

## **Prof. Beytullah Afşin**

### **Personal Information**

**Email:** bafsin@omu.edu.tr

**Web:** <https://avesis.omu.edu.tr/bafsin>

### **Education Information**

Doctorate, University of Wales, England 1988 - 1992

Postgraduate, University of Wales, England 1988 - 1988

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1980 - 1985

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Application of photoelectron and electron energy loss spectroscopies to the study of some surface chemical reactions, University of Wales, 2019

Postgraduate, XPS Studies of Chemisorption at Single Crystal Surfaces, University of Wales, 1988

### **Academic Titles / Tasks**

Professor, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Kimya Bölümü, 1999 - Continues

Assistant Professor, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Kimya Bölümü, 1992 - 1994

Research Assistant, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Kimya Bölümü, 1985 - 1992

### **Academic and Administrative Experience**

Ondokuz Mayıs University, 2006 - 2008

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

- I. **Butylamine-resadiye bentonite composite characterization**  
Koksal E., Afşin B., Tabak A., Çağlar B.  
SPECTROSCOPY LETTERS, vol.53, no.10, pp.745-750, 2020 (SCI-Expanded)
- II. **Pathways of volcanic glass alteration in laboratory experiments through inorganic and microbially-mediated processes**  
Cuadros J., Afşin B., Jadubansa P., Ardakani M., Ascaso C., Wierzbos J.  
Clay Minerals, vol.48, no.3, pp.423-445, 2013 (SCI-Expanded)
- III. **Covalent grafting of pyridine-2-methanol into kaolinite layers**

- Çağlar B., Çırak Ç., Tabak A., Afsin B., Eren E.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1032, pp.12-22, 2013 (SCI-Expanded)
- IV. **CHARACTERIZATION OF UNYE BENTONITE AFTER TREATMENT WITH SULFURIC ACID**  
Çağlar B., Afsin B., Koksall E., Tabak A., Eren E.  
QUIMICA NOVA, vol.36, no.7, pp.955-959, 2013 (SCI-Expanded)
- V. **Microbial and inorganic control on the composition of clay from volcanic glass alteration experiments**  
Cuadros J., Afsin B., Jadubansa P., Ardakani M., Ascaso C., Wierzechos J.  
American Mineralogist, vol.98, no.2-3, pp.319-334, 2013 (SCI-Expanded)
- VI. **Fast, microscale-controlled weathering of rhyolitic obsidian to quartz and alunite**  
Cuadros J., Afsin B., Michalski J. R., Ardakani M.  
Earth and Planetary Science Letters, vol.353-354, pp.156-162, 2012 (SCI-Expanded)
- VII. **Structural analysis of naproxen-intercalated bentonite (Unye)**  
Tabak A., Yilmaz N., Eren E., Çağlar B., Afsin B., Sarihan A.  
CHEMICAL ENGINEERING JOURNAL, no.1, pp.281-288, 2011 (SCI-Expanded)
- VIII. **Structural Characterization of Aniline-Bentonite Composite by FTIR, DTA/TG, and PXRD Analyses and BET Measurement**  
Koksall E., Afsin B., Tabak A., Çağlar B.  
SPECTROSCOPY LETTERS, no.2, pp.77-82, 2011 (SCI-Expanded)
- IX. **The Spectral, Structural and Thermal Characterizations of Dimethyl Sulphoxide, Pyridine, Ethanolamine and N-Methyl Formamide Intercalated Kaolinites**  
Çağlar B., Afsin B., Eren E., Tabak A., Çırak Ç., Cubuk O.  
ZEITSCHRIFT FÜR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES, vol.65, no.11, pp.1009-1019, 2010 (SCI-Expanded)
- X. **Adsorption of Reactive Red 120 from aqueous solutions by cetylpyridinium-bentonite**  
Tabak A., Baltaş N., Afsin B., Emirik M., Çağlar B., Eren E.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.85, no.9, pp.1199-1207, 2010 (SCI-Expanded)
- XI. **Characterization of the cation-exchanged bentonites by XRPD, ATR, DTA/TG analyses and BET measurement**  
Çağlar B., Afsin B., Tabak A., Eren E.  
CHEMICAL ENGINEERING JOURNAL, no.1-3, pp.242-248, 2009 (SCI-Expanded)
- XII. **Removal of basic dye using raw and acid activated bentonite samples**  
Eren E., Afsin B.  
JOURNAL OF HAZARDOUS MATERIALS, vol.166, no.2-3, pp.830-835, 2009 (SCI-Expanded)
- XIII. **Removal of lead ions by acid activated and manganese oxide-coated bentonite**  
Eren E., Afsin B., ÖNAL Y.  
JOURNAL OF HAZARDOUS MATERIALS, vol.161, no.2-3, pp.677-685, 2009 (SCI-Expanded)
- XIV. **Determination of adsorptive properties of a Turkish Sepiolite for removal of Reactive Blue 15 anionic dye from aqueous solutions**  
Tabak A., Eren E., Afsin B., Çağlar B.  
JOURNAL OF HAZARDOUS MATERIALS, no.2-3, pp.1087-1094, 2009 (SCI-Expanded)
- XV. **An investigation of Cu(II) adsorption by raw and acid-activated bentonite: A combined potentiometric, thermodynamic, XRD, IR, DTA study**  
Eren E., Afsin B.  
JOURNAL OF HAZARDOUS MATERIALS, vol.151, no.2-3, pp.682-691, 2008 (SCI-Expanded)
- XVI. **Investigation of a basic dye adsorption from aqueous solution onto raw and pre-treated bentonite surfaces**  
Eren E., Afsin B.  
DYES AND PIGMENTS, vol.76, no.1, pp.220-225, 2008 (SCI-Expanded)
- XVII. **Characterization and pillaring of a Turkish bentonite (Resadiye)**  
Tabak A., Afsin B., Çağlar B., Koksall E.

- JOURNAL OF COLLOID AND INTERFACE SCIENCE, no.1, pp.5-11, 2007 (SCI-Expanded)
- XVIII. **Effect of cation exchanged bentonites (CEBs) on the aggregation of a cresol based dye**  
Eren E., Afsin B.  
DYES AND PIGMENTS, vol.72, no.2, pp.228-232, 2007 (SCI-Expanded)
- XIX. **Investigation of a basic dye adsorption from aqueous solution onto raw and pre-treated sepiolite surfaces**  
Eren E., Afsin B.  
DYES AND PIGMENTS, vol.73, no.2, pp.162-167, 2007 (SCI-Expanded)
- XX. **Structural characteristics of organo-modified bentonites of different origin**  
Tabak A., Afsin B., Aygun S. F., Koksall E.  
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, vol.87, no.2, pp.375-381, 2007 (SCI-Expanded)
- XXI. **Benzamide species retained by DMSO composites at a kaolinite surface**  
Caglar B., Afsin B., Tabak A.  
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, no.2, pp.429-432, 2007 (SCI-Expanded)
- XXII. **Phenanthroline Cu(II)-bentonite composite characterization**  
Tabak A., Afsin B., Aygun S., Icbudak H.  
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, vol.81, no.2, pp.311-314, 2005 (SCI-Expanded)
- XXIII. **Firmly adsorbed ammonia and pyridine species at activated kaolinite surfaces**  
Ahmet T., Beytullah A.  
Adsorption Science and Technology, vol.19, no.8, pp.673-680, 2001 (SCI-Expanded)
- XXIV. **Stability of hydroxy-formate species at a Pb(110) surface**  
Afsin B., Gökdere M., TINKILIÇ N.  
Spectrochimica acta, Part B: Atomic spectroscopy, vol.55, no.7, pp.985-990, 2000 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Weakly chemisorbed ammonia species at a Cu(110) surface**  
Afsin B., Macit M.  
Physics of Low-Dimensional Structures, vol.1998, no.3-4, pp.191-198, 1998 (Scopus)
- II. **Formation of an oxy-chloride overlayer at a bi(0001) surface**  
Afsin B., Roberts M.  
Spectroscopy Letters, vol.27, no.1, pp.139-146, 1994 (Scopus)
- III. **Reaction pathways in the oxydehydrogenation of ammonia at Cu(110) surfaces**  
Afsin B., Davies P., Pashusky A., Roberts M., Vincent D.  
Surface Science, vol.284, no.1-2, pp.109-120, 1993 (Scopus)
- IV. **Surface structure and the instability of the formate overlayer at a Pb(110) surface**  
Afsin B., Roberts M.  
Catalysis Letters, vol.13, no.3, pp.277-282, 1992 (Scopus)
- V. **The role of a dioxygen precursor in the selective formation of imide NH(a) species at a Cu(110) surface**  
Afsin B., Davies P., Pashuski A., Roberts M.  
Surface Science, vol.259, no.1-2, 1991 (Scopus)

## Books & Book Chapters

- I. **GENEL KİMYA Moleküler Bir Yaklaşımla Kimyanın İlkeleri**  
AFŞİN B.  
NOBEL Akademik Yayıncılık, 2016
- II. **Genel Kimya Laboratuvar Klavuzu**

AFŞİN B., ERDEM E., TINKILIÇ N., MENEK N.  
Ondokuz Mayıs Üniversitesi, Samsun, 1993

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

- I. **Stability of Hydroxy Formate Species at a Pb 110 Surface**  
Gökder M., AFŞİN B., TINKILIÇ N.  
Colloquium Spectroscopicum Internationale XXXI, Ankara 1999, Ankara, Turkey, 5 - 10 September 1999
- II. **Aktifleştirilmiş Sepiolit Yüzeylerinin Hammet Asitlikleri**  
GÖKDERE M., AFŞİN B., TINKILIÇ N.  
XIII. Ulusal Kimya Kongresi, Samsun 1999, Samsun, Turkey, 31 August - 04 September 1999
- III. **Pb2 Sepiolit Üzerinde Oluşan Hidroksiklorür Türleri**  
Gökder M., AFŞİN B., TINKILIÇ N.  
XIII. Ulusal Kimya Kongresi, Samsun 1999, Samsun, Turkey, 31 August - 04 September 1999

### **Supported Projects**

Afşin B., Project Supported by Higher Education Institutions, Microbial and inorganic control on the composition of clay from volcanic glass alteration experiments, 2016 - 2016