

## Ferah OĐUN

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### ACADEMIC DEGREES

- Feb. 2014-ongoing Ph.D., Mechanical Engineering Department, Middle East Technical University (METU), Ankara (GPA: 3.42/4.00)
- Sept. 2011-Sept. 2013 M.Sc., Mechanical Engineering Department, Middle East Technical University (METU), Ankara (GPA: 3.71/4.00) (Thesis title: Implementation and Comparison of Different Constitutive Models in Deep Drawing Process)
- Sept. 2007-June 2011 B.Sc., Mechanical Engineering Department, Bařkent University, Ankara (GPA: 3.51/4.00, 1<sup>st</sup> ranking student of the department in graduation).
- 2004-2007 High school, Gazi University Foundation Private Science High School, Ankara (GPA: 5.00/5.00, 3<sup>rd</sup> ranking student in high school graduation).

### EMPLOYMENT

- Jan. 2, 2014-ongoing Research Assistant, Mechanical Engineering Department, ankaya University, Ankara.

### AWARDS AND SCHOLARSHIPS

- Sept. 2008- Sept. 2013 High Honor student during B.Sc. and M.Sc. studies
- October 2011 3<sup>rd</sup> award, 6<sup>th</sup> National Hydraulic Pneumatic Congress and Exhibition-Project Contest (Project title: Sıvı Basıncı ile Sac řekillendirme (Hydroforming) Sisteminin Tasarımı, İmalatı ve Denenmesi).
- June 2011 1<sup>st</sup> ranking student in B.Sc. graduation
- Sept. 2011-June 2011 TÜBİTAK-BİDEB Scholarship in B.Sc. graduation project
- Sept. 2008- June 2011 Success Scholarships during B.Sc. studies
- 2004-2007 3<sup>rd</sup> ranking student in high school graduation

## PUBLICATIONS

### A) International Journals (SCI and SCI-expanded)

- 1) Cogun, C., Esen, Z., Genc, A., **Cogun, F.** and Akturk, N., “The Effect of PM Cu-B<sub>4</sub>C Electrodes on Workpiece Surface Characteristics and Machining Performance of EDM”, Proc. Instn. of Mech. Engineers-Part B, Journal of Engineering Manufacture, 230(12), 2190-2203, 2016.
- 2) **Cogun, F.** and Darendeliler, H., “Comparison of different yield criteria in various deep drawn cups”, International Journal of Material Forming, 10(1), 85-98, 2017.
- 3) **Çoğun, F.**, Yıldırım, E. and Arıkan, M.A.S., “An Investigation on Replication of Microfluidic Channels by Hot Embossing”, Materials and Manufacturing Processes, 2017 (accepted for publication).

### B) International Conferences

- 1) **Çoğun, F.**, Alkan, F. and Elaldı, F., “Design, Manufacture and Implementation of Sheet Metal Hydroforming System”, 6<sup>th</sup> International Conference and Exhibition on Design and Production of Machines and Dies/Molds, June 23-26, Atılım University, Ankara, 2011.
- 2) **Cogun, F.**, Esat, V. and Yildirim, R.O., “Comparison of Analytical and Numerical Approaches for the Effect of Die and Tube Parameters on Tube Expansion Process”, 8<sup>th</sup> International Conference and Exhibition on Design and Production of Machines and Dies/Molds, June 18-21, pp. 67-71, Kuşadası, Aydın, 2015.
- 3) Kasap, E. N., **Çoğun, F.**, Yıldırım, E., Boyacı, İ. H., Çetin, D., Suludere, Z., Tamer, U., Ertaş, N., “Microchip Based Determination of Bacteria by In-Chip Sandwich Immunoassay”, International Multidisciplinary Symposium on Drug Research and Development, October 15-17, Eskişehir 2015 (poster presentation).
- 4) **Çoğun, F.**, Yıldırım, E. and Parsian, M. “Effect of preheating on channel geometry and surface texture in fabrication of plastic microfluidic chips by ultrasonic hot embossing”, Microfluidics 2016, July 24-26, Heidelberg, Germany, 2016 (poster presentation).
- 5) Ahi, E. E., Gumustas, A., Çiftçi, H., Caglayan, M. G., Somay Selbes, Y., **Çogun, F.**, Yıldırım, E., Tamer, U., “Chip-Based Immunomagnetic Separation of Human Chorionic Gonadotropin”, 10<sup>th</sup> Aegean Analytical Chemistry Days, 29 Sept. - 2 Oct., Çanakkale, 2016 (poster presentation) (poster award).
- 6) Dogan, U., Kasap, E., **Çogun, F.**, Yıldırım, E., Cetin, D., Suludere, Z., Boyacı, İ. H., Ertaş, N., Tamer, U., “Simultaneous Detection of Two Different Bacteria Using QDs and MNPs”, 10<sup>th</sup> Aegean Analytical Chemistry Days, 29 Sept. - 2 Oct., Çanakkale, 2016 (poster presentation).

### C) National Conferences

- 1) Alkan, F., **Çoğun, F.** and Elaldı, F., “Sıvı Basıncı ile Sac Şekillendirme (Hydroforming) Sisteminin Tasarımı, İmalatı ve Denenmesi” (text in Turkish), 6<sup>th</sup> National Hydraulic Pneumatic Congress and Exhibition, Oct. 12-15, İzmir, 2011.

- 2) Ziyara, A., **Çoğun, F.**, Varol, C., Totuk, O. and Yıldırım, E., “Optimization of Hot Embossing Process for Fabrication of Microfluidic Devices”, 8<sup>th</sup> Engineering and Technology Symposium, May 14-15, Cankaya University, Ankara, 2015 (text in English).

#### **D) Magazines**

- 1) Alkan, F., **Çoğun, F.** and Elaldı, F., “Sıvı Basıncı ile Sac Şekillendirme (Hydroforming) Sisteminin Tasarımı, İmalatı ve Denenmesi, Otomasyon Magazine, April 2012/04, Vol. 238, pp. 360-368 (text in Turkish).

#### **E) Books**

- 1) Proc. of 8<sup>th</sup> Engineering and Technology Symposium, May 14-15, 2015 (Editors: S. Kemal İder, Turgut Akyürek, Ulaş Beldek, Özgün Selvi, Ender Yıldırım, **Ferah Çoğun**, Sühan Mergen)

#### **CONFERENCE ORGANIZATION**

- 1) Organizing Committee Member, 8<sup>th</sup> Engineering and Technology Symposium, May 14-15, 2015.

#### **JOURNAL ARTICLE REVIEWS**

2014, Journal of Mechanical Science and Technology (indexed by SCI).

#### **PROJECTS**

2010-2011 “Design, Manufacture and Implementation of Sheet Metal Hydroforming System”, Project Leader, TÜBİTAK BİDEB 2209-National/International Research Projects Supporting Program for University Students.

#### **ASSISTANSHIP**

##### **2016-2017 (I) Term**

ME 203	Statics
ME 251	Statics and Strength of Materials
ME 210	Manufacturing Processes
ME 331	Numerical Methods for Mechanical Engineers
ME 301	Theory of Machines I

##### **2015-2016 (II) Term**

ME 102	Mechanical Engineering Orientation
ME 202	Strength of Materials
ME 206	Dynamics

ME 210	Manufacturing Processes
ME 402	Introduction to Finite Element Analysis

**2015-2016 (I) Term**

ME 203	Statics
ME 251	Statics and Strength of Materials
ME 210	Manufacturing Processes
ME 243	Fundamentals of Manufacturing Processes
ME 301	Theory of Machines I

**2014-2015 (II) Term**

ME 102	Mechanical Engineering Orientation
ME 114	Computer Aided Engineering Drawing II
ME 202	Strength of Materials
ME 206	Dynamics
ME 210	Manufacturing Processes
ME 308	Machine Elements II
ME 402	Introduction to Finite Element Analysis

**2014-2015 (I) Term**

ME 251	Statics and Strength of Materials
ME 203	Statics
ME 113	Computer Aided Engineering Drawing I
ME 301	Theory of Machines I

**2013-2014 (II) Term**

ME 102	Mechanical Engineering Orientation
ME 114	Computer Aided Engineering Drawing II
ME 202	Strength of Materials
ME 206	Dynamics

**INTERNSHIP**

June 2009 Erkunt Sanayi A.Ş., Manufacturing, 20 working days.

June 2010 Aselsan A.Ş., Management, 20 working days.

**COMPUTER SKILLS**

**Programming Languages:** MATLAB, FORTRAN.

**Design Softwares:** SOLIDWORKS, SOLIDCAM, AUTOCAD, AUTOCAD MECHANICAL, AUTODESK INVENTOR.

**Analysis Packages:** ABAQUS, DYNAFORM, GAMBIT, FLUENT, COMSOL.