



DAMLA YALÇIN GÖL

PERSONAL INFORMATION

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JOB EXPERINCE

Izmir Institute of Technology

01.2020 – Present

Research Assistant / Teaching Assistant

Responsibilities:

- Assisted courses are *Fluid Mechanics, Separation Processes, Thermodynamics II, Chemical Kinetics and Reactor Design, Chemical Engineering Laboratory I, Chemical Engineering Laboratory II.*

Izmir Institute of Technology

02.2019 – 07.2019

Student Research Assistant / Teaching Assistant

Responsibilities:

- Assisted course is *Chemical Engineering Laboratory I*

Petkim Petrokimya Holding A.Ş.

06.2017- 07.2017

Aliağa/Izmir, Turkey

Chemical Engineer Intern

Responsibilities:

- Mass and Energy Balance calculations in Pure Terephthalic Acid (PTA) Plant.
- Learning process details from workers to improve communication skills.
- Making a project about Optimization of Acetic Acid Dehydration Column in PTA Plant.

TAI-Tusaş Türk Havacılık Ve Uzay Sanayi A.Ş.

07.2015 - 08.2015

Kahramankazan/Ankara, Turkey

Chemical Engineer Intern

Responsibilities:

- Mass and Energy Balance calculations in Heat Treatment and Robotic Paintshop Plant.
- Learning process details from workers to improve communication skills.
- Taking part in seminars on 6S and Kaizen given by Cenk ULUS who is a chief of Paintshop Plant in TAI.

EDUCATION

- PhD Degree:** **Izmir Institute of Technology**
Institute of Engineering and Sciences,
Department of Chemical Engineering
(w/ Thesis) (2022 - present)
- Master's Degree:** **Izmir Institute of Technology**
Institute of Engineering and Sciences,
Department of Chemical Engineering
(w/ Thesis) (2018 - 2022) – 3.64/4.00
- Bachelor's Degree:** **Izmir Institute of Technology**
Faculty of Engineering,
Department of Chemical Engineering
(English Curriculum) (2012 - 2018) – 3.19/4.00
- Bachelor's Degree:** **Uniwersytet Technologiczno-Przyrodnicz im. Jana i**
Faculty of Chemical Technology and Engineering
(Erasmus+ Programme)
(02.2016-07.2016) 4.00/4.00

RESEARCHES AND PROJECTS

- IDEATHON: BEST For Biomass - Green Hydrogen Production System from Biogas**
2nd place awarded, Izmir, 2022
- Kendi Enerjini Kendin Üret - ASPİLSAN Enerji ve Orta Anadolu Kalkınma Ajansı – Infrared Solar Cells**
3rd place awarded, Kayseri, 2022
- Preparation and Characterization of PEG-Keratin Hydrogels by Chemically Crosslinked Method**
IZTECH Scientific Research Projects, Project No: 2020IYTE0096, (2020 - 2022)
- Production Methanol from Flue Gas**
Bachelor Final Project, Izmir Institute of Technology (10.2017 – 06.2018)
- Optimization of Acetic Acid Dehydration Column in PTA Plant**
Intern Project Competition at PETKİM, 2nd Prize, (06.2017 – 07.2017)
- Rechargeable Zinc/Air and Zinc/Nickel Batteries with Composite Zinc Electrodes**
CHE 101 – Introduction to Chemical Engineering Course, Advisor Asst. Prof. Ozgenc EBİL and Asst. Gizem CIHANOGLU, (10.2013 – 01.2014)

PUBLICATIONS

- Yalçın, D.,** Deliismail, O., Tuncer, & Sildir, H. (2024). Crude oil farming planning under equipment and port operational costs through mixed integer quadratically constrained programming. *Computers and Chemical Engineering (submitted)*.
- Yalçın, D.,** Deliismail, O., Tuncer, B., Boy, O.C., Bayar, I., Kayar, G., Ozpınar, M., & Sildir, H. (2024). Automatization of deep learning architecture development based on sensitivity and model statistics. *Chemical Engineering Science (submitted)*.
- Yalçın, D.,** & Top, A. (2024). Evaluation of partially reduced keratins extracted from wool fibers as a hydrogel forming biomaterial. *Brazilian Archives of Biology and Technology*.
- Yalçın, D.,** & Top, A. (2022). Novel biopolymer-based hydrogels obtained through crosslinking of keratose proteins using tetrakis (hydroxymethyl) phosphonium chloride. *Iranian Polymer Journal, 1-11*.
- Pakkaner, E., **Yalçın, D.,** Uysal, B., & Top, A. (2018). Self-assembly behavior of the keratose proteins extracted from oxidized Ovis aries wool fibers. *International Journal of Biological Macromolecules*.

ORAL PRESENTATIONS AT INTERNATIONAL SYMPOSIUMS, CONGRESSES, CONFERENCES

D. Yalçın, H. Sildir, Stochastic optimization with automated number of storage tank selection for crude oil scheduling, 33rd European Conference on Operational Research (EURO24), 30th June – 3rd July 2024, Technical University of Denmark (DTU), Copenhagen, DENMARK.

D. Yalçın, “2nd Copenhagen School of Stochastic Programming”, Department of Mathematical Sciences, University of Copenhagen, 25 – 28 June 2024, Copenhagen, DENMARK.

D. Yalçın, A. Top, PEG-keratin hidrojellerin hazırlanması ve karakterizasyonu, 5th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2022), 23 November 2022, Ankara, TÜRKİYE

D. Yalçın, A. Top, Merinos koyun yününden farklı sülfitoliz yöntemleriyle elde edilen keratinlerin karakterizasyonu, 4th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2021), 24 – 26 November 2021, Ankara, TÜRKİYE

D. Yalçın, A. Top, Kimyasal Olarak Çapraz Bağlanmış Keratoz Bazlı Hidrojellerin Hazırlanması ve Karakterizasyonu, 14. Ulusal Kimya Mühendisliği Kongresi (UKMK2020), 10 – 12 Haziran 2021, Konya Teknik Üniversitesi, Konya, TÜRKİYE

SKILLS

Computer: Polymath, Aspen Plus V9, Microsoft Office, Python, Pyomo, Matlab

Language: English (Fluent), Germany (Beginner)

