

ATEŞ BATIKAN ÖZDAMAR

Curriculum Vitae



Personal Information

Date & Place of Birth: 15.05.1994 / Izmir, TR
E-Mail Address: atesozdamar |at| iyte.edu.tr
Citizenship: Turkey
Mobile Telephone: +90 539 566 11 61
Driving License: B Class

Education

Doctor of Philosophy (Ph.D.), **Izmir Institute of Technology** Izmir,
2020 - ongoing Chemical Engineering, CGPA: 3.88 / 4.00

Master of Science (M.Sc.), **Izmir Institute of Technology** Izmir,
2019 - 2020 Chemical Engineering, CGPA: 3.00 / 4.00

Master of Science (M.Sc.), **Middle East Technical University** Ankara,
2017 - 2019 Chemical Engineering, CGPA: 3.00 / 4.00

Bachelor of Science (B.Sc.), **Middle East Technical University** Ankara,
2012 - 2017 Chemical Engineering, CGPA: 2.56 / 4.00

Work Experience

Izmir Institute of Technology – Chemical Engineering Department / Izmir



Research & Teaching Assistant,

February 2020- ...

Responsibilities:

- Assisted courses are *Material and Energy Balances in Engineering, Computer Tools in Engineering, Process Dynamics & Control, Biochemistry and Laboratory Applications of Chemical Engineering*

Izmir Institute of Technology – Chemical Engineering Department / Izmir



Project Assistant,

August 2019-Jun 2020

Responsibilities:

- Working on a 1003 project funded by Tubitak.
- Creating electrolyte-based simulations of CO₂ capture processes with Aspen Plus V10 Software.

Organizational Development and Planning Office – METU / Ankara



Student Assistant,

February 2019-May 2019

Responsibilities:

- Helping to prepare Strategic Plan, Internal and External Quality Assessment Report, Annual Activity Report and University Performance Rankings with reliable and valid data.
- Providing regular data entry to the office website and making improvements.

Koç Holding TÜPRAŞ A.Ş. – Aliğa / Izmir Refinery



Engineering Intern,

August 2016-September 2016

Responsibilities:

- Observing processes of different production departments such as Atmospheric Distillation (Crude Oil), Vacuum Distillation (Base Oil) and Waste Water Treatment.
- Learning process details from workers to improve communication skills.
- Mass and Energy Balance calculations in Atmospheric Distillation Unit.
- Measuring temperature, pressure, specific gravity and flowrate from process equipments such as heat exchangers and distillation columns.

Cementr Holding Çimentoş A.Ş. Çimento Fabrikası – Izmir Plant



Engineering Intern, Voluntary

Jun 2016-July 2016

Responsibilities:

- Observing processes of different cement production units such as cement kilns, mills and laboratories (Waste, Chemistry, Robolab, Process, Raw Material and Sample, R&D) with chemical engineers.
- Taking part in seminars on 6S, lean production and Kaizen given by OPEX (Operational Excellency) Department.
- Performing mass balance and energy balance calculations.
- Measuring temperature, pressure and flowrate with gas analyzer around kilns and cyclones.

Polibak Plastik Film Sanayi & Ticaret A.Ş. – Çiğli / Izmir



Engineering Intern, Voluntary

August 2015-September 2015

Responsibilities:

- Observing processes of BOPP (Biaxially Oriented Polypropylene), CPP (Cast Polypropylene) production lines and quality control laboratories.
- Working in Start-up process of BOPP Line V and preparing instructions for Line V.
- Co-working with employees to learn about plastic film production process.
- Making presentations on TPM (Total Productive Maintenance), 5S and Kaizen Projects to chief chemical engineers and to Nitto Denko Corporation managers.
- Mass and energy balance calculations around BOPP Line I and Extrusion Line III.

Responsibilities:

- Observing production processes of printing inks (flexo and rotogravure) and masterbatches and tests applied by quality control laboratories.
- Learning details of batch and continuous processes by a chemical engineer.
- Mass Balance calculations around a mixer producing printing ink.
- Energy Balance calculations around a reactor with electric heater.

Awards and Certificates

- *Middle East Technical University Honor Roll,*
METU-Chemical Engineering 2016-2017 Spring Semester
- *Certificate of Internship Achievement,*
METU Chemical Engineering Head of Department 2016-2017 Spring Semester
- *Certificate of Participation,*
METU AIChE Student Chapter Plus+8 Sempodium by (Henkel, Ravago, Petkim, BASF, Bosch,TAI and Eczacıbaşı) 2018
- *Certificate of Participation,*
METU AIChE Student Chapter Plus+6 Sempodium by (Henkel, Ravago, Tüpraş and Zentiva) 2016
- *Certificate of Participation,*
METU AIChE Student Chapter Plus+5 Sempodium by (Sanofi, Ravago, Eczacıbaşı and Limak) 2015
- *Certificate of Participation,*
METU AIChE Student Chapter Plus+4 Sempodium by (Loreal, Akxa, Tüpraş, Eczacıbaşı and Unilever) 2014

Organizations:

- **GençKal Membership - Türkiye Kalite Derneği (Kalder)** 2017-...
- **AICHE (American Institute of Chemical Engineers) Membership** 2014-2017

Research Projects:

- **Project Title:** Effect of Additives on Combustion Characteristics of Biomass, September 2017-Jun 2019

Summary of the project: Olive residue is a specific type of biomass from olive oil production process. Fluidized bed combustion, frequently used for biomass combustion, is characterized by low operation temperature which reduces occurrence of ash melting problem. Alkali species especially high concentrations of potassium and low chlorine and sulfur content of olive residue results in operational problems like slagging and fouling during combustion.

Using additive is an alternative way to prevent operational problems during biomass combustion processes. The effect of coal fly ash additive from METU 0.3 MW_{th} bubbling fluidized bed combustor (BFBC) on combustion characteristics of olive residue by using thermogravimetric analyzer (TGA) combined with Fourier-transform infrared (FTIR) spectrometer was investigated.

- **Project Title:** Experimental Verification of Solar Driven Convective Food Dryer Design, 2017 Spring Semester

Summary of the project: Solar drying is an ages old method to preserve fruits and vegetables. However, if implemented under uncontrolled conditions, poisonous mold formation occurs. Harvesting solar energy efficiency and providing controlled, constant conditions for drying process is key to an economical and safe drying process. A smart food dryer was built and several experiments conducted on it. The air entering into the was modelled on Matlab and temperature distributions were obtained under different conditions. It is completed with a group of 2.

Languages:

English: Full Professional Proficiency

German: Beginner Proficiency

IT Proficiency:

MS-Office, Aspen PLUS, Aspen HYSYS, Mathcad, Matlab, Simulink, GNU Octave, Scilab/Xcos, KeyCreator, OriginPro

Personel Interests:

- **Doing Aikido:** Successfully completed the 6. Kyu Rank by Aikido and Budo Federation.
- **Playing Classical Guitar:** Taking education for 2 years.
- **Tango Dancing:** Participating dance course given by METU Dance Club.