

Mahmoud Amin Ahmed

Professor

Mechanical Engineering Department.
Assiut University, Assiut 71516, Egypt

Research interests:

- Micro-and nano-scale fluid mechanics, heat and mass transfer with particular emphasis on fuel cells, photoelectrochemical reactors, electrokinetic flows.
- Multiphase flows, liquid atomization and spray systems, droplet impact on a surface, multiscale computations (continuum-meso), molecular dynamic simulation, parallel computing.

Education:

- Ph.D., Engineering, 1994, Mississippi State University (MSU), U.S.A.
- M.S., Mechanical Engineering, 1987, Assiut University, Assiut, Egypt
- B.S., Mechanical Engineering, 1983, Assiut University, Assiut, Egypt

Employment and activities:

2008 – Present Professor, Mechanical Engineering Department, Assiut University, Egypt
2015 (Mar-May) Visiting Professor, Graduate School of Engineering Science, Osaka university, Japan
2012 – 2013 Vice Dean of graduate studies and research, Faculty of Engineering, Assiut University, Assiut, Egypt
2005- 2008 Visiting Associate Professor, Mechanical and Industrial Engineering Department, University of Toronto, Canada
2003 – 2004 Associate Professor, Mechanical Engineering Department, Assiut University, Egypt
2002 – 2003 Visiting Assistant Professor, Mechanical and Industrial Engineering Department, Concordia University, Canada
1995 – 2002 Assistant Professor, Mechanical Engineering Department, Assiut University, Egypt.
1994 – 1995 Instructor and PDF, Mechanical Engineering Department, Drexel University, U.S.A.
1991 – 1994 Teaching and Research Assistant, School of Engineering, Mississippi State University, U.S.A.
1987 – 1991 Assistant Lecture, Mechanical Engineering Department, Assiut University, Egypt
1983 – 1987 Teaching and Research Assistant, Mechanical Engineering Department, Assiut University, Egypt

Teaching:

More than 20 years of teaching experience at Egypt, USA, and Canada.
The following courses were taught:

Undergraduate courses:

Fluid Mechanics, Hydraulic Machines, Theory of Turbo-machines, Modeling and Simulation of dynamic Systems, Thermodynamics, Heat and mass transfer, Automotive Mechanics, Mechanical Engineering Laboratories, Engineering Mechanics (Statics and Dynamics), Numerical Methods in Engineering, Programming and Numerical Computing, Computer Language (FORTRAN).

Graduate courses:

Advanced Fluid Mechanics, Computational Fluid Dynamics and Heat Transfer, Heat Conduction, Advanced Engineering Mathematics, Advanced Numerical Methods, Fuel Cell Technology, Renewable energy, Multiphase flows.