

## Asst. Prof. İLKAY KOÇER KULOĞLU

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAS-2092-2020

Yoksis Researcher ID: 204564

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği A.B.D., Turkey 2015 - 2021

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği A.B.D., Turkey 2012 - 2015

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği, Turkey 2007 - 2012

### Dissertations

Doctorate, Production of recombinant antibody fragments in bacteria and their development towards medical diagnosis, Hacettepe University, Fen Bilimleri Enstitüsü, 2021

Postgraduate, Farklı yöntemlerle kitosan eldesi ve karakterizasyonu, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), 2015

### Research Areas

Chemical Engineering and Technology, Biotechnology, Enzyme Engineering, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2013 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Ni(II) functionalized polyhedral oligomeric silsesquioxane based capillary monolith for purification of histidine-tagged proteins by immobilized metal affinity micro-chromatography**  
Çambay Kuban F., Koçer İ., Kip Ç., Çelik E., Tuncel A.  
Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, vol.1225, 2023 (SCI-Expanded)
- II. **In silico analysis of the different variable domain oriented single-chain variable fragment antibody-antigen complexes**  
Koçer İ., Çelik E.  
Journal of Biomolecular Structure and Dynamics, 2023 (SCI-Expanded)
- III. **Shotgun scanning glycomutagenesis: A simple and efficient strategy for constructing and**

### **characterizing neoglycoproteins**

Li M., Zheng X., Shanker S., Jaroentomechai T., Moeller T. D., Hulbert S. W., Kocer İ., Byrne J., Cox E. C., Fu Q., et al. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.118, no.39, 2021 (SCI-Expanded)

- IV. **Effects of variable domain orientation on anti-HER2 single-chain variable fragment antibody expressed in the Escherichia coli cytoplasm**  
Koçer Kuloğlu İ., Cox E. C., Delisa M. P., Çelik E.  
BIOTECHNOLOGY PROGRESS, vol.37, no.2, 2021 (SCI-Expanded)
- V. **Microfluidic immobilized metal affinity chromatography based on Ti(IV)-decorated silica microspheres for purification of phosphoproteins**  
Yildirim D., Kip C., Tsogtbaatar K., KOÇER İ., Celik E., Tuncel A.  
JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES, vol.1140, 2020 (SCI-Expanded)
- VI. **Ni(II)-decorated porous titania microspheres as a stationary phase for column chromatography applications: Highly selective purification of hemoglobin from human blood**  
Kip C., Tosun R. B., Alpaslan S., KOÇER İ., Celik E., Tuncel A.  
TALANTA, vol.200, pp.100-106, 2019 (SCI-Expanded)
- VII. **Computational affinity maturation of camelid single-domain intrabodies against the nonamyloid component of alpha-synuclein**  
Mahajan S. P., Meksiriporn B., Waraho-Zhmayev D., Weyant K. B., Kocer İ., Butler D. C., Messer A., Escobedo F. A., DeLisa M. P.  
SCIENTIFIC REPORTS, vol.8, 2018 (SCI-Expanded)
- VIII. **Protein A and protein A/G coupled magnetic SiO<sub>2</sub> microspheres for affinity purification of immunoglobulin G**  
Salimi K., Usta D. D., KOÇER İ., Çelik E., Tuncel A.  
International Journal of Biological Macromolecules, vol.111, pp.178-185, 2018 (SCI-Expanded)
- IX. **Highly selective magnetic affinity purification of histidine-tagged proteins by Ni<sup>2+</sup> carrying monodisperse composite microspheres**  
SALIMI K., Usta D. D., KOÇER İ., Celik E., Tuncel A.  
RSC ADVANCES, vol.7, no.14, pp.8718-8726, 2017 (SCI-Expanded)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **A New Magnetic silica Based Sorbent for Isolation of Green Fluorescent Protein by Immobilized Metal Affinity Chromatography**  
USTA D. D., SALİMİ K., KOÇER İ., ÇELİK E., TUNCEL S. A.  
44th International Symposium & Exhibit on High Performance Liquid Phase Separations and Related Techniques (HPLC2016), 19 - 24 June 2016
- II. **Production of Chitin and Chitosan from Crustacean Shells and Aspergillus niger**  
Koçer İ., Yavuz Ersan H.  
NanoBiotech 2015 , Muğla, Turkey, 6 - 12 September 2015, pp.122
- III. **Production and Characterization of the Recombinant Enzyme for Synthesis of Chitosan Biopolymer**  
KOÇER İ., YAVUZ ERSAN H., ÇELİK E.  
International Conference on Chemical and Biochemical Engineering, Paris, France, 20 - 22 July 2015, vol.1, pp.44
- IV. **Mikroorganizmalardan kitosan eldesinde verimin artırılması**  
KOÇER İ., ÇELİK E., YAVUZ ERSAN H.  
11. Ulusal Kimya Mühendisliği Kongresi, Eskişehir, Turkey, 2 - 05 September 2014, pp.24-25

## Supported Projects

ÇELİK AKDUR E., Cilasun S., KOÇER İ., Project Supported by Higher Education Institutions, Anti-HER2 Antikor Fragmentinin Bakterilerde Çözünür Formda Üretimine Yönelik Proses Geliştirilmesi, 2021 - 2023

ÇELİK AKDUR E., KOÇER İ., Project Supported by Higher Education Institutions, Selülaz Enzimlerine Bakteriyel Glikozilasyonunun Etkilerinin Araştırılması, 2017 - 2017

Koçer İ., Çelik Akdur E., Project Supported by Higher Education Institutions, Kitosan Biyopolimerinin Sentezine Yönelik Rekombinant Enzimin Üretimi ve Karakterizasyonu , 2014 - 2015

Koçer İ., Yavuz Ersan H., Project Supported by Higher Education Institutions, Mikroorganizmalardan Kitosan Eldesi, 2013 - 2014

## Metrics

Publication: 13

Citation (Scopus): 167

H-Index (Scopus): 7

## Scholarships

TÜBİTAK 2214-A Doktora Sırası Yurt Dışı Araştırma Burs Programı, TUBİTAK, 2018 - 2019

2211- A Yurt İçi Doktora Burs Programı , TUBİTAK, 2015 - 2019