



Dr. Taher Saleh Maatallah

Assistant Professor

Personal Data

Nationality | Tunisian

Date of Birth | 05-02-1985

Department | Mechanical and Energy Engineering

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- ✦ University Profile: https://www.iau.edu.sa/en/colleges/college-of-engineering/faculty/dr-Taher-maatallah?search_api_views_fulltext=&page=4
- ✦ LinkedIn: <https://www.linkedin.com/in/taher-maatallah-13539854>
- ✦ Google Scholar: <https://scholar.google.com/citations?user=QOJrOnsAAAAJ&hl=en>
- ✦ Research Gate: https://www.researchgate.net/profile/Taher_Maatallah/publications

Language Proficiency

Language	Read	Write	Speak
Arabic	x	x	x
English	x	x	x
French	x	x	x
German	x	x	x

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2015	Ph.D. Energy engineering	Tunisia	National School of Engineering of Monastir (ENIM), University of Monastir (UM)
2009	M Sc. Energy engineering	Tunisia	National School of Engineering of Monastir (ENIM), University of Monastir (UM)
2008	B.E. Energy Engineering	Tunisia	Univer National School of Engineering of Monastir (ENIM), University of Monastir (UM)sity of Monastir



PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

Ph.D Eng. With High and honours distinction	Etude et optimisation des systèmes énergétiques hybrides
MSc. With High and honours distinction	ETUDE DES SYSTEMES HYBRIDES EOLIEN/SOLAIRE POUR LA PRODUCTION DE L'ELECTRICITE
B.E. With High and honours distinction	ETUDE D'UN SYSTEME HYBRIDE POUR LA PRODUCTION D'ELECTRICITE ET/OU DE L'EAU

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Assistant Professor	Department of Mechanical and Energy Engineering, College of Engineering, Imam Abdulrahman Bin Faisal University (IAU), Dammam, Saudi Arabia	08-02-2018àPresent
Assistant Professor	Department of Energy Engineering, National Engineering School of Monastir (ENIM), University of Monastir (UM)	28-09-2015à12-12-2017
Assistant	Department of Energy, Higher Institute of Sciences and Technologies of Energy (ISSTEG), University of Gafsa (UG)	15-09-2012à27-09-2015
Teacher Assistant	Department of Energy, Higher Institute of Sciences and Technologies of Energy (ISSTEG), University of Gafsa (UG)	22-09-2009à14-09-2012

Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Coordinator of international Master Science Program (REMENA)	REMENA Office in the Energy department in collabaoration with Kassel and Cairo universities	2015-2017
Member in the university of Monastir Scientific Council	Scientific Council	2016
Internation expert of external universities evaluation	Tempus Qualicert	2011-2013

Scientific Achievements

Published Refereed Scientific Researches

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date
1	Maatallah T.S .	A comprehensive study of Pin Fins cooling channel for a single cell Concentration Photovoltaic system under Ultra-High concentration ratios.	International Journal of Energy Reserach	08, October 2020



2	Richu Z., Maatallah TS and Anish M.	Environmental and economic analysis of a PV assisted mixed mode greenhouse solar dryer with thermal energy storage and exhaust air recirculation.	International Journal of Energy Reserach	17, July 2020.
3	AlFalah G, Maatallah TS , Alzahrani M, Al-Amri FG	Optimization and feasibility analysis of a microscale pin-fins heat sink of an ultrahigh concentrating photovoltaic system.	International Journal of Energy Reserach	9, July 2020.
4	Maatallah TS , Rihab Ammar	Design, modeling, and optimization of a dual reflector parabolic trough concentration system	International Journal of Energy Reserach	4, October 2019.
5	Maatallah TS , Richu Zachariah, and Ghallab F	Exergo-economic analysis of a serpentine flow type water based photovoltaic thermal system with phase change material (PVT-PCM/water)	Solar Energy	17, September 2019
6	Maatallah TS , Ben Youssef W	Simulation and performance analysis of concentrating photovoltaic/thermal collector (CPV/T) with three-sided thermal insulation based on coupled optothermal model	Solar Energy	1, February 2019
7	Wafa Ben Youssef, Maatallah TS , Christophe Menezo, Sassi Ben Nasrallah	Modeling and optimization of a solar system based on concentrating photovoltaic/thermal collector	Solar Energy	14, May 2019
8	Ben Youssef W, Maatallah TS , Menizo C, Ben Nasrallah S	Assessment viability of a concentrating photovoltaic/thermal-energy cogeneration system (CPV/T) with storage for a textile industry application	Solar Energy	22, November 2017
9	Maatallah TS , Houcine Ahlem, Souheil El Alimi, Sassi Ben Nasrallah	A novel solar concentrating system based on a fixed cylindrical reflector and tracking receiver	Renewable Energy	11, October 2017



10	Houcine A, Maatallah TS , El Alimi S and Ben Nasrallah S	The Performance Study of Parabolic Trough Concentrator Using a New RT3D-4R Method	International Journal of Control Theory and Applications	4, October 2017
11	Houcine A, Maatallah TS , El Alimi S and Ben Nasrallah S	Optical modeling and investigation of sun tracking parabolic trough solar collector basing on Ray Tracing 3Dimensions-4Rays	Sustainable Cities and Society	14, September 2017
12	Maatallah TS , Nahed Ghodhbane, Sassi Ben Nasrallah	Assessment of economic viability for hybrid energy system (PV/wind/diesel) with storage in the northernmost city in Africa, Bizerte, Tunisia	Renewable and Sustainable Energy Reviews	5, June 2016
13	El Alimi S, Maatallah TS , Ben Nassrallah S	Break-even analysis and optimization of a stand-alone hybrid system with battery storage for residential load consumption-A case study	Renewable and Sustainable Energy Reviews	19, September 2014
14	El Ouderni AR, Maatallah TS , El Alimi S, Ben Nassrallah S	Experimental assessment of the solar energy potential in the gulf of Tunis, Tunisia.	Renewable and Sustainable Energy Reviews	9, December 2013
15	Maatallah TS , El Alimi S, Dahmouni AW, Ben Nassrallah S	Wind power assessment and evaluation of electricity generation in the Gulf of Tunis, Tunisia	Sustainable Cities and Society	8, February 2013
16	El Alimi S, Maatallah TS , Dahmouni AW, Ben Nassrallah S	Modeling and investigation of the wind resource in the gulf of Tunis, Tunisia	Renewable and Sustainable Energy Reviews	11, October 2012
17	Maatallah TS , El Ouderni AR, El Alimi S, Ben Nassrallah S	Experimental assessment of the solar energy potential in the gulf of Tunis, Tunisia	Sustainable Cities and Society	20, April 2012
18	Renewable and Sustainable Energy Reviews	Performance modeling and investigation of fixed, single and dual axis tracking photovoltaic panel in Monastir city, Tunisia	Renewable and Sustainable Energy Reviews	11, October 2011



Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Wafa Ben Youssef, Maatallah TS , Sassi Ben Nasrallah	Numerical and economic investigation of a parabolic trough linear CPVT system	International Congress on Energetic and Environment Systems (IEES-2017), October 2017
2	Houcine Ahlem, Maatallah TS , Souheil El Alimi, Sassi Ben Nasrallah	The Performance Study of Parabolic Trough Concentrator Using a New RT3D-4R Method	18èmes Journées Internationales de Thermique JITH 2017 Stockage et conversion, July 2017
3	Wafa Ben Youssef, Maatallah TS , Sassi Ben Nasrallah	Numerical study of a Parabolic Trough Photovoltaic/Thermal Collectors (CPV/T)	18èmes Journées Internationales de Thermique JITH 2017 Stockage et conversion, July 2017
4	Houcine Ahlem, Maatallah TS , Souheil El Alimi, Sassi Ben Nasrallah	The performance study of parabolic trough concentrator using a new RT3D-4R method	3 rd International Conference on Green Energy and Environmental Engineering GEEE-2016, April 2016
5	Ahmed Ridha El Ouderni, Taher Maatallah , Sassi Ben Nasrallah	Modeling and Investigation of the wind resources in the gulf of Tunis, Tunisia	9th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT2012, Malta 16 - 18 July

Current Researches

#	Research Title	Name of Investigator(s)
1	Innovative Technique for Achieving Uniform Temperatures across Solar Panels Using Heat Pipes and Liquid Immersion Cooling in the Harsh Climate in the Kingdom of Saudi Arabia," DSR Project (Project Number: 2020-055-Eng, Approved and In progress - Start date 1st April 2020).	P.I.: Fahad Ghallab Al-Amri CO: Maatallah TS CO: Sajid Khan, IAU
2	Development and implementation of a novel active cooled-PV system driving Air Gap membrane Desalination (AGMD)" Approved DSR project (In progress- Start date 12 June 2020)	P.I.: Fahad Ghallab Al-Amri CO: Maatallah TS CO: Sajid Khan, IAU CO: Umar Seddiki, IAU CO: Tapas Malik, Exeeter-UK

Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Energy Management Conference	A13, 14-15, January 2019	Prticipation



2	First exhibition and forum for solar and wind energy	A13, 8-9, April 2018	Organization
3	Second exhibition and forum for solar and wind energy	A13, 12-13, March 2019	Organization
4	KSA Jubail 2nd Energy Management Conference 2019 ...	Jubail, December 2019	Participation

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Fluid Mechanics	ENG-321	
2	Numerical Computational Methods	MN-ENR2	
3	Renewable Energy	ENRG-406	
4	Solar Power design systems	ENRG-557	
5	Desalination	ENRG-413	
6	Air Conditioning	CA-ENRG1	
7	Computational Fluid Dynamics applied to heat transfer	MNAHT-MEC_N3	
8	Computational Fluid Dynamics applied to Fluid Mechanics	MNAMF-MEC_N3	

Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Bioenergy	BE-MA1	
2	Energy certification and management	ECM-MA1	
3	Energy Audits	EA-MA1	

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	To
1	Fluid Mechanics	x		x		Aug. 2020-	Dec. 2020



Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Bachelor students	3	Sep.2019	May 2020
2	Bachelor students	3	Sep.2020	present

Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	Ph.D.	Study and optimization of concentrating photovoltaic thermal systems»	National Engineering School of Monastir (ENIM), University of Monastir (UM)	Date of defense: 23, July 2020.
2	Ph.D.	Contribution to the solar thermal concentrators	National Engineering School of Monastir (ENIM), University of Monastir (UM)	Date of defense: 2, December 2017.
3	MSc	Thermal modeling of a symmetric Greenhouse sun dryer derived by a parabolic trough concentrator	Faculty of Sciences of Monastir (FSM), University of Monastir (UM)	Date of defense: 22, December 2017.
4	MSc	Study and exergetic optimization of an asymmetrical Greenhouse sun dryer	Faculty of Sciences of Monastir (FSM), University of Monastir (UM)	Date of defense: 24, December 2017
5	MSc	Energy and efficiency audits of White rooms	Institute of Higher Sciences and Technologies of Energy (ISSTEG), University of Gafsa (UM)	Date of defense: 20, June 2014.
6	MSc	Energy audits and aeraulic circuits study of White rooms».	Institute of Higher Sciences and Technologies of Energy (ISSTEG), University of Gafsa (UM)	Date of defense: 22, June 2014.
7	MSc	Energy audits and aeraulic circuits study of White rooms	Institute of Higher Sciences and Technologies of Energy (ISSTEG), University of Gafsa (UM)	Date of defense: 22, June 2014.



Committee Membership

#	From	To	Position	Organization
1	University Senior Design Project, IAU,.	Standing committee, 2019-present	Member	College of Engineering, IAU
2	College of Engineering Senior Design Project	Standing committee, 2019-present	Member	College of Engineering, IAU
3	University Professional Exams for Engineering training committee	Standing committee, 2019-present	Member	College of Engineering, IAU
4	College of Engineering Professional Exams for Engineering training committee	Standing committee, 2019-present	Member	College of Engineering, IAU
5	College Engineering Students activities committee	Standing committee, 2018-2019	member	College of Engineering, IAU
6	Departmental Engineering Students activities committee	Standing committee, 2019-present	Member	College of Engineering, IAU
7	University Higher research studies committee	Standing committee, 2019-present	Member	College of Engineering, IAU

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Programming: Fortran, Matlab, Python, EES
2	Simulation applied to Renewable technologies: Ansys, COMSOL, Hybrid 2, HOMER, Retscreen, Pvsyst, Soltrace, ASPE, HELIOSCOPE
3	Simulation applied to building audits: HAP, Carrier, REVIT
4	Drawing: Solid works, AUTOCAD

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