

# Res. Asst. Mehmed Selim ÇÖGENLİ

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik, Turkey 2014 - 2020

Undergraduate, Ataturk University, Mühendislik Fakültesi, Kimya Mühendisliği, Turkey 2016 - 2019

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik, Turkey 2011 - 2014

Undergraduate, Ataturk University, Kâzım Karabekir Eğitim Fakültesi, Fizik Öğretmenliği, Turkey 2006 - 2011

## Foreign Languages

English, B1 Intermediate

## Research Areas

Chemical Engineering and Technology, Process and Reactor Design, Catalysis and Catalytic Processes, Engineering and Technology

## Academic Titles / Tasks

Research Assistant, Ataturk University, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik, 2012 - Continues

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

- I. **Evaluation of Low and High Surface Area TiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> Metal Oxides-Carbon Hybrids in Terms of Polymer Electrolyte Membrane Fuel Cell Catalyst Support**  
Çelik M. K., Özтурk A., Çögenli M. S., Bayraklıen Yurtcan A.  
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY, vol.20, pp.1189-1208, 2020 (SCI-Expanded)
- II. **Synthesis and characterization of Co, Zn, Mn, V modified Pd formic acid fuel cell anode catalysts**  
Çaglar A., Ulaş B., Cogenli M. S., Yurtcan A., Kivrak H.  
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.850, 2019 (SCI-Expanded)
- III. **Carbon-Based Nanomaterials for Alcohol Oxidation**  
ÇÖGENLİ M. S., Yurtcan A.  
NANOMATERIALS FOR ALCOHOL FUEL CELLS, vol.49, pp.1-78, 2019 (SCI-Expanded)

- IV. A complementary study on novel PdAuCo catalysts: Synthesis, characterization, direct formic acid fuel cell application, and exergy analysis  
 Kivrak H., Atbas D., Alal O., Çögenli M. S., Bayrakceken A., Mert S. O., Sahin O.  
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.48, pp.21886-21898, 2018 (SCI-Expanded)
- V. Graphene aerogel supported platinum nanoparticles for formic acid electro-oxidation  
 Çögenli M. S., Bayrakçeken Yurtcan A.  
 MATERIALS RESEARCH EXPRESS, vol.5, no.7, 2018 (SCI-Expanded)
- VI. Catalytic activity, stability and impedance behavior of PtRu/C, PtPd/C and PtSn/C bimetallic catalysts toward methanol and formic acid oxidation  
 Çögenli M. S., Yurtcan A.  
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.23, pp.10698-10709, 2018 (SCI-Expanded)
- VII. A novel Central Composite Design based response surface methodology optimization study for the synthesis of Pd/CNT direct formic acid fuel cell anode catalyst  
 Caglar A., Şahan T., Çögenli M. S., Yurtcan A., Aktaş N., Kivrak H.  
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.24, pp.11002-11011, 2018 (SCI-Expanded)
- VIII. Membrane Electrode Assembly with Ultra Low Platinum Loading for Cathode Electrode of PEM Fuel Cell by Using Sputter Deposition  
 Çögenli M. S., Mukerjee S., Yurtcan A.  
 Fuel Cells, vol.15, no.2, pp.288-297, 2015 (SCI-Expanded)
- IX. The variation of the features of SnO<sub>2</sub> and SnO<sub>2</sub>:F thin films as a function of V dopant  
 Turgut G., SÖNMEZ E., YILMAZ M., ÇÖGENLİ M. S., Yilmaz M., TURGUT Ü., DİLBER R.  
 JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.25, no.6, pp.2808-2828, 2014 (SCI-Expanded)

## Books & Book Chapters

- I. Carbon-Based Nanomaterials for Alcohol Oxidation  
 Çögenli M. S., Bayrakçeken Yurtcan A.  
 in: Nanomaterials for Alcohol Fuel Cells, İnamuddin,Rangreez T.A,Şen,F.,Asiri A.M., Editor, Materials Research Forum Llc, Pennsylvania, pp.1-78, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. Preparation of nitrogen doped graphene aerogel and carbon support materials and catalytic activities towards formic acid oxidation  
 ÇÖGENLİ M. S., ÖZÇELİK N., BAYRAKÇEKEN YURTCAN A.  
 2nd International Symposium on Materials for Energy Storage and Conversion, 26 - 28 September 2017
- II. Preparation of nitrogen doped graphene aerogel and carbon support materials and catalytic activities towards formic acid oxidation  
 ÇÖGENLİ M. S., ÖZÇELİK N., BAYRAKÇEKEN YURTCAN A.  
 2nd International Symposium on Materials for Energy Storage and Conversion, Nevşehir, Turkey, 26 - 28 September 2017
- III. Nitrogen Doped Graphene Aerogel Supported Platinum Catalysts for Methanol Electrooxidation  
 ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
 4th Anatolian School of Catalysis, 11 - 14 September 2017
- IV. Preparation of Boron-doped Graphene Aerogel and Catalytic Activity towards Formic Acid Oxidation  
 ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
 4th Anatolian School of Catalysis, 11 - 14 September 2017
- V. Investigation of PEM Fuel Cell Performance of TiO<sub>2</sub>-Carbon Composite Supported Pt Catalyst

- Çelik M. K., Öztürk A., Çögenli M. S., Bayrakçeken Yurtcan A.  
4th Anatolian School of Catalysis, İzmir, Turkey, 11 - 14 September 2017, vol.1, pp.110-111
- VI. **Noble Metal-Free Oxides for the Oxygen Evolution Reactions by Using Adam'xxs Fusion Method**  
KAYATAŞ DEMİR N., KAYA M. F., ÇÖGENLİ M. S.  
International Hydrogen Technologies Congress (IHTEC-2017), Adana, Turkey, 15 - 18 March 2017
- VII. **Graphene Aerogel Supported Platinum Catalysts for Formic Acid Electrooxidation**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
2nd International Hydrogen Technologies Congress, 15 - 18 March 2017
- VIII. **Catalytic activity of PtRu/C, PtPd/C and PtSn/C bimetallic catalysts toward methanol oxidation reaction**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
The Second International Hydrogen Technologies Congress (IHTEC-2017), 15 - 18 March 2017
- IX. **Utilization of N-Doped Carbon Materials Obtained from ZIF as Catalyst Support for PEM Fuel Cell**  
Özçelik N., Öztürk A., Bozkurt G., Çögenli M. S., Bayrakçeken Yurtcan A.  
2nd International Hydrogen Technologies Congress (IHTEC 2017), Adana, Turkey, 15 - 18 March 2017, pp.138
- X. **Carbon Supported Pt Pd Pt Sn and Pt Ru Electrocatalysts for Formic Acid Oxidation**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
1st International Mediterranean Science and Engineering Congress (IMSEC), 26 - 28 October 2016
- XI. **Carbon supported PtPd PtSn and PtRu electrocatalysts for formic acid oxidation**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), 26 - 28 October 2016
- XII. **Low Platinum Loading Electrode for Formic Acid Fuel Cell**  
ÇÖGENLİ M. S., MUKERJEE S., BAYRAKÇEKEN YURTCAN A.  
NCC6- 6th Catalysis Conference, 27 - 30 April 2016
- XIII. **Pt Catalyst Supported on Bi<sub>2</sub>O<sub>3</sub> for Direct Formic Acid Fuel Cells**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
NCC6- 6th Catalysis Conference, 27 - 30 April 2016
- XIV. **The preparation of Pt catalyst supported on MCM 41 with high surface area and its catalytic activity for formic acid oxidation**  
ÖZÇELİK N., ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
NCC6- 6th Catalysis Conference, 27 - 30 April 2016
- XV. **Low Platinum Loading Electrode for Formic Acid Fuel Cell Prepared by Ion-Beam Assisted Deposition**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
6th Catalysts Conference (NCC6), Bursa, Turkey, 27 - 30 April 2016, pp.1
- XVI. **Low Platinum Loading Electrode for Formic Acid Fuel Cell Prepared by Ion-Beam Assisted Deposition**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
6th Catalysts Conference (NCC6), Bursa, Turkey, 27 - 30 April 2016, pp.1
- XVII. **Pt Bi<sub>2</sub>O<sub>3</sub> Catalysts for Rechargeable Lithium Air Batteries**  
ÇÖGENLİ M. S., TANSEL Ş., DİNO T., BAYRAKÇEKEN YURTCAN A.  
International Symposium on Materials for Energy Storage and Conversion (mESC-IS 2015), 7 - 09 September 2015
- XVIII. **Sputter Deposited Au Pd Bimetallic Catalysts for Direct Formic Acid Fuel Cells**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
International Symposium on Materials for Energy Storage and Conversion(mESC-IS 2015), 7 - 09 September 2015
- XIX. **There s A Different World At The Bottom**  
ÇÖGENLİ M. S., YEŞİM H., BAYRAKÇEKEN YURTCAN A.  
22. Elektron Mikroskopı Kongresi (EMK 2015), Turkey, 2 - 04 September 2015
- XX. **Image acquisition in Scanning Electron Microscope Using Drift Correction**  
ÇÖGENLİ M. S., BAYRAKÇEKEN YURTCAN A.  
22. Elektron Mikroskopı Kongresi (EMK 2015), Turkey, 2 - 04 September 2015

- XXI. **Effect of Electrode Preparation Methods on PEMFC Performance**  
ÇÖGENLİ M. S., SANJEEV M., BAYRAKÇEKEN YURTCAN A.  
10. Nanoscience and Nanotechnology Conference (NanoTR10), Turkey, 17 - 21 June 2014
- XXII. **Durability of PtCo C alloys for PEM fuel cell cathode electrode**  
ÇÖGENLİ M. S., MUKERJEE S., BAYRAKÇEKEN YURTCAN A.  
10. Nanoscience and Nanotechnology Conference (NanoTR10), Turkey, 17 - 21 June 2014
- XXIII. **Sputtered Cathode Electrode with Low Pt Loading for High Performance PEM Fuel Cell**  
ÇÖGENLİ M. S., ERTUĞRUL M., BAYRAKÇEKEN YURTCAN A.  
9th Nanoscience and Nanotechnology Conference (NanoTR-9), Turkey, 24 - 28 June 2013
- XXIV. **PEM yakıt pilleri için sputtering yöntemi ile MEA hazırlanması**  
ÇÖGENLİ M. S., ERTUĞRUL M., BAYRAKÇEKEN YURTCAN A.  
Ulusal Kimya Mühendisliği Kongresi 10, İstanbul, Turkey, 3 - 06 September 2012, pp.1

## **Supported Projects**

BAYRAKÇEKEN A., ÇÖGENLİ M. S., ÖZTÜRK A., Project Supported by Higher Education Institutions, MİKRODALGA YÖNTEMİYLE KARBON DESTEKLİ BİMETALİK KATALİZÖRLERİN HAZIRLANMASI VE FORMİK ASİT VE METANOL YAKIT PİLLERİ İÇİN KULLANILMASI, 2016 - 2018

BAYRAKÇEKEN A., ÇÖGENLİ M. S., ÖZTÜRK A., Project Supported by Higher Education Institutions, MCM-41 DESTEKLİ PLATİN NANOPARÇACIKLARIN SENZEZİ, KARAKTERİZASYONU VE PEM YAKIT PILİNDE KULLANIMI, 2016 - 2017

## **Metrics**

Publication: 35  
Citation (WoS): 259  
Citation (Scopus): 273  
H-Index (WoS): 7  
H-Index (Scopus): 7