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OBJECTIVE

To pursue and promote the application of new technologies in the areas of advanced energy systems, energy conservation, and propulsion.

EDUCATION

Georgia Institute of Technology, Atlanta, GA

Doctor of Philosophy in Mechanical Engineering, 2004. Thesis topic: Investigation and Improvement of Ejector-Driven Heating and Refrigerating Systems. GPA: 3.89/4.0

Georgia Institute of Technology, Atlanta, GA

Master of Science in Mechanical Engineering, 1997. GPA: 4.0/4.0

King Saud University, Riyadh, Saudi Arabia.

Bachelor of Science in Mechanical Engineering with highest honor, 1993. GPA: 5.0/5.0

EMPLOYMENT AND TRAINING HISTORY

King Saud University, Riyadh, Saudi Arabia..... (May 2004 – present)

Assistant Professor. Department of Mechanical Engineering. Work involves academic instruction and research in the field of thermal-fluid sciences as well as administrative duties.

General Electric Company, Atlanta, GA..... (March 2000 – June 2002)

Student Intern. Assignments included conducting gas turbine performance analysis and writing proposals to customers to explain upgrade options to their existing gas turbines.

Georgia Institute of Technology, Atlanta, GA (August 1997 – December 1997)

Graduate Research Assistant. Participated in the design and construction of a large scale two-phase flow test facility for the thermal sciences research group at the School of Mechanical Engineering.

King Saud University, Riyadh, Saudi Arabia.....(September 1993 – June 1994)

Teaching Assistant. Responsibilities included giving tutorials, grading homework assignments, and giving quizzes. Courses included: Engineering Drawing, Thermodynamics, Fluid Mechanics, Power Plant Technology, Turbomachinery.

Plant Operations Division, King Saud University, Riyadh, Saudi Arabia(January 1993)

Student Intern. Work included inspection of a gas turbine during overhauling, and a short orientation program on power plant operations.

Arabian-American Oil Company, Riyadh, Saudi Arabia (July 1992 – September 1992)

Student Intern. Work included inspection of pumps and compressors in an oil refinery, and an orientation program on oil refinery operations.

COMPUTER EXPERIENCE

Programming Languages: BASIC, FORTRAN
Operating Systems: Windows, Macintosh OS, Linux
General Applications: Microsoft Office, Microcal Origin
Scientific Applications: Matlab, Minitab, SPSS, EES
CAD Applications: GeoMesh, GAMBIT
CFD Applications: Fluent

RESEARCH INTERESTS

- CFD modeling of fluid and thermal systems.
- Investigation and improvement of advanced energy systems.
- Design and modeling of turbomachinery.
- Desalination technologies
- Energy conservation in buildings

CONSULTING

Ministry of Higher Education, Riyadh, Saudi Arabia (January 2006 – present)
Responsibilities include reviewing air-conditioning, LPG, and compressed air drawings for several proposed university campuses in the kingdom.

KACST, Riyadh, Saudi Arabia (February 2005 – December 2006)
Responsibilities include supervising the process of establishing a jet engine test facility for the Aviation Technology Unit of the Space Research Institute.

King Faisal Air Force Academy, Riyadh, Saudi Arabia (October 2005 – February 2006)
Participate in establishing the academy's new four-year academic program.

KSU INSTITUTIONAL SERVICE

College Strategic Plan Committee (2005 – present)
Member

Departmental Strategic Plan Committee (2006 – present)
Chairman

Departmental Accreditation Committee (2005 – present)
Member

Departmental Teaching Assistants & Scholarship Holders Committee (2005 – present)
Chairman

Departmental Purchasing Committee (2005 – present)
Chairman

Departmental Student Affairs Committee (2005 – present)
Chairman

College Sports Activities Division (2004 – 2006)
Coordinator

RESEARCH GRANTS

KACST, Riyadh, Saudi Arabia..... (November 2006 – October 2008)
“A New Method for Waste Water and Biowaste Recycling”. Grant Total: SR 1,040,000

SABIC, Riyadh, Saudi Arabia (May 2006 – April 2007)
“Experimental Study of Steady State Natural Convection Heat Transfer From Triangular Metallic Ducts”. Grant Total: SR 41,475

Saudi Telecom Company, Riyadh, Saudi Arabia..... (May 2006 – April 2007)
“Study of Air Conditioning Compressor Operating Problems”. Grant Total: SR 152,000.

ASHRAE, Atlanta, USA..... (February 2001 – January 2002)
“Experimental Analysis of Two-Phase Flow in Ejectors”. Grant Total: \$7500.

PUBLICATIONS

Al-Ansary, H.A., 2007, “The Use of Ejector Refrigeration Systems for Turbine Inlet Air Cooling – A Thermodynamic and CFD Study”. Accepted for publication in the proceedings of Energy Sustainability 2007, Long Beach, California.

Al-Ansary, H. A., 2006, “A Semi-Empirical One-Dimensional Model for Flow in Ejectors Used for Gas Evacuation”. Proceedings of the 2006 ASME Joint U.S.-European Fluids Engineering Summer Meeting, Miami, Florida. Paper FEDSM2006-98138.

Al-Ansary, H. A. and Jeter, S. M., 2004, “Numerical and Experimental Analysis of Single-Phase and Two-Phase Flow in Ejectors”, *International Journal of Heating Ventilating, Air-conditioning and Refrigerating Research*, Vol. 10, No. 4, pp. 521-538.

Al-Ansary, H. A. and Jeter, S. M., 1999, “Development of a Simple Homogeneous Flow Model of a Two-Phase Ejector”. Proceedings of the 34th Intersociety Energy Conversion Engineering Conference, Vancouver, British Columbia, Paper 1999-01-2698

HONORS AND AWARDS

ASHRAE , Atlanta, GA.....(February, 2001)
Winner of Grant-In-Aid Research Fellowship.

Royal Embassy of Saudi Arabia, Washington, DC..... (November, 1999)
Winner of Ambassador Prince Bandar Bin Sultan Award of Academic Achievement.

King Saud University, Riyadh, Saudi Arabia.....(1993)
Winner of the College of Engineering Student of the Year Award.

King Saud University, Riyadh, Saudi Arabia.....(1992 , 1993)
Winner of the School of Mechanical Engineering Student of the Year Award.

PROFESSIONAL AFFILIATION

Member of the American Society of Mechanical Engineers
Member of the American Society of Heating Refrigerating and Air Conditioning Engineers

LANGUAGE SKILLS

- Fluency in English and Arabic.
- Reading fluency in French.

OTHER ACTIVITIES

Saudi Students Club of Georgia, Atlanta, GA.....(1996 – 1998)
Cultural Activities Organizer

King Saud University, Riyadh, Saudi Arabia.....(1991 , 1992)
Participated in the college of engineering freshmen orientation program.

King Saud University, Riyadh, Saudi Arabia.....(1989 , 1992)
Member of the college of engineering basketball team.

NOTE: Rereferences available upon request.