



1. Name and Academic Rank: Khaled Abdelghani Chahine, Associate Professor, Full Time

2. Education: Degrees, Discipline, Institution and Date:

- Ph.D., Electrical and Electronics Engineering, University of Nantes, France, 2010.
- M.Sc., Electronic Systems and Electrical Engineering, Polytech'Nantes, France, 2007.
- B.E., Electrical and Electronics Engineering, Lebanese University Faculty of Engineering, Branch III, Beirut, Lebanon, 2007.

3. Work Experience

- Beirut Arab University, Electrical and Computer Engineering Department, Electrical Power and Machines Engineering Program, Associate Professor, September 2016 – Present, Full Time.
- Lebanese International University, Electrical and Electronics Engineering Department, Assistant Professor, 2011 – 2016, Full Time.
- Blaise Pascal University and Landis+Gyr, Postdoc, 2010 – 2011.

4. Honors and Awards

- Second-Place Award, Automated Solid Waste Segregation, *19th Engineering Projects Day (Smart Structures)*, Beirut Arab University, Debbieh, May 2017.
- First-Place Award, A Smart Reverse Osmosis System, *1st Innovate for Lebanon National Competition (Water and Wastewater Track)*, Rafik Hariri University, May 2017.

5. Service Activities

- Reviewer: Signal Processing, IET Signal Processing, Journal of Computing in Civil Engineering, Near Surface Geophysics, European Signal Processing Conference EUSIPCO, International Workshop on Advanced Ground Penetrating Radar.

6. Research Interests

- Control Theory
- Statistical Signal Processing
- Inverse Problems
- Non-destructive Testing and Evaluation
- Nonintrusive Appliance Load Monitoring.

7. National Research Cooperation

- Project 1 in collaboration with the Lebanese University
 - a. Title: Smart Poultry Farm Control Using Wireless Sensor Network Based on ZigBee
 - b. Grant: 10,000,000 LBP from the Lebanese University
 - c. Duration: 1 year (2017 - 2018)
- Project 2 in collaboration with the Lebanese International University
 - a. Title: Development of a Novel Signal Processing Technique Applied to the PEA Cell Used for the Electrical Characterization of Insulators
 - b. Grant: 14,000,000 LBP from the CNRS
 - c. Duration: 2 years (2017 - 2019)

8. Principal Publications and Presentations



9.1 Journal Publications

1. **K. Chahine**. Rotor Fault Diagnosis in Induction Motors by the Matrix Pencil Method and Support Vector Machine. *International Transactions on Electrical Energy Systems*, Vol. 28, Issue 10, **2018**.
2. **K. Chahine**, R. Murr, M. Ramadan, H. El Hage, and M. Khaled. Use of Parabolic Troughs in HVAC Applications – Design, Calculations and Analysis. *Case Studies in Thermal Engineering*, Vol. 12, Pages 285-291, **2018**.
3. M. Kanaan and **K. Chahine**. CFD Study of Ventilation for Indoor Multi-Zone Transformer Substation. *International Journal of Heat and Technology*, Vol. 36, Issue 1, Pages 88-94, **2018**.
4. **K. Chahine** and B. Ghazal. Automatic Sorting of Solid Wastes Using Sensor Fusion. *International Journal of Engineering and Technology*, Vol. 9, Issue 6, Pages 4408-4414, **2017**.
5. B. Ghazal, K. Khatib, and **K. Chahine**. A Poultry Farming Control System Using a ZigBee-Based Wireless Sensor Network. *International Journal of Control and Automation*, Vol. 10, Issue 9, Pages 191-198, **2017**.
6. M. Tarnini, N. Abdel Karim, and **K. Chahine**. Simulation of Leakage Current and THD Compensation in a Large PV System. *International Journal of Applied Engineering Research*, Vol. 12, Issue 19, Pages 8602-8608, **2017**.

9.2 Papers Book Section

1. C. Le Bastard, **K. Chahine**, Y. Wang, V. Baltazart, N. Pinel, C. Bourlier, and X. Derobert. Microwave Nondestructive Testing of Non-Dispersive and Dispersive Media Using High-Resolution Methods. *Book Non-Destructive Testing*, Intech (ID 5223), July **2016**.

9.3 Conference Proceedings

1. N. Meselmani, M. Khayrat, **K. Chahine**, M. Ghantous, and M. Hajj-Hassan. Pattern recognition of EMG signals: Towards adaptive control of robotic arms. *IMCET*, November **2016**, Beirut, Lebanon.
2. M. Arnaout, **K. Chahine**, and W. Salameh. Modeling and simulating a PWP cell for the electric characterization of space dielectric materials. *ACTEA*, July **2016**, Beirut, Lebanon.
3. A. Haddad, M. Ramadan, M. Khaled, and **K. Chahine**. An Investigation on Coupling Fuel Cell and Photovoltaic Systems for Power Generation. *ACTEA*, July **2016**, Beirut, Lebanon.
4. **K. Chahine**, M. Khaled, Z. Merhi, H. Jaber, and M. Ramadan. Power Generation from TEG: Parametric Analysis and New Concept. *ICREGA*, 8-10 February **2016**, Belfort, France. (Selected for a special issue)
5. B. Ghazal, K. El-Khatib, **K. Chahine**, and M. Kherfan. Smart Traffic Light Control System. *EECEA2016*, 21-23 April **2016**, Lebanese University, Faculty of Engineering, Beirut, Lebanon.
6. M. Arnaout, **K. Chahine**, M. Mannah, and R. Rammal. An Educational Electric Power Simulator. *ACTEA2016*, 13-15 July **2016**, Notre Dame University, Zouk Mosbeh, Lebanon.
7. M. Arnaout, W. Salameh, A. Assi, and **K. Chahine**. My PV TOOL: A MATLAB-Based Tool to Study the Series and Shunt Resistances in Photovoltaic Modules. *REDEC2016*, 13-15 July **2016**, Notre Dame University, Zouk Mosbeh, Lebanon.