



**Mohsen Ahmadnia**

## **PERSONAL DATA**

**Degree** :Assistant professor, Faculty of Electrical & Computer Engineering ,  
Hakim Sabzevari University, Iran, Sabzevar, 9617976487,  
<http://staff.hsu.ac.ir/en/?char=A>  
[https://scholar.google.com/citations?hl=en&user=u3tqxE4AAAAJ&view\\_op=list\\_works&sortby=pubdate](https://scholar.google.com/citations?hl=en&user=u3tqxE4AAAAJ&view_op=list_works&sortby=pubdate)

**Telephone number** : +985144012830

**E-mail** : m.ahmadnia@hsu.ac.ir, mn.ahmadnia@gmail.com,

**Date of Birth** : 15<sup>th</sup> Sep 1985

**Nationality** : Iranian

**Languages** : Persian, Russian, English.

## **EDUCATION**

**Ph.D.**, Peoples' Friendship University of Russia, Moscow, 2015

**M.Sc.**, Shiraz University, 2011

**B.S.**, University of Hormozgan, 2008.

## **TEACHING**

### **Courses Taught (Beginning Fall 2015)**

Undergraduate Courses:

1 - Special machine, 2 - Electric machines (1), 3 - Insulation and high pressure  
4-Electrical machines (2) 4. Electric energy production, 5. Electric machines  
(2),

Masters Courses:

1. Advanced technology power plants, 2. Quality of electric power, 3.The  
general theory of electrical machines, 4. Insulation and pressure technology.

## **PROFESSIONAL ACTIVITIES**

1. Advisor and Director of Hakim Sabzevari University in the Institute of Science and Technology, Iran - Tehran, in the conclusion of agreements, contracts, research projects and relations with the industry of Hakim Sabzevari University of Science and Technology, (from 2016).
2. Industry Relations Manager, Faculty of Electrical Engineering and Computer, Hakim Sabzevari University- Iran ( from 2016 )

## **Refereed Journal Publications**

1. «Investigation of 2DOF FOPI controller for synchronous generator voltage stability», Mohsen Ahmadnia, Ahmad Hajipour, Farhad Firouzi, International Journal of Nonlinear Analysis and Applications, 2022, DOI [10.22075/IJNAA.2022.28632.3946](https://doi.org/10.22075/IJNAA.2022.28632.3946) . *ISC*
2. «Tracking the maximum power point of a combined wind and solar power plant with the help of a colonial competition algorithm», Mohsen Ahmadnia, Ahmad Hajipour, Ali Gholamzadeh, International Journal of Nonlinear Analysis and Applications, 2022, DOI. [10.22075/IJNAA.2022.27736.3692](https://doi.org/10.22075/IJNAA.2022.27736.3692) . *ISC*
3. «Comparison between radial basis neural network improvement method with SALP optimization algorithm (RBF-SSA) with other hybrid optimization algorithms», Mohsen Ahmadnia, Ahmad Hajipour, Seyed Saeed Bani Fatemi, International Journal of Nonlinear Analysis and Applications, 2022, DOI. [10.22075/IJNAA.2022.27662.3673](https://doi.org/10.22075/IJNAA.2022.27662.3673) . *ISC*
4. «Adaptive load frequency control using Lager network-based model predictive control and regression least squares estimation for three-zone power system», Vahidreza Jafarinia, Mohsen Ahmadnia, Ahmad Hajipour, Journal of Nonlinear Systems in Electrical Engineering, Certificate of acceptance of the article from the chief editor of the journal. 2022 . *ISC*
5. «Relationship between mechanical properties, microstructure and texture evaluations during hot deformation of AZ63 magnesium alloy», Kaviani, M; Ebrahimi, GR; Ezatpour, hamidreza; Ahmadnia, M, Materials Research Express, Vol. 6, No. 6, March 2019, pp 1-10. *JCR*.
6. «Optimization of the Fuel Consumption for the Vehicle by Increasing the Efficiency of the Electrical Transmission System», Mohsen Ahmadnia, Lecture Notes in Electrical Engineering (LNEE), Vol. 480, July 2018, pp 465-471. *Scopus*.
7. «An Overview on the Probabilistic Safety Assessment (PSA), the Loss of External Power Source Connected to the Nuclear Power Plant», Mohsen Ahmadnia, Lecture Notes in Electrical Engineering (LNEE), Vol. 480, July 2018, pp 453-463. *Scopus*.
8. « Modified Projective Synchronization of Chaotic Systems with Noise Disturbance, an Active Nonlinear Control Method», Hamed Tirandaz, Mohsen Ahmadnia, Hamid Reza Tavakoli,, International Journal of Electrical and Computer Engineering (IJECE), Vol. 7, No. 6, December 2017, pp. 1 – 9. *Scopus*.
9. «ADAPTIVE PROJECTIVE LAG SYNCHRONIZATION OF T AND LU CHAOTIC SYSTEMS», Hamed Tirandaz, Mohsen Ahmadnia, Hamid Reza Tavakoli,, International Journal of Electrical and Computer Engineering (IJECE), Vol.7, No.6, December 2017. *Scopus*.
10. «GEOMETRIC-TOPOLOGICAL BASED ARABIC CHARACTER RECOGNITION, A NEW APPROACH», Hamed Tirandaz, Mohsen Ahmadnia, Hamid Reza Tavakoli,

11. « Расчетные исследования автомобильного двигателя на режимах испытательных циклов», С.В. Гусаков, Мохсен Ахмадния, В.А. Марков., Машиностроение 2016, № 1 (670), с. 13 - 15. **ВАК**.
12. «Расчетные исследования двигателя автомобиля, оборудованного электромеханической трансмиссией и силовым аккумулятором», Гусаков С.В., Мохсен Ахмадния, В.А. Марков., ИЗВЕСТИЯ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ. МАШИНОСТРОЕНИЕ - 2015 №5, с. 44 – 54. **ВАК**.
13. «ЭЛЕКТРОМЕХАНИЧЕСКАЯ ТРАНСМИССИЯ КАК СПОСОБ УЛУЧШЕНИЯ ТОПЛИВНОЙ ЭКОНОМИЧНОСТИ СИЛОВОЙ УСТАНОВКИ АВТОМОБИЛЯ», ГУСАКОВ С.В., Мохсен Ахмадния, МАРКОВ В.А., АФАНАСЬЕВА И.В., Автомобильная промышленность 2015, №06, с. 5-8. **ВАК**.
14. « ТОПЛИВНАЯ ЭКОНОМИЧНОСТЬ СИЛОВОЙ УСТАНОВКИ АВТОМОБИЛЯ С ЭЛЕКТРОМЕХАНИЧЕСКОЙ ТРАНСМИССИЕЙ», ГУСАКОВ С.В., АФАНАСЬЕВА И.В., Мохсен Ахмадния, МАРКОВ В.А., Вестн. Волгогр. гос. ун-та. Сер. 10, Иннов. деят. 2015. № 1 (16), с. 53-62. **ВАК**.
15. «Сравнение по эксплуатационной топливной экономичности бензинового и дизеля при различных типах трансмиссии автомобиля», Афанасьева И.В., Мохсен Ахмадния, Гусаков С.В, Сб. Научн. Трудов молодежной международной научно-практической конференции «Молодые ученые – альтернативной транспортной энергетике» 20-21 ноября 2014 г. – Воронеж: Изд-во ФГБОУ ВПО «ВГЛТА», с. 13 – 15. **ВАК**.
16. «ИССЛЕДОВАНИЕ РЕЗЕРВОВ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ РАБОТЫ ДВС В СОСТАВЕ ГИБРИДНОЙ СИЛОВОЙ УСТАНОВКИ», С.В. Гусаков, Мохсен Ахмадния, Известия ВолгГТУ. Серия: Процессы преобразования энергии и энергетические установки. – 2014, № 18 (145), вып.6, с. 41- 44. **ВАК**.
17. «Выбор подходящего местоположения для измерения мощности Исследовательского реактора Тегерана с использованием камеры деления и Программы расчёта переноса нейтронов и протонов методом Монте-Карло», Мохсен Ахмадния, Хосейн Халафи, Мохаммедреза Эскандери, Инновации и инвестиции, Научно - аналитический журнал 2014, № 11, с. 225-227. **ВАК**.
18. «ПРОЕКТИРОВАНИЕ И СТРОИТЕЛЬСТВО КАНАЛА ИЗМЕРЕНИЯ УРОВНЯ МОЩНОСТИ ДЛЯ ТЕГЕРАНСКОГО ИССЛЕДОВАТЕЛЬСКОГО РЕАКТОРА С ИСПОЛЬЗОВАНИЕМ КАМЕРЫ ДЕЛЕНИЯ», Мохсен Ахмадния, Хосейн Халафи, Мохаммедреза Эскандери, “Научное обозрение” 2014, № 11, с.65-68. **ВАК**.
19. «Применение электродвигателей в гибридных электрических системах автомобиля», Мохсен Ахмадния, в журнал «Естественные и технические науки» №5 2014 г. с. 110 – 114. **ВАК**.

## Conference Proceedings

1. «The effect of heat exchanger temperature control on improving solar water heater performance», Mohsen Ahmadnia, Mohamadhasan Nikkhah, Fifth International Conference on Electrical, Computer and Mechanical Engineering, Iran, Tehran, 4 JULY, 2020.
2. «Proposed multilevel voltage source converter topology», Mohsen Ahmadnia, Farzad Mehrazin, , Mohammadamin Aalami, Ebrahim Babaei, Fifth International Conference on Electrical, Computer and Mechanical Engineering, Iran, Tehran, 4 JULY, 2020.
3. «Research and acquire the ability to evaluate the potential of solar energy using satellite images and numerical models», Mohsen Ahmadnia, Mohamadhasan Nikkhah, Fourth International Conference on Research in Science and Engineering, Thailand, Bangkok, 18 JULY, 2019.
4. «Effect of dust on the amount of radiation received by solar systems», Mohsen Ahmadnia, Mohsen Bakhshabadi, Fourth International Conference on Research in Science and Engineering, Thailand, Bangkok, 18 JULY, 2019.
5. «The role of control optimization in improving the operation of solar water heating systems in green buildings», Mohsen Ahmadnia, Mohamadhasan Nikkhah, Zahra Shateri, Fifth National Conference on Electrical and Mechatronics Engineering of Iran, Iran, Tehran, 13 DECEMBER, 2019.
6. « Features of the Automobile Engine Operation Which the EUDC and HWFET Test Cycle is Implemented», Mohsen Ahmadnia, Third International Conference on Electrical Engineering, Iran, Tehran, 7 SEPTEMBER, 2018.
7. «Appropriate location for fission chamber detector in Tehran Research Reactor», Mohsen Ahmadnia, Third International Conference on Electrical Engineering, Iran, Tehran, 7 SEPTEMBER, 2018.
8. «Improvement of fuel indicators economics of power installation of vehicle with electromechanical transmission», Mohsen Ahmadnia, Third International Conference on Knowledge and Innovation in Engineering, Science and Technology, Iran, Tehran, 19 JULY, 2018.
9. «Optimal Power Management of the Motor Vehicle Equipped with Electromechanical and Power Accumulator», Mohsen Ahmadnia, Third International Conference on Knowledge and Innovation in Engineering, Science and Technology, Iran, Tehran, 19 JULY, 2018.
10. «Analyzing Nuclear Codes RELAP - MELCOR - CONTAIN and its application in Iran», Mohsen Ahmadnia and Farshid Kioumars, Fourth International Conference on Engineering of knowledge and innovation, Iran University of Science & Technology, Iran, Tehran, 22 December, 2017.

11. «Using the Computer Program "CYCLE" For Optimizing the Characteristics Combined Propulsion System of the Vehicle Electrical», Mohsen Ahmadnia, International Conference on Fundamental Research in Electrical Engineering, ALLAMEH TABATABAI UNIVERSITY, Iran, Tehran, 5 JULY, 2017.
12. «Reactor core power measurement using fission chamber (FC) and its application in Tehran Research Reactor (TRR) », Mohsen Ahmadnia, International Conference on Fundamental Research in Electrical Engineering, ALLAMEH TABATABAI UNIVERSITY, Iran, Tehran, 5 JULY, 2017.
13. « ИСПОЛЬЗОВАНИЕ КОМПЬЮТЕРНОЙ ПРОГРАММЫ «ЦИКЛ» ДЛЯ ОПТИМИЗАЦИИ КАРАКТЕРИСТИК КОМБИНИРОВАННОЙ СИЛОВОЙ УСТАНОВКИ АВТОМОБИЛЯ», Mohsen Ahmadnia, в работе VIII международной научно-практической конференции “ Инженерные системы - 2015”, на инженерном факультете Российского университета дружбы народов, Россия, Москва, 20-22 апреля, 2015.
14. «Повышение топливно-экономических показателей силовой установки автомобиля, оборудованного электромеханической трансмиссией», Mohsen Ahmadnia, 8th Scientific Conference of Iranian Students in The Russian Federation St. Petersburg, Russia, April 25-26, 2015.
15. «ОПТИМАЛЬНОЕ УПРАВЛЕНИЕ МОЩНОСТЬЮ ДВИГАТЕЛЯ АВТОМОБИЛЯ, В СОСТАВЕ ГИБРИДНОЙ СИЛОВОЙ УСТАНОВКИ» Mohsen Ahmadnia, 8th Scientific Conference of Iranian Students in the Russian Federation St. Petersburg, Russia, April 25-26, 2015.
16. «Оптимизация энергетических потоков гибридной силовой установки автомобиля», международный симпозиум “Интеллектуальные системы - 2014”, РУДН, с. 426-432, Россия, Москва, 30 июня – 4 июля 2014г.
17. «Electric motors in hybrid electric vehicle system application programs», Mohsen Ahmadnia, 7<sup>th</sup> Annual Scientific Conference of Iranian Students in Russian Federation, Gubkin Russian State University of oil and Gas , Russia , Moscow ,12 April 2014.
18. «Control algorithm in the motors AC, synchronous and asynchronous systems for hybrid electric vehicles», Mohsen Ahmadnia, 7<sup>th</sup> Annual Scientific Conference of Iranian Students in Russian Federation, Gubkin Russian State University of oil and Gas , Russia , Moscow ,12 April 2014.
19. «Некоторые аспекты оптимизации характеристик гибридной силовой установки автомобиля», в работе VII международной научно- практической конференции “ Инженерные системы - 2014”, на инженерном факультете Российского университета дружбы народов, Россия, Москва, 16-18 апреля .
20. «Design and construction of power measurement channel for Tehran Research using fission chamber», Mohsen Ahmadnia, 6<sup>th</sup> Annual Scientific Conference of Iran Students in Russian Federation, organized by Moscow Islamic Students Association, Russia, Moscow, 2 March 2013.

21. «Build a device to measure the research reactor by FC using MCNP code», Mohsen Ahmadnia, 6<sup>th</sup> Annual Scientific Conference of Iran Students in Russian Federation, organized by Moscow Islamic Students Association , Russia, Moscow, 2 March 2013.
22. «Designing and constructing a measuring channel for the Tehran Research Reactor by a fissure chamber», The 5th Iranian Student Conference in the European Union at the State University of Moscow, Russia, Moscow, March 2012.
23. «Measuring the Power of the Tehran Research Reactor using fission chamber detectors (FC) », The 17th Iranian Nuclear Conference, Iran, Isfahan, February 23-24, 2011.
24. «A New Method for Locating Errors in Distribution Systems by Wavelet and Neural Network Transformation», Eighteenth International Conference on Electrical Engineering of Iran, Iran, Isfahan, 22 December 2010.

### **Students under the supervision and guidance**

PhD student in Electrical Engineering - Power (Supervisor)

Eleven graduate students- Master- in Electrical Engineering - Power (Supervisor)

Thirty-three Graduate Students - Bachelor - Electrical Engineering - Power (Supervisor)

Three graduate students in Electrical Engineering - Power (Master of Referee)

### **Committees**

1. Executive Secretary of the 5th Engineer's Day, February 22-23, 2019 - Hakim Sabzevari University, Iran, Sabzevar.
2. Member of the Scientific Committee of the 5th International Conference on Electrical and Computer Engineering with its Native Speakers - January 2018 - Allameh Tabatabai University Tehran-Iran.
3. Member of the Scientific Committee of the International Conference on Basic Research in Electrical Engineering - July 2017 - Allameh Tabataba'i University Tehran-Iran.
4. Scientific secretary and referee of Engineering Engineering at the 8th Iranian Student Conference in the European Union in April 2015 - University of St. Petersburg, Russia.

***Date of most recent resume update.***

***December, 19, 2022***