

## Prof. NURİYE AKBAY

### Personal Information

Office Phone: [+90 216 280 3405](tel:+902162803405)

Email: [nuriye.akbay@medeniyet.edu.tr](mailto:nuriye.akbay@medeniyet.edu.tr)

Web: <https://avesis.medeniyet.edu.tr/nuriye.akbay>

Address: İstanbul Medeniyet Üniversitesi Ünalán, Ünalán Sok., D-100 Karayolu Yanyol, 34700 Üsküdar/İstanbul

### Education Information

Post Doctorate, University Of Maryland, School Of Medicine, Biochemistry And Molecular Biology Department, United States Of America 2011 - 2012

Doctorate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Analitik Kimya, Turkey 2003 - 2009

Post Graduate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Analitik Kimya, Turkey 2000 - 2003

Under Graduate, Hacettepe University, Kimya, Turkey 1995 - 2000

### Research Areas

Life Sciences, Molecular Biology and Genetics, Chemistry, Analytical Chemistry, Spectroscopical Methods, Natural Sciences

### Academic Titles / Tasks

Professor, İstanbul Medeniyet University, Faculty of Engineering and Natural Sciences , Chemistry , 2019 - Continues  
Associate Professor, İstanbul Medeniyet University, Faculty of Engineering and Natural Sciences , Chemistry , 2016 - 2019

Associate Professor, Tekirdağ Namik Kemal University, Faculty Of Arts And Sciences, 2014 - 2016

Assistant Professor, Tekirdağ Namik Kemal University, Faculty Of Arts And Sciences, 2010 - 2014

Other, University Of Maryland, School Of Medicine, Biochemistry And Molecular Biology Department, 2011 - 2012

Research Assistant, Hacettepe Üniversitesi, Fen Fakültesi, Kimya, 2001 - 2010

Research Assistant, --Seçiniz--, National Academy Of Sciences Of Ukraine, Molecular Biology And Genetic Institute, 2006 - 2007

### Advising Theses

AKBAY N., JWH-122 ve JWH-122 N-(4-HİDROKSİPENTİL) METABOLİTİNİN LC-MS/MS İLE KANDA TAYİNİ, Post Graduate, M.Yılmaz(Student), 2017

AKBAY N., Quantitative analysis of MDMA by GC/FID and method validation, Post Graduate, M.Şahin(Student), 2016

AKBAY N., Çeşitli hidrazon türevleri ile nükleik asitlerin bağlanma mekanizmalarının florimetrik yöntemle incelenmesi, Post Graduate, Ş.Özkan(Student), 2016

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

1. Palladium(II) and ruthenium(II) complexes of benzotriazole functionalized N-heterocyclic carbenes:

### **Cytotoxicity, antimicrobial, and DNA interaction studies**

Onar G., GÜRSES C., KARATAŞ M. O. , Balcıoğlu S., Akbay N., Özdemir N., ATEŞ B., ALICI B.  
Journal of Organometallic Chemistry, pp.48-56, 2019 (Journal Indexed in SCI)

- II. **Multispectroscopic and Computational Investigation of ct-DNA Binding Properties with Hydroxybenzylidene Containing Tetrahydrocarbazole Derivative**  
Ozkan S., Taskin-Tok T., Uzgoren-Baran A., AKBAY N.  
JOURNAL OF FLUORESCENCE, vol.29, no.1, pp.101-110, 2019 (Journal Indexed in SCI)
- III. **Metal-enhanced fluorescence of the trimethine cyanine dyes complexed with amyloid fibrils**  
LOSZYTSKY M. Y. , AKBAY N., CHERNII S. V. , KRYVOROTENKO D. V. , YARMOLUK S. M. , Kovalska V. B.  
JOURNAL OF LUMINESCENCE, vol.204, pp.209-215, 2018 (Journal Indexed in SCI)
- IV. **Characterization of the Interaction between Phthalocyanine and Amyloid Fibrils by Surface-Enhanced Raman Scattering (SERS)**  
Losytsky M., AKBAY N., Chernii S., Avci E., Chernii V., Yarmoluk S., Culha M., Kovalska V.  
ANALYTICAL LETTERS, vol.51, pp.221-228, 2018 (Journal Indexed in SCI)
- V. **Investigation of binding properties of two ethidium derivatives with serum albumins: spectral and computational approach**  
AKBAY N., Tok T. T. , Seferoglu Z., GÖKOĞLU E.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.36, no.12, pp.3114-3121, 2018 (Journal Indexed in SCI)
- VI. **Metal-enhanced intrinsic fluorescence of nucleic acids using platinum nanostructured substrates**  
Akbay N., Mahdavi F., Lakowicz J. R. , Ray K.  
CHEMICAL PHYSICS LETTERS, vol.548, pp.45-50, 2012 (Journal Indexed in SCI)
- VII. **Distance-Dependent Metal-Enhanced Intrinsic Fluorescence of Proteins Using Polyelectrolyte Layer-by-Layer Assembly and Aluminum Nanoparticles**  
Akbay N., Lakowicz J. R. , Ray K.  
JOURNAL OF PHYSICAL CHEMISTRY C, vol.116, no.19, pp.10766-10773, 2012 (Journal Indexed in SCI)
- VIII. **Interactions of Two Ethidium Derivatives with Calf Thymus DNA and Serum Albumins Using Fluorescence Quenching Method**  
Akbay N., Seferoglu Z., Goekoglu E.  
CURRENT ANALYTICAL CHEMISTRY, vol.6, no.4, pp.334-340, 2010 (Journal Indexed in SCI)
- IX. **Fluorescence study on the interaction of bovine serum albumin with two coumarin derivatives**  
Akbay N., Topkaya D., Ergun Y., Alp S., GÖK E.  
JOURNAL OF ANALYTICAL CHEMISTRY, vol.65, no.4, pp.382-387, 2010 (Journal Indexed in SCI)
- X. **Fluorescence Interaction and Determination of Calf Thymus DNA with Two Ethidium Derivatives**  
Akbay N., Seferoglu Z., Gok E.  
JOURNAL OF FLUORESCENCE, vol.19, no.6, pp.1045-1051, 2009 (Journal Indexed in SCI)
- XI. **Determination of Vitamin B(12) Using a Chemiluminescence Flow System**  
Akbay N., GÖK E.  
JOURNAL OF ANALYTICAL CHEMISTRY, vol.63, no.11, pp.1073-1077, 2008 (Journal Indexed in SCI)
- XII. **Interaction of thyroxine with 7 hydroxycoumarin: A fluorescence quenching study**  
Goek E., Oeztuerk C., Akbay N.  
JOURNAL OF FLUORESCENCE, vol.18, no.5, pp.781-785, 2008 (Journal Indexed in SCI)
- XIII. **The mechanism of benzothiazole styrylcyanine dyes binding with dsDNA: Studies by spectral-luminescent methods**  
Akbay N., LOSZYTSKY M. Y. , KOVALSKA V. B. , BALANDA A. O. , YARMOLUK S. M.  
JOURNAL OF FLUORESCENCE, vol.18, no.1, pp.139-147, 2008 (Journal Indexed in SCI)

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

- I. **Plasmon-controlled fluorescence and single DNA strand sequencing**

Akbay N., RAY K., CHOWDHURY M. H. , LAKOWICZ J. R.

Conference on Plasmonics in Biology and Medicine IX, San-Francisco, Costa Rica, 22 - 24 January 2012, vol.8234

**II. Distance-dependent intrinsic fluorescence of proteins on aluminum nanostructures**

Akbay N., Lakowicz J. R. , Ray K.

Conference on Plasmonics in Biology and Medicine IX, San-Francisco, Costa Rica, 22 - 24 January 2012, vol.8234

## **Supported Projects**

AKBAY N., EU Framework Program Project, Study Of Axially Coordinated Phthalocyanines As AntiFibrilogenic Agents And Sers-Probes For Amyloid Aggregates Detection, 2014 - Continues

AKBAY N., TUBITAK Project, Amiloid Fibrillerin Etkili Tayini için Siyanin Boyalarının Metal Genişletilmiş Floresans Problarının Geliştirilmesi, 2014 - Continues

AKBAY N., TUBITAK Project, Nükleik Asitlerin Tayininde Kullanılabilecek Yeni Floresant Uçların Sentezlenmesi ve Etkileşimlerinin Spektroflorimetrik Yöntemle İncelenmesi, 2007 - 2009

## **Citations**

Total Citations (WOS):172

h-index (WOS):7