

## Kişisel Bilgiler

İş Telefonu: [+90 +90 531 662 2396](tel:+90+905316622396)

Fax Telefonu: [+90 +90 531 662 2396](tel:+90+905316622396)

E-posta: [tarikbay@metu.edu.tr](mailto:tarikbay@metu.edu.tr)

Diğer E-posta: [tarikbaytekin@yahoo.de](mailto:tarikbaytekin@yahoo.de)

Web: <https://avesis.metu.edu.tr/tarikbay>



## Uluslararası Araştırmacı ID'leri

ScholarID: 686M5L4AAAAJ

ORCID: 0000-0002-2004-1702

Publons / Web Of Science ResearcherID: K-5088-2014

ScopusID: 14049930100

Yoksis Araştırmacı ID: 226204

## Eğitim Bilgileri

Doktora, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Fen Bilimleri Enstitüsü, Türkiye 1999 - 2002

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 1995 - 1998

Lisans, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Türkiye 1990 - 1995

## Yabancı Diller

İngilizce, C1 İleri

## Yaptığı Tezler

Doktora, Fluorescence sensing of cations, anions and neutral molecules towards information processing at molecular level, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Chemistry, 2002

Yüksek Lisans, Development of backscattered laser-induced spectrofluorometer and measurement of phytoplanktons in-situ, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Chemistry, 1998

## Araştırma Alanları

Temel Bilimler

## Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Kimya Bölümü, 2020 - Devam Ediyor

Dr. Öğr. Üyesi, İhsan Doğramacı Bilkent Üniversitesi, Nanotechnology Institute, 2014 - 2018

Araştırmacı, Harvard University, Department of Chemistry and Chemical Biology, 2014 - 2014

Arařtırmacı, Northwestern University, Non-equilibrium Energy Research Center (NERC), 2009 - 2014  
Arařtırmacı, Fraunhofer Research Institute, Golm., Fraunhofer Research Institute, Golm., 2009 - 2009  
Arařtırmacı, Federal Institute for Materials Research and Testing- BAM, Federal Institute for Materials Research and Testing- BAM, 2007 - 2009  
Arařtırmacı, Freie Universitaet Berlin, Institute of Organic Chemistry and Biochemistry, 2005 - 2007  
Arařtırmacı, Rheinische Friedrich-Wilhelms-Universitaet Bonn, Institute of Organic Chemistry and Biochemistry, 2003 - 2005  
Arařtırmacı, Humboldt-Universitaet zu Berlin, Department of Chemistry, 2002 - 2003  
Arařtırma Görevlisi, Orta Doęu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Kimya Bölümü, 1995 - 2002

## Verdiği Dersler

Physical Chemistry-2, Lisans, 2023 - 2024  
Physical Chemistry-2 Laboratory, Lisans, 2023 - 2024  
Physical Chemistry-1, Lisans, 2022 - 2023  
General Chemistry, Lisans, 2022 - 2023  
Physical Chemistry-1 Laboratory, Lisans, 2022 - 2023

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayımlanan Makaleler

- I. **Core-Shell Quantum Dot-Embedded Polymers for Antistatic Applications**  
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- II. **Organic Charge Transfer Cocrystals as Additives for Dissipation of Contact Charges on Polymers**  
Ekim S. D., Kaya G. E., DAŞTEMİR M., YILDIRIM E., BAYTEKİN H. T., BAYTEKİN B.  
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- III. **Online lubricant degradation monitoring using contact charging of polymers**  
Karluk A. A., Ekim S. D., BAYTEKİN B., BAYTEKİN H. T.  
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- IV. **Why Does Wood Not Get Contact Charged? Lignin as an Antistatic Additive for Common Polymers**  
Ozel M., Demir F., Aikebaier A., Kwiczak-Yigitbasi J., Baytekin H. T., Baytekin B.  
CHEMISTRY OF MATERIALS, cilt.32, sa.17, ss.7438-7444, 2020 (SCI-Expanded)
- V. **Self-Regulating Plant Robots: Bioinspired Heliotropism and Nyctinasty**  
Cezan S. D., Baytekin H. T., Baytekin B.  
SOFT ROBOTICS, cilt.7, sa.4, ss.444-450, 2020 (SCI-Expanded)
- VI. **Mechanical Control of Periodic Precipitation in Stretchable Gels to Retrieve Information on Elastic Deformation and for the Complex Patterning of Matter**  
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- VII. **Control of triboelectric charges on common polymers by photoexcitation of organic dyes**  
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- VIII. **Minimizing friction, wear, and energy losses by eliminating contact charging**  
Sayfidinov K., Cezan S. D., Baytekin B., Baytekin H. T.  
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- IX. **Slit Tubes for Semisoft Pneumatic Actuators**  
Belding L., Baytekin B., Baytekin H. T., Rothemund P., Verma M. S., Nemiroski A., Sameoto D., Grzybowski B. A., Whitesides G. M.  
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- X. **Artificial Heliotropism and Nyctinasty Based on Optomechanical Feedback and No Electronics**  
Baytekin B., Cezan S. D., Baytekin H. T., Grzybowski B. A.  
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- XI. **The Charging Events in Contact-Separation Electrification**  
Musa U. G., Cezan S. D., Baytekin B., Baytekin H. T.  
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- XII. **Dependence of triboelectric charging behavior on material microstructure**  
Wang A. E., Gil P. S., Holonga M., Yavuz Z., Baytekin H. T., Sankaran R. M., Lacks D. J.  
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- XIII. **Mechanochemical Activation and Patterning of an Adhesive Surface toward Nanoparticle Deposition**  
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- XIV. **Mechanically Driven Activation of Polyaniline into Its Conductive Form**  
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- XV. **Mechanical Control of Surface Adsorption by Nanoscale Cracking**  
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- XVI. **Retrieving and converting energy from polymers: deployable technologies and emerging concepts**  
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ENERGY & ENVIRONMENTAL SCIENCE, cilt.6, sa.12, ss.3467-3482, 2013 (SCI-Expanded)
- XVII. **Control of Surface Charges by Radicals as a Principle of Antistatic Polymers Protecting Electronic Circuitry**  
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- XVIII. **What Really Drives Chemical Reactions on Contact Charged Surfaces?**  
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- XIX. **Mechanoradicals Created in "Polymeric Sponges" Drive Reactions in Aqueous Media**  
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- XX. **Material Transfer and Polarity Reversal in Contact Charging**  
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- XXI. **The Mosaic of Surface Charge in Contact Electrification**  
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- XXII. **Is Water Necessary for Contact Electrification?**  
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ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, cilt.50, sa.30, ss.6766-6770, 2011 (SCI-Expanded)
- XXIII. **Surface analytical characterization of micro-fluidic devices hot embossed in polymer wafers: Surface chemistry and wettability**  
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- XXIV. **Metallo-Supramolecular Nanospheres via Hierarchical Self-Assembly**  
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- XXV. **Hierarchical Self-Assembly of Metallo-Supramolecular Nanospheres**  
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- XXVI. **Dendrimer Disassembly in the Gas Phase: A Cascade Fragmentation Reaction of Frechet Dendrons**  
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- XXVII. **Characterization of Self-Assembled Metallo-dendrimers in Solution, in the Gas Phase, and at Air/Solid Interfaces**  
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- XXVIII. **Determination of wettability of surface-modified hot-embossed polycarbonate wafers used in microfluidic device fabrication via XPS and ToF-SIMS**  
Baytekin H. T., Wirth T., Gross T., Treu D., Sahre M., Theisen J., Schmidt M., Unger W. E. S.  
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- XXIX. **Reactivity of self-assembled supramolecular complexes in the gas phase: A supramolecular neighbor group effect**  
Engeser M., Rang A., Ferrer M., Gutierrez A., Baytekin H. T., Schalley C. A.  
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- XXX. **Mass spectrometric studies of non-covalent compounds: why supramolecular chemistry in the gas phase?**  
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- XXXI. **Mass spectrometry as a tool in dendrimer chemistry: from self-assembling dendrimers to dendrimer gas-phase host-guest chemistry**  
Schalley C. A., Baytekin B., Baytekin H. T., Engeser M., Felder T., Rang A.  
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- XXXII. **A molecular NAND gate based on Watson-Crick base pairing**  
Baytekin H. T., Akkaya E.  
ORGANIC LETTERS, cilt.2, sa.12, ss.1725-1727, 2000 (SCI-Expanded)

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Seeing is Believing Scanning Probe Microscopy of Electrification**  
BAYTEKİN H. T., BAYTEKİN B., GRZYBOWSKI B. A.  
ESA Annual Meeting on Electrostatics 2013, 11 - 13 Haziran 2013
- II. **Scanning Probe Microscopy to Visualize Tribocharging on Polymers and Polymer Blends**  
BAYTEKİN H. T., BAYTEKİN B., PATASHINSKI A. Z., GRZYBOWSKI B. A.  
2013 MRS Spring Meeting & Exhibit, 1 - 05 Nisan 2013
- III. **Contact electrification of polymers custom made charging**  
BAYTEKİN H. T., BAYTEKİN B., INCORVATI J. T., GRZYBOWSKI B. A.  
243rd ACS National Meeting, 24 - 29 Mart 2012
- IV. **Material Transfer in Contact Electrification**  
BAYTEKİN H. T., BAYTEKİN B., PATASHINSKI A. Z., GRZYBOWSKI B. A.  
ESA Annual Meeting on Electrostatics 2011, 12 - 14 Haziran 2011
- V. **Just by squeezing Starting with Hydrogen peroxide production by mechanically treated polymers**  
BAYTEKİN B., BAYTEKİN H. T., TEJERINA B., GRZYBOWSKI B. A.  
241st ACS National Meeting, 27 - 31 Mart 2011
- VI. **Seeing charges on polymer surfaces Kelvin Force Microscopy of polymers**  
BAYTEKİN H. T., BAYTEKİN B., PATASHINSKI A. Z., GRZYBOWSKI B. A.  
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- VII. **Contact electrification in water free media**  
BAYTEKİN B., BAYTEKİN H. T., GRZYBOWSKI B. A.  
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- VIII. **Seeing charges on polymer surfaces: Kelvin force microscopy of charged polymers**  
Baytekin H. T., Baytekin B., Patashinski A. Z., Grzybowski B. A.  
241st National Meeting and Exposition of the American-Chemical-Society (ACS), California, Amerika Birleşik Devletleri, 27 - 31 Mart 2011, cilt.241
- IX. **Mechanochemical Reactions by Polymer Compression**  
BAYTEKİN B., BAYTEKİN H. T., TEJERINA B., GRZYBOWSKI B. A.  
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- X. **Investigation of Wettability of Surface Modified Polymer Wafers Used in Micro Fluidic Device Fabrication**  
BAYTEKİN H. T., UNGER W. E. S., THEISEN J., SCHMIDT M.  
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- XI. **Photoactive Metallo supramolecular Squares**  
BAYTEKİN H. T., SCHALLEY C. A.  
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- XII. **Modulation of Ruthenium II MLCT Emission by Metal Ions**  
BAYTEKİN H. T., AKKAYA E. U.  
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- XIII. **Development of a Laser diode fiber Optic Fluorometer for in situ Phytoplankton Measurement**  
BAYTEKİN H. T., GÖKMEN A.  
Colloquium Spectroscopicum Internationale XXX, 21 - 26 Eylül 1997

## Metrikler

Yayın: 45

Atf (WoS): 1631

Atf (Scopus): 1676

H-İndeks (WoS): 18

H-İndeks (Scopus): 19

## Burslar

Deutscher Akademischer Austausch Dienst (DAAD), Diğer Uluslararası Organizasyonlar, 2003 - 2003

## Ödüller

Baytekin H. T., EXCELLENT SCIENCE - Marie Skłodowska-Curie , Bilkent University, Mart 2016

Baytekin H. T., ACS Postdoc to faculty workshop 2012 participant travel award (American Chemical Society), 2012., Acs, Haziran 2012