

## Prof. MUSTAFA TAVASLI

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAB-1630-2020

ScopusID: 6506308760

Yoksis Researcher ID: 4108

### Education Information

Doctorate, University of Durham-The Graduate Society, Kimya Anabilim Dalı, United Kingdom 1996 - 1999

Postgraduate, Selcuk University, Institute Of Science, Kimya (YI) (Tezli), Turkey 1991 - 1993

Undergraduate, Selcuk University, Faculty Of Education, Kimya Öğretmenliği Pr., Turkey 1987 - 1991

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Synthesis of a New Class of Homochiral Amines and Novel Bio-active Tropanes, University of Durham, Graduate School, Chemistry, 1999

Postgraduate, Bazı kaliks(n)arenlerin faz transfer özelliklerinin incelenmesi, Selcuk University, Institute Of Science, 1993

### Research Areas

Natural Sciences

### Academic Titles / Tasks

Professor, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, KİMYA, 2011 - Continues

Associate Professor, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, KİMYA, 2006 - Continues

Research Assistant, University of Durham, 2003 - 2008

Research Assistant, University of Newcastle Upon Tyne, 2002 - 2003

Research Assistant, University of St. Andrews, 2001 - 2002

Lecturer, Afyon Kocatepe University, 2000 - 2001

Research Assistant, Afyon Kocatepe University, 1993 - 2000

## Academic and Administrative Experience

Director of Continuing Education Center, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, KİMYA, 2019 - 2020

Head of Department, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, KİMYA, 2016 - 2019

Deputy Head of Department, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, KİMYA, 2013 - 2016

## Courses

### Undergraduate

Bitirme Çalışması II, Undergraduate, 2021 - 2022

Organik Kimya II, Undergraduate, 2021 - 2022

Reaction Mechanism in Organic Chemistry, Undergraduate, 2021 - 2022

Industrial Organic Molecules, Undergraduate, 2021 - 2022

Bitirme Çalışması I, Undergraduate, 2021 - 2022

Biyorganik Kimya, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Organik Kimya I, Undergraduate, 2021 - 2022

Infrared Spectroscopy in Organic Chemistry, Undergraduate, 2021 - 2022

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

- I. **A reaction-based carbazole-dicyanovinyl conjugated colorimetric and ratiometric fluorescent probe for selective detection of cyanide ions**  
Battal A., Kassa S. B., ALTINÖLÇEK GÜLTEKİN N., TAVASLI M., ONGANER Y.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.304, 2024 (SCI-Expanded)
- II. **A Carbazole-based Fluorescent Turn-off Chemosensor for Iron (II/III) Detection in a Dimethyl Sulfoxide**  
Battal A., Kassa S. B., Gultekin N., TAVASLI M., ONGANER Y.  
JOURNAL OF FLUORESCENCE, vol.33, no.4, pp.1421-1429, 2023 (SCI-Expanded)
- III. **A red-orange carbazole-based iridium(III) complex: Synthesis, thermal, optical and electrochemical properties and OLED application**  
Altinolcek N., Battal A., TAVASLI M., Cameron J., Peveler W. J., Yu H. A., Skabara P. J., Fairbairn N. J., Hedley G. J.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.951, 2021 (SCI-Expanded)
- IV. **Carbazole-based D-pi-A molecules: Determining the photophysical properties and comparing ICT effects of pi-spacer and acceptor groups**  
Altinolcek N., Battal A., Vardalli C. N., TAVASLI M., Yu H. A., Peveler W. J., Skabara P. J.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1239, 2021 (SCI-Expanded)
- V. **Yellowish-orange and red emitting quinoline-based iridium(III) complexes: Synthesis, thermal, optical and electrochemical properties and OLED application**  
Altinolcek N., Battal A., TAVASLI M., Cameron J., Peveler W. J., Yu H. A., Skabara P. J.  
SYNTHETIC METALS, vol.268, 2020 (SCI-Expanded)
- VI. **Synthesis of novel multifunctional carbazole-based molecules and their thermal, electrochemical and optical properties**  
Altinolcek N., Battal A., TAVASLI M., Peveler W. J., Yu H. A., Skabara P. J.  
BEILSTEIN JOURNAL OF ORGANIC CHEMISTRY, vol.16, pp.1066-1074, 2020 (SCI-Expanded)
- VII. **Synthesis and optical characterization of novel carbazole Schiff bases**  
ÇİÇEK B., Calisir U., TAVASLI M., TÜLEK R., TEKE A.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1153, pp.42-47, 2018 (SCI-Expanded)
- VIII. **Synthesis of biscyclometalated iridium(III) acetylacetonate complexes via a 15 min bridge-splitting reaction, their characterisations and photophysical properties**  
Altinolcek N., Aydemir M., TAVASLI M., Dos Santos P. L., Monkman A. P.

JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.851, pp.184-188, 2017 (SCI-Expanded)

- IX. **High efficiency OLEDs based on anthracene derivatives: The impact of electron donating and withdrawing group on the performance of OLED**  
Aydemir M., Haykir G., Battal A., Jankus V., Sugunan S. K., Dias F. B., Al-Attar H., Turksoy F., TAVASLI M., Monkman A. P.  
ORGANIC ELECTRONICS, vol.30, pp.149-157, 2016 (SCI-Expanded)
- X. **Synthesis, thermal and optical properties of a novel bis(2-(4-dicyanovinylphenyl) pyridinato-N, C2) iridium(acetylacetonate)**  
Altinolcek N., TAVASLI M., Aydemir M., Abay B., Monkman A. P.  
INORGANICA CHIMICA ACTA, vol.440, pp.102-106, 2016 (SCI-Expanded)
- XI. **Synthesis of Quaternary, Long-Chain N-Alkyl Amides and Their Corrosion Inhibition in Acidic Media**  
ÖZTÜRK S., YILDIRIM A., Cetin M., TAVASLI M.  
JOURNAL OF SURFACTANTS AND DETERGENTS, vol.17, no.3, pp.471-481, 2014 (SCI-Expanded)
- XII. **Colour tuning from green to red by substituent effects in phosphorescent tris-cyclometalated iridium(III) complexes of carbazole-based ligands: synthetic, photophysical, computational and high efficiency OLED studies**  
TAVASLI M., Moore T. N., Zheng Y., Bryce M. R., Fox M. A., Griffiths G. C., Jankus V., Al-Attar H. A., Monkman A. P.  
JOURNAL OF MATERIALS CHEMISTRY, vol.22, no.13, pp.6419-6428, 2012 (SCI-Expanded)
- XIII. **Highly Efficient, Solution-Processed, Single-Layer, Electrophosphorescent Diodes and the Effect of Molecular Dipole Moment**  
Al-Attar H. A., Griffiths G. C., Moore T. N., TAVASLI M., Fox M. A., Bryce M. R., Monkman A. P.  
ADVANCED FUNCTIONAL MATERIALS, vol.21, no.12, pp.2376-2382, 2011 (SCI-Expanded)
- XIV. **Syntheses of two diamine substituted 1,3-distal calix[4]arene-based magnetite nanoparticles for extraction of dichromate, arsenate and uranyl ions**  
Sayin S., YILMAZ M., TAVASLI M.  
TETRAHEDRON, vol.67, no.20, pp.3743-3753, 2011 (SCI-Expanded)
- XV. **Molecular Bridging of Silicon Nanogaps**  
Ashwell G. J., Phillips L. J., Robinson B. J., Urasinska-Wojcik B., Lambert C. J., Grace I. M., Bryce M. R., Jitchati R., TAVASLI M., Cox T. I., et al.  
ACS NANO, vol.4, no.12, pp.7401-7406, 2010 (SCI-Expanded)
- XVI. **Cationic bis-cyclometalated iridium(III) phenanthroline complexes with pendant fluorenyl substituents: Synthesis, redox, photophysical properties and light-emitting cells**  
Zeng X., TAVASLI M., Perepichka I. F., Batsanov A. S., Bryce M. R., Chiang C., Rothe C., Monkman A. P.  
CHEMISTRY-A EUROPEAN JOURNAL, vol.14, no.3, pp.933-943, 2008 (SCI-Expanded)
- XVII. **A tris-cyclometalated iridium(III) complex of 2-(5,5-dioxido-dibenzothiophen-3-yl)pyridine: Synthesis, structural, redox and photophysical properties**  
TAVASLI M., Bettington S., Perepichka I. F., Batsanov A. S., Bryce M. R., Rothe C., Monkman A. P.  
EUROPEAN JOURNAL OF INORGANIC CHEMISTRY, no.30, pp.4808-4814, 2007 (SCI-Expanded)
- XVIII. **Tris-cyclometalated iridium(III) complexes of carbazole(fluorenyl)pyridine ligands: Synthesis, redox and photophysical properties, and electrophosphorescent light-emitting diodes**  
Bettington S., TAVASLI M., Bryce M. R., Beeby A., Al-Attar H., Monkman A. P.  
CHEMISTRY-A EUROPEAN JOURNAL, vol.13, no.5, pp.1423-1431, 2007 (SCI-Expanded)
- XIX. **Intramolecular charge transfer assisted by conformational changes in the excited state of fluorene-dibenzothiophene-S,S-dioxide co-oligomers**  
Dias F. B., Pollock S., Hedley G., Palsson L., Monkman A., Perepichka I. I., Perepichka I. F., TAVASLI M., Bryce M. R.  
JOURNAL OF PHYSICAL CHEMISTRY B, vol.110, no.39, pp.19329-19339, 2006 (SCI-Expanded)
- XX. **Bridged diiridium complexes for electrophosphorescent OLEDs: synthesis, X-ray crystal structures, photophysics, and devices**  
Bettington S., TAVASLI M., Bryce M., Batsanov A., Thompson A., Al Attar H., Dias F., Monkman A.  
JOURNAL OF MATERIALS CHEMISTRY, vol.16, no.11, pp.1046-1052, 2006 (SCI-Expanded)
- XXI. **Practical syntheses of N-hexylcarbazol-2-yl- and -3-yl-boronic acids, their cross-coupled products**

**and a derived tris-cyclometalated (pyridin-2-yl)carbazole iridium(III) complex**

TAVASLI M., Bettington S., Bryce M., Batsanov A., Monkman A.

SYNTHESIS-STUTTGART, no.10, pp.1619-1624, 2005 (SCI-Expanded)

- XXII. **White polymeric light-emitting diode based on a fluorene polymer/Ir complex blend system**  
Al Attar H., Monkman A., TAVASLI M., Bettington S., Bryce M.  
APPLIED PHYSICS LETTERS, vol.86, no.12, 2005 (SCI-Expanded)
- XXIII. **Oligo(fluorenyl) pyridine ligands and their tris-cyclometalated iridium(III) complexes: synthesis, photophysical properties and electrophosphorescent devices**  
TAVASLI M., Bettington S., Bryce M., Al Attar H., Dias F., King S., Monkman A.  
JOURNAL OF MATERIALS CHEMISTRY, vol.15, no.46, pp.4963-4970, 2005 (SCI-Expanded)
- XXIV. **The fluorine gauche effect. Langmuir isotherms report the relative conformational stability of (+/-)-erythro- and (+/-)-threo-9,10-difluorostearic acids**  
TAVASLI M., O'Hagan D., Pearson C., Petty M.  
CHEMICAL COMMUNICATIONS, no.11, pp.1226-1227, 2002 (SCI-Expanded)
- XXV. **Extreme enantiomeric discrimination of fluoroalkanes using deuterium NMR in chiral liquid crystalline media**  
TAVASLI M., Courtieu J., Goss R., Meddour A., O'Hagan D.  
CHEMICAL COMMUNICATIONS, no.8, pp.844-845, 2002 (SCI-Expanded)
- XXVI. **1-(1,3-Dithian-2-yl)-2-phenylethanone**  
Batsanov A., Howard J., O'Hagan D., TAVASLI M.  
ACTA CRYSTALLOGRAPHICA SECTION C-CRYSTAL STRUCTURE COMMUNICATIONS, vol.56, 2000 (SCI-Expanded)
- XXVII. **3 alpha-Tosyloxymethyltropane(N-8-B)-borane**  
Batsanov A., Howard J., O'Hagan D., TAVASLI M.  
ACTA CRYSTALLOGRAPHICA SECTION C-CRYSTAL STRUCTURE COMMUNICATIONS, vol.56, 2000 (SCI-Expanded)
- XXVIII. **A synthesis of (S)-alpha-(fluorodiphenylmethyl)alkylamines by HF-pyridine treatment of 4-alkyl-5,5-diphenyl-oxazolidinones**  
O'Hagan D., Royer F., TAVASLI M.  
TETRAHEDRON-ASYMMETRY, vol.11, no.9, pp.2033-2036, 2000 (SCI-Expanded)
- XXIX. **A short synthesis of (S)-alpha-(diphenylmethyl)alkyl amines from amino acids**  
O'Hagan D., TAVASLI M.  
TETRAHEDRON-ASYMMETRY, vol.10, no.6, pp.1189-1192, 1999 (SCI-Expanded)
- XXX. **The synthesis, conformation and antimuscarinic properties of ketone analogues of tropane esters**  
TAVASLI M., O'Hagan D., Batsanov A., Foxon G., Halliwell R., Howard J.  
JOURNAL OF THE CHEMICAL SOCIETY-PERKIN TRANSACTIONS 1, no.23, pp.3455-3461, 1999 (SCI-Expanded)
- XXXI. **A short synthesis of (S)-2-(diphenylmethyl)pyrrolidine, a chiral solvating agent for NMR analysis**  
Bailey D., O'Hagan D., TAVASLI M.  
TETRAHEDRON-ASYMMETRY, vol.8, no.1, pp.149-153, 1997 (SCI-Expanded)
- XXXII. **SELECTIVE EXTRACTION OF FE<sup>3+</sup> BY A POLYMERIC CALIX[4]ARENE**  
DELIGOZ H., TAVASLI M., YILMAZ M.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.32, no.15, pp.2961-2964, 1994 (SCI-Expanded)

## Books

I. **Temel Organik Kimya**

AKTAN E., ALTUNDAŞ A., AYDOĞAN A., DİNÇER S., DİŞLİ A., KOZ Ö., SARIKAHYA N., SAYIL M. Ç., SEFEROĞLU Z., TAVASLI M., et al.

Bilim Yayınları, 2020

II. **Bir Bakışta Heterosiklik Kimya**

BARAN A., TAVASLI M., ÖCAL SUNGUROĞLU Z. N., YILDIRIM A., DOĞAN İ. S.

## Papers Published in Refereed Scientific Meetings

- I. **Bis(2-phenyl-4/5-formylpyridinato-N,C2')iridium(III)acetylacetonate (5a and 5b): their 15 Minute synthesis, characterisations and photophysical properties**  
ALTINÖLÇEK N., TAVASLI M., AYDEMİR M., Dos Santos P. L., Monkman A. P.  
İstanbul International Organic Electronic Symposium, 2 - 04 December 2019
- II. **Design and Synthesis of Novel Cyclometalating Ligands**  
TAVASLI M.  
Istanbul International Organic Electronic Symposium, 2 - 04 December 2019
- III. **Synthesis, Thermal and Optical Properties of a Novel Bis(2-(4-dicyanovinylphenyl)pyridinato-N,C2)iridium(acetylacetonate)**  
ALTINÖLÇEK N., TAVASLI M., AYDEMİR M., ABAY B., MONKMAN A. P.  
The Internatinonal Conference on Materials Science Mechanical and Automotive Engineerings and Technology in CAPPADOCIA/TURKEY (IMSMATEC'19), 21 - 23 June 2019
- IV. **Design, Synthesis and Characterization of Carbazole Based Biothiol Fluorescent Sensors**  
VARDALLI C., ALTINÖLÇEK N., TAVASLI M.  
The Internatinonal Conference on Materials Science Mechanical and Automotive Engineerings and Technology in CAPPADOCIA/TURKEY (IMSMATEC'19), 21 - 23 June 2019
- V. **White polymeric light-emitting diode based on a fluorens polymer/Ir complex blend system**  
Al Attar H. A., Monkman A. P., TAVASLI M., Bettington S., Bryce M. R.  
Building European OLED Infrastructure, Cambridge, England, 6 - 07 June 2005, vol.5961
- VI. **Oligo(fluorenyl)pyridine ligands and their iridium complexes: Synthesis, photophysical properties and electrophosphorescent devices.**  
TAVASLI M., Bettington S., Bryce M., Monkman A., Al Attar H., Dias F., King S.  
229th National Meeting of the American-Chemical-Society, California, United States Of America, 13 - 17 March 2005, vol.229

## Supported Projects

Tavaslı M., ALTINÖLÇEK N., Project Supported by Higher Education Institutions, Bis(2-(N-hekzilkarbazol-3-il)-4/5-formilpiridin)(asetilasetonat)iridyum(III) komplekslerinin sentezi, karakterizasyonu ve fotofiziksel özelliklerinin incelenmesi, 2018 - 2020

TAVASLI M., Project Supported by Higher Education Institutions, Asetilasetonatobis(2-fenil-4/5-disiyanovinilpiridinato-N,C2 )iridyum(III) komplekslerinin sentezi ve fotofiziksel özelliklerinin incelenmesi, 2016 - 2017

Hacismailoğlu M. C., Altınölçek N., Özer M., Ahmetoğlu M., Tavaslı M., Karamangil M. İ., Project Supported by Higher Education Institutions, ORGANİK IŞIK YAYAN DİYOT OLED VE ORGANİK GÜNEŞ PİLLERİ ÜRETİMİ VE KARAKTERİZASYONU, 2015 - 2017

Tavaslı M., TUBITAK Project, 2-(karbazol-3-il)piridin Tabanlı Ligand Ile Yeni Mavi Işık Yayan Iridyum(III) Komplekslerinin Tasarımı Ve Sentezi; Termal, Elektrokimyasal Ve Fotofiziksel Özelliklerinin İncelenmesi, 2011 - 2013

## Metrics

Publication: 41

Citation (WoS): 1187

Citation (Scopus): 1217

H-Index (WoS): 18

H-Index (Scopus): 18

## **Non Academic Experience**

Uludağ Üniversitesi, Fen-Edebyat Fak., Kimya Bölümü, Profesör

Uludağ Üniversitesi, Fen-Edebyat Fak., Kimya Bölümü, Öğretim Üyesi ? Doçent

Aksaray Yuva Ortaokulu, Stajyer Kimya Öğretmeni

Uşak Üniversitesi, Banaz Meslek Yüksekokulu, , Öğretim Görevlisi

University of Durham, Department of Chemistry, Research Associate

University of Newcastle upon Tyne, School of Clinical & Laboratory Sciences, Research Associate

University of St Andrews, School of Chemistry, Research Fellow

Afyon Kocatepe Univ, Uşak Eğitim Fak., Araştırma Görevlisi

Afyon Kocatepe Univ, Uşak Eğitim Fak., Araştırma Görevlisi

Aksaray Yeşiltepe Lisesi, Stajyer Kimya Öğretmeni