

**Name:** Amar Bouafassa

**Rank:** Maître de Conférences Classe «A»

**Department:** Department of Electrical, Electronic, and Automatic Engineering.

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**Educational Profile:**

- Ph.D in Automatic. November 2015. Ferhat Abbas, Sétif-1 University, Algeria.
- M.S in Automatic. June 2011. Ferhat Abbas, Sétif-1 University, Algeria.

**Honors and Distinctions**

**Scientific Activities & Membership of Scientific Societies**

1. School's Scientific Council Member
2. School's commission visibility member

**List of Current Research Projects**

Title: Contribution to the control and stability of electro-energetic systems by integrating FACTS devices and renewable energies.

Period: 2020-2024.

Post: PI

Financial support: Algerian Ministry of Higher Education and Scientific Research.

No. A01L08ES250120200001.

**List of Journal Publications**

1. S.E Halledj, A. Bouafassa . Novel anti-disturbance fast terminal sliding mode control with improved quick reaching law for DC-DC buck converter. Proc IMechE Part I: Journal of Systems and Control Engineering.2023, doi: 10.1177/0959651823115322.
2. S.E Halledj, A. Bouafassa . Anti-disturbance GITSMC with quick reaching law for speed control of PMSM drive. Bulletin of Electrical Engineering and Informatics , 2022, vol. 11(6):3228-3238.
3. A. Bouafassa, L. M. Fernández-Ramírez. A DSP-based implementation of fuzzy logic and predictive current control for a Sheppard-Taylor power factor correction converter. International Journal of Circuit Theory and Applications, 2022, vol. 50(3): 812-826.
4. A.Bouafassa, L.M. Fernández-Ramírez, B. Babes. Power quality improvements of arc welding power supplies by modified bridgeless SEPIC PFC converter. Journal of Power Electronics, 2020, vol. 20:1445–1455.
5. A.Bouafassa, L.Rahmani, S. Mekhilef. Design and real time implementation of single phase boost power factor correction converter. ISA Transactions, 2015, vol.55: 267-274.
6. A.Bouafassa, L. Rahmani, A. Kessal, B. Babes. Unity power factor converter based on a fuzzy controller and predictive input current. ISA Transactions. 2014, vol.53(6):1817-1821

### **List of Conference Papers**

1. S. E. Halledj, A. Bouafassa. Intelligent control of efficient bridgeless SEPIC PFC converter powered BLDC Motor. 1st International Conference on Autonomous Systems and their Applications (ICASA'22). 2022, Taref, Algeria.
2. S. E. Halledj, A. Bouafassa. A Particle Swarm Optimization-trained artificial neural network of three stage maximum power tracking solar charge controller. 1er conference internationale Electrotechnique et Technologies Modernes. 2022, Soukahres, Algeria, doi: 10.1250/conf.10.
3. K. Benayad, T. Zabaïou and A. Bouafassa. Wide-Area Based SVC-Fractional Order PID Controller for Damping Inter-Area Oscillations. 6th IEEE International Energy Conference (ENERGYCon), 2020, pp. 610-615
4. A. Bouafassa, L. Rahmani, B. Babes and R. Bayindir. Experimental design of a finite state model predictive control for improving power factor of boost rectifier. IEEE 15<sup>th</sup> International Conference on Environment and Electrical Engineering (EEEIC), 2015, pp. 1556-1561, doi: 10.1109/EEEIC.2015.7165403.

### **List of Current Doctoral Research Students Supervision**

1. Salah Eddine Halledj