

Res. Asst. PhD ÇİSEM ALTUNAYAR ÜNSALAN

Personal Information

Email: cisem.altunayar@ege.edu.tr

Web: <https://avesis.ege.edu.tr/cisem.altunayar>

Address: Ege Üniversitesi Merkezi Araştırma Test ve Analiz
Laboratuvarı Uygulama ve Araştırma Merkezi (EGE-MATAL)
35100 Bornova/İZMİR



Education Information

Doctorate, Ege University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2012 - 2018

Post Graduate, Ege University, Fen Bilimleri Enstitüsü, Fizik (YI), Turkey 2009 - 2012

Under Graduate, Ege University, Fen Fakültesi, Fizik Bölümü, Turkey 2005 - 2009

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Education Management and Planning, Multidisipliner/Uygulamalı Kırmızıaltı (Infrared) Spektroskopisi Eğitimi, Ege Üniversitesi, 2018

Other, Olimpos Gökyüzü ve Bilim Festivali, xxx, 2018

Education Management and Planning, MicroCal PEAQ – ITC Training and Bioscience Seminar, Ege Üniversitesi, 2018

Education Management and Planning, PerkinElmer Spektrum Two ATR-FTIR Cihazı Operatör Eğitimi, Ege Üniversitesi, 2017

Education Management and Planning, ERC – Avrupa Araştırma Konseyi Bilgi Günü, Ege Üniversitesi, 2016

Education Management and Planning, Tehlikeli Atık Yönetimi Eğitimi, Ege Üniversitesi, 2016

Education Management and Planning, BRUKER Dimension Edge System AFM Training, Ege Üniversitesi, 2016

Occupational Health and Safety, İSG Eğitim Belgesi, Ege Üniversitesi, 2015

Education Management and Planning, Akdeniz Moleküler Modelleme ve Spektroskopi Derneği, Proje Hazırlama Eğitimi, Akdeniz Üniversitesi, 2015

Education Management and Planning, TA Instruments Q800 Model DMA Cihazı Operatör Eğitimi, Ege Üniversitesi, 2015

Education Management and Planning, TA Instruments Q600 Model Simultane DSC/TGA Cihazı Operatör Eğitimi, Ege Üniversitesi, 2015

Education Management and Planning, TA Instruments Q20 Model Modulated DSC Cihazı Operatör Eğitimi, Ege Üniversitesi, 2015

Occupational Health and Safety, EGE İSG Eğitim Belgesi, Ege Üniversitesi, 2015

Education Management and Planning, TEYDEB 1505 Proje Yazım Atölyesi, Ege Üniversitesi, 2015

Education Management and Planning, HORIZON 2020 Proje Yazım ve Ortaklık Kurma Eğitimi, Ege Üniversitesi, 2015

Other, Disiplinlerarası Ege Zirvesi, Ege Üniversitesi, 2014

Education Management and Planning, Temel Bilimler Alanında Disiplinlerarası Araştırma Projeleri Hazırlama Eğitimi,

Afyon Kocatepe Üniversitesi, 2014

Education Management and Planning, Genç Araştırmacılar İçin Makale Yazım Semineri, Ege Üniversitesi, 2014

Other, Temel Bilimler Sempozyumu (TBS'2014), Ege Üniversitesi, 2014

Education Management and Planning, AB Horizon 2020 Programı, Ege Üniversitesi, 2014

Education Management and Planning, Fizik Odaklı Bilimsel Araştırma Projesi Hazırlama Eğitimi, Süleyman Demirel Üniversitesi, 2014

Other, Ege Üniversitesi Fen Bilimleri Enstitüsü 4. Oryantasyon Programı, Ege Üniversitesi, 2014

Foreign Language, English Language Course, English Office Language Course, 2011

Foreign Language, Academic Western Language Education Corporation, English Language Course, 2008

Dissertations

Doctorate, Kolesterol ve Kolesterol Analoglarının Lipit Membranlar Üzerine Etkilerinin Spektroskopik ve Kalorimetrik Tekniklerle İncelenmesi, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Fizik (Dr), 2018

Post Graduate, Sterol - Lipit Etkileşiminin Spektroskopik ve Kalorimetrik Tekniklerle İncelenmesi, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Fizik (YI), 2012

Research Areas

Life Sciences, Biophysics, Molecular Biophysics, Spectroscopical Methods, Thermal Methods, Natural Sciences

Academic Titles / Tasks

Research Assistant PhD, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Ege-Matal, 2018 - Continues

Research Assistant, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Fizik (Dr), 2013 - 2018

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

- I. **Fenoterol and dobutamine as COVID-19 main protease inhibitors: A virtual screening study**
Bolelli K., Bolelli T. E., Ünsalan O., Altunayar Ünsalan Ç.
JOURNAL OF MOLECULAR STRUCTURE, vol.1, pp.129449-129467, 2020 (Journal Indexed in SCI)
- II. **FTIR, Raman and DFT studies on 2-[4-(4-ethylbenzamido)phenyl] benzothiazole and 2-[4-(4-nitrobenzamido)phenyl]benzothiazole supported by differential scanning calorimetry**
ÜNSALAN O., Ari H., Altunayar-Ünsalan C., Bolelli K., Boyukata M., Yalcin I.
JOURNAL OF MOLECULAR STRUCTURE, vol.1218, 2020 (Journal Indexed in SCI)
- III. **Shock-induced olivine-ringwoodite and plagioclase-maskelynite transformations in Bursa L6 chondrite: A Raman and ATR-FTIR spectroscopic study**
Ünsalan O., Altunayar Ünsalan Ç.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.240, pp.118590, 2020 (Journal Indexed in SCI)
- IV. **MEAN ATOMIC WEIGHT AND THERMOPHYSICAL PROPERTIES OF SARICICEK HOWARDITE**
Szurgot M., Wach R. A., Ünsalan O., Altunayar Ünsalan Ç.
Meteoritics & Planetary Science, vol.54, pp.6011, 2019 (Journal Indexed in SCI)
- V. **SPECIFIC HEAT, MEAN ATOMIC WEIGHT AND RELICT TEMPERATURES OF BURSA L6 CHONDRITE**
Wach R. A., Szurgot M., Ünsalan O., Altunayar Ünsalan Ç.
Meteoritics & Planetary Science, vol.54, pp.6024, 2019 (Journal Indexed in SCI)
- VI. **The Saricicek howardite fall in Turkey: Source crater of HED meteorites on Vesta and impact risk of Vestoids**

Ünsalan O., Jenniskens P., YIN Q., Kaygisiz E., ALBERS J., CLARK D. L., Granvik M., Demirkol I., Erdogan I. Y., Bengu A. S., et al

METEORITICS & PLANETARY SCIENCE, vol.54, pp.953-1008, 2019 (Journal Indexed in SCI)

VII. **A concentration dependent spectroscopic study of binary mixtures of plant sterol stigmasterol and zwitterionic dimyristoylphosphatidylcholine multilamellar vesicles: An FTIR study**

Altunayar Ünsalan Ç., Şahin İ., Kazancı N.

JOURNAL OF MOLECULAR STRUCTURE, vol.1174, pp.127-132, 2018 (Journal Indexed in SCI)

VIII. **A calorimetric comparison of the effects of cholesterol and stigmasterol on zwitterionic dimyristoylphosphatidylcholine model membranes**

ALTUNAYAR Ç., ŞAHİN İ., KAZANCI N.

Febs Journal, vol.283, pp.290-291, 2016 (Journal Indexed in SCI)

IX. **A comparative study of the effects of cholesterol and desmosterol on zwitterionic DPPC model membranes**

Altunayar C., ŞAHİN İ., KAZANCI N.

CHEMISTRY AND PHYSICS OF LIPIDS, vol.188, pp.37-45, 2015 (Journal Indexed in SCI)

Articles Published in Other Journals

I. **Kaolinite based risk assessment of traffic-related pollution for selected historical libraries in Istanbul: Insights from urban topsoils studied by DRIFTS**

Ünsalan O., Altunayar Ünsalan Ç., Kuzucuoğlu A.

Journal of Spectroscopy and Molecular Sciences, vol.1, pp.22-64, 2020 (Refereed Journals of Other Institutions)

II. **Effect of desmosterol on DPPC model membrane an FTIR study**

ŞAHİN İ., ALTUNAYAR Ç., KAZANCI N.

Azerbaijan Journal of Physics, Fizika, vol.18, pp.19-25, 2012 (Refereed Journals of Other Institutions)

III. **Interaction of desmosterol with model membrane DPPC**

ALTUNAYAR Ç., ŞAHİN İ., KAZANCI N.

Ege University Journal of the Faculty of Science, vol.35, pp.56-72, 2011 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

I. **Temperature dependent vibrational spectra of a recently discovered astro-organometallic compound simulated in Martian climate**

Ünsalan O., Altunayar Ünsalan Ç., Yılmaz B.

14th International GeoRaman Conference (GeoRaman 2020), Bilbao, Spain, 2 - 05 November 2020, pp.1-2

II. **Extraterrestrial organic carbon in NWA 5508 chondrite: Peak metamorphic temperature determination based on first-order Raman modes**

Ünsalan O., Altunayar Ünsalan Ç.

14th International GeoRaman Conference (GeoRaman 2020), Bilbao, Spain, 2 - 05 November 2020, pp.3-4

III. **Mean Atomic Weight and Thermophysical Properties of Çanakkale Meteorite**

Szurgot M., Wach R., Ünsalan O., Altunayar Ünsalan Ç.

51st Lunar and Planetary Science Conference, Texas, United States Of America, 16 - 20 March 2020, pp.1287

IV. **Evidence of shock metamorphism in Bursa L6 chondrite: Raman and Infrared Spectroscopic Approach**

Ünsalan O., Altunayar Ünsalan Ç.

The 38th. International Meteor Conference (IMC 2019), Berlin, Germany, 3 - 06 October 2019, pp.1

V. **Donor-Acceptor π -conjugated Naphtalene Bis-benzimidazole: A DFT, Infrared and Raman Spectroscopic Study on a Heterojunction Solar Cell**

Ünsalan O., Altunayar Ünsalan Ç., Sert Y., Erten Ela Ş.

- IV. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2019)), Aydın, Turkey, 5 - 09 August 2019, pp.86
- VI. **Strong shock indication in Kemer meteorite: implications from Infrared spectroscopy**
Ünsalan O., Altunayar Ünsalan Ç.
IV. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2019), Aydın, Turkey, 5 - 09 August 2019, pp.85
- VII. **Evidence of maskelynite formation in Didim meteorite by infrared spectroscopy**
Ünsalan O., Altunayar Ünsalan Ç.
IV. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2019), Aydın, Turkey, 5 - 09 August 2019, pp.44
- VIII. **Vibrational Spectroscopic and DFT Investigation on Electron Acceptor Perylene Bisbenzimidazole**
Ünsalan O., Altunayar Ünsalan Ç., Sert Y., Erten Ela Ş.
IV. International Turkish Congress on Molecular Spectroscopy (TURCMOS2019), Aydın, Turkey, 5 - 09 August 2019, pp.87
- IX. **Spectroscopic and structural investigations on Bursa L6 meteorite**
Ünsalan O., Altunayar Ünsalan Ç.
III. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2017), Muğla, Turkey, 26 - 29 August 2017
- X. **Investigation of physical properties of Betula Pendula (Silver Birch) bark by calorimetric , spectroscopic and microscopic techniques**
Ünsalan O., Altunayar Ünsalan Ç.
III. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2017), Muğla, Turkey, 26 - 29 August 2017
- XI. **Concentration and temperature dependent studies of interaction of provitamin D3 with zwitterionic DPPC model membranes**
ALTUNAYAR ÜNSALAN Ç., ŞAHİN İ., KAZANCI N.
III. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2017), Muğla, Turkey, 26 - 29 August 2017
- XII. **Effect of plant sterol stigmasterol on the physical properties of DMPC membranes: an FTIR study**
ALTUNAYAR ÜNSALAN Ç., ŞAHİN İ., KAZANCI N.
III. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2017), Muğla, Turkey, 26 - 29 August 2017
- XIII. **EGE MATAL Alt Yapısı ile Analitik Problem Çözümüne Bazı Örnekler**
ÖZTÜRK ATAY N., AKAKÇE N., SÖZER BAHADIR P., EROĞLU D., ALTUNAYAR Ç., GÜÇER Ş.
8. Ulusal Analitik Kimya Kongresi, Turkey, 30 May - 03 June 2016
- XIV. **A Calorimetric Comparison of the Effects of Cholesterol Desmosterol and 7 Dehydrocholesterol on Zwitterionic DPPC Model Membranes**
ALTUNAYAR Ç., ŞAHİN İ., KAZANCI N.
"II. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2015), Antalya, Turkey, 13 - 18 September 2015
- XV. **Concentration Dependent Effect of Desmosterol on Zwitterionic Model Membranes Differential Scanning Calorimetry and FTIR Spectroscopy Studies**
ALTUNAYAR Ç., ŞAHİN İ., KAZANCI N.
32nd European Congress on Molecular Spectroscopy (EUCMOS 2014), Düsseldorf, Germany, 24 - 29 August 2014
- XVI. **Desmosterolün DPPC Model Membranı Üzerine Etkisi**
ALTUNAYAR Ç., ŞAHİN İ., KAZANCI N.
1. Ege Nanoteknoloji Günleri, İzmir, Turkey, 18 - 19 April 2013
- XVII. **Desmosterolün Model Membranlar ile Etkileşimi**
ALTUNAYAR Ç., ŞAHİN İ., KAZANCI N.
Turkish Physical Society 29th International Physics Congress, Muğla, Turkey, 5 - 08 September 2012
- XVIII. **Desing of Bi Based Ceramic Supercapacitor**

ALTUNAYAR Ç., PURSALI D.

Balkan Physical Union 2nd International Physics Project Competition for University Student, Muğla, Turkey, 18 - 20 August 2008

Supported Projects

ÜNSALAN O., ALTUNAYAR ÜNSALAN Ç., Project Supported by Higher Education Institutions, FLAVONOİDLERİN MODEL MEMBRANLARDA OLUŞTURDUĞU YAPISAL VE İŞLEVSEL DEĞİŞİKLİKLERİN BİYOFİZİKSEL YÖNTEMLERLE MOLEKÜLER DÜZEYDE İNCELENMESİ, 2018 - 2020

ÜNSALAN O., ALTUNAYAR ÜNSALAN Ç., Project Supported by Higher Education Institutions, SARIÇİÇEK METEORİTİNİN TERMAL ÖZELLİKLERİNİN KALORİMETRİK YÖNTEMLERLE İNCELENMESİ, 2017 - 2019

ŞAHİN İ., BİLGE M. D. , ALTUNAYAR ÜNSALAN Ç., Project Supported by Higher Education Institutions, AJAN-LİPİT ETKİLEŞİMLERİNİN SPEKTROSKOPİK VE KALORİMETRİK TEKNİKLERLE İNCELENMESİ EK ALTYAPI PROJESİ, 2014 - 2018

Altunayar Ünsalan Ç., Şahin İ., Project Supported by Higher Education Institutions, KOLESTEROL VE KOLESTEROL ANALOGLARININ LİPİT MEMBRANLAR ÜZERİNE ETKİLERİNİN SPEKTROSKOPİK VE KALORİMETRİK TEKNİKLERLE İNCELENMESİ, 2014 - 2017

Altunayar Ünsalan Ç., Şahin İ., Bilge D., Project Supported by Higher Education Institutions, AJAN-LİPİT ETKİLEŞİMİNİN SPEKTROSKOPİK VE KALORİMETRİK TEKNİKLERLE İNCELENMESİ, 2013 - 2017

Altunayar Ünsalan Ç., Kazancı N., Project Supported by Higher Education Institutions, STEROL - LİPİT ETKİLEŞİMİNİN SPEKTROSKOPİK VE KALORİMETRİK TEKNİKLERLE İNCELENMESİ, 2011 - 2014

Tasks In Event Organizations

Ünsalan O., Altunayar Ünsalan Ç., 3. Asteroit Madenciliği ve Meteor Bilimi Çalıştayı, Workshop Organization, İzmir, Turkey, Aralık 2019

Ünsalan O., Altunayar Ünsalan Ç., IV. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2019), Scientific Congress, Aydın, Turkey, Ağustos 2019

Ünsalan O., Altunayar Ünsalan Ç., 2. Asteroit Madenciliği ve Meteor Bilimi Çalıştayı, Workshop Organization, İzmir, Turkey, Şubat 2018

Ünsalan O., Altunayar Ünsalan Ç., III. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2017), Scientific Congress, Muğla, Turkey, Ağustos 2017

Ünsalan O., Altunayar Ünsalan Ç., II. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2015), Scientific Congress, Antalya, Turkey, Eylül 2015

Invited Congress and Symposium Activities

The 51st Lunar and Planetary Science Conference (LPSC2020), Working Group, Texas, United States Of America, 2020

III. Asteroit Madenciliği ve Meteor Bilimi Çalıştayı, Working Group, İzmir, Turkey, 2019

The 38th. International Meteor Conference (IMC 2019), Attendee, Berlin, Germany, 2019

IV. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2019), Attendee, Aydın, Turkey, 2019

The 82nd Annual Meeting of the Meteoritical Society, Working Group, Sapporo, Japan, 2019

10th Meteoroids (METEORIDS 2019), Working Group, Bratislava, Slovakia, 2019

V. Uluslararası Taş Kongresi, Working Group, İzmir, Turkey, 2019

II. Asteroit Madenciliği ve Meteor Bilimi Çalıştayı, Working Group, İzmir, Turkey, 2018

III. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2017), Attendee, Muğla, Turkey, 2017

8. Ulusal Analitik Kimya Kongresi, Attendee, Isparta, Turkey, 2016

II. International Turkish Congress on Molecular Spectroscopy (TURCMOS 2015), Attendee, Antalya, Turkey, 2015

32nd European Congress on Molecular Spectroscopy (EUCMOS 2014), Attendee, Dusseldorf, Germany, 2014

1. Ege Nanoteknoloji Gunleri, Attendee, İzmir, Turkey, 2013

Turkish Physical Society 29th International Physics Congress, Attendee, Muęla, Turkey, 2012

1st International Symposium on Computing in Science & Engineering (ISCSE2010), Attendee, Aydın, Turkey, 2010

6th Nanoscience & Nanotechnology Conference (NANOTR-VI), Attendee, İzmir, Turkey, 2010

The 4th International Student Conference on Advanced Science and Technology (ICAST2010), Attendee, İzmir, Turkey, 2010

6th International Student Conference of The Balkan Physical Union (BPU6), Attendee, Muęla, Turkey, 2008

Balkan Physical Union 2nd International Physics Project Competition for University Student, Attendee, Muęla, Turkey, 2008

Citations

Total Citations (WOS):16

h-index (WOS):2

Awards

Altunayar nsalan ., Ege niversitesi 2008-2009 Eęitim-ęretim Yılı 45. Dnem Fizik Blm ncs, Ege niversitesi Fen Fakltesi, June 2009