# **CURRICULUM VITAE**

# 1 PERSONAL INFORMATION

Full Name : Firas Mohammad Deeb Alawneh

Sex : Male
Date of Birth : 3/9/1970
Marital Status : Married
Children : 4

Nationality : Jordanian

Mobile : +962 79 90 500 83 E-mail : firas.alawneh@qmail.com

# 2 LANGUAGES:

	<u>Reading</u>	<u>Writing</u>	<u>Speaking</u>
Arabic	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent

# 3 ACADEMIC QUALIFICATIONS:

B. Sc. in Electrical Engineering (Good 70.9%), Jordan University of Science and Technology, Irbid, Jordan, 1993

# 4 EMPLOYMENT AND POSITIONS HELD:

## **Full Time:**

# Jul. 1, 2005 - present:

Head of Photovoltaics (PV) Division National Energy Research Center (NERC) Royal Scientific Society (RSS) Amman, Jordan

# Jan. 1, 2000 - Jun. 30, 2005:

Head of IT & GIS Division Senior Consultant for Photovoltaics (PV) Division National Energy Research Center (NERC) Royal Scientific Society (RSS) Amman, Jordan

# April. 16, 1994 - Dec. 31, 1999:

Research Engineer Photovoltaics (PV) Division Renewable Energy Research Center (RERC) Royal Scientific Society (RSS) Amman, Jordan

# **Part Time:**

# Sep. 25, 2012 - present:

Part-time lecturer in two solar courses and labs (PV1 and PV2) Al-Huson University College Al-Balqa Applied University Huson, Jordan



## 5 AREAS OF SPECIALIZATION:

- Renewable Energy Sources
- Renewable Energy Systems
- Renewable Energy Economics
- Renewable Energy Training

# 6 MAJOR WORKS:

- Consultancy services for solar PV projects
- Solar Radiation Measurements and Evaluation
- Design and Sizing of Solar PV Systems
- Performance Evaluation of PV Systems
- Procurement, Installation and Commissioning of Solar PV Systems
- Supervision on PV installation works
- Training in the field of Solar Radiation and Solar PV Systems
- Feasibility studies of PV power systems.
- Research in the field of PV projects funded by national and international programs.
- Teaching and training in the field of PV systems (university and training courses).
- Administration

## 7 EXPERT AND SCIENTIFIC MISSIONS & TRAINING:

# a) Expert and Scientific Missions

## • October 2014 – present:

Supervision on installation and commissioning of 420 kWp grid connected PV power system for The Children's Museum Jordan – Amman.

#### • September 2014 – present:

Design, tendering, supervision on installation and commissioning of 250 kWp grid connected PV system for Arab Open University – Amman.

# • January 2012 – present:

Design, tendering, supervision on installation and commissioning of 704 kWp grid connected PV system for International Academy – Amman.

# • September 2013 – May 2013:

Tender evaluation, supervision on installation and commissioning of 1 MWp grid connected PV system for Ma'an Development Company – Ma'an.

## • January 2012 – February 2013:

Design , tendering, supervision on installation and commissioning for PV street lighting project within the campus of Muwaqar Free Zone for Jordan's Free Zones Company.

## • January 2012 - October 2013:

Testing and commissioning of 100 kWp grid connected PV system for Gardenia Solar System Co. Ltd. (Third party consultant approved by the utility operator).

# • September 2012 – February 2013:

Supervision on installation and commissioning of 50 kWp grid connected PV system for Zarqa Chamber of Industry (ZCI) – Zarqa.

## • March 2013 - August 2013:

Design, tendering, supervision on installation and commissioning of grid connected PV systems with total nominal peak power of 60 kWp for EDAMA society in Fefa village.

# • December 2011 –present:

Technical and Scientific Committee member in FORSTErinMED project <a href="https://www.fosterinmed.eu">www.fosterinmed.eu</a>

## • January 2012 - present:

Steering Committee member in MED-SOLAR project www.medsolarproject.com

#### • January 2012 – October 2013:

Trainer in the field of Solar PV at the vocational training center of Nippon International Cooperation for Community Development (NICCOD) center located at Zarqa city in Jordan.

# • January 2012 – January 2014:

Member in the technical tender committee for 2MWp PV power plant on medium voltage at Azraq area through a project funded by the Government of Spain for the benefit of the Government of Jordan.

## • February 2011 – December 2012:

Design of the PV evaluation field at Al-Huson University College in Irbid. Five different PV systems were purchased, installed and tested. This research project was funded by the Regional Center for Renewable Energy and Energy Efficiency (RCREEE) founded in Eygpt.

## • June 2010 - October 2011:

Design, tendering, ordering, supervision on installation and commissioning of a 288 kWp grid connected PV system at 400V line within the campus of Royal Scientific Society (RSS). A 7000 square meters plot of land within the campus of RSS was dedicated for this project at Al-Jubeiha in Amman. This project was funded by the Government of Japan.

#### • January 2011 – January 2014:

Design of the PV evaluation field for Shmasma'an Power Generation Company. Nine different PV systems were installed and tested. This project was implemented according to a signed agreement between NERC and Shamsma'an.

## • June 2010 – June 2012:

Design, order and installation of a solar radiation measuring system for global, direct and diffuse irradiances along with meteorological parameters at Ma'an Industrial Park. This project was implemented according to a signed agreement between NERC and Ma'an Development Area (MDA).

# October 2010 – January 2011:

Design, supply and installation of a 10.6 kWp standalone PV system for brackish water pumping and desalination system for the German Jordanian University, Amman- Jordan. This project was an open local tender.

# • Oct. 10 – Nov. 4, 2011:

Secondment for 4 weeks at the Center for Renewable Energy Sources and Savings (CRES). Athens- Greece. Scientific research in the field of solar radiation measurements and solar Photovoltaic systems.

# • December 20-25, 2010:

Final Steering committee meeting / OPEN-GAIN project funded by the European Commission. Hammamet-Tunisia. Testing & commissioning of the hybrid PV/Wind/Diesel system implemented through the project.

# • September 20-21, 2010:

Final Steering committee meeting / RAMseS project funded by the European Commission. Poznan-Poland. Evaluation of the prototype for the multi-purpose agricultural vehicle implemented through the project.

## December 15 - 19, 2009:

Steering committee meeting / OPEN-GAIN project funded by the European Commission. Tunis-Tunisia.

# • October 6 - 9, 2009:

Steering committee meeting / RAMseS project funded by the European Commission. Warsaw - Poland.

#### April 15 - 18 2008:

A study visit to Durham University in UK to have a look on wind Permanent Magnet Generator (PMG) laboratories to design and implement a PMG wind generator at NERC laboratories in lordan.

Durham - UK.

# • July 27 - 31, 2008:

A study visit to Photovoltaic Systems Laboratories at the Center for Renewable Energy Sources (CRES), through the twining project funded by the European Commission.

Athens - Greece.

#### • Jan. 13 - 15, 2008:

"Renewable Energy and Energy Efficiency" Workshop organized by the Association of Middle Eastern and US Academies of Sciences, Kempenski, Dead Sea – Jordan.

## • Sep. 3 - 6 2007:

Fifth Jordanian International Mining Conference. Participating with a paper titled "Annual Hourly Simulation for a Grid Connected PV System in Jordan – A Lab Experiment"

## • Oct. 31 – Nov. 1, 2007:

The 3<sup>rd</sup> Conference on Technology Commercialization held in Amman-Jordan, organized by the Royal Scientific Society. Amman - Jordan

## May 21 – 25, 2006:

Conference and Exhibition "Desalination Strategies in South Mediterranean Countries", EuroMed2006, Montpellier-France. Participating with a paper titled "RESYSproDESAL in Jordan - A Case Study on De-central Water and Power Production by BWRO Integrating Solar Energy".

## • July 26 – 27, 2005:

Kick-off meeting of RESYSproDESAL project funded by the European Commission. Graz - Austria.

#### • April 2 – 4, 2001:

The Seventh Jordanian Geological Conference. Participating with a paper titled "Studying Hydrocarbon Source Rocks of Jordan using GIS Software", Amman - Jordan.

# • Jun. 3 – 6, 2003:

The Atlas Thematic Seminar "Using Geographic Information Systems (GIS) for Energy and Environment Planning in Urban Cities for the Mediterranean Countries" organized by the Center for Renewable Energy Studies (CRES), Athens - Greece.

# May 14 – 17, 2006:

The Eighth Arab Energy Conference organized by the Ministry of Energy and Mineral Resources of Jordan, Amman-Jordan.

## • Feb. 9 – 10, 2007:

Regional meeting "Status and Potentials of Renewable Energy Technologies in Lebanon, Syria, Palestine, Egypt and Jordan" organized by Green Line Association, Beirut - Lebanon.

## b) Training

- October 22-23, 2014: "Installation of Photovoltaic self-consumption applications & PowerStudio SCADA software" held in Spain, organized by CIRCUTOR.
- May 13-18, 2012: "Expert advice and know-how transfer in the field of solar energy for public
  and private institutions in Jordan" held in Germany, organized by SMA Solar Academy and
  Kirchner Solar Group.
- May 4 -8, 2009: SMA Inverter Seminar held in Niestetal-Germany, organized by SMA Solar Academy / Niestetal – Germany

## Dec. 21 - 24, 2008:

Training course "Report Writing" held in Amman-Jordan, organized by Team International / Amman - Jordan.

## Dec. 1 - 4, 2008:

Training course "Strategic Planning" held in Amman-Jordan, organized by Team International / Amman - Jordan.

# • Aug. 4- 7, 2008:

Training course "Quality Management System ISO 9001: 2000 and TQM" held in Amman - Jordan, organized by Team International / Amman - Jordan.

# • Sept. 9 - 10, 2007:

Workshop organized by the American Chamber of Commerce in Jordan tilted "The One Minute Management Techniques". Amman - Jordan

#### • Jul. 26 –27, 2005:

The Standard Training Course for the IPSEpro Design Suite, organized by Simulation Technology Company, SimTech, Graz - Austria.

# Mar. 26 - 29, 2007:

Training course "Advanced Reverse Osmosis Desalination" held in Amman-Jordan, organized by the Middle East Desalination Research Center (MEDRC), Muscat - Oman. A lecture titled "Water Desalination Using Renewable Energies" was presented.

## • Jan. 18- 28, 2003:

Training course "Hybrid Photovoltaic/Utility Power Supply for a Water Reverse Osmosis Desalination Unit" organized by the National Renewable Energy Laboratory (NREL), Denver - USA.

## • Jan. 27- May 2, 2002:

Training Course "Web Computing" organized by The Computer Center in The Royal Scientific Society (Introduction to Unix, HTML & Javascript, Java Programming Language, Java Servlets, Java Server Pages, XML Programming, WAP Programming), Amman - Jordan.

## May 7- 21, 2000:

Training Course "Accelerated Training for Microsoft Windows NT Server4.0 Enterprise & TCP/IP" organized by Business Technology Solutions Training Center, Amman - Jordan.

# • May 22- Jun. 5, 2000:

Training Course "Introduction to ArcInfo 8" organized by InfoGraph, Amman - Jordan.

## May 14- 16, 2000:

Training Course Introduction to ArcView 3.2), by InfoGraph Amman - Jordan.

## • Sep. 19- 23, 1999:

Training Course by Quality Assurance Department at the Royal Scientific Society (ISO 25 Guide of the Royal Scientific Society), Amman - Jordan.

## • Nov. 13- 17, 1996:

Training Course by Renewable energy Research Center at the Royal Scientific Society (Practical Energy Audit Program), Amman - Jordan.

# • Jul. 26- Sep. 8, 1995:

Training Course by Carl Von Ossietzky University (Photovoltaic Technology), Oldenburg - Germany.

# 8 MEMBERSHIP:

Jordan Engineers Association (JEA), 1993 - Present.

#### 9 **PUBLICATIONS:**

#### a) **Technical Papers**

1. Firas M. Alawneh

> "RESYSproDESAL in Jordan - A Case Study on De-central Water and Power Production by BWRO Integrating Solar Energy"

"Desalination Strategies in South Mediterranean Countries, EuroMed 2006" Montpellier, France, 2006

2. Firas M. Alawneh, Sura H. Deebajeh

"Annual Hourly Simulation for a Grid Connected PV System in Jordan – A Lab Experiment" "Fifth Jordanian International Mining Conference" Amman, Jordan, 2007

#### **Technical Reports** b)

1. National Energy Research Center

> "Solar Powered Desalination and Pumping Unit for Brackish Water in Jordan" Submitted to National Renewable Energy Laboratory (NREL), USA Amman-Jordan, February, 2006

Renewable Energy Research Center- Royal Scientific Society 2.

"Feasibility Study (Scientific, Economic & Sociological) - Producing Drinkable Water From Brackish Water Resources In Village of Qatar, Using Reverse Osmosis (RO) Desalination Systems, Powered by Solar Energy (Photovoltaic)"

Submitted to Ecopeace Organization for the Middle East Energy Zone Project, Amman-Jordan & Mertz-Gilmore Foundation, USA

Amman-Jordan, November, 1998

3. Renewable Energy Research Center- Royal Scientific Society "Concentrated Action for Testing & Cost Reduction of PV Water Pumping Systems" Submitted to AVICENNE Project – Round-Robin Test of Solar Pumps Amman-Jordan, October, 1996