

# **Prof. MÜMTAZ ÇOLAK**

## **Personal Information**

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## **International Researcher IDs**

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Publons / Web Of Science ResearcherID: P-9285-2019

Yoksis Researcher ID: 6112

## **Education Information**

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Ekonomik Jeoloji (YI) (Tezli), Turkey 1987 - 1991

Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, Turkey 1982 - 1987

## **Foreign Languages**

English, B1 Intermediate

## **Dissertations**

Doctorate, The Emet and Kirka borate mines (Turkey) 1. Mineralogy and chemistry of the clays, 2. Ceramic applications of their tailing products, University Of Fribourg, 1995

Postgraduate, Geochemistry and economic geology of natural zeolites in tuffs around of borate mine at Kestelek (Bursa), Dokuz Eylul University, Fen Bilimleri Enstitüsü, Ekonomik Jeoloji (YI) (Tezli), 1991

## **Research Areas**

Geological Engineering, Ore Deposits-Geochemistry, Mineral Deposits

## **Academic Titles / Tasks**

Professor, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2012 - Continues

Associate Professor, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2007 - 2012

Assistant Professor, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2000 - 2006

Assistant Professor, Manisa Celal Bayar University, Gölstmara Vocational School, 1997 - 2000

Research Assistant, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 1987 - 1997

## **Academic and Administrative Experience**

Dokuz Eylul University, 2012 - 2020

Dokuz Eylul University, 2008 - 2010

Dokuz Eylul University, 2006 - 2008

## Courses

JEOKİMYA, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2003 - 2004, 2000 - 2001

BİTİRME PROJESİ, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002, 2000 - 2001

KİL MİNERALLERİ TEKNOLOJİSİ, Postgraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002, 2000 - 2001

M.S.C. THESİS, Postgraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002, 2000 - 2001

M.S.C. SEMİNAR, Postgraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002, 2000 - 2001

M.S.C. RESEARCH, Postgraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002, 2000 - 2001

PH.D. THESİS, Doctorate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007

JEOKİMYASAL DÖNGÜLER, Postgraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002, 2000 - 2001

ÇEVRE JEOKİMYASI, Doctorate, 2013 - 2014, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2006 - 2007, 2003 - 2004

1.SINIF MODÜLLERİ, Undergraduate, 2009 - 2010, 2007 - 2008, 2005 - 2006, 2003 - 2004, 2001 - 2002

## Advising Theses

ÇOLAK M., Investigation of convenient additive materials for Turgutlu lightweight brick production, Postgraduate, E.ALAN(Student), 2017

ÇOLAK M., Hisaralan (Sındırı-Balıkesir) jeotermal sahasındaki fosil ve aktif hidrotermal alterasyonun kıl mineralojisi ve jeokimyası, Doctorate, C.KOCABAŞ(Student), 2015

ÇOLAK M., The evaluation of the clays and the tailings of Kirka borax mine through lithium contents, Postgraduate, S.SAKYILDIZ(Student), 2015

ÇOLAK M., Bleaching of wall tiles body with addition of CaO, Postgraduate, G.GAMZE(Student), 2015

ÇOLAK M., Clay potential studies around of Tlos antiqe city (Fethiye), Postgraduate, B.SERT(Student), 2015

ÇOLAK M., Study of the use of Buca clays as drilling mud, Postgraduate, F.ÖZYOL(Student), 2015

ÇOLAK M., In Ancient Times the Abaility of Clay Around the Agora, Postgraduate, E.ÇEP(Student), 2010

ÇOLAK M., Geochemical and petrographical approaches concerning at the origin of Hisarönü (Marmaris) amphoras, Postgraduate, A.ÖZER(Student), 2006

ÇOLAK M., Utilization of waste glasses as a recyled product in floor-tiles body, Postgraduate, Y.TURGAY(Student), 2005

ÇOLAK M., Clays of southern Akhisar (Manisa) and their economic importance, Postgraduate, E.ÖZBEN(Student), 2003

ÇOLAK M., Mineralogy of clays in sliding zones around of İzmir, Postgraduate, E.ÖZYEŞİLOVA(Student), 2003

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

- I. **Durability assessments of rare green andesites widely used as building stones in Buca (Izmir), Turkey**  
Yavuz A. B., Kaputoglu S. A., Çolak M., Tanyu B. F.  
ENVIRONMENTAL EARTH SCIENCES, vol.76, no.5, 2017 (SCI-Expanded)
- II. **Geochemical assessment of mineral scaling in Kizildere geothermal field, Turkey**  
Tarcan G., Ozen T., Gemici Ü., Çolak M., Karamanderesi I. H.  
ENVIRONMENTAL EARTH SCIENCES, vol.75, no.19, 2016 (SCI-Expanded)
- III. **Investigation of discrepancy between tuff used as building stones in historical and modern buildings in western Turkey**  
YAVUZ A. B., AKAL C., Turk N., ÇOLAK M., Tanyu B. F.  
CONSTRUCTION AND BUILDING MATERIALS, vol.93, pp.439-448, 2015 (SCI-Expanded)
- IV. **Geophysical Investigation of the Hematite Zones in Ko double dagger arla +/–Demirtepe (Ayda +/-n/Turkey)**  
GÖNENÇ T., TİMUR E., UTKU M., SARI C., ERHAN Z., ÇOLAK M.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.38, no.7, pp.1841-1849, 2013 (SCI-Expanded)
- V. **Heavy metal concentrations in sultana-cultivation soils and sultana raisins from Manisa (Turkey)**  
ÇOLAK M.  
ENVIRONMENTAL EARTH SCIENCES, vol.67, no.3, pp.695-712, 2012 (SCI-Expanded)
- VI. **Sintering properties of the Bornova shale (Turkey) and its application in the production of red fired ceramics**  
Çolak M., Özkan İ.  
INDUSTRIAL CERAMICS, vol.31, pp.209-215, 2011 (SCI-Expanded)
- VII. **Characterization of waste clay from the Sardes (Salihli) placer gold mine and its utilization in floor-tile manufacture**  
Özkan İ., Çolak M., Oyman R. E.  
APPLIED CLAY SCIENCE, vol.49, no.4, pp.420-425, 2010 (SCI-Expanded)
- VIII. **FORMATION OF PODIFORM DUNITES IN THE LYCIAN PERIDOTITE NAPPES (AGLA - KOYCEGIZ, SW TURKEY)**  
Akbulut M., Çolak M., Oyman T., Gnos E., Piskin O.  
OFIOLITI, vol.34, no.1, pp.1-15, 2009 (SCI-Expanded)
- IX. **Ancient art tiles from lalapaşa mosque (Erzurum, Turkey)**  
Çolak M.  
KEY ENGINEERING MATERIALS, vol.264, pp.2411-2416, 2004 (SCI-Expanded)
- X. **Refractory olivine bricks application from the Ağla-Köyceğiz (Turkey) dunite**  
Çolak M.  
KEY ENGINEERING MATERIALS, vol.264, pp.1799-1802, 2004 (SCI-Expanded)
- XI. **Presence and distribution of lithium in borate deposits and some recent lake waters of west-central Turkey**  
Helvaci C., Mordogan H., ÇOLAK M., Gundogan I.  
INTERNATIONAL GEOLOGY REVIEW, vol.46, no.2, pp.177-190, 2004 (SCI-Expanded)
- XII. **Firing transformations of Turgutlu (Manisa-Turkey) brick-tile raw material used in manufacturing of ceramic bodies**  
Colak M.  
INDUSTRIAL CERAMICS, vol.24, no.1, pp.13-17, 2004 (SCI-Expanded)
- XIII. **Hydrogeochemical and hydrogeological investigations of thermal waters in the Emet area (Kutahya, Turkey)**  
GEMİCİ Ü., TARCAN G., ÇOLAK M., Helvaci C.  
APPLIED GEOCHEMISTRY, vol.19, no.1, pp.105-117, 2004 (SCI-Expanded)
- XIV. **Refractory olivine bricks application from the Agla-Koycegiz (Turkey) dunite**

- Colak M., Oyman T., Altun I., Piskin O.  
 EURO CERAMICS VIII, PTS 1-3, pp.1799-1802, 2004 (SCI-Expanded)
- XV. Ancient art tiles from Lalapasa Mosque (Erzurum, Turkey)  
 Karaoglu S., Colak M., Isik I.  
 EURO CERAMICS VIII, PTS 1-3, pp.2411-2414, 2004 (SCI-Expanded)
- XVI. The effects of colemanite deposits on the arsenic concentrations of soil and groundwater in Igdekoy-Emet, Kutahya, Turkey  
 Çolak M., Gemici Ü., Tarcan G.  
 WATER AIR AND SOIL POLLUTION, vol.149, pp.127-143, 2003 (SCI-Expanded)
- XVII. Saponite from the Emet colemanite mines, Kutahya, Turkey  
 Çolak M., Helvacı C., Maggetti M.  
 CLAYS AND CLAY MINERALS, vol.48, no.4, pp.409-423, 2000 (SCI-Expanded)

## Articles Published in Other Journals

- I. Kaolin Formation in Yatağan (Muğla) Lignite Deposit  
 Büçkün Z., Çolak M.  
 Eskişehir Technical University Journal of Science and Technology A- Applied Sciences and Engineering, vol.24, no.19th National Clay Symposium (Clay'2023) Special Issue 2023, pp.63-89, 2023 (Peer-Reviewed Journal)
- II. Clay Mineralogy and Geochemistry of Fossil and Active Hydrothermal Alteration in the Hisaralan Geothermal Field (Sındırı-Balıkesir), western Turkey  
 KOCABAŞ C., TOKCAER M., ÇOLAK M.  
 Afyon Kocatepe University Journal of Sciences and Engineering, vol.16, no.1, pp.132-154, 2016 (Peer-Reviewed Journal)
- III. Hydrogeochemical study of the gümüşköy spa Aydin and its vicinity  
 ÖZEN BALABAN T., AKIN H., TARCAN G., GEMİCİ Ü., ÇOLAK M., KARAMANDERESİ İ. H.  
 PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BİLİMLERİ DERGİSİ, vol.22, no.6, pp.553-558, 2016 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. Jeoloji  
 KORKUT T., İŞİN G., TEKOĞLU Ş. R., ÇOLAK M., GÖKTÜRK R. S.  
 in: Arkeoloji Epigrafi Jeoloji Doğal ve Kültürel Peyzaj Yapılarıyla Tlos Antik Kenti ve Territoryumu, Taner Korkut, Editor, Sarıyıldız Ofset, Ankara, pp.251-280, 2015
- II. Maden Yataklarının Yorumlanması-II  
 Çolak M., Oyman T.  
 in: Maden Yataklarını Kavramak, Taner Ünlü, M. Bahadır Şahin, Editor, TMMOB Maden Mühendisleri Odası Yayınları, Ankara, pp.1-844, 2014
- III. Les régions productrices d'alun en Turquie aux époques antique, médiévale et moderne : gisements, produits et transports  
 Çolak M., Thirion-Merle V., Blonde F., Picon M.  
 in: L'alun de Méditerranée, BORGARD, Philippe (dir.) ; BRUN, Jean-Pierre (dir.) ; et PICON, Maurice (dir.), Editor, Publications du Centre Jean Bérard, Naples, pp.1-354, 2005

## Refereed Congress / Symposium Publications in Proceedings

- I. Harmanlı (Edirne) Kömür Sahasının Hidrojeolojik İncelenmesi

- AKAR A. T., GEMİCİ Ü., KÜÇÜKSÜMBÜL A., TARCAN G., ÇOLAK M.  
73.TÜRKİYE JEOLOJİ KURULTAYI, Ankara, Turkey, 24 May 2021
- II. **Clay mineralogy of the hydrothermal alteration around Sındırı Balıkesir Turkey**  
Çolak M., Kocabas C.  
5th European Clay Science, Budapest, Hungary, 10 - 12 August 2010
- III. **Clay mineralogy and geochemistry of Turgut coal bearing sediments (Muğla-Turkey)**  
BÜÇKÜN Z., ÇOLAK M.  
7. INTERNATIONAL EARTH SCIENCE COLLOQUIUM ON THE AEGEAN REGION, İzmir, Turkey, 7 - 11 October 2019, pp.149
- IV. **Cl-rich Scapolite in the Buzlukdağ Aureole, Kırşehir-Turkey: A Geochemical Evidence for Inner Tauride Ocean - Buzlukdağ (Kırşehir, Türkiye )**  
ÖZGENÇ İ., OYMAN T., AKBULUT M., ŞAŞMAZ A., TOKCAER M., ÇOLAK M.  
8thGeochemistry Symposium with International Participation, 2 - 06 May 2018, pp.295-296
- V. **Tlos (Muğla) Seramiklerinin Arkeometrik Özellikleri ve Lokal Killerle Karşılaştırılması**  
ÇOLAK M., KORKUT T., İŞİN G., UYGUN Ç., ÖZDEMİR B. Ş., SEZGİN K.  
17. Ulusal Kil Sempozyumu, Muğla, Turkey, 4 - 07 October 2017, vol.1, pp.60-74
- VI. **Archeometric Properties of Tlos (Muğla) Ceramicsand Comparison with Local Clays**  
ÇOLAK M., KORKUT T., İŞİN G., SEZGİN K., UYGUN Ç., ÖZDEMİR B. Ş.  
17. Ulusal Kil Sempozyumu, Turkey, 4 - 07 October 2017, vol.1, pp.61-75
- VII. **Water Quality in Buyuk Menderes Graben Turkey**  
ÖZEN BALABAN T., TARCAN G., GEMİCİ Ü., ÇOLAK M., Karamanderesi İ. H.  
World Academy of Science, Engineering and TechnologyGeological and Environmental Engineering, Paris, France, 27 - 28 August 2015, vol.2
- VIII. **Water Quality in Buyuk Menderes Graben Turke**  
ÖZEN BALABAN T., TARCAN G., GEMİCİ Ü., ÇOLAK M., hakkı k.  
World Academy of Science, Engineering and TechnologyGeological and Environmental Engineering, 27 - 29 August 2015
- IX. **Kırka Eskişehir Boraks Madeni Killerinin ve İşletme Atıklarının Lityum İçeriği Açısından Değerlendirilmesi**  
Sercan A., ÇOLAK M.  
9. Uluslararası Endüstriyel Hammaddeler Sempozyumu, İzmir, İzmir, Turkey, 14 - 15 May 2015, pp.185-193
- X. **Hydrogeochemical Characterizations of Tekkehamam Region Denizli Turkey**  
ÖZEN BALABAN T., TARCAN G., GEMİCİ Ü., ÇOLAK M., Karamanderesi İ. H.  
Proceedings World Geothermal Congress 2015, Melbourne, Australia, 19 May - 25 April 2015, pp.1-4
- XI. **Archaeological and archaeometric investigations of the amphorae cargo of late Roman shipwreck sunk near the Cape of Plaka (Crimea, Ukraine)**  
Çolak M., Waksman Y., Morozova Y., Zelenko S.  
4th International Conference on Late Roman Coarse Ware, Cooking Ware and Amphorae in The Mediterranean: Arcaeology and Archaeometry, Thessaloniki, Greece, 7 - 11 April 2011, pp.911-929
- XII. **Ömerler Mekanize Yeraltı Kömür Ocağında Tahkimat Tasarımına Yönelik Kaya Kütle Sınıflama Sistemleri Uygulaması**  
YENİCE H., ÖZDOĞAN M. V., KARAKUŞ D., GÖNEN A., KONAK G., TOSUN A., ONUR A. H., KÖSE H., ÇOLAK M.  
Türkiye 23. Uluslararası Madencilik Kongresi ve Sergisi, 16 - 19 April 2013
- XIII. **The Hüsamilar lignite deposit preliminary results of a coal petrologystudy**  
BÜÇKÜN Z., İNANER H., CHRISTANIS K.  
International Earth Science Colloquium on the Aegean Region, İzmir, Turkey, 1 - 05 January 2012, pp.231
- XIV. **Clay mineralogy of fossil and active hydrothermal systemsaround Hisaralan geothermal field, Sındırı, Balıkesir, Turkey**  
KOCABAŞ C., TOKCAER M., ÇOLAK M.  
6th MID European Clay Conference, Czech Republic, 04 September 2012
- XV. **Formation of alteration zones and dickite genesis in Sındırı Balıkesir Western Turkey**

- Papoulis D., ÇOLAK M., KOCABAŞ C.  
 14th International Clay Conference, Italy, 5 - 07 August 2009
- XVI. Koçarlı Aydin Iron Ore Geophysical and Geological Evidences  
 GÖNENÇ T., TİMUR E., UTKU M., ERHAN Z., SARI C., ÇOLAK M.  
 Türkiye 21. Uluslararası Madencilik Kongresi ve Sergisi, Antalya, Turkey, 6 - 08 May 2009, pp.607-619
- XVII. Distribution of As B and other elements in Kocacay river catchment Emet Turkey  
 GEMİCİ Ü., TARCAN G., HELVACI C., ÇOLAK M., ŞAŞMAZ A., YÜCE G., Italiano F.  
 WATER-ROCK INTERACTION, VOLS 1 AND 2, PROCEEDINGS, China, 14 - 16 July 2007, vol.12, pp.1047-1051
- XVIII. Golden mica cooking pottery from Gokeyup (Manisa), Turkey  
 ÇOLAK M., Maggett M., Galetti G.  
 Symposium on Geomaterials in Cultural Heritage held at the 32nd International Geological Congress, Florence, Italy, 20 - 28 August 2004, vol.257, pp.141-142
- XIX. Quarries and characterisation of an hitherto unknown alabaster and marble from Thyatira Akhisar Turkey  
 Çolak M., Lazzarini L.  
 ASMOSIA VI, Venice, Italy, 10 - 12 June 2000, pp.35-40
- XX. Production techniques and provenance of the middle bronze age pottery of Ried-Hölle (ct. Fribourg, Switzerland)  
 Çolak M., Anderson T., Maggetti M., Galetti G.  
 Ceramic in the Society 6th European Meeting on Ancient Ceramics, Fribourg, Switzerland, 3 - 06 October 2001, pp.75-86
- XXI. Les régions productrices d alun en Turquie aux époques antique médiévale et moderne gisements produits et transports  
 Çolak M., Thirion-Merle V., Blonde F., Picon M.  
 Colloque International L alun de Méditerranée, Naples, Italy, 14 - 16 June 2003, vol.23, pp.59-68
- XXII. Menemen İzmir seramik hammaddeleri mineralojik ve kimyasal özellikleri  
 Çolak M., Aksu G.  
 10.Kil Sempozyumu, Konya, Turkey, 22 - 24 September 2001, pp.228-234
- XXIII. Kestelek M Kemalpaşa Bursa zeolitik tüfleri  
 ÇOLAK M.  
 1. Batı Anadolu Hammadde Kaynakları Sempozyumu, Turkey, 20 - 22 March 1999, pp.430-437
- XXIV. Brick tile application of the Kırka Eskişehir TR borax mine tailing products with the Turgutlu Manisa TR clays  
 ÇOLAK M.  
 The Lowell Volume 1, United States Of America, 15 - 17 August 1998, pp.366-374
- XXV. Etibank Kırka boraks işletmesi atıklarının Turgutlu killeri ile tuğla kiremit denemesi  
 ÇOLAK M.  
 8. Ulusal Kil Sempozyumu, Kütahya, Turkey, 13 - 15 September 1997
- XXVI. Hisarcık Emet Kolemanit Ocağı Killeri  
 Çolak M.  
 8. Ulusal Kil Sempozyumu, Kütahya, Turkey, 13 - 15 September 1997, pp.25-36

## Expert Reports

### I. bilirkişi raporu

Pakel M., Tarcan G., Çolak M., Koç K.  
 İzmir 3 idare Mahkemesi, pp.45, İzmir, 2023

## **Supported Projects**

ÇOLAK M., BÜÇKÜN Z., Project Supported by Higher Education Institutions, Yatağan Havzasındaki (Muğla,Türkiye)  
Turgut kömürlü Neojen tortullarının kil mineralojisi, jeokimyası ve ekonomisi, 2018 - 2022

## **Scientific Refereeing**

CLAYS AND CLAY MINERALS, SCI Journal, November 2023

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BİLİMLERİ  
DERGİSİ, National Scientific Refreed Journal, March 2023

Eskişehir Osmangazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, National Scientific Refreed Journal, December 2022

CLAYS AND CLAY MINERALS, SCI Journal, September 2022

CLAYS AND CLAY MINERALS, SCI Journal, June 2022

Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, August 2021

ENVIRONMENTAL EARTH SCIENCES, Journal Indexed in SCI-E, February 2021

## **Metrics**

Publication: 53

Citation (WoS): 274

Citation (Scopus): 291

H-Index (WoS): 9

H-Index (Scopus): 9

## **Congress and Symposium Activities**

Organic Petrology in the Energy Transition Era: Challenges ahead 2023 Joint 74th ICCP and 39th TSOP Meeting ,  
Attendee, Patras, Greece, 2023