

Curriculum Vitae

First name(s) / Surname(s)
Address

Amjad Ali (PhD, MIET, IEEE)
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Mobile
E-mail(s)
Nationality
Date of birth
Gender

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amjad.ase@gmail.com, ali.pcret@gmail.com
Pakistan
Feb. 15, 1980
Male



Total Experience: 11 years

Professional Experiences

Dates	August 2012 → December 2016
Occupation or position held	Ph. D (Research Scholar).
Main activities and responsibilities	<ol style="list-style-type: none">Optimization of Incremental Conductance MPPT Based on Simple Moving Voltage Average TechniqueSystem Configuration, Energy Management and Power Conversion for DC-Based Micro-grids.Advanced Distributed DC-Based Photovoltaic (PV) Modules for Next-Generation Renewable Energy Systems.
Name and address of employer	Zhejiang University Hangzhou, China.
Type of business or sector	R&D and Educational
Dates	July 2011 → August 2012
Occupation or position held	Director (Renewable Energy and Energy Management)
Main activities and responsibilities	<ol style="list-style-type: none">Solar PV system sizing and designing (Domestic & Commercial) Off grid and On grid.Installation and maintenance of mini and micro wind/hydro turbines.Procurement of Solar PV and Thermal appliances.Solar PV and Thermal project development and monitoring.Energy audit of energy Project.Energy efficiency and Energy conservation for domestic/commercial/industries.
Name and address of employer	ATS Engineering Sales and Services Islamabad (Pakistan)
Type of business or sector	Renewable Energy Development
Dates	May 2006 → July 2011
Occupation or position held	Assistant Director (Research Officer) Renewable Energies
Main activities and responsibilities	<ol style="list-style-type: none">Testing and Labeling of Renewable Energy Products.QA/QC management of Energy projects.Energy Audit.Establishing testing laboratory for Photovoltaic and Solar thermal appliances.Conduct the training for professional on renewable energy and energy efficiency (Solar Thermal and Solar PV) for promotion and development of RET in Pakistan.
Name and address of employer	Pakistan Council of Renewable Energy Technologies

Type of business or sector	PCRET, 25, H-9, Islamabad (Pakistan) Renewable Energy Research & Development
Dates	July 2010 → December 2010
Occupation or position held	Consultant Energy Efficiency
Main activities and responsibilities	<ul style="list-style-type: none"> a. Develop Minimum Energy Performance Standards (MEPS) for home appliance as per international standards. b. Technical design improvement in Fans to improve the energy efficiency. c. Conduct energy efficiency and energy conservation awareness workshops.
Name and address of employer	UNDP/GEF/ENERCON, Islamabad (Pakistan).
Type of business or sector	Development

Dates	November 2009 → June 2010
Main activities and responsibilities	Manager in Country (Technical)
	<ul style="list-style-type: none"> a. Develop Energy Efficiency Testing and Labeling. b. Develop Minimum Energy Performance Standards (MEPS) for home appliances in Pakistan c. Support Government of Pakistan in ES&L policy formulation.
Name and address of employer	USAID, IRG, ASE (Alliance to Save Energy) Islamabad (Pakistan)
Type of business or sector	Development

Teaching Experiences

Dates	Feb. 2012 → June 2012
Main activities and responsibilities	Assistant Professor (Visiting)
	<ul style="list-style-type: none"> a. Teaching "Renewable Energy Technologies" subject to graduate (MS) students. b. Co-supervisor for graduate (MS) student's project thesis.
Name and address of employer	International Islamic University, Islamabad (Pakistan)
Type of business or sector	Educational

Dates	March 2005 → May 2006
Main activities and responsibilities	Research Associate/Lecturer
	<ul style="list-style-type: none"> a. Teaching and conducting the practical laboratories to BS Electronics.
Name and address of employer	Institute of Information and Communication Technology (IICT), University of Sindh, Jamshoro, Pakistan
Type of business or sector	Educational

Dates	Jan. 2004 → March 2005
Main activities and responsibilities	Research Associate/Lecturer
	<ul style="list-style-type: none"> a. Teaching and conducting the practical laboratories to BS Information Technology.
Name and address of employer	Information Technology Centre (ITC), Sindh Agriculture University, Tando Jam, Pakistan
Type of business or sector	Educational

Educational Background

Dates	August 2012 → December 2016
Title of qualification awarded	PhD Electrical Engineering (Microgrid Energy Management System)
Principal subjects / occupational skills	Design, simulation and control of microgrid energy management system using Different techniques and tool.
Name and type of organization	Zhejiang University (College of Electrical Engineering), Hangzhou (China)
Level in national or international	China top three universities and world top 110 universities
Type of business or sector	Educational

Dates	2009 → 2010
Title of qualification awarded	Masters in Energy Management
Principal subjects / occupational skills	Energy policy and planning, Energy project management, Renewable Energies, Energy Economics, Energy conservation, Energy & Environment.
Name and type of organization	COMSATS (University), H-8, 44000 Islamabad (Pakistan)
Level in national or international	Ranked "A" University by Higher Education Commission of Pakistan
Type of business or sector	Educational

Dates	2002 → 2003
Title of qualification awarded	Masters in Electronics
Principal subjects / occupational skills	Electronics
Name and type of organization	Institute of Information Technology (University of Sindh, Jamshoro) Jamshoro, Hyderabad, Sindh (Pakistan)
Level in national or international	2 nd largest university of Pakistan
Type of business or sector	Educational

Dates	1999 → 2002
Title of qualification awarded	Bachelors in Electronics
Principal subjects / occupational skills	Electronics
Name and type of organization	Institute of Information Technology (University of Sindh, Jamshoro) Jamshoro, Hyderabad, Sindh (Pakistan)
Level in national or international	2 nd largest university of Pakistan
Type of business or sector	Educational

National and International Trainings

International:

- a. Introduction to Energy Management: Building an Energy Management Process (Energy Institute) UK
- b. Energy Management Foundation Training (ISO-15000)
- c. Solar Power System Installation (USA) online by International Centre for Appropriate & Sustainable Technology (ICAST).
- d. Introduction to Wind Energy Industry Training (USA) online by International Centre for Appropriate & Sustainable Technology (ICAST).
- e. Residential Energy Efficiency Auditor (USA) online by International Centre for Appropriate & Sustainable Technology (ICAST).
- f. Residential Energy Efficiency Installation (USA) online by International Centre for Appropriate & Sustainable Technology (ICAST).
- g. Small Commercial Energy Efficiency Auditor (USA) online by International Centre for Appropriate & Sustainable Technology (ICAST).
- h. Introduction to Renewable Energies, (USA) online by Solar Energy International.
- i. Battery testing system, (Aachen, Germany) by Digatron firing Circuits.
- j. Wind energy (Brussels, Belgium) online, by Leonardo energy.

National:

- a. Laboratory fundamental training in accordance with ISO/IEC 17025-2005.
- b. Uncertainty in measurements ISO/ IEC 17025- General Requirements for the Competence of Testing and Calibration Laboratories.
- c. Quality Assurance.
- d. Method validation and implementation of technical requirement of ISO/IEC 17025-2005.
- e. Internal audit in accordance with ISO/IEC 17025-2005.
- f. Certificate on solar energy (Pakistan Engineering Council) Islamabad.
- g. Energy Management and Audit (By "NPO" Ministry of Industries & FPCCI)

Technical Skills and Competence:

- a. Have worked in various types of team projects Energy management/Energy audit with different multinational organization for development of Renewable Energy and Energy efficiency in Pakistan.
- b. Project completed rural electrification of Houses, Mosques, Schools and Hospital (Energy audit / testing & labeling).
- c. Working on the project establishing of testing laboratories and standards for Photovoltaic and solar thermal appliances.
- d. Working on the project up gradation and extension of solar cell production laboratories (Silicon Solar Cell, Testing Facilities, Thin film R&D , Cell processing, Crystal puller) at PCRET, Islamabad.

Organizational skills and competences:

- a. Energy Project simulation (MATLAB, PV Sol, RET Screen, Homer).
- b. Energy Project Designing.
- c. Energy Project Management.
- d. Energy Project Auditing.
- e. Solar thermal hot water system simulation systems for testing using "lab view" .
- f. National Instruments.
- a. Certificate MS-Office (MS-Word, MS-Power Point, MS-Excel).

Additional information:

- a. Worked with GTZ, ISE, Freiburg (Fraunhofer Institut) and CIM (Germany) energy experts for PV and Solar Thermal projects in Pakistan.
 - b. Worked with OEKOZENTRUM (Switzerland) energy expert on solar thermal testing laboratory project in Pakistan.
 - c. Conduct professional courses on renewable energy (solar thermal and solar photovoltaic) for the promotion of renewable energy and energy efficiency in Pakistan.
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List of Research Publications:

1. **Amjad Ali**, Wuhua Li, and Xiangning He, Barry. W. Williams "Overview of Current Microgrid Policies, Incentives and Barriers in European Union, United states and China" Journal of Energy Policy. 2016 (*Under Review*).
2. **Amjad Ali**, Wuhua Li, and Xiangning He, Barry. W. Williams "Classification of Maximum Power Point Tracking Techniques under Uniform and Non-Uniform Solar Irradiation Conditions- A Recapitulate Review" Journal of Modern Power System and Clean Energy. 2016 (*Under Review*).
3. **Amjad Ali**, Wuhua Li and Xiangning He. "Performance Analysis of Incremental Conductance MPPT with Simple Moving Voltage Average Method for Distributed PV System ". The Open Electrical & Electronic Engineering Journal, 2016 (*Accepted*).
4. **Amjad Ali**, Zahid Ali Memon, Muhammad Zuhaib "Promotion and Development of Energy Efficiency & Labeling in Pakistan". T1st International Conference on Science, Technology and Innovation Policy and Management (STIPM) , 2016 (*Accepted*).
5. M. Zuhaiba, **Amjad Ali**, Asghar Ali, Zahid Ali Memon " Study of Incremental Conductance Maximum Power Point Technique Under Non-Uniform Solar Irradiations Conditions for Solar PV system" 4th International Conference on Energy, Environment and Sustainable Development 2016 (EESD 2016) (*Accepted*).
6. Muhammad Zeeshan Malik, **Amjad Ali**, Qunwei Xu " A New Quadratic Boost Converter with Voltage Multiplier Cell: an Analysis and Assessment " International Journal of Smart Home 10(8):281-294.
7. **Amjad Ali**, Wuhua Li, and Xiangning He, "Simple Moving Voltage Average Incremental Conductance MPPT Technique with Direct Control Method under Non-uniform Solar Irradiance Conditions," International Journal of Photoenergy, vol. 2015, Article ID 479178, 12 pages, 2015
8. **Amjad Ali**, Wang Yuxiang, Wuhua Li and Xiangning He "Implementation of Simple Moving Voltage Average Technique with Direct Control Incremental Conductance Method to Optimize the Efficiency of DC Microgrid". IEEE International Conference on Emerging Technologies (ICET-2015), December 19-20, 2015.
9. Muhammad Zeeshan Malik, Ajmal Farooq, **Amjad Ali** and Guozhu Chen. " A DC-DC Boost Converter With Extended Voltage Gain". International Conference on Mechanical Engineering and Electrical Systems (ICMES). MATEC Web of Conferences 40, 07001 (2016).
10. **Amjad Ali**, Furqan Habib and Sheraz Alam Malik. "Wind Energy Development Policies in Developing Countries and Their Effects: Turkey, Egypt and Prospects for Pakistan". American Journal of Energy and Power Engineering, 2015; 2(5): 56-61.
11. **Amjad Ali**, Ajmal Farooq, Zeeshan Muhammad, Furqan Habib and Sheraz Alam Malik. "A Review: DC Microgrid Control and Energy Management System". International Journal of Electrical and Electronic Science, 2015; 2(2): 24-30.
12. **Amjad Ali**, Yunjie Gu, Chi Xu, Wuhua Li, Xiangning He. "Comparing the Performance of Different Control Techniques for DC-DC Boost Converter with Variable Solar PV Generation in DC Microgrid" *IEEE 9th Conference on Industrial Electronics and Applications (ICIEA)*, 2014, 9-11 June 2014.