

## Asst. Prof. FATOŞ ÇİĞDEM KİP

### Personal Information

Office Phone: [+90 312 297 7402](tel:+903122977402) Extension: 123

Email: [cigdemg@hacettepe.edu.tr](mailto:cigdemg@hacettepe.edu.tr)

Web: <https://avesis.hacettepe.edu.tr/cigdemg>

### Research Areas

Chemical Engineering and Technology, Chemical Technologies, Polymer Technology, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2019 - Continues

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2007 - 2019

### Courses

Process Control, Undergraduate, 2019 - 2020

ATIKSU ARITIMI, Undergraduate, 2016 - 2017, 2017 - 2018

Undergraduate, 2018 - 2019

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Monodisperse-porous cerium oxide microspheres as a new support with appreciable catalytic activity for a composite catalyst in benzyl alcohol oxidation**  
HAMALOĞLU K. Ö. , Tosun R. B. , Ulu S., Kayı H., KAVAKLI C., AKKAŞ KAVAKLI P., Kip C., Tuncel A.  
NEW JOURNAL OF CHEMISTRY, vol.45, no.4, pp.2019-2029, 2021 (Journal Indexed in SCI)
- II. **Highly Porous, Molecularly Imprinted Core-Shell Type Boronate Affinity Sorbent with a Large Surface Area for Enrichment and Detection of Sialic Acid Isomers**  
Kip C., Demir M. C. , YILDIRIM D., HAMALOĞLU K. Ö. , ÇELİKBIÇAK Ö., Tuncel A.  
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, 2021 (Journal Indexed in SCI)
- III. **Recent trends in sorbents for bioaffinity chromatography**  
Kip C., HAMALOĞLU K. Ö. , Demir C., Tuncel A.  
JOURNAL OF SEPARATION SCIENCE, 2021 (Journal Indexed in SCI)
- IV. **One-pot, direct glucose detection in human whole blood without using a dilution factor by a magnetic nanozyme with dual enzymatic activity**  
Gokcal B., Kip C., Tuncel A.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.843, 2020 (Journal Indexed in SCI)
- V. **Colorimetric determination of tumor cells via peroxidase-like activity of a cell internalizable nanozyme: Hyaluronic acid attached-silica microspheres containing accessible magnetite nanoparticles**  
Kip C., ÇETİN E., Gokcal B., Savas B. O. , Onur M. A. , Tuncel A.  
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.598, 2020 (Journal Indexed in SCI)

- VI. **A Magnetic Plasmonic Catalyst Based on Monodisperse-Porous Silica Microspheres for Rapid Reduction of 4-Nitrophenol**  
Kip C.  
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, vol.30, no.5, pp.1695-1702, 2020 (Journal Indexed in SCI)
- VII. **Surface-imprinted silica particles for Concanavalin A purification from Canavalia ensiformis**  
Razym G., Bakhshpour M., Yavuz H., Kip C., Tuncel A., DENİZLİ A.  
JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES, vol.1136, 2020 (Journal Indexed in SCI)
- VIII. **Polymeric template assisted synthesis of monodisperse-porous manganese oxide microspheres: a new nanozyme with oxidase-like activity allowing biomolecule determination via bimodal sensing**  
Tosun R. B., Kip C., Tuncel A.  
NEW JOURNAL OF CHEMISTRY, vol.43, no.47, pp.18505-18516, 2019 (Journal Indexed in SCI)
- IX. **Magnetic-porous microspheres with synergistic catalytic activity of small-sized gold nanoparticles and titania matrix**  
HAMALOĞLU K. Ö., Sag E., Kip C., ŞENLİK E., Kaya B. S., Tuncel A.  
FRONTIERS OF CHEMICAL SCIENCE AND ENGINEERING, vol.13, no.3, pp.574-585, 2019 (Journal Indexed in SCI)
- X. **Aggregation-resistant nanozyme containing accessible magnetite nanoparticles immobilized in monodisperse-porous silica microspheres for colorimetric assay of human genomic DNA**  
Ogut E., Kip C., Gokcal B., Tuncel A.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.550, pp.90-98, 2019 (Journal Indexed in SCI)
- XI. **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 (Journal Indexed in SCI)
- XII. **In-situ photopolymerized C4-functionalized organosilicon monoliths for reversed-phase protein separation in nano-liquid chromatography**  
Kip C., Liu S., Fu X., Tuncel A., Laemmerhofer M.  
TALANTA, vol.198, pp.330-336, 2019 (Journal Indexed in SCI)
- XIII. **Molecularly imprinted polymeric shell coated monodisperse-porous silica microspheres as a stationary phase for microfluidic boronate affinity chromatography**  
Sungu C., Kip C., Tuncel A.  
JOURNAL OF SEPARATION SCIENCE, vol.42, no.11, pp.1962-1971, 2019 (Journal Indexed in SCI)
- XIV. **Ti (IV) attached-phosphonic acid functionalized capillary monolith as a stationary phase for in-syringe-type fast and robust enrichment of phosphopeptides**  
Salimi K., Kip C., ÇELİKBIÇAK Ö., Usta D. D., PINAR A., SALİH B., Tuncel A.  
BIOMEDICAL CHROMATOGRAPHY, vol.33, no.6, 2019 (Journal Indexed in SCI)
- XV. **Isolation of RNA and beta-NAD by phenylboronic acid functionalized, monodisperse-porous silica microspheres as sorbent in batch and microfluidic boronate affinity systems**  
Kip C., Gulusur H., Celik E., Usta D. D., Tuncel A.  
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.174, pp.333-342, 2019 (Journal Indexed in SCI)
- XVI. **Alkanethiol-functionalized organosilicon monoliths for nano-reversed-phase liquid chromatography**  
Demir C., Kip C., Tuncel A.  
ELECTROPHORESIS, vol.39, no.22, pp.2919-2928, 2018 (Journal Indexed in SCI)
- XVII. **Comparative DNA isolation behaviours of silica and polymer based sorbents in batch fashion: monodisperse silica microspheres with bimodal pore size distribution as a new sorbent for DNA isolation**  
Gunal G., Kip C., Ogut S. E., İLHAN H., KİBAR G., Tuncel A.  
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.46, no.1, pp.178-184, 2018 (Journal Indexed in SCI)
- XVIII. **One pot synthesis of carboxyl functionalized-polyhedral oligomeric siloxane based monolith via**

- photoinitiated thiol-methacrylate polymerization for nano-hydrophilic interaction chromatography**  
Kip C., Demir C., Tuncel A.  
JOURNAL OF CHROMATOGRAPHY A, vol.1502, pp.14-23, 2017 (Journal Indexed in SCI)
- XIX. Human genomic DNA isolation from whole blood using a simple microfluidic system with silica- and polymer-based stationary phases**  
Gunal G., Kip C., Ogut S. E. , Usta D. D. , ŞENLİK E., Kibar G., Tuncel A.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.74, pp.10-20, 2017 (Journal Indexed in SCI)
- XX. HILIC Stationary Phase Based on Monodisperse-Porous Polymethacrylate Beads Functionalized with Zwitterionic Molecular Brushes**  
Kip C., Tuncel A.  
CHROMATOGRAPHIA, vol.80, no.4, pp.565-575, 2017 (Journal Indexed in SCI)
- XXI. Synthesis of a reactive polymethacrylate capillary monolith and its use as a starting material for the preparation of a stationary phase for hydrophilic interaction chromatography**  
Kip C., Erkakan D., Gokaltun A., Celebi B., Tuncel A.  
JOURNAL OF CHROMATOGRAPHY A, vol.1396, pp.86-97, 2015 (Journal Indexed in SCI)
- XXII. New vinyl ester-based monoliths as a new stationary phase for capillary electrochromatography**  
Kip C., Tuncel A.  
ELECTROPHORESIS, vol.36, no.6, pp.945-954, 2015 (Journal Indexed in SCI)
- XXIII. Butyl methacrylate based monoliths with different cross-linking agents using DMF-aqueous buffer as porogen**  
Golgelioğlu C., Tuncel A.  
ELECTROPHORESIS, vol.34, no.2, pp.331-342, 2013 (Journal Indexed in SCI)
- XXIV. Aqueous size exclusion chromatography in semimicro and micro-columns by newly synthesized monodisperse macroporous hydrophilic beads as a stationary phase**  
Golgelioğlu C., Bayraktar A., CELEBI B., Uguzdogan E., Tuncel A.  
JOURNAL OF CHROMATOGRAPHY A, vol.1224, pp.43-50, 2012 (Journal Indexed in SCI)
- XXV. Click-chemistry for surface modification of monodisperse-macroporous particles**  
Bayraktar A., Saracoglu B., Golgelioğlu C., Tuncel A.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.365, no.1, pp.63-71, 2012 (Journal Indexed in SCI)
- XXVI. Polystyrene-Based High Internal Phase Emulsion Polymer Monolithic Stationary Phase for Capillary Electrochromatography**  
TUNC Y., Golgelioğlu C., Tuncel A., ULUBAYRAM K.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.47, no.16, pp.2444-2449, 2012 (Journal Indexed in SCI)
- XXVII. Acrylic-based high internal phase emulsion polymeric monolith for capillary electrochromatography**  
TUNC Y., Golgelioğlu C., HASIRCI N., ULUBAYRAM K., Tuncel A.  
JOURNAL OF CHROMATOGRAPHY A, vol.1217, no.10, pp.1654-1659, 2010 (Journal Indexed in SCI)
- XXVIII. Synthesis of Monodisperse Glycerol Dimethacrylate-Based Microgel Particles by Precipitation Polymerization**  
Saracoglu B., Uguzdogan E., Golgelioğlu C., Tuncel A.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.48, no.10, pp.4844-4851, 2009 (Journal Indexed in SCI)

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

- I. Alkanethiol functionalized organosilicon monoliths via one-pot thiol-methacrylate polymerization for nano-reversed phase chromatography**  
DEMİR C., KİP F. Ç. , KUBAN A., TUNCEL S. A.  
45th International Symposium on High Performance Liquid Phase Separations and Related Techniques, 18 - 22 June 2017
- II. Phosphopeptide enrichment from human-serum via immobilized metal affinity chromatography**

## using phosphonic acid functionalized capillary monolith as a stationary phase in a microfluidic system

USTA D. D. , KİP F. Ç. , salimi k, ÇELİKBIÇAK Ö., PINAR A., SALİH B., TUNCEL S. A.

45th International Symposium on High Performance Liquid Phase Separations and Related Techniques(HPLC 2017), 18 - 22 June 2017

## Supported Projects

HAMALOĞLU K. Ö. , TUNCEL S. A. , KİP F. Ç. , Ulu S., Babacan Tosun R., Project Supported by Higher Education Institutions, İridyum veya Rutenyum Aktif Merkez İçeren Gözenekli Oksidasyon Katalizörlerinin Sentezi ve Sentezlenen Katalizörlerin Su Oksidasyonunda Kullanılabilirliğinin İncelenmesi, 2018 - 2020

KİP F. Ç. , TUNCEL S. A. , ÇELİKBIÇAK Ö., Project Supported by Higher Education Institutions, Yeni bir erken evre tümör belirtecinin moleküler baskılama ve LC-MS/MS kullanılarak geliştirilmesi, 2017 - 2019

KİP F. Ç. , Project Supported by Higher Education Institutions, Fonksiyonel gruplu ayırma ortamlarının geliştirilmesi ve kromatografik performanslarının incelenmesi, 2017 - 2018

KİP F. Ç. , TUNCEL S. A. , Project Supported by Higher Education Institutions, Hidrofilik etkileşim kromatografisi için tiyolen reaksiyonu ile hidrofilik ligand bağlı eşboyutlu gözenekli poli(TMSPM-co-EDMA) partikül dolgulu mikrokolonların geliştirilmesi, 2016 - 2018

KİP F. Ç. , TUNCEL S. A. , Project Supported by Higher Education Institutions, Immobilize metal affinite mikro kromatografisi için fosforik asitle işlevselleştirilmiş lantanit iyonları taşıyan polimetakrilat bazlı monolitlerin sentezi, 2016 - 2016

KİP F. Ç. , TUNCEL S. A. , Project Supported by Higher Education Institutions, Organik kirleticilerden 4-nitrofenolün fotokatalitik dekompozisyonu için manyetik fotokatalizörlerin geliştirilmesi, 2015 - 2016

KİP F. Ç. , TUNCEL S. A. , Project Supported by Higher Education Institutions, Kapiler elektrokromatografide nötral ve polar analitlerin kromatografik ayrımı için polimetakrilat bazlı monolitlerin sentezi, 2015 - 2015

## Citations

Total Citations (WOS):213

h-index (WOS):8

## Awards

Kip F. Ç. , Hacettepe University "Scientific Encouragement Award", Hacettepe Üniversitesi, June 2020