

## Prof. Murat Çınar

### Personal Information

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### International Researcher IDs

ScholarID: LhvYeyEAAAAJ

ORCID: 0000-0002-9887-0666

Publons / Web Of Science ResearcherID: C-6679-2013

ScopusID: 36693026500

Yoksis Researcher ID: 25293

### Education Information

Doctorate, Stanford University, School Of Earth Sciences, Energy Resources Engineering, United States Of America 2007 - 2011

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Petrol Ve Doğalgaz Mühendisliği Anabilim Dalı, Turkey 2003 - 2005

Undergraduate, Istanbul Technical University, Maden Fakültesi, Petrol Ve Doğalgaz Mühendisliği Bölümü, Turkey 1999 - 2003

### Foreign Languages

English

### Certificates, Courses and Trainings

Entrepreneurship, Summer institute for entrepreneurship, Stanford University, 2010

### Dissertations

Doctorate, KINETICS OF CRUDE OIL COMBUSTION IN POROUS MEDIA INTERPRETED USING ISOCONVERSIONAL METHODS, Stanford University, Energy Resources Engineering, 2011

Postgraduate, Jeotermal kuyular için çok girişli kuyu içi p-T akış modelinin geliştirilmesi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Petrol Ve Doğalgaz Mühendisliği Anabilim Dalı, 2005

### Research Areas

Petroleum And Natural Gas Engineering, Reservoir, Reservoir Engineering and Recovery Methods, Jeothermal Reservoir Engineering, Engineering and Technology

## Academic Titles / Tasks

Associate Professor, Istanbul Technical University, Maden, Petrol Ve Doğalgaz Mühendisliği, 2019 - Continues  
Assistant Professor, Istanbul Technical University, Maden, Petrol Ve Doğalgaz Mühendisliği, 2012 - 2019  
Research Assistant, Istanbul Technical University, Maden, Petrol Ve Doğalgaz Mühendisliği, 2004 - 2012

## Academic and Administrative Experience

Yetkin Mühendislik Koordinatörü, Istanbul Technical University, Maden, Petrol Ve Doğalgaz Mühendisliği, 2020 - Continues  
Deputy Head of Department, Istanbul Technical University, Maden, Petrol Ve Doğalgaz Mühendisliği, 2017 - 2019

## Courses

Rock Properties, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Mühendislik Etiği, Undergraduate, 2021 - 2022, 2020 - 2021

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

- I. **Temperature-Transient Analysis for Matrix Linear Flow Toward Infinite-Conductivity Hydraulically Fractured Wells**  
Onur M., Gul K. G., Çınar M.  
SPE Journal, vol.28, no.4, pp.1793-1817, 2023 (SCI-Expanded)
- II. **Laboratory experiments of in situ combustion in core samples with simulated fractures**  
Çınar M., Deniz-Paker M.  
Journal of Petroleum Science and Engineering, vol.220, 2023 (SCI-Expanded)
- III. **An Experimental Investigation of In Situ Combustion in High Permeability Contrast Systems**  
Deniz-Paker M., Çınar M.  
Journal of Energy Resources Technology, Transactions of the ASME, vol.144, no.7, 2022 (SCI-Expanded)
- IV. **Interpretation of temperature transient data from coupled reservoir and wellbore model for single phase fluids**  
Alan C., Çınar M.  
JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, vol.209, 2022 (SCI-Expanded)
- V. **Reservoir characterization using dynamic capacitance-resistance model with application to shut-in and horizontal wells**  
Salehian M., Çınar M.  
Journal of Petroleum Exploration and Production Technology, vol.9, no.4, pp.2811-2830, 2019 (SCI-Expanded)
- VI. **Analysis of sandface-temperature-transient data for slightly compressible, single-phase reservoirs**  
Onur M., Çınar M.  
SPE Journal, vol.22, no.4, pp.1134-1155, 2017 (SCI-Expanded)
- VII. **Investigation of the combustion characteristics of Bati Raman oil with sand**  
Deniz-Paker M., Çınar M.  
Journal of Petroleum Science and Engineering, vol.157, pp.793-805, 2017 (SCI-Expanded)
- VIII. **Transient temperature behavior and analysis of single-phase liquid-water geothermal reservoirs during drawdown and buildup tests: Part II. Interpretation and analysis methodology with applications**  
Onur M., Palabıyık Y., Türeyen Ö. İ., Çınar M.  
JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, vol.146, pp.657-669, 2016 (SCI-Expanded)
- IX. **Transient temperature behavior and analysis of single-phase liquid-water geothermal reservoirs during drawdown and buildup tests: Part I. Theory, new analytical and approximate solutions**

- Palabıyık Y., ONUR M., Türeyen Ö. İ., Çınar M.  
Journal of Petroleum Science and Engineering, vol.146, pp.637-656, 2016 (SCI-Expanded)
- X. **Effect of pressure on the isoconversional in situ combustion kinetic analysis of Bati Raman crude oil**  
Anto-Darkwah E., Çınar M.  
Journal of Petroleum Science and Engineering, vol.143, pp.44-53, 2016 (SCI-Expanded)
- XI. **Combustion kinetics of heavy oils in porous media**  
Cınar M., Castanier L. M., Kavscek A. R.  
Energy and Fuels, vol.25, no.10, pp.4438-4451, 2011 (SCI-Expanded)
- XII. **Predictability of crude oil in-situ combustion by the isoconversional kinetic approach**  
Cınar M., Haşçakır B., Castanier L. M., Kavscek A. R.  
SPE Journal, vol.16, no.3, pp.537-547, 2011 (SCI-Expanded)
- XIII. **Isoconversional kinetic analysis of the combustion of heavy hydrocarbons**  
Cınar M., Castanier L. M., Kavscek A. R.  
Energy and Fuels, vol.23, no.8, pp.4003-4015, 2009 (SCI-Expanded)
- XIV. **An investigation of recent deconvolution methods for well-test data analysis**  
Onur M., Çınar M., İlk D., Valkö P. P., Blasingame T. A., Hegeman P.  
SPE Journal, vol.13, no.2, pp.226-247, 2008 (SCI-Expanded)

### Articles Published in Other Journals

- I. **A general review of underground coal gasification with major field applications** Yeralti komur gazlastırması üzerin e genel bir derleme ve önemli saha çalışmalarını  
Kılıçkap S., Sarıçam İ. H., Çevik M. H., Çınar M.  
Scientific Mining Journal, vol.61, no.2, pp.93-103, 2022 (Scopus)
- II. **karbondioksitin jeotermal rezervuarın üretim performansına etkisi**  
Öztorun F. B., TÜREYEN Ö. İ., SATMAN A., ÇINAR M.  
Mühendis ve Makina, vol.56, no.664, 2015 (Peer-Reviewed Journal)
- III. **Modelling of compositional, heating value and wobble index changes in LPG use LPG (sivilaştırılmış Petrol Gazı) kullanımı sırasında oluşan bileşim, isil değer ve wobble indeksi değişiminin modellenmesi**  
Çınar M., Solhan E., Yamanlar Ş.  
Turkish Journal of Oil and Gas, vol.12, no.3, pp.20-28, 2006 (Scopus)
- IV. **Modeling of the Variations in Composition, Thermal Value and Wobble Index During the Production of LPG**  
Çınar M., Solhan E., Yamanlar Ş.  
Turkish Journal of Oil and Gas, vol.12, pp.20-28, 2006 (Peer-Reviewed Journal)
- V. **Analysis of Well Test Pressure Data from Faulted Systems**  
Onur M., Çınar M., Yüksel K.  
Turkish Journal of Oil and Gas, vol.10, pp.31-40, 2004 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **A New Approach to Estimate Friction Factor for Horizontal Wells from Production Logging Data**  
Gök İ. M., Çevik M. H., Çınar M.  
International Petroleum Technology Conference , Ar Riyad, Saudi Arabia, 21 - 23 February 2022, pp.1-8
- II. **Reservoir management through characterization of smart fields using capacitance-resistance models**  
Salehian M., Temizel C., Gök İ. M., Çınar M., Alkili M. Y.  
Abu Dhabi International Petroleum Exhibition and Conference 2018, ADIPEC 2018, Abu Dhabi, United Arab Emirates, 12 - 15 November 2018

- III. **Experimental investigation of Steam-Alkali flooding with borax: A case study on bati raman oil field**  
Noori W. H., Çınar M., Salehian M., Alkouh A.  
SPE International Heavy Oil Conference and Exhibition 2018, HOCE 2018, Kuwait City, Kuwait, 10 - 12 December 2018
- IV. **A theoretical and practical comparison of capacitance-resistance modeling with application to mature fields**  
Temizel C., Salehian M., Çınar M., Gok I. M., Alkkih M. Y.  
SPE Kingdom of Saudi Arabia Annual Technical Symposium and Exhibition 2018, SATS 2018, Dammam, Saudi Arabia, 23 - 26 April 2018
- V. **Correlations for Joule-Thomson Coefficients of Geothermal Waters Containing CO<sub>2</sub>**  
Çınar M., Palabıyık Y., Onur M.  
42nd Workshop on Geothermal Reservoir Engineering, Stanford, United States Of America, 13 - 15 February 2017, pp.1-12
- VI. **Modeling and analysis of temperature transient sandface and wellbore temperature data from variable rate well test data**  
Onur M., Çınar M.  
SPE Europec Featured at 79th EAGE Conference and Exhibition, Paris, France, 12 - 15 June 2017, pp.1261-1294
- VII. **Temperature transient analysis of slightly compressible, single-phase reservoirs**  
Onur M., Çınar M.  
78th EAGE Conference and Exhibition 2016: Efficient Use of Technology - Unlocking Potential, Vienna, Austria, 30 May - 02 June 2016
- VIII. **Effect of CO<sub>2</sub> on pressure and temperature profiles of geothermal wells**  
Çınar M., ONUR M.  
20 th International Petroleum and Natural Gas Congress and Exhibition of Turkey, Ankara, Turkey, 27 - 29 May 2015, pp.101-104
- IX. **Temperature Transient Analysis of Single-Phase Oil Reservoirs and Liquid-Water Geothermal Reservoirs**  
Palabıyık Y., Çınar M., Onur M.  
20 th International Petroleum and Natural Gas Congress and Exhibition of Turkey, Ankara, Turkey, 27 - 29 May 2015, pp.350-353
- X. **In Situ Combustion Kinetic Analysis of Bati Raman Crude with Isoconversional Method**  
Deniz Paker M., Çınar M.  
0 th International Petroleum and Natural Gas Congress and Exhibition of Turkey, Ankara, Turkey, 27 - 29 May 2015, pp.272-276
- XI. **Batı Raman Petrolünün Yanmasının Eşdönüşüm Yöntemi İle Analizi**  
DENİZ PAKER M., ÇINAR M.  
International Petroleum and Natural Gas Congress and Exhibition of Turkey, Ankara, Turkey, 27 - 29 May 2015
- XII. **Effects of Carbon Dioxide Dissolved in Geothermal Water on Reservoir Production Performance**  
Hoşgör F. B., Türeyen Ö. İ., Satman A., Çınar M.  
World Geothermal Congress 2015, Melbourne, Australia, 19 - 25 April 2015, pp.1-10
- XIII. **A Wellbore Model for Geothermal Wells Containing Considerable Amount of CO<sub>2</sub>**  
Çınar M., Onur M.  
World Geothermal Congress 2015, Melbourne, Australia, 19 - 25 April 2015, pp.1-10
- XIV. **Karbondioksitin Jeotermal Rezervuarın Üretim Performansı Üzerindeki Etkisi**  
hoşgör F. B., TÜREYEN Ö. İ., SATMAN A., ÇINAR M.  
12. Ulusal Tesisat Mühendisliği Kongresi, Turkey, 8 - 11 April 2015
- XV. **Assessing the consistency of measurements and models for the kinetics of in situ combustion**  
Çınar M., Kavscek A. R.  
SPE Annual Technical Conference and Exhibition, ATCE 2015, Texas, United States Of America, 28 - 30 September 2015, pp.6194-6214
- XVI. **Creating Enhanced Geothermal Systems in Depleted Oil Reservoirs via In situ Combustion**

- Çınar M.  
STANFORD GEOTHERMAL WORKSHOP Thirty-Eight, California, United States Of America, 11 - 13 February 2013, pp.1-5
- XVII. **In situ Combustion Kinetics of Heavy Oils**  
Çınar M.  
ITU PNGE Seminar and Exhibition, İstanbul, Turkey, 21 - 22 June 2012, pp.139-156
- XVIII. **In situ combustion of heavy oils**  
ÇINAR M.  
22. İTU Petrol ve Doğal Gaz Semineri ve Sergisi, İstanbul, Turkey, 21 - 22 June 2012
- XIX. **A combined experimental and simulation workflow to improve predictability of in situ combustion**  
Bazargan M., Chen B., Cinar M., Glatz G., Lapene A., Zhu Z., Castanier L., Gerritsen M., Kovscek A.  
Society of Petroleum Engineers Western North American Regional Meeting 2011, Anchorage, AK, United States Of America, 7 - 11 May 2011, pp.566-577
- XX. **Isoconversional kinetic analysis of the combustion of heavy hydrocarbons**  
Cinar M., Castanier L., Kovscek A.  
SPE Western Regional Meeting 2009, San Jose, CA, United States Of America, 24 - 26 March 2009, pp.171-186
- XXI. **Improved analysis of the kinetics of crude-oil in-situ combustion**  
Cinar M., Castanier L., Kovscek A.  
SPE Western Regional and Pacific Section AAPG Joint Meeting 2008 - "Adding Reserves Through Collaboration, Innovation, and Technology Transfer", Bakersfield, CA, United States Of America, 31 March - 02 April 2008, pp.359-378
- XXII. **A New Non-Isothermal Lumped-Parameter Model For Low-Temperature Liquid Dominated Geothermal Reservoirs and Its Applications**  
Onur M., Sarak H., Türeyen Ö. İ., Çınar M., Satman A.  
33rd, Stanford, United States Of America, 28 - 30 January 2008, pp.1-10
- XXIII. **Analysis of Well Tests in Afyon Omer-Gecek Geothermal Field, Turkey**  
Onur M., Çınar M., Aksoy N., Serpen U., Satman A.  
32nd Workshop on Geothermal Reservoir Engineering, Stanford, United States Of America, 22 - 24 January 2007, pp.1-10
- XXIV. **A comparative study of recent robust deconvolution algorithms for well-test and production-data analysis**  
Cinar M., Ilk D., Onur M., Valko P., Blasingame T.  
SPE Annual Technical Conference and Exhibition, ATCE 2006: Focus on the Future, San Antonio, TX, United States Of America, 24 - 27 September 2006, vol.4, pp.2437-2455
- XXV. **Determining reservoir boundary and volume by using well test and deconvolution of production data**  
Çınar M.  
ITU PNGE Seminar and Exhibition, İstanbul, Turkey, 1 - 02 June 2006, pp.1-10
- XXVI. **Well test analysis in geothermal reservoirs and field applications**  
Onur M., Türeyen Ö. İ., Çınar M.  
UTES 2006, Isparta, Turkey, 25 - 27 May 2006, pp.1-10
- XXVII. **Development of the Multi-feed p-T Wellbore Model for Geothermal Wells**  
Çınar M., Onur M., Satman A.  
31st Workshop on Geothermal Reservoir Engineering, Stanford, United States Of America, 30 January - 01 February 2006, pp.1-10
- XXVIII. **Analysis of Well Test Pressure Data from Faulted Systems", Proceedings**  
Onur M., Çınar M., Yüksel K.  
15th international Petroleum and Natural Gas congress and Exhibition of Turkey, Ankara, Turkey, 11 - 13 May 2005, pp.1-10

## Supported Projects

- Çınar M., Company, RMS-A Doğal Gaz Çıkış Sıcaklığı Optimizasyonu - Faz Davranışları ve boru içi sıcaklıkları ön değerlendirilmesi, 2021 - 2021
- Çınar M., Project Supported by Higher Education Institutions, Yerinde Yanmanın Ağır Petrolü Çatlaklı Sistemlerde Deneysel Olarak İndelenmesi, 2015 - 2018
- Çınar M., Project Supported by Higher Education Institutions, Yüksek Oranda CO2 İçeren Jeotermal Sistemler için Bir Kuyu İçi Modeli, 2015 - 2018
- Çınar M., Project Supported by Higher Education Institutions, Yerinde Yakma Yöntemiyle Terkedilmiş Petrol Rezervuarlarının Geliştirilmiş Jeotermal Sistemlere Dönüştürülmesi, 2013 - 2018
- Çınar M., Project Supported by Other Private Institutions, İstatistiksel envanter uyuşturma yönteminin test edilmesi, 2016 - 2016
- Çınar M., TUBITAK Project, YERİNDE YANMANIN CATLAKLI SİSTEMLERDE DENEYSEL OLARAK İNCELENMESİ, 2013 - 2016
- Çınar M., TUBITAK Project, TÜRKİYEDEKİ KARBONDİOKSİT İCEREN JEOTERMAL SAHALARIN MODELLENMESİ, 2013 - 2015
- Çınar M., Other International Funding Programs, Rice Enhanced oil recovery collaborative project, 2008 - 2011
- Çınar M., Other International Funding Programs, Schlumberger center for excellence in in situ combustion at StanfordUniversity, 2008 - 2011
- TUBITAK Project, Düşük sıcaklıklı jeotermal rezervuarların akışkan ve ısı üretim davranışının tank modelleriyle modellenmesi, 2004 - 2009

## Scientific Refereeing

- JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, Journal Indexed in SSCI, December 2021
- JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, Journal Indexed in SSCI, September 2021
- GEOTHERMICS, Journal Indexed in SSCI, May 2021
- ENERGY & FUELS, Journal Indexed in SSCI, June 2020
- JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, Journal Indexed in SSCI, January 2020
- ENERGY & FUELS, SCI Journal, October 2019
- FUEL, Journal Indexed in SSCI, March 2019
- FUEL, Journal Indexed in SSCI, December 2018
- SPE JOURNAL, SCI Journal, December 2018
- SPE JOURNAL, SCI Journal, July 2018
- SPE JOURNAL, SCI Journal, March 2018
- JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, Journal Indexed in SSCI, March 2018
- JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, Journal Indexed in SSCI, March 2018
- JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, Journal Indexed in SSCI, February 2018
- Journal of Petroleum Science and Engineering, SCI Journal, June 2017
- Journal of Petroleum Science and Engineering, SCI Journal, March 2017
- SPE JOURNAL, SCI Journal, January 2017
- Journal of Petroleum Science and Engineering, SCI Journal, October 2016
- SPE Journal, SCI Journal, August 2016
- SPE Journal, SCI Journal, August 2016
- Journal of Petroleum Science and Engineering, SCI Journal, July 2016
- Journal of Petroleum Science and Engineering, SCI Journal, May 2016
- Journal of Petroleum Science and Engineering, SCI Journal, April 2016
- Fuel, SCI Journal, February 2016
- Journal of Petroleum Science and Engineering, SCI Journal, February 2016
- Energy&Fuels, SCI Journal, December 2015

Journal of Petroleum Science and Engineering, SCI Journal, February 2015  
Energy&Fuels, SCI Journal, September 2014  
Journal of Petroleum Science and Engineering, SCI Journal, June 2014  
Journal of Petroleum Science and Engineering, SCI Journal, March 2014

## **Metrics**

Publication: 50  
Citation (WoS): 202  
Citation (Scopus): 451  
H-Index (WoS): 8  
H-Index (Scopus): 12

## **Scholarships**

Öğretim Elemanı Yetiştirme, YOK, 2007 - Continues

## **Non Academic Experience**

Company, STFA, Doğal Gas Dağıtım  
TPAO  
IGDAS