**Dr. Aysar Yasin**

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**CURRENT POSITION**

**Assistant Professor at Energy and Environment Engineering Department, An- Najah National University, September 2012 – Present**

**EDUCATION**

• **PhD. International Course on Energy**, **Catania University, Italy, November 2008 – February 2012**

Research Subject: Distributed Generation Systems Based on Hybrid Wind/Photovoltaic/Fuel Cell Structures

• **MSc. Clean Energy and Energy conservation Engineering, An Najah National University, Palestine, 2005 –2007.**

**• BSc. Electrical Engineering, An Najah National University, Palestine, 1994 – 1999**

**WORK EXPERIENCE**

**Assistant Professor, Energy and Environment Engineering Department, An-Najah National University, Nablus, West Bank, Palestine. September 2012- Present.**

**Director in the Department of Energy and Energy Efficiency, Palestinian Energy & Environment Research Center (PEC)- Palestinian Energy Authority, Palestine, October 2011 – September 2012**

**Researcher (PhD Candidate), National Research Council of Italy CNR-ITAE, Energy System Group, Messina, Italy. November 2009 – November 2011.**

* Power management strategy of a stand-alone hybrid system.
* Fuzzy logic based management of a stand-alone hybrid generator.
* Comparison study between five different bus voltage configurations for a stand-alone hybrid generator based on PV, wind, FC energy conversion systems in addition to different energy storage systems.
* Control of SOFC–PEFC energy systems connected in parallel through a low DC bus voltage.
* Testing the Performance of Different Battery Technologies in Hybrid System. (CNR/ITAE Labs).

**Researcher (PhD Candidate), Center for promotion and transferring of innovation technology CePTIT, Italy. Feb 2009 – November 2009.**

* Modelling, validation and control of a multi source hybrid system components which includes the following items: PV, Wind, Fuel Cell energy conversion system.
* Control of a Residential Wind/PV/Battery Power System with Performance Analysis.

**Director in the Department of Energy and Energy Efficiency, Palestinian Energy & Environment Research Center (PEC)- Palestinian Energy Authority, Palestine, 2006 – February 2009.**

* Local project manger at DISTRES project (Promotion and consolidation of all RTD activities for renewable distributed generation technologies in the Mediterranean region).
* Participating in the energy workshops and periodic projects meetings abroad.
* Conducting researches and developing proposals in the field of energy planning, renewable energies, energy conservation and energy economics.
* Training, Awareness & information dissemination in the field of renewable energy and energy efficiency.
* Establishment of cooperation links with local & regional energy institutes for development of energy sector in Palestine.

**Project Engineer, Palestinian Energy & Environment Research Center (PEC), Palestine, January 2000 – 2005.**

* Local project manager of IRESMED project (Integration of renewable energies in the southern Mediterranean countries).
* Design and installation of photovoltaic (PV) systems at Buden Wuttenberg project which focused on Electrification of the rural areas and public facilities (Agricultural farms 2.00kWp, 22 rural houses with capacity of 6.6kWp, vocational school in Nablus.0.440KWp, water pumping systems, etc.)
* Design and installation of PV systems for isolated remote villages in Palestine (clinics, schools, Bedouin communities and agricultural farms) – ELDORADO regional project.
* Design and installation of solar system water pumping units. (i.e Yanoon village/Nablus, local farms at Nablus district).
* Local Project manager in MEDA project (Energy and Urban Environment in the Mediterranean Countries).
* Energy Auditing and DSM (industrial and residential sector).

**Maintenance Engineer, National Aluminium and profile Company (NAPCO). Palestine, June 1999 – Jan 2000.**

* Operating a power station of capacity exceeds 4 MW includes the general utility supply synchronized with company special Generators.
* Extrusion and Aluminium painting plants by anodizing and powder coating methods, water & waste water unit and cast house.
* Operating and maintaining the water pump stations.

**Local Consultancy work :**

* Design of electrical works for water pumping systems (Submersible pump, vertical pump turbine and surface booster pumps), wastewater plant.
* Design and maintenance of electrical control panels for different types of water pumps (submersible, vertical and booster pumps)
* Local consultant in the field of PV electrification and energy efficiency: Design of solar PV systems for residential, commercial and agricultural applications.
* Managing tenders in the field of PV electrifications and following up installation process.
* Design solar water heating systems for Al-Etihad hospital.
* Energy Auditing in commercial buildings and industries ( Etihad hospital , Al Safa company , Al Amoor company, etc)
* Developing proposals in the field of energy planning, renewable energy, energy conservation and energy economics.
* Local technical consultant of ETRERA\_2020 ( Empowering Trans-Mediterranean Renewable Energy Research Alliance for Europe 2020 challenges). THEME [INCO.2013-9.1 INCO.2013-9.1]. project number: 609543.

**COMPUTER SKILLS**

* MatLab, Simulink and SimPowerSys.
* Load Flow programs and AutoCAD.
* PVsyst (PV design).
* HOMER

**TRAINING**

* Operating and Managing Renewable Energy Projects (PV, Wind, Geothermal, Hydropower )- Bereket Company – Denizli – Turkey, December 2015 ( one week).
* Teaching skills- preparing to teach and promoting learning, An Najah University, Palestine, September 2012 (3 days).
* Training to operate the solar electricity generation system in Jericho (350kW) , The project for introduction of clean energy by solar electricity generation system, Palestine, Jericho, 1st July 2012 ( two weeks).
* Energy conservation in building sector, Palestine, 20th May 2012. (5 days)
* Applying renewable energy in public buildings – PV distributed generation system in autonomous and grid-tied applications ,Palestine. 23rd November 2011. (2days)
* Rural electrification with solar hybrid micro grids for electricity generation in Palestine, Institut Catalá d’Energia / Spain. 18th November 2006 (3 days).
* Renewable Biomass – Based Energy Systems, KTH university, Department of Energy Technology, Stockholm, Sweden. 12th May 2006 , (2 weeks).
* Energy Conservation in the Industries, A°F- International AB, Sweden, 17th 2001. (one month).
* Occupation Safety . Palestinian Engineers Committee. Nablus, Palestine. 1999. (6 weeks).
* Operating Power stations, Power factor correction, High and low voltage networks. Nablus Municipality, 1998. (three months).

**AWARDS**

* **Full doctoral scholarship** Catania University, Italy, PhD 2008-2011.

**COURSES TAUGHT:**

**BACHELOR COURSES:**

* Energy and Environment.
* Solar Energy systems and wind energy.
* Solar thermal engineering systems.
* Energy Conversion.
* Energy Conservation and Efficiency.
* Electrical Engineering Circuits Analysis.
* Electrical Machines.
* Electrical Installation
* Automatic control.
* Numerical Analysis for engineers

**Master COURSES:**

* Special topics in energy.
* Renewable energy systems.

**Master Supervision and examining:**

* 1. Title: Feasibility study of Implementing CSP Technology In Palestine.(supervisor)
	2. Title: Designing of reverse osmosis desalination plant in Jordan valley using optimal energy options with less environmental impacts. (supervisor)
	3. Title: Techno- economic analysis of implementation energy management resources in some factories in west bank. (internal examiner).
	4. Title: An Iterative Method for Optimally Sizing Solar Inverter in Grid Connected System. (internal examiner)

**PUBLICATIONS**

**REFEREED JOURNALS:**

* Aysar Yasin, Osama Draidi .; " Design and Sizing Characteristics of a Solar Thermal Power Plant with Parabolic Trough Collectors for a Typical Site in Palestinian Territories”, under review in
* Aysar Yasin, 2017. Optimum Design of a Stand-alone Hybrid Energy System for a Remote Village in Palestinian Territories. Gaza Islamic University, Journal of Engineering Research and Technology, volume 4, issue 2, June, 2017.
* Techno-economic Assessment of Implementing CSP Technology in Palestinian Territories. (under review)
* A. Yasin, 2016. Technical and Financial Assessment of Glazed and Evacuated tubes Solar Collectors for Domestic Water Heating Application in Palestine, An - Najah Univ. J. Res. (N. Sc.) Vol. 13(1), 2017.
* Aysar Yasin, Osama Draidi .; " Feasibility of utilizing CSP power technology in Palestine. (under review at energy for sustainable development)
* A. Yasin, Optimum Design of a Stand-alone Hybrid Energy System for a Remote Village in Palestinian Territories ( under review at applied energy journal).
* A.Yasin, G. Napoli, M. Ferraro and V. Antonucci, 2011. Modeling and Control of a Residential Wind/PV/Battery Hybrid Power System with Performance Analysis. Journal of Applied Sciences, 11: 3663-3676.
* Giuseppe Napoli, Marco Ferraro, Francesco Sergi, Giovanni Brunaccini, Giorgio Dispenza, Laura Andaloro, Aysar Yasin, and Vincenzo Antonucci, Development of a SOFC Hybrid System, ECS Trans. 42, 209 (2012), DOI:10.1149/1.4705497

##### A. G. Tsikalkis, T. K. Tomtsi, N. D. Hatziargyriou, A. Poullikkas, ch. Malamatenios, L. Giakoumelos, O. C. Jaouad, A. Chenak, T. Matar, A. Yasin , “Review of best practices of solar electricity resources applications in selected Middle East and North Africa (MENA) countries”. Renewable and Sustainable Energy Reviews. 01/2011; 15(6):2838-2849. DOI: 10.1016/j.rser.2011.03.005

**REFEREED CONFERENCES:**

* Aysar Yasin, 2017. ‘Environmental Impact Assessmemt of a Collective Solar Water Heater System in West Bank’. In proceeding of the first international on climate change /Palestine Ramallah, Palestine. (8-9)May 2017.
* Aysar Yasin, Osama Draidi .; " Design and Sizing Characteristics of a Solar Thermal Power Plant with Parabolic Trough Collectors for a Typical Site in Palestine”, In proceeding of fourth conference on Energy and Environmental Protection in Sustainable Development ( ICEEP IV), Hebron, Palestine. April 2016.
* Aysar Yasin, D. Barakat , L. Antari and N. Assaf. "University Students’ Practices Related to Energy Conservation: A survey-based study”, In proceeding of Fifth International Energy Conference –Palestine (IECP 5), Palestine. January 2015.
* Yasin A.; "Comparison of Bus Voltage Configurations for a Residential Wind/PV/Battery Hybrid System Architectures, In proceeding of third conference on Energy and Environmental Protection in Sustainable Development ( ICEEP III), Hebron, Palestine. October 2013.
* Yasin, A.; Scimone, T.; De Caro, S., "Efficiency analysis of stand alone Wind/Photovoltaic hybrid plant architectures," Clean Electrical Power (ICCEP), 2013 International Conference on , vol., no., pp.783,788, 11-13 June 2013
doi: 10.1109/ICCEP.2013.6586948
* S. De Caro, T. Scimone, A. Testa, A. Yasin, “Optimal Size Selection for Step-Up Transformers for Wind Generation Plants”. 2012 International Symposium on Power Electronics, Electrical Drives, Automation and Motion . (IEEE proceedings) Print ISBN: 978-1-4673-1299-8 DOI: [10.1109/SPEEDAM.2012.6264605](http://dx.doi.org/10.1109/SPEEDAM.2012.6264605).
* Yasin, A.; Napoli, G.; Ferraro, M.; Testa, A.; Antonucci, V.; , "Fuzzy logic based management of a stand-alone hybrid generator," Clean Electrical Power (ICCEP), 2011 International Conference on , vol., no., pp.690-696, 14-16 June 2011
doi: 10.1109/ICCEP.2011.6036355
* Aysar Yasin, Distributed generation System based on renewable energy sources – case study. In proceeding of Second Emuni ReSouk - The Euro-Mediterranean Student Multi-Research Conference –14 June 2010, Pages: 855-866, ISBN 978-961-6805-02-9.
* A Yasin, G. Napoli, M. Ferraro, A. Testa, V.Antonucci, Power Management of a Stand-Alone Hybrid System. In proceeding of Third Emuni ReSouk Multi Conference- Innovation and Employability –21 March 2011, Pages: 813-823, ISBN 978-961-6805-04-9.
* A Yasin, M. Al Sayed, B. Yasin and H. Arafat, Evaluation of Energy and CO2 Savings of An Institutional Collective Solar Water Heating System in Palestine, Third Emuni ReSouk Multi Conference- Innovation and Employability –21 March 2011, Pages :48-61, ISBN 978-961-6805-04-9.

**REFERENCES**

Available upon request