

# Prof. ELMAS GÖKOĞLU

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## International Researcher IDs

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Yoksis Researcher ID: 6877

## Education Information

Doctorate, Hacettepe University, Fen/Fen Bilimleri/Kimya, Kimya/Analitik, Turkey 1986 - 1992

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Doctorate, Fluorimetrik Yöntemlerle, Fonksiyonel Hidrofilik Polihidroksietil-metakrilat (Poli-HEMA) Membran ve Mikropartiküllerde Yapısal Karakterizasyon; BSA ve Fibrinojen Adsorpsiyon Kinetiğinin İncelenmesi, Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 1992

## Research Areas

Chemistry, Analytical Chemistry, fluorimetry, Spectroscopical Methods, Natural Sciences

## Academic Titles / Tasks

Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2004 - Continues

Associate Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 1995 - 2004

## Academic and Administrative Experience

Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2014 - Continues

Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2002 - 2005

## Courses

Analitik Kimya II, Undergraduate, 2016 - 2017

Analitik Kimya I, Undergraduate, 2016 - 2017

## Advising Theses

Gökoğlu E., Yeni sentezlenmiş katyonik stiril boyanın biyomoleküllerle etkileşiminin spektroskopik ve moleküler kenetlenme metotları ile incelenmesi, Postgraduate, B.DOYURAN(Student), 2022

Gökoğlu E., Kumarin-hidrazon temelli bir schiff bazı ile pepsin/hsa arasındaki bağlanma özelliklerinin spektroskopik ve moleküler kenetlenme metotları ile incelenmesi, Postgraduate, E.ÖZGENÇ(Student), 2020

Gökoğlu E., Sülfonamid ve karbazol türevlerinin dna/protein etkileşimlerinin spektroskopik ve moleküler kenetlenme yöntemleri ile incelenmesi, Doctorate, F.KIPÇAK(Student), 2020

Gökoğlu E., 3,6 diamino akrinin türevlerinin serum albüminlerle etkileşiminin floresans sönüm yöntemi ile incelenmesi, Postgraduate, F.GÖKER(Student), 2010

Gökoğlu E., The mechanisms of novel fluorescent probes binding with dsDNA: Studies by spectral-luminescent methods, Doctorate, N.AKBAY(Student), 2009

Gökoğlu E., Determination of thyroxine hormone based on fluorescence quenching of 7-hydroxy coumarin, Postgraduate, C.ÖZTÜRK(Student), 2007

Gökoğlu E., Determination of cobalt in vitamin B12 with luminescence techniques, Postgraduate, N.AKBAY(Student), 2003

Gökoğlu E., Fluorimetric investigation of conjugation reaction between fluorescein isothiocyanate and insulin, Postgraduate, S.OLGAZ(Student), 2003

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

- I. **Synthesis of a BODIPY-quinoline dyad probe and studies of its biophysical interactions with fibrinogen/HSA by spectral and computational methods**  
GÖKOĞLU E., Tekiz P., TEKNİKEL E., Doyuran B., TAŞKIN TOK T.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, 2025 (SCI-Expanded)
- II. **Fluorescence Studies on the Binding Affinity and Determination of Vitamin B12 in the Presence of Fibrinogen**  
GÖKOĞLU E., Budun S. S., Doyuran B., TAŞKIN TOK T.  
JOURNAL OF FLUORESCENCE, 2024 (SCI-Expanded)
- III. **A Study on the Luminescent Terbium(III) and Pyridine 2,6 Dicarboxylate Complexes by Experimental and TD-DFT Approaches**  
Tugsuz T., YÜKSEL D., GÖKOĞLU E., Ateş S.  
Journal of Fluorescence, vol.33, no.3, pp.1057-1065, 2023 (SCI-Expanded)
- IV. **Evaluation of the Binding Properties of A New Phenylurea Appended Carbazole Compound to Pepsin/Trypsin by Computational and Multi-Spectral Analysis**  
Gökoğlu E., Doyuran B., Özen G., Duyar H., Taskin-Tok T., Seferoğlu Z.  
Journal of Fluorescence, 2023 (SCI-Expanded)
- V. **A Novel Fluorescent Probe for the Detection of Cyanide Ions in Solutions and Studies on Its Biophysical Interactions with ctDNA and Proteases**  
Doyuran B., Gökoğlu E., Zouitini A., Keles E., Taşkın Tok T., Seferoğlu N., Seferoğlu Z.  
JOURNAL OF FLUORESCENCE, vol.32, no.6, pp.2173-2188, 2022 (SCI-Expanded)
- VI. **Structural analysis and calf thymus DNA/HSA binding properties of new carbazole derivative containing piperazine**  
GÖKOĞLU E., Kıpçak F., TAŞKIN TOK T., Duyar H., SEFEROĞLU Z.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.426, 2022 (SCI-Expanded)
- VII. **Synthesis of new morpholine containing 3-amido-9-ethylcarbazole derivative and studies on its**

**biophysical interactions with calf thymus DNA/HSA**

Kipcak F., TAŞKIN TOK T., Duyar H., SEFEROĞLU Z., GÖKOĞLU E.

JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.39, no.5, pp.1561-1571, 2021 (SCI-Expanded)

- VIII. **Investigation of binding properties of two ethidium derivatives with serum albumins: spectral and computational approach**  
Akbay N., Taşkın Tok T., Seferoğlu Z., Gökoğlu E.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.36, no.12, pp.3114-3121, 2018 (SCI-Expanded)
- IX. **Investigation of binding properties of dicationic styrylimidazo[1,2-a]pyridinium dyes to human serum albumin by spectroscopic techniques**  
Ozdemir A., GÖKOĞLU E., Yilmaz E., YALÇIN E., Gokoglu E., SEFEROĞLU Z., TEKİNAY T.  
LUMINESCENCE, vol.32, no.1, pp.86-92, 2017 (SCI-Expanded)
- X. **Study of Binding Properties Between Two New Ibuprofen and Naproxen Based Acyl Hydrazone Derivatives and Trypsin**  
GÖKOĞLU E., YILMAZ E., GOKOGLU E., Baran A. U.  
JOURNAL OF FLUORESCENCE, vol.26, no.1, pp.113-119, 2016 (SCI-Expanded)
- XI. **Studies on the interactions of 3,6-diaminoacridine derivatives with human serum albumin by fluorescence spectroscopy**  
GÖKOĞLU E., KIPCAK F., Seferoglu Z.  
LUMINESCENCE, vol.29, no.7, pp.872-877, 2014 (SCI-Expanded)
- XII. **Fluorescence Interaction and Determination of Sulfathiazole with Trypsin**  
GÖKOĞLU E., YILMAZ E.  
JOURNAL OF FLUORESCENCE, vol.24, no.5, pp.1439-1445, 2014 (SCI-Expanded)
- XIII. **Investigation of Binding Properties of Umbelliferone (7Hydroxycoumarin) to Lysozyme**  
Gökoğlu E.  
JOURNAL OF FLUORESCENCE, vol.23, no.2, pp.333-338, 2013 (SCI-Expanded)
- XIV. **Fluorescence study on the interaction of bovine serum albumin with two coumarin derivatives**  
Akbay N., Topkaya D., Ergun Y., Alp S., Gökoğlu E.  
JOURNAL OF ANALYTICAL CHEMISTRY, vol.65, no.4, pp.382-387, 2010 (SCI-Expanded)
- XV. **Interactions of two ethidium derivatives with calf thymus DNA and serum albumins using fluorescence quenching method**  
Akbay N., Seferoğlu Z., Gökoğlu E.  
CURRENT ANALYTICAL CHEMISTRY, vol.6, no.4, pp.334-340, 2010 (SCI-Expanded)
- XVI. **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 (SCI-Expanded)
- XVII. **Determination of vitamin B12 using a chemiluminescence flow system**  
GÖKOĞLU E.  
JOURNAL OF ANALYTICAL CHEMISTRY, vol.63, no.11, pp.1073-1077, 2008 (SCI-Expanded)
- XVIII. **Interaction of thyroxine with 7 hydroxycoumarin: A fluorescence quenching study**  
Gökoğlu E., Öztürk C., Akbay N.  
JOURNAL OF FLUORESCENCE, vol.18, no.5, pp.781-785, 2008 (SCI-Expanded)
- XIX. **Determination of thyroxine hormone by luminol chemiluminescence**  
Gökoğlu E., Ateş S.  
ANALYTICA CHIMICA ACTA, vol.505, no.1, pp.125-127, 2004 (SCI-Expanded)
- XX. **Binding of Fluorescein Isothiocyanate to Insulin A Fluorimetric Labeling Study**  
Gök E., Olgaz S.  
JOURNAL OF FLUORESCENCE, vol.14, no.2, pp.203-206, 2004 (SCI-Expanded)
- XXI. **Determination of H<sub>2</sub>O<sub>2</sub> Content of Various Water Samples Using Chemiluminescence Technique**  
Tügsüz T., Gökoğlu E., Ateş S.  
TURKISH JOURNAL OF CHEMISTRY, vol.27, pp.41-47, 2003 (SCI-Expanded)
- XXII. **Fluorimetric Determination of Thyroxine Hormone with Eu(III)-(Pyridine-2,6-Dicarboxylate) Tris**

### **Complex**

Gök E., Ateş S.

JOURNAL OF FLUORESCENCE, vol.13, no.3, pp.221-225, 2003 (SCI-Expanded)

- XXIII. **Fluorimetric Detection of Insulin in the Presence of Eu(III)-(Pyridine-2,6-Dicarboxylate)Tris Complex**

Gökoğlu E., Ateş S.

TURKISH JOURNAL OF CHEMISTRY, vol.25, pp.81-91, 2001 (SCI-Expanded)

- XXIV. **Protein Adsorption on Functional Hydrophilic Polymer Beads: Role of Structural Properties and Medium Conditions**

Gökoğlu E., Kiremitçi M., Ateş I.

REACTIVE POLYMERS, vol.24, pp.41-48, 1994 (SCI-Expanded)

- XXV. **Inclusion Complexation of Warfarin with  $\beta$ -Cyclodextrins and its Influence on Absorption Kinetics of Warfarin in Rat**

Gökoğlu E.

Journal of Inclusion Phenomena and Molecular Recognition in Chemistry, vol.20, pp.23-32, 1994 (SCI-Expanded)

- XXVI. **Protein Adsorption Behaviour of Ionogenic Poly(HEMA) Membranes: A Fluorescence Study**

Kiremitçi M., Gökoğlu E., Ateş S.

JOURNAL OF BIOMATERIALS SCIENCE, POLYMER EDITION, vol.6, no.5, pp.425-433, 1994 (SCI-Expanded)

- XXVII. **A Novel Approach for the Determination of Stability Constants of Eu(III) and Tb(III) Pyridine-2,6-Dicarboxylic Acid Complexes, Using Fluorescence Spectroscopy**

Oktar O., Gökoğlu E., Ateş S.

ANALYTICAL LETTERS, vol.25, no.11, pp.2123-2142, 1992 (SCI-Expanded)

- XXVIII. **Fluorimetric Detection of Solid Surface-Catalysed Inactivation of Bovine Serum Albumine in Dilute Solutions**

Gökoğlu E., Kiremitçi M., Ateş S.

ANALYTICAL LETTERS, vol.25, no.1, pp.49-62, 1992 (SCI-Expanded)

- XXIX. **Determination of Chlorpromazine in Aqueous Solutions as Studied by Photoacoustic Spectroscopy Using a Carbon Black Detector**

Ateş S., Gökoğlu E.

ANALYTICAL LETTERS, vol.20, no.1, pp.117-129, 1987 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **Deciphering of Biophysical Interaction of Calf Thymus DNA with a Sulfa Drug: Spectroscopic and Molecular Docking Study**

Gökoğlu E., Kıpçak F., Taskin Tok T.

Iranian Journal of Science, vol.47, no.5-6, pp.1451-1459, 2023 (Scopus)

- II. **Investigation on the Binding properties of a Coumarin Derivative to Insulin by Spectroscopic and Computational Approaches**

Gökoğlu E., Aklar B., Taşkın Tok T.

Hacettepe Journal of Biology and Chemistry, vol.51, pp.297-307, 2023 (Peer-Reviewed Journal)

- III. **Interaction of BSA and Fibrinogen with Eu(III) Pyridine-2,6-Dicarboxylic Acid Complexes**

Ateş S., Gökoğlu E.

Hacettepe Bulletin of Natural Sciences and Engineering Series A / Biology and Chemistry, vol.23, pp.109-127, 1994 (Peer-Reviewed Journal)

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

- I. **Molecular interactions of antibacterial drug sulfadiazine with trypsin by spectral and molecular**

## **docking methods**

Adıgüzel Z., Gökoğlu E., Koyuncu H., Taşkın Tok T.

ITAC 2018 International Trace Analysis Congress, Sivas, Turkey, 20 - 23 June 2018, pp.130

- II. **Rezonans enerji transferi ile insulin ve umbelliferon etkileşiminin spektrofotometrik incelenmesi**  
Aklar B., Gökoğlu E.  
XV. Ulusal Spektroskopi Kongresi, Yalova, Turkey, 17 - 19 May 2017, pp.99
- III. **Fluorimetric investigation of interactions between two ethidium derivatives and serum albumins**  
Akbaş N., Gökoğlu E.  
9th Aegean Analytical Chemistry Days AACD 2014, Chios, Athens, Greece, 29 September - 03 October 2014, pp.63
- IV. **Tripsin Enziminin Sülfatiazol ile Etkileşiminin Florimetrik ve Termodinamik Açısından İncelenmesi**  
Yılmaz E., Gökoğlu E.  
EsAn-2014, III. Eser Analiz Çalıştayı, Tokat, Turkey, 15 - 18 May 2014, pp.76
- V. **Lizozim enziminin 7-hidroksi kumarin ile etkileşiminin FRET ve termodinamik açıdan incelenmesi**  
Gökoğlu E.  
XIII. Ulusal Spektroskopi Kongresi, Burdur, Turkey, 15 - 18 May 2013, pp.143
- VI. **Floresans Rezonans Enerji transferi (FRET) ile Proflavin ve 3,6 Diamino Türevlerinin HSA Etkileşiminin İncelenmesi.**  
Gökoğlu E., Kıpçak F.  
EsAn-2012, II. Eser Analiz Çalıştayı, Trabzon, Turkey, 27 - 30 June 2012, pp.67
- VII. **Spectrofluorimetric study on the interaction of calf thymus DNA with two hydroxycoumarin derivatives**  
Gökoğlu E., Akbaş N., Topkaya D., Ergün M. Y., Alp S.  
7th Aegean Analytical Chemistry Days AACD 2010, Mitilini, Greece, 29 September - 03 October 2010, pp.280
- VIII. **DNA ile 3,8-dikarbamat etidinyum türevlerinin bağlanma özelliklerinin floresans sönüm yöntemi ile incelenmesi**  
Gökoğlu E., Akbaş N., Seferoğlu Z.  
5. Ulusal Analitik Kimya Kongresi, Erzurum, Turkey, 21 - 25 June 2010, pp.19
- IX. **Interactions of acridine derivatives with bovin serum albumin: A fluorescence quenching**  
Göker F., Akbaş N., Seferoğlu Z., Gökoğlu E.  
5th Black Sea Basin Conference on Analytical Chemistry, Ordu, Turkey, 23 - 26 September 2009, pp.182
- X. **Study on the binding behaviors of serum albumins with two ethidium derivatives by fluorescence spectroscopy**  
Gökoğlu E., Göker F., Akbaş N.  
Colloquium Spectroscopium Internationale, Budapest, Hungary, 30 August - 03 September 2009, pp.283
- XI. **Binding mechanism of triazole derivatives with DNA Studies by spectral luminescent methods**  
Akbaş N., Uzgören Baran A., Okay G., Gökoğlu E.  
6th Aegean Analytical Chemistry Days, Denizli, Turkey, 9 - 12 October 2008, pp.264
- XII. **Interactions of new ethidium bromide derivatives with deoxyribonucleic acid and bovine serum albumin by the fluorescence quenching method**  
Gökoğlu E., Seferoğlu Z., Akbaş N.  
6th Aegean Analytical Chemistry Days, Denizli, Turkey, 9 - 12 October 2008, pp.41
- XIII. **Interaction of Thyroxine Hormone with 7-Hydroxycoumarin: A Fluorescence Quenching Study**  
Akbaş N., Öztürk C., Gökoğlu E.  
10th Conference on Methods and Applications of Fluorescence (MAF)10, Salzburg, Austria, 9 - 12 September 2007, pp.250
- XIV. **Luminol chemiluminescent determination of cobalt(II) in vitamin B12**  
Gökoğlu E., Akbaş N.  
VII European Furnace Symposium on Atomic Absorption Spectrometry, Electrothermal Vaporization and Atomization (EFS 2006), Sankt-Peterburg, Russia, 2 - 07 July 2006, pp.116
- XV. **Determination of Metal Ions in Waste Water Using Luminol Chemiluminescence**  
Akbaş N., Gökoğlu E.

- 3rd Black Sea Basin Conference on Analytical Chemistry, Constanta, Romania, 12 - 14 September 2005, pp.166
- XVI. **Determination of Thyroxine Hormone with a Eu(III) Chelate: A Spectrofluorimetric Study**  
Gökoğlu E., Ateş S.  
V Mediterranean Basin Conference on Analytical Chemistry, Taranto, Italy, 24 - 28 May 2005, pp.123
- XVII. **Spectrofluorimetric Determination of Cobalt by Catalytic Oxidation of Reduced Fluorescein**  
Akbay N., Gökoğlu E.  
4th Aegean Analytical Chemistry Days, Aydın, Turkey, 29 September - 03 October 2004, pp.396-398
- XVIII. **Immobilization of Cobalt-Ethanolamine Complex on a Resin**  
Akbay N., Gökoğlu E.  
BIOMED 2004 11. International Biomedical Science and Technology Days, Ankara, Turkey, 6 - 10 September 2004, pp.7
- XIX. **İnsulin Hormonunun Fluorescein İzotiyosiyanat ile İşaretlenmesinin Fluorimetrik Yöntemle İncelenmesi**  
Olgaz S., Akbay N., Gökoğlu E.  
IV. Ulusal Kromatografi Kongresi, Ankara, Turkey, 17 - 19 September 2003, pp.22
- XX. **Spectrofluorimetric Determination of Cobalt(II) by its Quenching Effect on the Fluorescence of Fluorescein**  
Akbay N., Olgaz S., Gökoğlu E.  
2nd Black Sea Basin Conference on Analytical Chemistry, İstanbul, Turkey, 14 - 17 September 2003, pp.239
- XXI. **Fluorimetric Determination of Insulin Hormone with a Eu(III) Chelate**  
Gökoğlu E., Ateş S.  
Colloquium Spectroscopicum Internationale CSI XXXIII, Granada, Spain, 7 - 12 September 2003, pp.193
- XXII. **Determination of Thyroxine Hormone with Chemiluminescence**  
Gökoğlu E., Ateş S.  
3rd Aegean Analytical Chemistry Days, Mitilini, Greece, 29 September - 03 October 2002, pp.251-252
- XXIII. **Fluorimetric Labeling of Insulin A Theoretical Approach to The Conjugation of Fluorescein Isothiocyanate**  
Gökoğlu E., Tügsüz T., Akbay N., Olgaz S., Ateş S.  
MBCAC IV 4th Mediterranean Basin Conference on Analytical Chemistry, Ljubljana, Slovenia, 15 - 20 September 2002, pp.185
- XXIV. **Fluorimetric Labeling of Insulin : An Experimental Work on Conjugation of Fluorescein Isothiocyanate**  
Gökoğlu E., Olgaz S., Akbay N., Tügsüz T., Ateş S.  
MBCAC IV 4th Mediterranean Basin Conference on Analytical Chemistry, Ljubljana, Slovenia, 15 - 20 September 2002, pp.53
- XXV. **Doğal Su Örnekleri H<sub>2</sub>O<sub>2</sub> İçeriğinin Kemilüminesans Yöntemle Saptanması**  
Tügsüz T., Gökoğlu E., Ateş S.  
XV. Ulusal Kimya Kongresi, İstanbul, Turkey, 4 - 07 September 2001, pp.51
- XXVI. **Conjugation of Isothiocyanate to Serum Albumin: A Fluorescent Labeling Study**  
Gökoğlu E., Ateş S.  
Colloquium Spectroscopicum Internationale CSI XXXII, Pretoria, South Africa, 8 - 13 July 2001, pp.113
- XXVII. **Terbium Luminescence in Glass Matrix**  
Ateş S., Tügsüz T., Gökoğlu E.  
3rd Mediterranean Basin Conference on Analytical Chemistry, Antalya, Turkey, 4 - 09 June 2000, pp.180

## Supported Projects

GÖKOĞLU E., Kıpçak F., Project Supported by Higher Education Institutions, Spektroflorimetrik yöntemle sülfonamid içeren bileşiklerin biyomoleküllerle etkileşiminin floresans rezonans enerji transferi FRET ve termodinamik açıdan incelenmesi, 2017 - 2019

GÖKOĞLU E., Project Supported by Higher Education Institutions, Floresans Spektroskopi ile 36 diaminoakridin Türevlerinin İnsan Serum Albümin ile Etkileşimleri Üzerinde Çalışmalar, 2016 - 2016

GÖKOĞLU E., Project Supported by Higher Education Institutions, Tripsin ile sülfatiazolün tayini ve floresans etkileşimi, 2015 - 2016

## **Metrics**

Publication: 60

Citation (WoS): 136

Citation (Scopus): 190

H-Index (WoS): 6

H-Index (Scopus): 7

## **Non Academic Experience**

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