
21. SA Taher, M Jafari, M Pakdel, "[A New Approach for Modeling Electromagnetic Railguns](#)", IEEE Transactions on Plasma Science 43 (5), 1733-1741, 2016.
22. SA Taher, M Zolfaghari, "[Designing robust controller to improve current-sharing for parallel-connected inverter-based DGs considering line impedance impact in microgrid networks](#)," International Journal of Electrical Power & Energy Systems 63, 625-644.
23. M Farshadnia, SA Taher, "[Current-based direct power control of a DFIG under unbalanced grid voltage](#)," International Journal of Electrical Power & Energy Systems 62, 571-582.
24. M Zolfaghari, SA Taher, "[Fuzzy Approximation Model-based Robust Controller Design for Speed Control of BLDC Motor](#)," International Journal of Engineering-Transactions C: Aspects 28 (3), 426.
25. Seyed Abbas Taher, Hamed Mahmoodi, Hojjat Aghaamouei, "[Optimal PMU location in power systems using MICA](#)", Alexandria Engineering Journal, 2015.
26. SA Taher, S Mansouri, "[Optimal PI controller design for active power in grid-connected SOFC DG system](#)," International Journal of Electrical Power & Energy Systems 60, 268-274.
27. SA Taher, SA Afsari, "[Optimal location and sizing of DSTATCOM in distribution systems by immune algorithm](#)," International Journal of Electrical Power & Energy Systems 60, 34-44.
28. SA Taher, M Malekpour, M Farshadnia, "[Diagnosis of broken rotor bars in induction motors based on harmonic analysis of fault components using modified adaptive notch filter and discrete wavelet transform](#)," Simulation Modelling Practice and Theory 44, 26-41.
29. SA Taher, MH Fini, SF Aliabadi, "[Fractional order PID controller design for LFC in electric power systems using imperialist competitive algorithm](#)," Ain Shams Engineering Journal 5 (1), 121-135.
30. SA Taher, M Pakdel, "[Solution of multi-objective optimal reactive power dispatch using pareto optimality particle swarm optimization method](#)", Journal of AI and Data Mining (JAIDM) 2 (1), 39-52, 2014.
31. SA Taher, S Akbari, SM Hosseini", [Robust Controller Design for IG Driven by Variable-Speed in WECS Using \$\mu\$ -Synthesis](#), Energy Engineering & Management, 2 (4), 2-11,

2013.

32. SA Taher, R Bagherpour, "[A new approach for optimal capacitor placement and sizing in unbalanced distorted distribution systems using hybrid honey bee colony algorithm](#)," International Journal of Electrical Power & Energy Systems 49, 430-448.
33. SA Taher, M Farshadnia, MR Mozdianfard, "[Optimal gain scheduling controller design of a pitch-controlled VS-WECS using DE optimization algorithm](#)," Applied Soft Computing 13 (5), 2215-2223.
34. SA Taher, R Hemmati, A Abdolalipour, S Akbari, "[Comparison of different robust control methods in design of decentralized UPFC controllers](#)," International Journal of Electrical Power & Energy Systems 43 (1), 173-184.
35. SA Taher, MK Amooshahi, "[New approach for optimal UPFC placement using hybrid immune algorithm in electric power systems](#)" International Journal of Electrical Power & Energy Systems 43 (1), 899-909.
36. SA Taher, SA Afsari, "[Optimal location and sizing of UPQC in distribution networks using differential evolution algorithm](#)", Mathematical Problems in Engineering 2012.
37. I Sadeghkhan, A Ketabi, SA Taher, "[Mitigation of Shunt Reactor Overvoltages Using Delta-Bar-Delta and Directed Random Search Algorithms](#)", Przegląd Elektrotechniczny 88 (12a), 269-274.
38. SA Taher, M Malekpour, "[A novel technique for rotor bar failure detection in single-cage induction motor using FEM and MATLAB/SIMULINK](#)", Mathematical Problems in Engineering 2011.
39. SA Taher, MK Amooshahi, "[Optimal placement of UPFC in power systems using immune algorithm](#)", simulation modelling practice and theory 19 (5), 1399-1412.
40. SA Taher, M Hasani, A Karimian, "[A novel method for optimal capacitor placement and sizing in distribution systems with nonlinear loads and DG using GA](#)", Communications in Nonlinear Science and Numerical Simulation 16 (2), 851-862.
41. SA Taher, A Karimian, M Hasani, "[A new method for optimal location and sizing of capacitors in distorted distribution networks using PSO algorithm](#)", Simulation Modelling Practice and Theory 19 (2), 662-672.
42. SA Taher, S Akbari, A Abdolalipour, R Hematti, "[Robust decentralized controller design for UPFC using \$\mu\$ -synthesis](#)", Communications in Nonlinear Science and Numerical Simulation 15 (8), 2149-2161.
43. SA Taher, I Sadeghkhan, "[Estimation of magnitude and time duration of temporary overvoltages using ANN in transmission lines during power system restoration](#)", Simulation Modelling Practice and Theory 18 (6), 787-805.

44. SA Taher, AA Abrishami, "[UPFC location and performance analysis in deregulated power systems](#)", Mathematical Problems in Engineering 2009.
45. H Besharat, SA Taher, "[Congestion management by determining optimal location of TCSC in deregulated power systems](#)", International Journal of Electrical Power & Energy Systems 30 (10), 563-568.
46. M Abedi, S.A. Taher, A.K. Sedigh, "[Controller design using, \$\mu\$ -synthesis for static VAR compensator to enhance the voltage profile for remote induction motor loads](#)", Electric Power Systems Research 46 (1), 35-43.

MSC and PHD Theses Supervision

- **70 Master Science Students (from 2007 to now)**
- **2 PhD students (from 2014 to now)**

Honors and Awards

- **Distinguished researcher at the University of Kashan, 2013, 2016, 2018.**
- **Distinguished teacher at the University of Kashan, 2010, 2011, 2013, 2014, 2016.**
- **IEEE Senior Member, 2017.**