

CURRICULUM VITAE

Mohamed R. O. Ali

Address: Reda Othman House,

Abu Jerj, Bani Mazar El Minia, 61746

Egypt

M: +201129733734

T: +20863880317

E-mail addresses :

mohamedroali@mu.edu.eg & mohamedroali@gmail.com



Personal Summary

A committed assistant lecturer and assistant professor with around 20 years of experience at one of the U.K. leading academic and research institutions (the University of Manchester) and Egyptian Universities (Minia University) teaching students from various social and cultural backgrounds. Possessing excellent administrative, verbal communication and written skills along with constructive and effective teaching methods that promote a stimulating learning environment, Able to work in a managerial role or as part of team and having the proven ability to successfully work to tight schedules and deadlines, currently looking for suitable academic opportunities in universities or colleges for further education.

The co-manager of the quality assurance and accreditation unit, faculty of Engineering, Minia University where I am sorting with the unit manager most of the required activities from the unit.

Key Skills

Expert in dealing with computers

- Expert with ABAQUS and MATLAB
- Have fair experience with Energy Plus, ANSYS packages, and FORTRAN programming.

- Well user of Microsoft Office
- Uses AUTOCAD Mechanical
- Did some work with Carrier E20 load calculation software

Career History

Job title	Start	End
Assistant Professor, Faculty of Engineering, Minia University, Al Minia, Egypt	June 2013	Still in
<p>Responsible for carrying out teaching and research duties, involved in the administration of degree and postgraduate courses as well as responsible for organizing lectures and supervising seminars and tutorials. Involved in the research and designing of new courses and materials.</p> <p>Assessing students course work and material.</p> <p>Involved in the setup of exams and the marking of results.</p> <p>Responsible for some of the departmental administrative tasks.</p> <p>Providing mentoring, advice and support to students on a personal level.</p> <p>Implementing University research projects and involved in its publication.</p> <p>Actively leading class discussions and encouraging debate.</p> <p>Supervising over seven MSc students working in energy conversion technologies such as thermoelectric generation, heating and cooling, and energy storage in solids.</p>		
Assistant lecturer, Faculty of Engineering, Minia University, Al Minia, Egypt	April 2013	June 2013
Teaching assistant in School of Mechanical, Aerospace, and Civil Engineering, the University of Manchester	Sep. 2007	June 2012
<p>Demonstrate and help in teaching undergraduate courses like heat transfer, HVAC lab, FORTRAN, ABAQUS, ANSYS, Surveying</p>		
Assistant lecturer, Faculty of Engineering, Minia University, Al Minia, Egypt	July 2004	March 2007
<p>Demonstrate and help in teaching undergraduate courses like heat transfer, fluid mechanics, thermodynamics, gas dynamics, power plants, and mathematics</p>		
Demonstrator, Faculty of Engineering, Minia University, Al Minia, Egypt	March 2003	July 2004
<p>Demonstrate and help in teaching undergraduate courses like heat transfer, fluid mechanics, thermodynamics, gas dynamics, power plants, and mathematics</p>		
Demonstrator, Air Defence College, Alexandria, Egypt	March 2001	March 2003
<p>Demonstrate and help in teaching undergraduate courses like fluid mechanics, mathematics, AUTOCAD</p>		
Demonstrator, Faculty of Engineering, Minia University, Al Minia, Egypt	Oct. 2000	Jan. 2001

Demonstrate and help in teaching undergraduate courses like heat transfer, fluid mechanics, thermodynamics, gas dynamics, power plants, and mathematics.

Education and Training

Name of institution and location	Start	End
Renewable Energy Engineering; Texas A&M University- College Station- Texas, the USA	July 2016	Sept. 2016
PhD, Mechanical engineering, School of Mechanical, Aerospace, and Civil Engineering, the University of Manchester	April 2007	Feb. 2013
Compressed Course on Sustainable Development and Climate Change, Sustainable consumption institute, University of Manchester	April 2009	April 2009
Intercultural Awareness course, British Council, Cairo, Egypt	Sept. 2006	Oct. 2006
M.Sc. Mechanical Engineering, Faculty of Engineering, Minia University, Al Minia, Egypt	May 2001	June 2004
B.Sc. Mechanical Engineering, Faculty of Engineering, Minia University, Al Minia, Egypt	Sept 1993	May 2000
Heating and cooling load calculation training on Carrier Manuals @ Allied Consultant, Egypt	May 1998	August 1998

Courses taught for

● Mechanical Power Engineering and Energy Students:	
1) Engineering Mathematics (1); BSP111	2) Thermal Engineering; MPE321
3) Engineering Mathematics (2): BSP212	4) Mechanical Power Engineering Labs; MPE323
5) Engineering Thermodynamics (2): MPE223	6) Graduation Projects Supervision
7) New and Renovated Energy Resources; MPE221	
● Biomedical Engineering Students:	
8) Engineering Mathematics (1); BSB1110	9) Mechanical Engineering (2); MPB2270
10) Engineering Mathematics (2); BSB1220	
● Production Engineering and Mechanical Design Students	
11) Thermodynamics and Heat Transfer; MPP225	

Awards & Grants

<i>Apr 2007</i>	Scholarship: PhD scholarship sponsored by the Egyptian government to the University of Manchester, England, the UK.	
<i>July 2016</i>	<p>Fulbright Junior Faculty Development Program for Egypt 2016-2017 is funded by the U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA) and supported by the Binational Fulbright Commission in Egypt as part of its flagship Fulbright Program. The program is administered by the Council for International Exchange of Scholars (CIES), a division of the Institute of International Education. U.S. host institutions were selected based on an open competition to implement a 10-week program for developing teaching methods for renewable energy courses.</p> <p>II. Program Objectives</p> <ul style="list-style-type: none"> • Build higher education capacity in Egypt through faculty development and mentoring for junior scholars. • Foster long-term collaborations and institutional linkages between Egyptian and U.S. academics. • Promote mutual understanding between Egyptian and Americans by facilitating building strong relationships between the institutes in both countries. 	
<i>2014-2017</i>	<p>Nanotechnological Approach for the Development and Implementation of Microbial Fuel Cell for Energy Harvesting from Wastewater project fund of €450000 form the Research, Development & Innovation Programme (RDI-2)</p> <p>Representative of the EU</p>	450k euro
<i>2019- to present</i>	Advanced Solar Energy-Assisted Water Desalination System in High Salinity and Brackish Water Areas with Controlled Greenhouse for Sustainable Agriculture: A WEF Nexus Project	\$ 270k

Publications

Thesis

Mohamed R. O. Ali: *Modelling the performance of horizontal heat exchanger of ground-coupled heat pump systems with Egyptian conditions.* 02/2013, Degree: PhD, Supervisor: Dr. Rodger R. Edwards; Dr. Jonathan Dewsbury,

Mohamed R. O. Ali: *Development of Design Factors for Spiral Ground Heat Exchanger in Heat Pump Applications,* 05/2005, Degree: Master of Science, Supervisor: Professor Maher A. Mohamed; Dr. Ali O. Mohamed; P.E. Ahmed A. Motawee

Publication Highlights

Journal Publications

Mohamed R. O. Ali, Ahmed G. H. Saif, and Seddik S. Wahid, *Investigating the Effect of Pyrolysis Parameters on Product Yields of Mixed Wood Sawdust in a Semi-Batch Reactor and its Characterization*, Petroleum & Coal, 2020, Vol. 62, p 85-103. 18p

Saeed, S., I. Ashour, H. Sherif, and **Mohamed R.O. Ali**, *Catalytic and noncatalytic fast pyrolysis of Jatropha seeds: Experimental measurements and modeling*. Egyptian Journal of Chemistry, 2020. 63(1): p. 8-9.

Saeed, S., I. Ashour, and **Mohamed R.O. Ali**, *Fast pyrolysis of jatropha seeds in a fixed bed furnace*, Petroleum & Coal, 2019, Vol. 61 Issue 6, p1494-1504. 11p

Bassiouny, R., **Mohamed R.O. Ali**, Mohamed K. Hassan: *An Idea to Enhance the Thermal Performance of HDPE Pipes used for Ground-Source Applications*. Applied Thermal Engineering 08/2016; 109:15-21., DOI: 10.1016/j.applthermaleng.2016.08.055

Bassiouny, R., **Mohamed R. O. Ali**, Al Sadek Hassan Noor El-Deen: *Modeling the Thermal Behavior of Egyptian Perforated Masonry Red Brick Filled with Material of Low Thermal Conductivity*. Journal of building engineering, 03/2016; 5: 158-164.

Conference Proceedings

Ahmed G. H. Saif, **Mohamed R. O. Ali**, Seddik S. Wahid: *Pyrolysis of Sugarcane bagasse: The Effects of Process Parameters on the Product Yields*. 2nd International conference of Chemical, Energy and Environmental Engineering (ICCEEE 2019), Egypt Japan University of Science and Technology, Alexandria, Egypt.; 07/2019

Abdelkareem, M., Mohamed S. Mahmoud, **Mohamed R. O. Ali**, Faiza A. Hammad, Nasser A.M. Barakat, I. A. Ashour: *Cobalt-Doped Carbon Nanofibers as Effective*

ORR Catalyst. European Fuel Cell Technology & Applications Conference - Piero Lunghi Conference, Naples, Italy; 12/2015

Serageldin, Ahmed A., Ali K.Abdelrahman, Ahmed Hamza.H.Ali, **Mohamed R.O.Ali**, Shinichi Ookawara: *Soil Temperature Profile for some New Cities in Egypt: Experimental Results and Mathematical Model*. 14th International Conference on Sustainable Energy Technologies, The Albert Hall, Nottingham; 08/2015

Posters:

Ali, Mohamed R.O., Capareda, S. C., M. Salah Hassan, A. H. El-Sayed, Mohamed S. Mahmoud, R. Mohtar and M. Akbulut. 2019. *Advanced solar energy-assisted water desalination system in high salinity and brackish water areas with controlled greenhouse for sustainable agriculture: A Water-Energy Food (WEF) Nexus project*. Poster presented at the 2019 NAS-STDF Symposium held in Cairo, Egypt from November 20-21, 2019.

Capareda, S. C., R. Mohtar and M. Akbulut, **Ali, Mohamed R.O.**, M. Salah Hassan, A. H. El-Sayed, Mohamed S. Mahmoud. 2018. *Advanced solar energy-assisted water desalination system in high salinity and brackish water areas with controlled greenhouse for sustainable agriculture: A Water-Energy Food (WEF) Nexus project*. Poster presented at the 2018 NAS-STDF Symposium held in Cairo, Egypt from November 5-7, 2018.

Ali, Mohamed R. O., Jonathan Dewsbury, Rodger Edwards: *An Investigation into the Performance of Horizontal Ground Heat Exchangers in Ground-Coupled Heat Pump Applications*. School of Mechanical, Aerospace & Civil Engineering Postgraduate Research Conference, PGR-MACE09, School of Mechanical, Aerospace & Civil Engineering, Manchester University; 06/2009

Graduation Projects Supervision:

Project Title	Academic year
Free Energy, is it real or Fake?	2018/2019

Winter Energy Saving in Small Scale Poultry Farm (case Study)	2017/2018
Solar-Geothermal Driven Thermoelectric Generator (SGTEG)	2015/2016
Design and Setup Thermal Conductivity Measurement Device	2014/2015
Experimental Study for the Possibility of Direct Conversion of Heat to electricity by Seebeck Effect	2013/2014

Interests and hobbies

- Reading
- Beekeeping
- Farming
- Juggling
- Swimming
- Social works

Personal profile

- Trustful
- Helpful in teamwork
- Social
- Creative
- Responsible

References

Name:	Position and Contact
Ali Omar Mohamed Omar	PhD, Professional Engineer Mobile: +201014494235
Ahmed A. Ghani Metawie	The Chairman of Allied Consultants Ltd, E-mail: aaghani@alliedco.org
Ibrahim M. M . El-Moghazy	Emeritus Professor, interim Department head, Faculty of engineering, Minia University E-mail: elmoghazy@mu.edu.eg
Rodger Edwards	Reader, the University of Manchester E-mail: Rodger.edwards@manchester.ac.uk
Ramadan Bassiouny	Professor and Faculty Dean, Faculty of engineering, Minia University E-mail: Ramadan.b@mu.edu.eg
Capareda, S. C	Professor, College of Agriculture and Life Sciences (COAL), Texas A&M, College station, Texas, U.S. E-mail: Scapareda@tamu.edu