

EDUCATION

Ph.D. Candidate in Mechanical Engineering, University of Houston, Houston, Texas. GPA: **3.97**

Dissertation Topic: Two-Phase Flow with Heat Transfer in a Minichannel.

Expected Graduation date: May, 2010.

B.S. Mechanical Engineering, 2001, Middle East Technical University, Ankara, Turkey. GPA: 3.16

B.S. Industrial Engineering, 2002, Middle East Technical University, Ankara, Turkey. (double major)

PROFESSIONAL EXPERIENCE

CAMERON - Measurement Systems 2009 Summer

Sr. Level Engineering Internship: Re-engineered a temperature element for the circular chart recorders. Replaced a mercury fill with an inorganic nitrogen fill.

Notable Accomplishments:

- Designed, produced and tested 10 working prototypes for the temperature range 0-150°F. Demonstrated the interchangeability of the existing system with nitrogen fill.
- Modeled the temperature measurement system mechanism. Improved the calibration accuracy and linearity.

Heat Transfer & Phase Change Laboratory - University of Houston..... 2006 - present

Research Assistant: Conducts research on two-phase flow and heat transfer in narrow channels. Designed and built an experimental facility featuring a 1 millimeter-wide heated channel that allows simultaneous high-speed imaging of the flow and thermal imaging of the test surface using thermochromic liquid crystals. Simulated the temperature distribution over the channel cross section using the software Fluent.

Teaching Assistant: Assists in laboratory instruction for the course "Thermal-Fluids Laboratory" and grades lab reports.

Notable Accomplishments:

- Awarded an assistantship stipend and a university tuition fellowship.
- Awarded the Cullen College of Engineering Outstanding Teaching Assistantship Award for 2009.
- Working Paper: "A Method for Concurrent Thermographic-Photographic Visualization of Flow Boiling in a Minichannel"
- Working Paper: "The Onset of Nucleate Boiling of a Subcooled Liquid Flowing in a Narrow Channel"

BEKO - Turkey..... 2003 - 2006

The 3rd largest home appliances company in Europe with 17,000 employees worldwide and \$6 Billion net sales.

Project Manager: Managed construction and equipment installation and was responsible for upgrading the existing production system.

Process and Production Engineer: Handled the thermoforming process. Calculated and reported the assembly line efficiencies to senior management on a regular basis.

Notable Accomplishments:

- Awarded "**Engineer of the Year 2006**".
- Awarded "**Innovative Young Star**" in 2006.
- **International Patent** "A Cooling Device", Europe, P#WO 2007/023470 A2, A. Ozer et al.
- **International Patent** "A Cooling Device", Europe, P#WO 2007/029171 A1, A. Ozer et al.
- **International Patent** "A Cooling Device", Europe, P#WO 2007/074125 A1, A. Ozer et al.
- Designed, planned and managed the construction of a full assembly line. Company is currently producing more than 500,000/year SBS type refrigerators on this assembly line.
- Led a team of designers and technicians in design and fabrication of a rotary thermoforming machine. It was the first time production equipment built in-house at BEKO. Company saved 55% of \$1.1M.
- Conducted a lean manufacturing project for the thermoforming process. Cycle time was reduced by 15%, and scrap material was reduced by more than 25%.
- Participated in R&D studies for improving the performance of the existing products. Faster freezing of foods was achieved. Obtained 3 international patents based on this study.

Turkish NAVY 2002 - 2003

Lieutenant: Responsible for the computer system upgrades and hardware maintenance. Designed and programmed a database for the military high school student records.

Undergraduate Internships

TEPE Construction and Infrastructure, Summer 2001: Updated the layout of a power plant construction project using the software AutoCAD.

New Holland Manufacturing Plant, Summer 2000: Prepared a report explaining the manufacturing technology and processes in the company.

TRAINING and CERTIFICATIONS

Hydraulics, Pneumatics, Basic Electrics, PLC's, AutoCAD, Unigraphics, Solidworks, Fluent, and Matlab.

Six Sigma Green Belt, Lean Manufacturing, Minitab, Visual Basic, Ms Access, Word, Excel, Power Point, Outlook, and Project.
