

**Dr. Osama Omari**

**PERSONAL**

Name Osama Adam Omari  
Date of Birth 08. Sep. 1969  
Place of Birth Faqou'a, Jenin, Palestine  
Marital Status Married (5 Children)  
Nationality Palestinian

**Addresses**

Work: Arab American University-Jenin,  
Jenin,  
Palestine.  
Tel: +972 42 510 801 Ext.: 607  
Fax: +972 42 510 877  
Email: [osama.omari@aauj.edu](mailto:osama.omari@aauj.edu)

Home: Jenin,  
Palestine.  
Tel: +972 42 417 369  
Mobile: +972 599 66 17 13  
E-mail: [oaomari@hotmail.com](mailto:oaomari@hotmail.com)

**Curricula Development Activities:**

- 1. Main participant in preparing the Bachelor in Telecommunication Engineering program at AAUJ. The program went through a hard evaluation process and was approved by the ministry of education at 2007.*
- 2. Leader of a team constructed to restructure the proposal for Bachelor in Computer Systems Engineering curriculum after first revision. Restructuring of subjects, description of the materials to be taught and specifying the needed pre-requisites for each has been done. The program was approved.*



3. *Team leader to prepare the recently proposed Electrical Engineering with Renewable Energy program at AAUJ. The program has been constructed from A to Z. In addition to courses, structure, instructors, levels, obligator, elective and other related tasks, a market need study and an economical study has been done. The program is still under revision.*
4. *Evaluator of Bachelor program for the ministry of higher education.*

**Most recent activities in the field of Energy:**

1. *Preparing a study for implementing a 1- MWp PV system at the AAUJ through a proposed "Campus - Greening Project", October 2013.*
2. *Preparing a Bachelor degree program proposal of Electrical Engineering with Renewable energy to be applied at the Faculty of Engineering at the AAUJ, March 2014.*
3. *Preparing a study for the construction of a renewable energy center (REC) at the AAUJ in cooperation with the German Hanns Seidel Foundation, April 2014.*

**EDUCATION**

Dec. 01 - Feb. 05

PhD, Electrical Engineering, University of Bolton (England) in collaboration with the University of Applied Sciences South Westphalia / Soest (Germany).

Title of the thesis:

Conceptual Development of a General Supply Philosophy for Isolated Electrical Power Systems.

Oct. 99 - May 01

M.Sc., Electronic Systems and Engineering Management, Bolton Institute (England) and Paderborn University (Germany).

Thesis Title:

Simulation study of integrating photovoltaic systems into conventional electric power networks for the purpose of peak-load shaving.

Oct. 87 - Feb. 95

B.Sc., Electrical Engineering, Birzeit University,  
(Palestine).

Thesis title:

Software/Hardware Package for the reduction of  
the electrical losses in the local medium-voltage  
distribution network by the use of non-physical  
capacitors.

1987

General Secondary Education Certificate Examination.

Experiences

Jun. 05 – Now

Arab American University - Jenin  
Assistant Professor – Engineering and  
Information Technology faculty,  
Telecommunications Engineering Department.

Duties included:

- Teaching
- Faculty acting dean during summer semester 2010.
- Department chairperson for almost 4 years.
- Responsible for the construction of Engineering Faculty.
- Representing IT faculty in the University council for 2 years.
- Scientific research committee member for 1 year.
- Faculty council member for most of the time.

Sep. 10 – Aug. 12

Engineering and Information Technology  
**Faculty Dean,**  
Arab American University – Jenin, West Bank,



Palestine.

Jan. 02 – Mar. 05

University of Applied Sciences South  
Westphalia / Campus Soest / Department of  
Power Engineering / Laboratory of Power  
Systems and Power Economics:

- Scientific Researcher in the fields of renewable energy systems, hybrid power systems, distributed power generation.
- Supervision and co-supervision of 9 master students.
- Teaching undergraduate students.
- Preparing two proposals for transnational projects submitted to the European Commission.
- Performing two research projects for the Ministry of Science and Research in North Rhine Westphalia, Germany.

Jun. 01- Dec. 01

Paderborn University / Campus Soest /  
Department of Power Engineering / Laboratory  
of Power Systems and Power Economics:

- Scientific Researcher in the fields of renewable energy systems, hybrid power systems, distributed power generation.
- Performing a research project for the Ministry of Science and Research in North Rhine Westphalia, Germany.

Apr. 96 - Aug. 99

Jenin Municipality, Electricity Department.

Feb. 95 - Oct. 95

RUST-Kennedy & Dunkin as a local  
counterpart engineer in the project:  
Rehabilitation of the electrical grid in the West  
bank and Gaza strip.



## TRAINING COURSES

- |                   |   |
|-------------------|---|
| Oct. 98 - Jan. 99 | Industrial School of Nablus, a training course in Programmable Logic Controllers (PLC) – Theory and Applications.   |
| Jun. 98 - Sep. 98 | Jenin Municipality Technological Center, AUTOCAD Technical Drawing.   |
| Oct. 95 - Feb. 96 | Jordan Electricity Authority (JEA), training in the fields of Installation and maintenance of transforming substations, cabling and jointing, and control panels. |
| 1994              | Jordan Electricity Authority (JEA), 6 weeks training in the fields of Generation plants, power substations, transmission lines, and distribution nets.            |

## PROJECTS

- Multiskalierbares Hybridsystem für Inselnetze mit regenerativen Energiequellen (Forschungsprojekt) [Expandable hybrid system for isolated grids with renewable energy sources (Research project)], promoted by the Ministry of Science and Research of NRW in the context of the program TRAF0, June 2004.
- Peak-Load Shaving in Electrical Grids by Small PV Systems, promoted by Ministry of Science and Research of North Rhine Westphalia, January 2002.

## Fields OF Interests

- ✓ Electrical power systems comprising conventional and unconventional energy conversion systems and distributed



power generation. Of special interest is the active integration of renewable energy systems into conventional grids.

- ✓ Control algorithms, load- and generation-management, and communication systems and their applications to power systems with considerable percentages of distributed generation.
- ✓ Power electronic inverters with droop control and load sharing between parallel inverters without special communication in between. Of particular interest is the idea of making inverters acquire a frequency behaviour similar to the that of conventional power sources with rotating parts.
- ✓ Renewable energy sources, particularly photovoltaics and wind energy converters.
- ✓ Isolated power systems for remote areas and rural electrification.

## PUBLICATIONS

1. **Osama Omari**, "Acceptability of Conventional Electrical Grids to Renewable Energy Sources", 4th international Energy Conference, Ramallah, Palestine, Jan. 2011.
2. Alaa Mohd, Egon Ortjohann, Danny Morton, and **Osama Omari**, "Review of control techniques for inverters' parallel operation", Electric Power Systems Research journal (2010), Volume: 80, Issue: 12, Pages: 1477-1487, ISSN: 03787796, DOI: 10.1016/j.epsr.2010.06.009
3. **Osama Omari**, Egon Ortjohann, Alaa Mohd, and Danny Morton, "An Online Control Strategy for DC Coupled Hybrid Power Systems", IEEE PES 2007 general meeting, Tampa, Florida, USA, June 24-28, 2007.
4. **Osama Omari**, Egon Ortjohann, Alaa Mohd, Danny Morton, "An Optimal Control Strategy for DC Coupled Hybrid Power Systems", 2007 IEEE International Symposium on Industrial Electronics, Vigo, Spain, June 4-7, 2007.



5. Egon Ortjohann, Alaa Mohd, Nedzad Hamsic, Danny Morton, **Osama Omari**, "Advanced Control Strategies for Three-Phase Grid Inverters with Unbalanced Loads for PV/Hybrid Power Systems", 21st European Photovoltaic Solar Energy Conference and Exhibition, Dresden, Germany, 4-9 September 2006.
6. **O. Omari**, E. Ortjohann, "*Active-Integration of PV/Hybrid Systems in Conventional Electrical Grids*", 20th European Photovoltaic Solar Energy Conference and Exhibition, Barcelone, Spain, 6-10 Jun. 2005.
7. E. Ortjohann, **O. Omari**, M. Muzibur Rahman, D. Morton, "*Active & Reactive Power Dispatch in Isolated mini-Grids fed by Decentralized Power Sources*", 3rd International Conference on Electrical & Computer Engineering, Dhaka, Bangladesh, 28-30 Dec. 2004.
8. E. Ortjohann, **O. Omari**, S. Adhikari, N. Hamsic, D. Morton, "*Improved Control of Inverters for Decentralised Power Systems*", International Conference on Power Systems, Challenges to Electric Utilities in the New Millennium, Kathmandu, Nepal, 3-5 Nov. 2004.
9. E. Ortjohann, N. Hamsic, **O. Omari**, "*Erweiterter Abschlussbericht zum Forschungsprojekt Multiskalierbares Hybridsystem für Inselnetze mit regenerativen Energiequellen*", A report presented to the Ministry of Science and Research in NRW, Germany, June 2004.
10. E. Ortjohann, **O. Omari**, N. Hamsic, "*Getting the Values of Irradiation & Temperature from the Operation Parameters of a PV System*", 14th International Photovoltaic Science and Engineering Conference, Jan. 2004, Bangkok, Thailand.
11. **O. Omari**, E. Ortjohann, R. Saiju, N. Hamsich, D. Morton, "*A Simulation Model For Expandable Hybrid Power Systems*", 2nd European PV-Hybrid and Mini-Grid Conference, Sep. 2003, Kassel, Germany.
12. E. Ortjohann & **O. Omari**, "*Small PV systems for the improvement of electrical grids' performance*", International Conference: PV in Europe – from PV technology to Energy Solutions, Oct. 2002, Rome, Italy.
13. Egon Ortjohann & **Osama A. Omari**, "*PEAK LOAD SHAVING IN CONVENTIONAL ELECTRICAL GRIDS BY SMALL PHOTOVOLTAIC SYSTEMS IN SUNNY REGIONS*", 29th IEEE Photovoltaic Specialists Conference, May 2002, New Orleans, USA.
14. E. Ortjohann, N. Hamsic, O. Omari, "*Zwischenbericht 2002 zum Forschungsprojekt Multiskalierbares Hybridsystem für Inselnetze mit*

*regenerativen Energiequellen*”, Power Systems & Power Economics Lab. Univ. of App. Sciences SWF, Division Soest, Interim Report to the Ministry of Science and Research, NRW, Germany, 2002.

15. E. Ortjohann, O. Omari, “*Peak-Load Shaving in Electrical Grids by Small PV Systems*”, a Research study supported by the Ministry of Research and Science in North Rhine Westphalia, Germany, Jan. 2002.

### Attended Conferences

1. The 20th European Photovoltaic Solar Energy Conference and Exhibition, 6 – 10 June 2005, Barcelone, Spain.
2. The 19th European Photovoltaic Solar Energy Conference and Exhibition, 7 – 11 June 2004, Paris, France.
3. 1. Forschungsforum TRAF0 (1st Research Forum TRAF0), 10 May 2004, University of Applied Sciences Düsseldorf, Düsseldorf, Germany.
4. The 14<sup>th</sup> International Photovoltaic Science and Engineering Conference, 26 – 30 Jan. 2004, Bangkok, Thailand.
5. The 2nd European PV-Hybrid and Mini-Grid Conference, 25 – 26 Sep. 2003, Kassel, Germany.
6. 2nd international Symposium, New Energy for the South, 1 – 2 Apr. 2003, Wissenschaftspark Gelsenkirchen, Germany.
7. PV in Europe – from PV technology to Energy Solutions, 7 – 11 Oct. 2002, Rome, Italy.
8. The 17th European Photovoltaic Solar Energy Conference and Exhibition, 22 – 26 Oct. 2001, Munich, Germany.

### Presentations in international conferences

1. Active-Integration of PV/Hybrid Systems in Conventional Electrical Grids, in the 20th European Photovoltaic Solar Energy Conference and Exhibition, Jun. 2005, Barcelone, Spain.





2. Getting the Values of Irradiation & Temperature from the Operation Parameters of a PV System, in the 14th international Photovoltaic Science and Engineering Conference, Chulalongkorn University, Bangkok, Thailand, Jan. 29, 2004.
3. A Simulation Model For Expandable Hybrid Power Systems, in the 2nd PV-Hybrid and Mini-Grid Conference, University of Kassel, Germany, Sep. 26, 2003.
4. Small PV Systems for the Improvement of Electrical Grids' Performance, in the International Conference: PV in Europe – from PV technology to Energy Solutions, Palazzo dei Congressi, Rome, Italy, Oct. 10, 2002.

#### Other scientific contributions

1. External Examiner for a PhD thesis at Bolton university-England, Jan. 2010.
2. Eternal Examiner for Master theses in local universities.
3. Member of the Organization committee and the scientific committee for the 4th international Energy conference in Palestine to be held in Ramallah Jan 2011

#### REFERENCES

1. Dr. Mahmoud Abu Mwais  
Arab American University – Jenin, President  
Jenin  
Wets Bank  
Palestine  
Tel: +972 42 510 801 Ext. 1122
2. Prof. Dr.-Ing. Egon Ortjohann  
Department of Electrical Engineering



University of Applied Sciences South Westphalia  
Lubecker Ring 2,  
D-59494 Soest.  
Tel: +49 (0) 2921 378 432, Fax: +49 (0) 2921 378 433  
Email: [ortjohann@fh-swf.de](mailto:ortjohann@fh-swf.de)

3. Prof. Dr. Danny Morton  
University of BOLTON  
DEANE ROAD  
BOLTON  
BL3 5AB  
U.K.  
Tel: +44 (0) 1204 903040, Fax: +44 (0)1204 903088  
Email: [dm3@bolton.ac.uk](mailto:dm3@bolton.ac.uk)

A handwritten signature in blue ink, appearing to be 'D. Morton', with a stylized flourish above the name.