

## **Prof. ERKAN AYDAR**

### **Personal Information**

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### **Education Information**

Doctorate, Université D'auvergne Clermont-Ferrand I, Laboratoire Magma Et Volcans, France 1989 - 1992

Postgraduate, Université D'auvergne Clermont-Ferrand I, Laboratoire Magmas Et Volcans, France 1988 - 1989

Undergraduate, Hacettepe Üniversitesi, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, Turkey 1981 - 1986

### **Foreign Languages**

English, C1 Advanced

French, C1 Advanced

### **Dissertations**

Doctorate, Etude volcano-structurale et magmatologique du strato-volcan Hasan Dagi (Anatolie Centrale-Turquie),  
Université Blaise Pascal: Clermont-Ferrand I, Laboratoire Magma Et Volcans, 1992

### **Research Areas**

Geological Engineering, Geology, Ore Deposits-Geochemistry, Mineralogy-petrography, Applied Geology, Engineering and Technology

### **Academic Titles / Tasks**

Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2003 - Continues

Associate Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 1997 - 2003

Assistant Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 1993 - 1997

### **Academic and Administrative Experience**

Hacettepe Üniversitesi, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2016 - Continues

Hacettepe Üniversitesi, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2006 - 2009

Hacettepe Üniversitesi, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2003 - 2006

### **Advising Theses**

AYDAR E., Göllüdağ-Acıgöl (Kapadokya Volkanik Provensi) bölgesinde yer alan Karnıyarık tepe cüruf konisinin ve Güneydağ tuf halkasının patlama ve yerleşme dinamiklerinin saptanması, Postgraduate, A.ANÇEL(Student), 2012

AYDAR E., Nevşehir yöresi magmatik kayalarında bulunan zirkon minerallerinin incelenmesi, Postgraduate, L.AKIN(Student), 2012

AYDAR E., Nevşehir bölgesindeki miyosen- pliyosen yaşlı efüzif, ekstrüzif volkanik faaliyetlerin incelenmesi, Postgraduate, E.KABADAYI(Student), 2010

AYDAR E., Nevşehir - Acıgöl Kaldera kompleksinin jeofizik yöntemlerle incelenmesi, Postgraduate, O.ATAK(Student), 2010

AYDAR E., Petrologic evolution of Nemrut stratovolcano (Turkey): Peralkaline magmatism in a collisional domain, Doctorate, H.EVREN(Student), 2008

AYDAR E., Quantitative morphological analysis of ashes from pyroclastic deposits of hydrovolcanic and magmatic origin, Doctorate, O.ERSOY(Student), 2007

AYDAR E., Türkmen dağı (Demirci-Manisa) ve çevresindeki pegmatitlerin oluşumu ve yerleşiminin incelenmesi, Postgraduate, G.ATICI(Student), 2006

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

- I. **Shoshonitic volcanism of the Bodrum caldera (SW Turkey): Hybridization of enriched mantle-derived and crustal melts**  
ÇUBUKÇU H. E. , AYDAR E., ULUSOY İ., Gourgaud A.  
JOURNAL OF ASIAN EARTH SCIENCES, vol.219, 2021 (Journal Indexed in SCI)
- II. **Volcanic ash and tsunami record of the Minoan Late Bronze Age Eruption (Santorini) in a distal setting, southwestern Turkey**  
AYDAR E., Ciner A., ERSOY O., Ecochard E., Fouache E. G.  
JOURNAL OF QUATERNARY SCIENCE, 2021 (Journal Indexed in SCI)
- III. **Zircon geochronology and O-Hf isotopes of Cappadocian ignimbrites: New insights into continental crustal architecture underneath the Central Anatolian Volcanic Province, Turkey**  
AKIN L., AYDAR E., Schmitt A. K. , ÇUBUKÇU H. E. , Gerdes A.  
GONDWANA RESEARCH, vol.91, pp.166-187, 2021 (Journal Indexed in SCI)
- IV. **Carcinogen soil radon enrichment in a geothermal area: Case of Guzelcamli-Davutlar district of Aydin city, western Turkey**  
AYDAR E., DİKER C.  
ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, vol.208, 2021 (Journal Indexed in SCI)
- V. **Volcanic unrest possibilities in response to recent Obruk seismic swarm on and around Hasandag stratovolcano (Central Anatolia, Turkey)**  
AYDAR E., DİKER C., ULUSOY İ., ŞEN E.  
COMPTES RENDUS GEOSCIENCE, vol.353, no.1, pp.1-18, 2021 (Journal Indexed in SCI)
- VI. **Geochemical Evaluation of Suitability of Central Anatolian (Turkey) Volcanic Rocks for Rock Fiber Production**  
ERSOY O., AYDAR E., ÇUBUKÇU H. E.  
NATURAL RESOURCES RESEARCH, 2020 (Journal Indexed in SCI)
- VII. **Application of zircon typology method to felsic rocks (Cappadocia, Central Anatolia, Turkey): a zircon crystallization temperature perspective**  
AKIN L., AYDAR E., Schmitt A. K. , ÇUBUKÇU H. E.  
TURKISH JOURNAL OF EARTH SCIENCES, vol.28, no.3, pp.351-386, 2019 (Journal Indexed in SCI)
- VIII. **Identifying the Volcanic Eruption Depicted in a Neolithic Painting at Catalhoyuk, Central Anatolia, Turkey**  
SCHMITT A. K. , DANISIK M., AYDAR E., ŞEN E., ULUSOY İ., LOVERA O. M.  
PLOS ONE, vol.9, no.1, 2014 (Journal Indexed in SCI)
- IX. **Comments on "Monitoring soil erosion in Cappadocia region (Selime-Aksaray-Turkey)" by Yilmaz et**

al. (*Environ Earth Sci* 2012, 66:75-81)

Ciner A., Sarikaya M. A. , Aydar E.

ENVIRONMENTAL EARTH SCIENCES, vol.70, no.4, pp.1927-1931, 2013 (Journal Indexed in SCI)

- X. **Multi-directional derivation of self-potential/elevation gradient (Ce) maps - swirl procedure**  
ULUSOY İ., LABAZUY P., AYDAR E.  
NEAR SURFACE GEOPHYSICS, vol.11, no.3, pp.275-282, 2013 (Journal Indexed in SCI)
- XI. **Central Anatolian Plateau, Turkey: incision and paleoaltimetry recorded from volcanic rocks**  
AYDAR E., ÇUBUKÇU H. E. , ŞEN E., AKIN L.  
TURKISH JOURNAL OF EARTH SCIENCES, vol.22, no.5, pp.739-746, 2013 (Journal Indexed in SCI)
- XII. **A Rhinocerotid Skull Cooked-to-Death in a 9.2 Ma-Old Ignimbrite Flow of Turkey**  
ANTOINE P., ORLIAC M. J. , ATICI G., ULUSOY İ., ŞEN E., ÇUBUKÇU H. E. , ALBAYRAK E., OYAL N., AYDAR E., SEN S.  
PLOS ONE, vol.7, no.11, 2012 (Journal Indexed in SCI)
- XIII. **Volcanological evolution and caldera forming eruptions of Mt. Nemrut (Eastern Turkey)**  
ULUSOY İ., ÇUBUKÇU H. E. , AYDAR E., LABAZUY P., ERSOY O., ŞEN E., GOURGAUD A.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.245, pp.21-39, 2012 (Journal Indexed in SCI)
- XIV. **STcorr: An IDL code for image based normalization of lapse rate and illumination effects on nighttime TIR imagery**  
ULUSOY İ., LABAZUY P., AYDAR E.  
COMPUTERS & GEOSCIENCES, vol.43, pp.63-72, 2012 (Journal Indexed in SCI)
- XV. **Correlation of ignimbrites in the central Anatolian volcanic province using zircon and plagioclase ages and zircon compositions**  
AYDAR E., SCHMITT A. K. , ÇUBUKÇU H. E. , AKIN L., ERSOY O., ŞEN E., Duncan R. A. , ATICI G.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.213, pp.83-97, 2012 (Journal Indexed in SCI)
- XVI. **Mt. Nemrut volcano (Eastern Turkey): Temporal petrological evolution**  
ÇUBUKÇU H. E. , ULUSOY İ., AYDAR E., ERSOY O., ŞEN E., GOURGAUD A., GUILLOU H.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.209, pp.33-60, 2012 (Journal Indexed in SCI)
- XVII. **Surface area and volume measurements of volcanic ash particles using micro-computed tomography (micro-CT): A comparison with scanning electron microscope (SEM) stereoscopic imaging and geometric considerations**  
ERSOY O., ŞEN E., AYDAR E., TATAR İ., Celik H. H.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.196, pp.281-286, 2010 (Journal Indexed in SCI)
- XVIII. **Structure of the Nemrut caldera (Eastern Anatolia, Turkey) and associated hydrothermal fluid circulation**  
ULUSOY İ., LABAZUY P., AYDAR E., ERSOY O., Cubukcu E.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.174, no.4, pp.269-283, 2008 (Journal Indexed in SCI)
- XIX. **Quantitative analysis on volcanic ash surfaces: Application of extended depth-of-field (focus) algorithm for light and scanning electron microscopy and 3D reconstruction**  
ERSOY O., AYDAR E., Gourgaud A., BAYHAN H.  
MICRON, vol.39, no.2, pp.128-136, 2008 (Journal Indexed in SCI)
- XX. **WDS versus silicon drift detector EDS: A case report for the comparison of quantitative chemical analyses of natural silicate minerals**  
ÇUBUKÇU H. E. , ERSOY O., AYDAR E., Cakir U.  
MICRON, vol.39, no.2, pp.88-94, 2008 (Journal Indexed in SCI)
- XXI. **Volcano stratigraphy and petrogenesis of the Nemrut stratovolcano (East Anatolian high Plateau): The most recent post-collisional volcanism in Turkey**  
Cubukcu H. E. , Aydar E., Gourgaud A.  
CHEMICAL GEOLOGY, vol.245, pp.120-129, 2007 (Journal Indexed in SCI)
- XXII. **Clustering of volcanic ash arising from different fragmentation mechanisms using Kohonen self-organizing maps**  
Ersoy O., Aydar E., Gourgaud A., Artuner H., Bayhan H.

- COMPUTERS & GEOSCIENCES, vol.33, no.6, pp.821-828, 2007 (Journal Indexed in SCI)
- XXIII. **Texture discrimination of volcanic ashes from different fragmentation mechanisms: A case study, Mount Nemrut stratovolcano, eastern Turkey**  
ERSOY O., CHINGA G., AYDAR E., GOURGAUD A., Cubukcu H. E., Ulusoy I.  
COMPUTERS & GEOSCIENCES, vol.32, no.7, pp.936-946, 2006 (Journal Indexed in SCI)
- XXIV. **Volcanic and deformation history of the Bodrum resurgent caldera system (southwestern Turkey)**  
Ulusoy I., Cubukcu E., AYDAR E., LABAZUY P., GOURGAUD A., VINCENT P.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.136, pp.71-96, 2004 (Journal Indexed in SCI)
- XXV. **Interaction of asthenospheric and lithospheric mantle: The genesis of cale-alkaline volcanism at Erciyes Volcano, central Anatolia, Turkey**  
Kurkcuoglu B., Sen E., Temel A., Aydar E., Gourgaud A.  
INTERNATIONAL GEOLOGY REVIEW, vol.46, no.3, pp.243-258, 2004 (Journal Indexed in SCI)
- XXVI. **Volcanological evolution of Mount Erciyes stratovolcano and origin of the Valibaba Tepe ignimbrite (Central Anatolia, Turkey)**  
Sen E., Kurkcuoglu B., Aydar E., Gourgaud A., Vincent P.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.125, pp.225-246, 2003 (Journal Indexed in SCI)
- XXVII. **Morphological analysis of active Mount Nemrut stratovolcano, eastern Turkey: evidences and possible impact areas of future eruption**  
AYDAR E., GOURGAUD A., Ulusoy I., DIGONNET F., LABAZUY P., Sen E., Bayhan H., Kurttas T., TOLLUOGLU A.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.123, pp.301-312, 2003 (Journal Indexed in SCI)
- XXVIII. **Initial explosive phases during extrusion of volcanic lava domes: example from rhyodacitic dome of Dikkartin Dag, Erciyes stratovolcano, Central Anatolia, Turkey**  
Sen E., Aydar E., Gourgaud A., Kurkcuoglu B.  
COMPTEs RENDUS GEOSCIENCE, vol.334, no.1, pp.27-33, 2002 (Journal Indexed in SCI)
- XXIX. **Trace-element modeling and source constraints for tholeiitic and calc-alkaline basalts from a depleted asthenospheric mantle source, Mt. Erciyes Stratovolcano, Turkey**  
Kurkcuoglu B., Sen E., Temel A., Aydar E., Gourgaud A.  
INTERNATIONAL GEOLOGY REVIEW, vol.43, no.6, pp.508-522, 2001 (Journal Indexed in SCI)
- XXX. **Geochemical approach to magmatic evolution of Mt Erciyes stratovolcano central Anatolia, Turkey**  
Kurkcuoglu B., Sen E., Aydar E., Gourgaud A., Gundogdu N.  
JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH, vol.85, pp.473-494, 1998 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Dağıtılmış Anahtarlamalı Özdirenç Görüntüleme Sistemi**  
ULUSOY İ., ARTUNER H., Aydar E.  
Yerbilimleri, vol.33, pp.205-218, 2012 (Other Refereed National Journals)

## Books & Book Chapters

- I. **Nemrut Caldera and Eastern Anatolian Volcanoes: Fire in the Highlands**  
ULUSOY İ., ÇUBUKÇU H. E., MOURALIS D., AYDAR E.  
in: Landscapes and Landforms of Turkey, Kuzucuoğlu Catherine, Çiner Attila, Kazancı Nizamettin, Editor, Springer Nature, Cham, pp.589-599, 2019
- II. **Nemrut caldera and Eastern Anatolian volcanoes: Fire in the highlands.**  
ULUSOY İ., ÇUBUKÇU H. E., MOURALIS D., AYDAR E.  
in: Landscapes and Landforms of Turkey, Kuzucuoğlu, C., Kazancı, N., Ciner,, Editor, Springer, Cham, pp.589-599, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **Acıgöl Maar Gölü'nün (Nevşehir, Orta Anadolu) Holosen Yaşlı Ostrakod Faunası ve Paleootamsal Özellikleri**  
TUNOĞLU C., TUNCER A., AYDAR E., ŞEN E., GÜMÜŞ B. A.  
71. Türkiye Jeoloji Kurultayı, 23 - 27 April 2018
- II. **Volcanic Ash –Aircraft Encounter Damages: in Volcanological Point of View**  
AYDAR E., ALADAĞ Ç. H. , MENTEŞ T.  
European Geosciences Union, Viyana, Austria, 22 - 30 April 2017
- III. **ANATOLIAN UPLIFT CAUSE OF CAUSE EFFECT MAGMATISM VS TECTONIC**  
AYDAR E., ÇUBUKÇU H. E. , AKIN L., Schmitt A. K.  
From Deep Earth to Surface:integrating lithosphere dynamics with rift basins and margins, 2 - 06 October 2016

## Supported Projects

- AYDAR E., Project Supported by Other Private Institutions, Biyokütle Pirolyzi ve katkı seçimleri, 2016 - Continues
- AYDAR E., Project Supported by Higher Education Institutions, Nemrut Kalderasının kaldera içi yapısallığının jeofizik etüdlerle incelenmesi, 2004 - Continues
- AYDAR E., Project Supported by Higher Education Institutions, Nemrut Sismik Gözlem Ağı Sisteminin Tekrar Aktif Hale Getirilmesi, 2017 - 2017
- AYDAR E., Project Supported by Higher Education Institutions, Volkanik Kül-Uçak Karşılaşma Zararları Volkanolojik Bakış Açısıyla EGU-2017 Viyana-Avusturya Kongresi katılımı (22 Nisan 2017-30 Nisan 2017), 2017 - 2017
- AYDAR E., Project Supported by Higher Education Institutions, Bilimsel Toplantı Katılım (Sorbonne Üniversitesi Jüri Üyeliği), 2016 - 2017
- AYDAR E., Project Supported by Higher Education Institutions, ANADOLU YÜKSELİMİ ETKİ TEPKİNİN ETKİSİ MAGMATİZMA TEKTONİĞE KARŞI, 2016 - 2017
- AYDAR E., Project Supported by Other Private Institutions, Beypazarı Boyalı Köyü Civarında Kurulmakta olan Beypi Piliç Damızlık Kümesinin bulunduğu alanın Jeolojik Jeomorfolojik Hidrojeolojik özelliklerinin belirlenmesi olası atıkların yaratabileceği çevre kirliliği konularının araştırılması, 2016 - 2016

## Citations

Total Citations (WOS):488

h-index (WOS):14