

# Tamer T. N. KHATIB, *Ph.D, Habilitation, SMIEEE*

## Full Professor of Renewable Energy at An-Najah National University

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### 1. PERSONAL INFORMATION

\* Nationality: Palestinian

\* Date of birth: 31/03/1985

\* Place of birth: Nablus

\* Gender: Male

\* Marital status: Married

\* Number of children: 3

### 2. WORKING EXPERIENCE

#### 2.1 Main tracks

- [4/2023 - present] **Full Professor**  
Energy Engineering & Environment Dept., An-Najah National University, Palestine
- [9/2021 - 06/2023] **Director (Dean Rank)**  
Scientific Centers, An-Najah National University, Palestine
- [8/2020 - 9/2021] **Chairman**  
Natural Sciences Graduate Programs, An-Najah National University, Palestine
- [4/2018 - 3/2023] **Associate Professor**  
Energy Engineering & Environment Dept., An-Najah National University, Palestine
- [3/2018 - present] **Director**  
An-Najah Company for Consultancy and Technical Studies, Nablus, Palestine
- [8/2015 - 3/2018] **Assistant Professor**  
Energy Engineering & Environment Dept., An-Najah National University, Palestine
- [9/2013- 6/2015] **Senior Researcher & Academic Staff**  
Inst. of Networked & Embedded System, University of Klagenfurt (KLU), Austria
- [11/2012 - 8/2013] **Researcher**  
Faculty of Engineering, Sohar University (SU), Sultanate of Oman
- [6/2008 - 12/2008] **Electrical Engineer**  
Fury Trade Ltd., Nablus, Palestine

#### 2.2 Secondary tracks

- [7/2017 - 9/2021] **Master Program Coordinator**  
**M.Sc. Clean Energy Engineering and Energy Conservation**  
**M.Sc. Electrical Power Engineering**  
Faculty of Graduate Studies, An-Najah National University, Palestine
- [01/2017 - 7/2018] **Technical Consultant for TVET projects**  
The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Palestine
- [12/2015 - Present] **Guest Professor of Renewable and Sustainable Energy**  
Inst. of Networked & Embedded System, University of Klagenfurt (KLU), Austria
- [7/2015- 8/2015] **Part Time Lecturer**  
Faculty of Engineering, Palestine Technical University (PTU-K), Tulkarm, Palestine
- [11/2014 - 12/2014] **Visiting Lecturer**  
Department of Electrical Engineering, National University of Malaysia, Malaysia
- [7/2013- 9/2013] **Part Time Lecturer**  
Faculty of Engineering, Palestine Technical University (PTU-K), Tulkarm, Palestine
- [6/2013 - 7/2013] **Visiting Technical Advisor**  
Sunergy for Renewable Solutions, Ramallah, Palestine
- [01/2011 - 11/2012] **Research Assistant**  
Solar Energy Research Institute, National University of Malaysia, Malaysia

- [9/2011 - 2/2012] **Part Time Lecturer**  
Faculty of Electrical Eng., Universiti Teknologi MARA (UiTM), Malaysia
- [12/2008 - 03/2010] **Research Assistant**  
Department of Electrical Engineering, National University of Malaysia, Malaysia
- For more details on these positions see Appendix 15.1*

### 2.3 Consultancy positions

I have served as a consultant for a number of projects in the field of photovoltaic system, distributed generation, energy policy, power distribution, fund raising, as well as funding proposal evaluation. For more details on the consultancy tasks that I have conducted see Appendix 15.1

### 2.4 Voluntary work

*full list of voluntary activities is provided in Appendix 15.3*

- [8/2018 - Present] **Renewable Energy International Program Officer**  
Palestinian International Cooperation Agency (PICA)  
Palestine Ministry of Foreign Affairs, Ramallah, Palestine
- [07/2016 - 10/2020] **Chair,**  
IEEE Palestine subsection
- [1/2011 - 3/2012] **Vice Chairman**  
IEEE student branch, Universiti Kebangsaan Malaysia, Malaysia

## 3. EDUCATION

- [01/2014 - 11/2015] **Habilitation in Renewable and Sustainable Energy**  
Alpen-Adria-Universität Klagenfurt, Klagenfurt, Austria  
*Specialization*: Photovoltaic Power Systems  
*Habilitationsschrift*: Renewable Energy from Photovoltaic Systems: Models, Performance & Possibilities of Harnessing
- [1/2011 - 6/2013] **Ph.D. in Electrical, Electronic and Systems Engineering**  
National University of Malaysia (UKM), Bangi, Malaysia  
*Specialization*: Photovoltaic Power Systems  
*Thesis title*: Solar energy prediction and photovoltaic system size optimization using artificial neural networks and numerical algorithms
- [1/2009 - 8/2010] **M.Sc. in Electrical, Electronic and Systems Engineering**  
National University of Malaysia (UKM), Bangi, Malaysia  
*Specialization*: Photovoltaic Power Systems  
*Thesis title*: Efficient maximum power point tracking controller and sun tracker for standalone photovoltaic systems
- [9/2003 - 6/2008] **B.Sc. in Electrical Engineering**  
An-Najah National University (ANNU), Nablus, Palestine  
*Specialization*: Electrical Power & Energy Systems  
*Graduation Project title*: Development of a photovoltaic I-V characteristic tester
- [9/2002 - 7/2003] **Secondary School Degree**

### 3.1 Training courses

- [23 - 24, 11/2011] CIRED, Malaysia, Intensive Renewable Energy workshop
- [15 - 16, 7/2009] BIZCHIP, Bangi, Malaysia, Intensive PIC Workshop
- [6/2007 - 8/2007] JEPSCO, Amman, Jordan, Trainee in electrical power stations section
- [10/6 - 20/7/2006] Electricians Union, Nablus, Palestine, Electrical Control
- [1/2006 - 2/2006] PalTel, Nablus, Palestine, Trainee in electrical power division
- [24/11 - 15/1/2006] AMRA, Nablus, Palestine, CompTIA Network Technician
- [20/3 - 9/6/2005] An-Najah National University, Nablus, Palestine, AutoCAD

## 4. PATENTS/ PRODUCTS

- [1] H. Kazem, T. Khatib. 2013. "REPS.OM" Renewable Energy Power Systems Optimization Tool For Oman. (Accepted and Declared, Ref No. is Pending)
- [2] T. Khatib, A. Mohamed, K. Sopian. 2012. PV.MY "Photovoltaic system optimization and simulation tool". Malaysia patent (Accepted and Declared, Ref No. is Pending)

## 5. PUBLICATION

**Highlights**: I. # of published articles: 123 (63% SCI/ISI indexed, 46% first author), # of citations received: 3865

II. The Quartile percentage of the SCI/ISI indexed articles in Energy & Fuels category: Q1:35%, Q2:23%, Q3:29%, Q4:13%

## 5.1 Selected research articles published in SCI/ISI indexed international journals

Note: Full publication list is provided in Appendix 15.4

- [\*] **T. Khatib**, R. Deria. East-west oriented photovoltaic power systems: model, benefits and technical evaluation. *Energy Conversion and Management* 266 (2022) 115810, *IF: 4.8, Q1*
- [\*] F. Damaira, **T. Khatib**. Assessment of innovation policy standards' impact on local development of renewable energy in Palestinian local government units. *Renewable Energy* 187(2022) 177-192, *IF: 4.8, Q1*
- [\*] **T. Khatib**, R. Direya, A. Said. An improved method for extracting photovoltaic module I-V characteristic curve using hybrid learning machine system. *Journal of Solar Energy Engineering*. 2021. 143():051006. *IF: 1.37, Q2*
- [\*] **T. Khatib**, I. Abunajeeb, Z. Heneni. Determination of Mars Solar-Belt by modeling of solar radiation using artificial neural networks. *Journal of Solar Energy Engineering*. 2020. 142 (1):11007, *IF: 1.19, Q2*
- [\*] **T. Khatib**, A. Saleh, S. Eid, M. Salah. Rehabilitation of Mauritanian Oasis using an optimal photovoltaic based irrigation system. *Energy Conversion and Management*. 2019, 199() 111984, *IF: 7.181, Q1*
- [\*] **T. Khatib**, A. Ghareeb, M. Tamimi, M. Jaber, S. Jaradat. A new offline method for extracting I-V characteristic curve for photovoltaic modules using artificial neural networks. *Solar Energy* 2018. 173():462-469, *IF: 4.374, Q1*
- [\*] I. Ibrahim, **T. Khatib**. A novel hybrid model for hourly global solar radiation prediction using random forests technique and firefly algorithm. *Energy Conversion & Management* 138(2017)413–425. *IF: 4.8, Q1*
- [\*] DH Muhsen, AB Ghazali, **T. Khatib**, IA Abed. A comparative study of evolutionary algorithms and adapting control parameters for estimating the parameters of a single-diode photovoltaic module's model. *Renewable Energy*. 2016. 96(): 377-389 *IF: 3.404, Q1*
- [\*] D. Muhsen, A. Ghazali, **T. Khatib**, I. Abed. Extraction of photovoltaic module model's parameters using an improved hybrid differential evolution/electromagnetism-like algorithm. *Solar Energy*. 2015. 119():286–297 *IF: 3.469, Q1*
- [\*] **T. Khatib**, W. Elemenreich. Novel simplified hourly energy flow models for photovoltaic power systems. *Energy conversion and Management*. 2014. 79(): 441-448. *IF: 3.59, Q1*
- [\*] **T. Khatib**, K. Sopian, H. Kazem. Actual performance and characteristic of a grid connected photovoltaic power system in the tropics: A short term evaluation. *Energy Conversion and Management*. 2013 71():115-119. *IF: 2.64, Q2*
- [\*] **T. Khatib**, A. Mohamed, K. Sopian. A review of solar energy modeling techniques. *J. of Renewable & Sustainable Energy Reviews*. 2012.16(5): 2864-2869. *IF: 5.3, Q1*.
- [\*] **T. Khatib**, A. Mohamed, K. Sopian, M. Mahmoud. Optimal sizing of building integrated hybrid PV/diesel generator system for zero load rejection for Malaysia. *J. of Energy & Buildings*. 2011.43(12): 3430-3435. *IF: 2.3, Q2*.

## 5.2 Books:

### 5.2.1 Scientific books

- [1] **T. Khatib**, Dhiaa M Halbot. 2020. *Photovoltaic Water Pumping Systems: Concept, Design and Methods of Optimization*. Elsevier. Forthcoming in November 2020.
- [2] **T. Khatib**, W. Elemeriech. 2016. *Modeling of photovoltaic systems using Matlab: simplified green codes*. Wiley. UK. ISBN: 978-1-119-11810-7

### 5.2.2 Literary books

- [1] **Tamer Khatib**, *Co-author*. 2012. *رغبة إكمال "Desire for Completion"*. WARD, Jordan. ISBN: 427-1-2011
- [2] **Tamer Khatib**. 2012. *وقفة على الأشواك "A stand on throns"*. Xlibris. Australia. ISBN: 1465301364

## 6. TEACHING EXPERIENCE

> I have taught (50) *B.Sc courses*, (23) *M.Sc courses* and (2) *Ph.D course*.

More details are in my teaching statement (Appendix 15.5)

## 7. RESEARCH EXPERIENCE

### 7.1 Research interests

My research interests mainly fall in the scope of photovoltaic systems and solar energy fundamentals. For more details please refer to my research statement in Appendix 15.6

### 7.2 Research thesis supervised

> I have supervised so far 5 Ph.D research thesis, 14 M.Sc research thesis & 20 B.Sc research thesis

> I have examined so far 2 Ph.D research thesis, 3 M.Sc research thesis

For more details please refer to the list of supervised and examined research in Appendix 15.7

### 7.3 Research grants

> So far I have worked on **10 research projects** as researcher, Co-principal investigator & principal investigator. *Total funding so far 2,002,616 USD*.

More details are in my research statement in Appendix 15.6

#### **7.4 Scientific editing**

[6-2021 - Present] **Editorial Board Member**, Renewable Energy, Elsevier  
[7-2020 - Present] **Editorial Board Member**, Electricity, MDPI  
[7-2019 - Present] **Editorial Board Member**, Sustainability, MDPI  
[4/2016 - 02/2017] **Lead Guest Editor**, International Journal of Photoenergy, Hindawi.  
[5/2015 - 6/2016] **Lead Guest Editor**, Journal of Engineering, Hindawi.  
[10/2014 - 10/2015] **Guest Editor**, IEEE Transactions on Industrial Electronics, IEEE.

#### **7.4.1 Served as a member of the scientific committee for 22 international conferences**

#### **7.5 Scientific reviewing:**

> Since 2010 I have reviewed 600+ research articles for many ISI indexed journal.

More details are in my research statement in Appendix 15.6

#### **8. Administrative Committees Membership**

[1] Strategic plan committee for scientific research, 2016, An-Najah National University, Palestine  
[2] Research Committee, 2017, An-Najah National University, Palestine  
[3] ANNU Research Award Committee, 2018, An-Najah National University, Palestine  
[4] Faculty of Engineering council, 2018, An-Najah National University, Palestine  
[5] Faculty of Graduate Studies Council, 2018, An-Najah National University, Palestine  
[6] Faculty of Graduate Studies Council, 2019, An-Najah National University, Palestine

#### **9. AWARDS**

[1] Research Excellence Award . An-Najah National University, Palestine. 2022  
[2] Research Excellence Award . An-Najah National University, Palestine. 2021  
[3] Research Excellence Award . An-Najah National University, Palestine. 2020  
[4] Research Excellence Award . An-Najah National University, Palestine. 2019  
[5] Research Excellence Award . An-Najah National University, Palestine. 2018  
[6] Research Excellence Award . An-Najah National University, Palestine. 2017  
[7] Research Excellence Award . An-Najah National University, Palestine. 2016  
[8] Distinguished research award. Islamic Bank of Palestine. 2016  
[9] Research Excellence Award . An-Najah National University, Palestine. 2015  
[10] Best Reviewer Award. Renewable Energy Journal/ Elsevier. 2014  
[11] The golden medal of international conference and exposition on invention of institution of higher learning (PECIPTA2013), PV.MY software. Kuala Lumpur. 2013  
[12] National University of Malaysia Research Fellowship, 2011-2013 : 40,000.00 USD  
[13] National University of Malaysia Research Fellowship, 2009-2010 : 10,000.00 USD

#### **10. LANGUAGES**

\* Arabic, Native Speaker  
\* English, IELTS 7\9, Equivalent to 100\120 TOEFL "Internet Based"  
\* Malay, Moderate  
\* German, Moderate

#### **11. PROGRAMMING LANGUAGES & SOFTWARES**

MATLAB, C++, VB, ASSEMBLY, HOMER, RETScreen, TRANSIS, PSCAD, POWER WORLD SIMULATOR, PV.MY, ETAB, PScad

#### **12. MEMBERSHIPS**

Senior member of Institute of Electrical and Electronic Engineering (IEEE), USA (12 Years)  
Member of The International Solar Energy Society, Germany (9 Years)  
Member of IEEE Power & Energy Society, USA (9 Years)  
Member of Jordanian Engineers Association, Jerusalem Center, Palestine (13 Years)

#### **13. OTHER SKILLS**

\* A good knowledge in computer hardware/software equivalent to ICDL & A+  
\* Have had a driving license since 2003

#### **14. REFERENCES**

**Prof. Dr. Abdel Naser Zaid**, *An-Najah National University*

\*Email: anzaid@najah.edu \*Contact Number: +970599674096 \*Relationship: Employer (ANNU)

**Prof. Dr. Wilfried Elmenreich**, *University of Klagenfurt, Austria*

\*Email: wilfried.elmenreich@aau.at \*Contact Number: +4346327003649 \*Relationship: Employer (KLU)

**Prof. Dr. Hussian Kazem**, *Sohar University, Oman*

\*Email: h.kazem@soharuni.edu.om \*Contact Number: 0096899645363 \*Relationship: Employer (SU)

**Prof. Dr. Azah Mohamud**, *National University of Malaysia, Malaysia*

Email: azah@eng.ukm.my \*Contact Number: 0060122137946 \*Relationship: M.Sc. & Ph.D supervisor

## **15. APPENDIX**

- 15.1 Detailed job descriptionr for the former positions i hold
- 15.2 Consultancy experience
- 15.3 List of voluntary projects and activities
- 15.4 Full publication list
- 15.5 Teaching statement
- 15.6 Research statement
- 15.7 Postgraduate supervision and examination