

Asst. Prof. DEMET ASİL ALPTEKİN

Personal Information

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Education Information

Doctorate, University Of Cambridge-Sidney Sussex College, United Kingdom 2011 - 2015

Post Graduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Kimya (YI) (Tezli), Turkey 2006 - 2008

Undergraduate Double Major, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, Turkey 2001 - 2006

Under Graduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, Turkey 2000 - 2005

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Post Graduate, A glow in the dark: synthesis and electropolymerization of chemiluminescent thiophene derivatives, Middle East Technical University, Graduate School of Natural and Applied Sciences, Kimya (YI) (Tezli), 2016

Doctorate, Hybrid Functional Materials for Optoelectronic Applications, University Of Cambridge-Sidney Sussex College, 2015

Research Areas

Physics, Chemistry

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2018 - Continues

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2016 - 2018

Lecturer PhD, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2015 - 2016

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2007 - 2015

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

- A comprehensive approach for the instability of PbTe quantum dots and design of a combinatorial

passivation strategy

Haciefendioğlu T., Solmaz T. K., Erkan M., Asil D.

Solar Energy Materials and Solar Cells, vol.207, 2020 (Journal Indexed in SCI)

● **Role of PbSe Structural Stabilization in Photovoltaic Cells**

Asil D., Walker B. J., Ehrler B., Vaynzof Y., Sepe A., Bayliss S., Sadhanala A., Chow P. C. Y., Hopkinson P. E., Steiner U., et al.

ADVANCED FUNCTIONAL MATERIALS, vol.25, pp.928-935, 2015 (Journal Indexed in SCI)

● **Temperature- and Voltage-Induced Ligand Rearrangement of a Dynamic Electroluminescent Metallopolymer**

Asil D., Foster J. A., Patra A., de Hatten X., del Barrio J., Scherman O. A., Nitschke J. R., Friend R. H.

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, vol.53, pp.8388-8391, 2014 (Journal Indexed in SCI)

● **A new blue light emitting and electrochromic polyfluorene derivative for display applications**

Carbas B. B., Asil D., Friend R. H., ÖNAL A. M.

ORGANIC ELECTRONICS, vol.15, pp.500-508, 2014 (Journal Indexed in SCI)

● **Aqueous Self-Assembly of an Electroluminescent Double-Helical Metallopolymer**

de Hatten X., Asil D., Friend R. H., Nitschke J. R.

JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.134, pp.19170-19178, 2012 (Journal Indexed in SCI)

● **A Diverse-Stimuli Responsive Chemiluminescent Probe with Luminol Scaffold and Its Electropolymerization**

ASİL ALPTEKİN D., CİHANER A., Algi F., ÖNAL A. M.

ELECTROANALYSIS, vol.22, pp.2254-2260, 2010 (Journal Indexed in SCI)

● **Electropolymerization and ion sensitivity of chemiluminescent thienyl systems**

ASİL ALPTEKİN D., CİHANER A., ÖNAL A. M.

ELECTROCHIMICA ACTA, vol.54, pp.6740-6746, 2009 (Journal Indexed in SCI)

● **A glow in the dark: synthesis and electropolymerization of a novel chemiluminescent terthienyl system**

ASİL ALPTEKİN D., CİHANER A., ÖNAL A. M.

CHEMICAL COMMUNICATIONS, pp.307-309, 2009 (Journal Indexed in SCI)

● **A novel conducting polymer based on terthienyl system bearing strong electron-withdrawing substituents and its electrochromic device application**

ASİL ALPTEKİN D., CİHANER A., Algi F., ÖNAL A. M.

JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.618, pp.87-93, 2008 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

● **PbSe Nanorods for hybrid solar cells: Optimization of synthesis protocols and investigation of surface stability**

Haciefendioğlu T., Alptekin D.

2018 International Conference on Photovoltaic Science and Technologies, PVCon 2018, Ankara, Turkey, 4 - 06 July 2018

Supported Projects

Asil Alptekin D., TUBITAK Project, Çoklu Eksiton Üretebilen PbSe Nano Çubukları: Tuzak Bantlarını Hedef Alan Yüzey Kontrol Protokollerinin İlk Kez Geliştirilmesi ve Hibrit Güneş Pili Uygulamaları, 2018 - 2020

TOPPARE L. K., ÖNAL A. M., ESENTÜRK O., DANIŞMAN M. F., EREL GÖKTEPE İ., ÇIRPAN A., ASİL ALPTEKİN D., HACALOĞLU J., Project Supported by Higher Education Institutions, İletken Kopolimer Bazlı Alkol Biyosensörleri Geliştirilmesi, 2018 - 2019

ASİL ALPTEKİN D., ERTÜRK O., AKIN T., Project Supported by Higher Education Institutions, PbSe Koloidal Kuantum

Noktacık Tabanlı Yüksek Çözünürlüklü, Kısa Dalga Boylu Kızılötesi Görüntüleme Sensörleri için Detektör Dizini Geliştirilmesi, 2017 - 2019

Asil Alptekin D., TÜBİTAK Project, PbTe Kuantum Noktacıklarının yüzey modifikasyon tekniklerinin tasarımı ve singlet fisyona duyarlı fotovoltaik hücrelere uygulanması, 2015 - 2018

Esentürk O., Asil Alptekin D., TÜBİTAK Project, PbTe Kuantum Noktacıklarının Yüzey Modifikasyon Tekniklerinin Tasarımı Ve Singlet Fisyona Duyarlı Fotovoltaik Hücrelere Uygulanması, 2015 - 2018

TOPPARE L. K. , ÖNAL A. M. , ESENTÜRK O. , AZERİ Ö. , BÜBER E. , DANIŞMAN M. F. , EREL GÖKTEPE İ. , ÇIRPAN A. , ASİL ALPTEKİN D. , HACALOĞLU J. , Project Supported by Higher Education Institutions, Farklı makroyapılar kullanılarak iletken polimer bazlı çeşitli alkol biyosensörlerinin geliştirilmesi, 2017 - 2017

ASİL ALPTEKİN D. , Project Supported by Higher Education Institutions, Çoklu Exsiton Üretebilen ve Tekli Fisyona Duyarlı Hibrit Güneş Pili Geliştirilmesi, 2016 - 2017

ESENTÜRK O. , ÖNAL A. M. , DOĞAN Ö. , DANIŞMAN M. F. , ASİL ALPTEKİN D. , AYTEKİN Y. S. , HACALOĞLU J. , PERSİL ÇETİNKOL Ö. , Project Supported by Higher Education Institutions, ŞARAP KALİTE TAYİNİ İÇİN YÖNTEM GELİŞTİRME ÇALIŞMALARI, 2016 - 2016

Scientific Refereeing

H2020 Project, H2020 Other Career Development Projects, Co-Funded Brain Circulation Scheme 2, Turkey, January 2020

Technopark, Middle East Technical University, Turkey, October 2019

TURKISH JOURNAL OF CHEMISTRY, National Scientific Refreed Journal, May 2019

RENEWABLE ENERGY, SCI Journal, April 2019

TURKISH JOURNAL OF CHEMISTRY, National Scientific Refreed Journal, January 2018

Newton Programme Project, Newton Fund-REL, Research Environment Links Project, TÜBİTAK, Turkey, November 2017

TUBİTAK Project, 1003 - Priority Areas R&D Projects Support Program, TÜBİTAK, Turkey, August 2017

Invited Congress and Symposium Activities

5th International Advanced Energy Materials Conference(AEM2018), Working Group, London, United Kingdom, 2018

Citations

Total Citations (WOS):191

h-index (WOS):7