

## Asst. Prof. GÖKÇE DİCLE KALAYCIOĞLU

### Personal Information

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**Address:** Hacettepe Üniversitesi Kimya Mühendisliği Bölümü Beytepe Kampüsü Çankaya/Ankara

### International Researcher IDs

ORCID: 0000-0002-9678-5855

ScopusID: 57188623040

Yoksis Researcher ID: 168974

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 2011 - 2017

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Bölümü, Turkey 2008 - 2011

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2003 - 2008

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Postgraduate, Yüzey aktif maddelerle dekore edilmiş nanopartiküllerin model hücre membranı ile fiziksel etkileşiminin incelenmesi, Hacettepe Üniversitesi, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2011

### Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Nanomaterials, Engineering and Technology

### Academic Titles / Tasks

Researcher, Kobenhavns Universitet (University of Copenhagen), Faculty of Health and Medical Sciences, Department of Pharmacy, 2023 - Continues

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2021 - Continues

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2009 - 2021

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

1. Tadpole-Like Anisotropic Polymer/Lipid Janus Nanoparticles for Nose-to-Brain Drug Delivery:

**Importance of Geometry, Elasticity on Mucus-Penetration Ability.**

ÖKMEN ALTAŞ B., KALAYCIOĞLU G. D., Lifshiz-Simon S., Talmon Y., AYDOĞAN N.

Molecular pharmaceutics, vol.21, no.2, pp.633-650, 2024 (SCI-Expanded)

- II. **Carthamus Tinctorius L. (Safflower) extracts inhibit expression of metastatic genes of MDA-MB-231 breast cancer cells**  
KAÇAROĞLU D., KALAYCIOĞLU G. D., ÖZDEN A. K.  
Cellular and molecular biology (Noisy-le-Grand, France), vol.69, no.12, pp.19-25, 2023 (SCI-Expanded)
- III. **Biophysical interaction of gold nanoparticles with model biological membranes: Investigation of the effect of geometry on cellular uptake and photothermal performance**  
Kalaycioglu G. D., Ökmen Altaş B., Aydogan N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.676, 2023 (SCI-Expanded)
- IV. **Omega-3 fatty acid nanocarriers: Characterization and potential applications**  
Yaghmur A., Ghayas S., Jan H., KALAYCIOĞLU G. D., Moghimi S. M.  
Current Opinion in Colloid and Interface Science, vol.67, 2023 (SCI-Expanded)
- V. **The effect of the gold nanoparticles and gold nano-clusters on the behavior of natural lung surfactant**  
Ozcan V. P., Ökmen Altaş B., Kalaycioglu G. D., Ergul E., Aydogan N.  
Journal of Molecular Liquids, vol.387, 2023 (SCI-Expanded)
- VI. **Trojan-like doxorubicin and gold nanoparticle entrapped smart nanostructured lipid carriers for breast cancer synergistic chemo/photothermal therapy**  
Okuyucu C. E., KALAYCIOĞLU G. D., KAÇAROĞLU D., ÖZDEN A. K., AYDOĞAN N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.672, 2023 (SCI-Expanded)
- VII. **Interfacial properties and aggregates of novel redox-active surfactant to synthesize silver nanoparticles at the air/water interface**  
KALAYCIOĞLU G. D., Yuksel D., ÖKMEN B., AYDOĞAN N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.624, 2021 (SCI-Expanded)
- VIII. **Fluorocarbon/hydrocarbon hybrid surfactant decorated gold nanoparticles and their interaction with model cell membranes**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
Journal of Molecular Liquids, vol.326, 2021 (SCI-Expanded)
- IX. **Custom-made lipid nanotubes as a tissue and hydrogel adhesive**  
AYDOĞAN N., KALAYCIOĞLU G. D., Unsal H., Ozkan M.  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.608, 2021 (SCI-Expanded)
- X. **pH-Sensitive Polymeric Poly (epsilon-caprolactone) Core- Chitosan/Alginate Shell Particle System for Oral Insulin Delivery**  
KALAYCIOĞLU G. D., Elamin A. A., Kinali H., AYDOĞAN N.  
CHEMISTRYSELECT, vol.6, no.4, pp.695-704, 2021 (SCI-Expanded)
- XI. **Layer-by-layer coated microcapsules with lipid nanodomains for dual-drug delivery**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.584, 2020 (SCI-Expanded)
- XII. **Smart Lipid Nanotubes for Easy Formation of Gold-Lipid Hybrid Nanotubes and Tunable Gold Superstructures**  
Unsal H., Kalaycioglu G. D., Aydogan N., Karakuscu N.  
CHEMISTRYSELECT, vol.4, no.35, pp.10276-10287, 2019 (SCI-Expanded)
- XIII. **Preparation and investigation of solid lipid nanoparticles for drug delivery**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.510, pp.77-86, 2016 (SCI-Expanded)
- XIV. **Stimuli-responsive lipid nanotubes in gel formulations for the delivery of doxorubicin**  
Ilbasmis-Tamer S., Unsal H., Tugcu-Demiroz F., KALAYCIOĞLU G. D., Degim I. T., AYDOĞAN N.  
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.143, pp.406-414, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Preparation of magnetic nanoparticle integrated nanostructured lipid carriers for controlled delivery of ascorbyl palmitate**  
KALAYCIOĞLU G. D.  
METHODSX, vol.7, 2020 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Colloidal Capsules for Combined Therapy**  
AYDOĞAN N., KALAYCIOĞLU G. D.  
31th Conference of Colloids and Interface Science Society, Madrid, Spain, 3 - 08 September 2017
- II. **STIMULI RESPONSIVE LIPID NANOTUBES GEL COMPLEXES FOR DOXORUBICIN DELIVERY**  
İLBASMIŞ TAMER S., ÜNSAL H., tugcu demiroz f., KALAYCIOĞLU G. D., DEĞİM İ. T., AYDOĞAN N.  
ecis 2016, 4 - 09 September 2016
- III. **DOKSORUBİSİN SALIMI İÇİN YENİ UYARI CEVAP LİPİT NANOTÜP JEL KOMPLEKS SİSTEMİ**  
İLBASMIŞ TAMER S., ÜNSAL H., tugcu demiroz f., KALAYCIOĞLU G. D., DEĞİM İ. T., AYDOĞAN N.  
UKMK 12, Turkey, 23 - 26 August 2016
- IV. **Preparation Characterization and Self Assembly of Solid Lipid Nanoparticles**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
Aiche, 8 - 13 November 2015
- V. **Self Assembled Doxorubicin Containing Lipid Nanotubes for Intracolonic Administrations**  
İLBASMIŞ TAMER S., ÜNSAL H., KALAYCIOĞLU G. D., FATMANUR T., DEĞİM İ. T., AYDOĞAN N.  
2015 AAPS Annual Meeting and Exposition, 25 October 2015 - 29 January 2016
- VI. **Investigation of Solid Lipid Nanoparticles for Drug Delivery**  
KALAYCIOĞLU G. D., AYDOĞAN N.  
29th Conference of the European Colloid and Interface Science ECIS, 6 - 11 September 2015

## Supported Projects

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Kombine Kanser Tedavisinde Yönelik Çok Fonksiyonlu Akıllı Nanoyapılı Lipit Taşıyıcıların Geliştirilmesi (119M377 nolu TÜBİTAK 1001 projesi ek bütçe desteği), 2022 - 2023

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Kolloidal Mikrokapsül Temelli İkili İlaç Salım Sistemlerinin Geliştirilmesi, 2017 - 2019

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Katı Lipit Nanopartiküllerin Sentezi Karakterizasyonu ve İlaç Taşınımında Kullanılabilirliğinin Araştırılması, 2017 - 2017

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Katı Lipit Nanopartiküller Kullanılarak KendiKendine Kümeleşme Yöntemiyle Kolloidal Mikrokapsüllerin Hazırlanması, 2016 - 2017

AYDOĞAN N., KALAYCIOĞLU G. D., Project Supported by Higher Education Institutions, Katı Lipit Nanopartiküller Kullanılarak KendiKendine Kümeleşme Yoluyla Mikroküre Oluşturulması ve İlaç Taşınımında Kullanılabilirliğinin Araştırılması, 2016 - 2017

KALAYCIOĞLU G. D., AYDOĞAN N., Project Supported by Higher Education Institutions, Katı Lipit Nanopartiküllerin Sentezi Karakterizasyonu ve KendiKendine Kümeleşme Özelliklerinin İncelenmesi, 2015 - 2016

## Scientific Refereeing

LANGMUIR, Journal Indexed in SCI-E, May 2023

LANGMUIR, Journal Indexed in SCI-E, November 2022

INTERNATIONAL JOURNAL OF PHARMACEUTICS, SCI Journal, April 2022

TURKISH JOURNAL OF BIOCHEMISTRY, Journal Indexed in SCI-E, March 2021

METHODSX, Journal Indexed in ESCI, April 2020

## **Metrics**

Publication: 31

Citation (WoS): 67

Citation (Scopus): 70

H-Index (WoS): 3

H-Index (Scopus): 3

## **Scholarships**

2219 YURT DIŐI DOKTORA SONRASI ARAŐTIRMA BURS PROGRAMI , TUBITAK, 2023 - Continues

## **Non Academic Experience**

Hacettepe Üniversitesi