

## **003062460Modele CV Enseignant**

**Name:** Tarik ZABAIYOU

**Rank:** Maitre de Conference A

**Department:** Electronics, Electrical Engineering and Automation

**Email Address:** [tarek.zabaiou@enp-constantine.dz](mailto:tarek.zabaiou@enp-constantine.dz), [tzabaiou@gmail.com](mailto:tzabaiou@gmail.com)

### **Educational Profile:**

- Doctorat Science/Ph.D. in Electrical Engineering, École de Technologie Supérieure (ÉTS), Montreal, Quebec, Canada, 2010.
- Master in Automatic Control/M.Ing., École de Technologie Supérieure (ÉTS), Montreal, Quebec, Canada, 2005.
- Engineer Diploma in Automatic Control, Ferhat Abbas university, Sétif, Algeria, 1994.

### **Honors and Distinctions**

- ✓ 2016 Premium Award for Best Paper in IET Generation, Transmission & Distribution.

### **Scientific Activities & Membership of Scientific Societies**

Peer reviewer for:

- ✓ IET Generation, Transmission & Distribution.
- ✓ International Transactions on Electrical Energy Systems.
- ✓ IEEE Transactions on Control Systems Technology.
- ✓ IEEE Transactions on Power Delivery.

### **List of Current Research Projects**

PRFU Research Project:

Project code : A01L08ES25012020000.

Title : Contribution to electric power systems control and stability by integrating FACTS devices and renewable energies.

### **List of Journal Publications**

1. Benayad K, Zabaiou T, Bouafassa A, 2022, Optimal Fractional SSSC Auxiliary Controller For Power System Low Frequency Oscillations Damping Improvement, Bulletin of Electrical Engineering and Informatics (accepted for publication).
2. Zabaiou T, Dessaint L-A, Kamwa I, 2014, Preventive control approach for voltage stability improvement using voltage stability constrained optimal power flow based on static line voltage stability indices, IET Generation, Transmission and Distribution, Vol: 8, Issue: 5, Pages: 924-934, ISSN: 1751-8687.
3. Zabaiou T, Dessaint L-A, Okou F-A , Grondin R, 2011, Coordinating control of static VAR compensators and synchronous generators based on selected remote measurements, Electric Power Components and Systems, Vol: 39, N: 5, Pages: 405-422, ISSN: 1532-5016.

4. Zabaïou T, Okou F-A., Dessaint L-A, Akhrif O, Time-delay compensation of a wide-area measurements-based hierarchical voltage and speed regulator, Canadian Journal of Electrical and Computer Engineering, Vol: 33, N: 2, Pages: 77-85, ISSN: 0840-8688.

#### **List of Conference Papers**

1. Benayad K, Zabaïou T, Bouafassa A, 2022, Design of an Optimized Fractional-Order Fuzzy PID Based-SSSC Controller for Power System Oscillations Damping, 2<sup>nd</sup> International Conference on Advanced Electrical Engineering (ICAEE), Constantine, Algeria.
2. Halledj SE, Bouafassa A, Zabaïou T, 2022, ANFIS based Proportional Integral Non-Singular Terminal Sliding Mode MPPT Control for PV system, 2<sup>nd</sup> International Conference on Advanced Electrical Engineering (ICAEE), Constantine, Algeria.
3. Benayad K, Zabaïou T, Bouafassa A, 2020, Wide-Area Based SVC-Fractional Order PID Controller For Damping Inter-Area Oscillations", 6th IEEE International Energy Conference (ENERGYCon), Gammarth, Tunis, Tunisia.
4. Bouafassa A, Babes B, Rahmani L, Zabaïou T, 2019, Predictive Control of Direct Matrix Converter of Wind Energy Conversion System Connected to Grid. 1st International Conference on Sustainable Renewable Energy Systems and Applications (ICSRESA), Tebessa, Algeria.
5. Zabaïou T, Dessaint L-A, Kamwa I, 2014, A Comparative Study of VSC-OPF Techniques for Voltage Security Improvement and Losses Reduction, IEEE Power and Energy Society General Meeting (PES), Washington, DC, USA.
6. Zabaïou T, Dessaint L-A, 2013, VSC-OPF based on line voltage indices for power system losses minimization and voltage stability improvement, IEEE Power and Energy Society General Meeting (PES), Vancouver, BC, Canada.
7. Zabaïou T, Dessaint L-A, Brunelle P, 2012, Development of a new library of IEEE excitation systems and its validation with PSS/E, IEEE Power and Energy Society General Meeting, San Diego, California, USA.
8. Zabaïou T, Dessaint L-A, Okou F-A, Grondin R, 2010, Wide-area coordinating control of SVCs and synchronous generators with signal transmission delay compensation," IEEE Power and Energy Society General Meeting, Minneapolis, Minnesota, USA.
9. Zabaïou T, Dessaint L-A, Okou F-A, Grondin R, 2008, Wide-area measurements based coordination of SVCs and synchronous generators," IEEE Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century, Pittsburgh, Pennsylvania, USA.

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

1. Khadidja BENAYAD