

# Mr. Boualam Benlahbib

[bouallam30@gmail.com](mailto:bouallam30@gmail.com) / [bouallam30@uraer.dz](mailto:bouallam30@uraer.dz) / (+213)670327275

Unité de Recherche Appliquée en Energies Renouvelables, URAER, CDER  
47133 Ghardaia, Algeria



## Civil Status

First name: **Boualam**

Last name (Family name): **Benlahbib**

Date of birth: **20/07/1986**

Place of birth: **Touggourt, Ouargla**

Citizen: **Algerian**

Marital status: **Married**

Current address: **bloc 102 n°16 city Elmansour Zauia Labidia Touggourt Ouargla**

## Education:

- DSc (Habilitation) from Kasdi Merbah Ouargla university
- Ph.D, Electrical Engineering, field: Electronic Instrumentation.  
University of science and technology Houari Boumediene, Algeria. 2019  
Thesis: “supervision of hybrid system wind solar connected to the grid”
- Master (magister) of Engineering, Electrical Engineering, field: Electrotechnics.  
National Military school Alger, Algeria, 2009-2012.  
Thesis:” wind farm supervision”
- Bachelor’s (Engineer) degree of Electrical Engineering. Field: Electro-mechanics.  
University of Badji Mokhtar Annaba, Algeria, 2004-2009 (**first class honors**).

## Principle Areas of Interest

- Energy Efficiency and Conversion
- Renewable Energy Technology
- Power electronics DC-AC converters
- Wind Solar management power

## Teaching Experience

- Lab demonstrator  
Power electronics  
National Military school Alger, Algeria, 09/2010 to 06/2011 (**9 months**).
- Teaching Assistant  
Assessment  
University of hama lakhdar Elouad, 09/2012 to 01/2013 (**4 months**).
- Teaching Assistant  
Electrical circuit  
University of Ouargla, 01/2013 to 06/2013 (**6 months**).

## Research Experience

- Senior Research Fellow  
Unité de Recherche Appliquée en Energies Renouvelables, URAER  
CDER, Algeria. From 05/2013-present.
- Research assistant (**18 months**)  
PEARL Lab Faculty of Engineering University of Malaya, Malaysia. From **01/2016** to **06/2017**.
- Short time training at department of Electrical Engineering at Castilla la Mancha University , Ciudad Real Spain, December 2019.

## Professional Experience

- Training and cabinet wiring (application Diploma) STS Institute ANNABA
- Training SIEMENS Step 7 PLC Programmable (Application Diploma) STS Institute ANNABA
- Supervisor of line couscous production at Mills Jdeai for 3 months
- Skills and Techniques:
  - MATLAB Simulink for Energy Engineering
  - Programmation in Pic 16F , 18F and DSPF28335 experimental kit of Texas Instruments and Despace 1104.

## Languages known

, Arabic (native), English, French

## Journal Publications

- [1]. **B.Benlahbib**, N. Bouarroudj, S. Mekhilef, D.Abdeldjalil, T.Abelkrim,F.Bouchaffa,A Lakhdari ‘Experimental investigation of power management and control of a PV/wind/fuel cell/battery hybrid energy system microgrid’ *International Journal of Hydrogen Energy*. Vo.45, N°.53, PP.29110-29122 October2020, <https://doi.org/10.1016/j.ijhydene.2020.07.251>
- [2]. **B Benlahbib** (2020) “Wind farm active and reactive power management”, *International Journal of Ambient Energy*, DOI: 10.1080/01430750.2020.1861093
- [3]. **B.Benlahbib**, F.bouchafaa, B.Noureddine, S.mkhilef, “Fractional Order PID Controller for DC link Voltage Regulation in Hybrid System Including Wind Turbine- and Battery packs- Experimental validations” *Int. J. Power Electronics*, Vol. 10, No. 3,PP:289-313 2019
- [4]. **B. Benlahbib**, Noureddine Bouarroudj, Saad Mekhilef, Tameur Abdelkrim, Abdelkader Lakhdari , Farid Bouchafaa « A Fuzzy Logic Controller Based on Maximum Power Point Tracking Algorithm for Partially Shaded PV Array-Experimental Validation » *ELEKTRONIKA IR ELEKTROTECHNIKA*, ISSN 1392-1215, VOL. 24, NO. 4, 2018(ISI thomson)
- [5].N Bouarroudj, D Boukhetala, V Feliu-Battle, F Boudjema, **B Benlahbib** “Maximum power point tracker based on fuzzy adaptive radial basis function neural network for PV-system” *Energies* 2019, 12, 2827; doi:10.3390/en12142827
- [6].Ghania Boudechiche, Mustapha Sarra , **B.benlahbib**, Oualid Aissa |, Jean-Paul Gaubert 2020“Anti-Windup FOPID-Based DPC for SAPF Interconnected to a PV System Tuned

Using PSO Algorithm” *European Journal of Electrical Engineering (EJEE)* 22 (4-5), 313-324

- [7]. **B.Benlahbib**, F.bouchafaa, S.mkhilef, B.Noureddine, “Wind Farm Management Using Artificial Intelligent Techniques” *International Journal of Electrical and Computer Engineering (IJECE)* Vol 7, No 3: June 2017.

## Internationals Communications

- [1]. **B.Benlahbib**, F.bouchafaa, T.Ghennam, E. M.Berkouk, “ Study supervision of a wind farm in Algeria Adrar”, the second International Conference On energy and sustainable development 19-20 february 2013 ,Adrar university, Algeria.
- [2]. **B.Benlahbib**, B.Noureddine, F.bouchafaa, B.Bachir, “Fractional Order PI Controller for Wind Farm Supervision” International Conference On Industrial Engineering And Engineering Management (Ieem2014) ,9 - 12 December 2014 In Selangor – Malaysia.
- [3]. **B.Benlahbib**, F.bouchafaa, B.Noureddine, B.Bachir “ Proportional Distribution Algorithm For Wind Farm Supervision”, International Journal of Scientific Research & Engineering Technology (IJSET) ISSN:2356-5608 vol.2; copyright IPCO-2014(Tunisia conference).
- [4]. N. Bouarroudj, D Boukhetala, A Djari, Y Rais, **B Benlahbib** “FLC based Gaussian membership functions tuned by PSO and GA for MPPT of photovoltaic system: A comparative study Systems and Control” (ICSC), 2017 6th International Conference on, 317-322.
- [5]. N. Bouarroudj, D. Boukhetala , **B. Benlahbib** and B. Batoun “Sliding Mode Control based On Fractional order Calculus for DC-DC Converters” International Journal of Mathematical Modelling & Computations Vol. 05, No. 04, Fall 2015, 319- 333.
- [6]. **B.Benlahbib**, N. Bouarroudj, F. Bouchafaa, S. Mekhilef, “A Single Input T-S FLC Algorithm for PV System MPPT- Experimental Validation” 2017 International Conference on Artificial Intelligence in Renewable Energetic Systems.
- [7]. T. Abdelkrim; A. Lakhdari; A. Borni; K. Benamrane; N. Bouarroudj; **B. Benlahbib**, Closed loop for regulation of AC voltages of cascaded PV enerator-boost converter-five levels NPC inverter, 18th International Conference on Sciences and Techniques of Automatic Control and Computer Engineering (STA), 2017. DOI: 10.1109/STA.2017.8314870

## References

**Pr.Saad Mekhlif** , Engineering Dean faculty Malaya university kuala lumpur Malaysia

**Pr.Tedjani Mesbahi** Strasbourg Estaca university france