

## Prof. GÖKSEL ÖZKAN



### Personal Information

**Office Phone:** [+90 312 582 3515](tel:+903125823515)

**Email:** [gozkan@gazi.edu.tr](mailto:gozkan@gazi.edu.tr)

**Other Email:** [ozkangoksel53@gmail.com](mailto:ozkangoksel53@gmail.com)

**Web:** <https://avesis.gazi.edu.tr/gozkan>

**Address:** Gazi Üniv. Mühendislik Fak. Kimya Müh. Böl. 06570 Maltepe Ankara

### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), Turkey 1991 - 1997

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Yl) (Tezli), Turkey 1986 - 1989

Undergraduate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1981 - 1985

### Dissertations

Doctorate, Otomobil egzoz emisyonlarının giderilmesinde kullanılan monolitik katalizörlerde eksenel dağılım, adsorbsiyon ve reaksiyon çalışmaları, Gazi University, Fen Bilimleri Enstitüsü, 1997

Postgraduate, Pilot ölçekli dolaşımli bir akışkan yatak yakma sisteminin tasarımı ve yanma çalışmaları, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Yl) (Tezli), 1989

### Research Areas

Engineering and Technology

### Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2013 - Continues

Associate Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2008 - 2013

Assistant Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2000 - 2008

Research Assistant, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 1986 - 2000

### Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2022 - Continues

Faculty Board Member, Gazi University, Mühendislik Fakültesi, 2020 - 2024

Director of the Center, Gazi University, Rektörlük, 2020 - 2023

Head of Department, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği, 2020 - 2023

Head of Department, Gazi University, Fen Bilimleri Enstitüsü, Kazaların Çevresel Ve Teknik Araştırması Anabilim Dalı (Disiplinlerarası), 2014 - 2018

Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2009 - 2013

## Courses

Transport Phenomena, Postgraduate, 2022 - 2023  
Lisans Araştırma Projesi, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021  
Lisans Araştırma Projesi, Undergraduate, 2022 - 2023  
Bitirme Ödevi, Undergraduate, 2022 - 2023  
Taşınım Olayları, Postgraduate, 2021 - 2022, 2019 - 2020  
Matematiksel Modelleme, Undergraduate, 2021 - 2022  
Transport Phenomena, Postgraduate, 2021 - 2022, 2020 - 2021  
Sayısal Analiz Yöntemler, Undergraduate, 2021 - 2022  
Kimya Mühendisliği Matematiği, Postgraduate, 2016 - 2017, 2015 - 2016  
Fuel Cells, Undergraduate, 2016 - 2017  
Matematiksel Modelleme, Undergraduate, 2016 - 2017  
Sayısal Analiz Yöntemler, Undergraduate, 2016 - 2017  
Kütle Aktarımı II, Undergraduate, 2016 - 2017

## Advising Theses

Özkan G., THE SYNTHESIS OF HYDRAZINE BORANE AND DERIVATIVES AND ITS UTILIZATION IN THE CATALYTIC HYDROGEN PRODUCTION, Doctorate, M.RABİA(Student), 2021  
Özkan G., Alkil amin boran üretimi ve dehidrojenasyon karakteristiği, Doctorate, H.BEGÜM(Student), 2021  
Özkan G., Synthesis And Non-Catalytic Dehydrogenation Of Ammonia Borane, Postgraduate, R.KIZILTAŞ(Student), 2019  
ÖZKAN G., Examination Of A Hazardous Waste Disposal Plant In The Context Of Occupational Health And Safety, Postgraduate, M.ERCAN(Student), 2019  
ÖZKAN G., Hydrogen Production Conditions From Sodium Borohydride And Sodium Amidoborane, Doctorate, M.SENA(Student), 2017  
ÖZKAN G., Hydrogen Production From Ammonia Boran By Catalytic Methanolysis And Kinetics, Postgraduate, H.BEGÜM(Student), 2016  
ÖZKAN G., Synthesis Of Sodium Amidoborane By Wet Chemical Method And Its Thermal Dehydrogenation, Postgraduate, M.BALCI(Student), 2016  
ÖZKAN G., Synthesis and characterization of borane-containing styrene divinylbenzene supported resin, Postgraduate, Ö.BİLDİ(Student), 2015  
ÖZKAN G., Development Of Metal-Organic Framework Structured Hybrid Composite Materials And Hydrogen Storage Characteristics, Doctorate, Z.ÖZTÜRK(Student), 2015  
ÖZKAN G., Synthesis and dehydrogenation of ammonia borane and determination of kinetic parameters, Doctorate, D.ÖZGÜR(Student), 2014  
ÖZKAN G., Synthesis and characterization of porous styrene divinyl benzene (SDVB) copolymers with suspension polymerization, Postgraduate, E.İNCE(Student), 2014  
ÖZKAN G., Development of styrene divinyl benzene and alumina supported catalyst for hydrogen production from ammonia borane in liquid phase, Postgraduate, T.ŞİMŞEK(Student), 2013  
ÖZKAN G., CATALYTIC PRODUCTION OF HYDROGEN USING STEAM REFORMING OF ETHANOL, Postgraduate, B.ŞAHBUDAK(Student), 2009  
ÖZKAN G., Erimiş karbonatlı yakıt hücrelerinde kullanılan katı elektrolitik yapı maddesinin sentezi ve karakterizasyonu çalışmaları, Postgraduate, V.ERGENÇOĞLU(Student), 2008  
Özkan G., SYNTHESIS AND CHARACTERIZATION OF MOLTEN CARBONATE FUEL CELL SOLID ELECTROLYTE MATERIALS, Postgraduate, V.ERGENÇOĞLU(Student), 2008  
ÖZKAN G., Erimiş karbonat yakıt hücresi anot malzemesi sentezi ve karakterizasyon çalışmaları, Postgraduate,

U.CAN(Student), 2007

ÖZKAN G., Aktif karbon destekli Ni, Ni-Cu, Ni-Cu-Pd katalizörleri ile etanolden hidrojen eldesi, Postgraduate, S.GÖK(Student), 2005

ÖZKAN G., Yakıt hücreleri ve pillerde kullanılan NiO ve LiCoO<sub>2</sub> katot malzemelerinin sentezi, karakterizasyonu ve adsorpsiyon çalışmaları, Postgraduate, E.ÖZÇELİK(Student), 2004

ÖZKAN G., ZSM-5 destekli monolitik katalizörlerde azot oksitlerin indirgenmesi ve adsorpsiyonu, Postgraduate, K.KAYA(Student), 2003

## Jury Memberships

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Gazi Üniversitesi, December, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Gazi Üniversitesi, June, 2022  
Associate Professor Exam, Associate Professor Exam, Gazi Üniversitesi, June, 2022

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Gazi Üniversitesi, April, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Gazi Üniversitesi, April, 2022

Appointment to Academic Staff-Professorship, Appointment Academic Staff, Gazi Üniversitesi, March, 2022

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

- I. **Development of Boron-Containing Electrolyte Additive for Lithium-Ion Batteries**  
Sarıgöl Z., ÖZKAN G., ÖZKAN G.  
Journal of Electrochemical Energy Conversion and Storage, vol.21, no.3, 2024 (SCI-Expanded)
- II. **Green synthesis of TiO<sub>2</sub> nanoparticles using Aloe Vera extract as catalyst support material and studies of their catalytic activity in dehydrogenation of Ethylenediamine Bisborane**  
Dülger B., ÖZKAN G., ANGI O. S., ÖZKAN G.  
International Journal of Hydrogen Energy, vol.75, pp.466-474, 2024 (SCI-Expanded)
- III. **Catalytic dehydrogenation of ethylene diamine bisborane in ethylene diamine media**  
MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
International Journal of Hydrogen Energy, vol.51, pp.388-397, 2024 (SCI-Expanded)
- IV. **Hydrogen generation from the hydrolysis of ethylenediamine bisborane using Ni/NixBy-Zr and Pd-Ni/NixBy-Zr as highly active catalysts**  
MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
Environmental Progress and Sustainable Energy, vol.42, no.4, 2023 (SCI-Expanded)
- V. **Non-linear kinetic analysis of catalytic hydrolysis of ethylenediamine bisborane with nano-structured Pd/TiO<sub>2</sub> catalyst**  
Angı O. S., Murathan H. B., Özkan G., Özkan G.  
International Journal of Hydrogen Energy, vol.47, no.95, pp.40430-40444, 2022 (SCI-Expanded)
- VI. **Synthesis of nickel boride and investigation of availability as an additive in the molten carbonate fuel cell anode material**  
Basarir E., Özkan G., Özkan G.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.46, no.8, pp.10088-10098, 2022 (SCI-Expanded)
- VII. **Ni-B and Zr-Ni-B in-situ catalytic performance for hydrogen generation from sodium borohydride, ammonia borane and their mixtures**  
Lim D., ÖZKAN G., ÖZKAN G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.5, pp.3396-3408, 2022 (SCI-Expanded)
- VIII. **Facile Ion-Exchange Method for Zn Intercalated MoS<sub>2</sub> As an Efficient and Stable Catalyst toward**

## Hydrogen Evaluation Reaction

Özgür D., ÖZKAN G., Atakol O., ÇELİKKAN H.

ACS APPLIED ENERGY MATERIALS, vol.4, no.3, pp.2398-2407, 2021 (SCI-Expanded)

- IX. **The Hydrolysis of Tert-Butylamine Borane By Using Ni-Zr-B-O Catalyst For Hydrogen Production**  
MURATHAN H. B., ÖZKAN G.  
Journal Of The Indian Chemical Society, vol.97, pp.1-170, 2020 (SCI-Expanded)
- X. **Rh-based Ternary Catalyst for the Catalytic Dehydrogenation of Hydrazine Borane as a Chemical Hydrogen Storage Material**  
Gürlük M. R., ÖZKAN G., ÖZKAN G.  
Journal Of The Indian Chemical Society, vol.97, pp.1-170, 2020 (SCI-Expanded)
- XI. **The effects of operating conditions on hydrogen production from sodium borohydride using Box-Wilson optimization technique**  
ÖZKAN G., Akkus M. S., ÖZKAN G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.20, pp.9811-9816, 2019 (SCI-Expanded)
- XII. **Effect of molar ratio of water/ethanol on hydrogen selectivity in catalytic production of hydrogen using steam reforming of ethanol**  
ÖZKAN G., Sahbudak B., ÖZKAN G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.20, pp.9823-9829, 2019 (SCI-Expanded)
- XIII. **Hydrogen production from the methanolysis of ammonia borane by Pd-Co/Al<sub>2</sub>O<sub>3</sub> coated monolithic catalyst**  
MURATHAN H. B., ÖZKAN G., Akkus M. S., ÖZGÜR D., ÖZKAN G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.23, pp.10728-10733, 2018 (SCI-Expanded)
- XIV. **New insights on the mechanism of vapour phase hydrolysis of sodium borohydride in a fed-batch reactor**  
Akkus M. S., MURATHAN H. B., ÖZGÜR D., ÖZKAN G., ÖZKAN G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.23, pp.10734-10740, 2018 (SCI-Expanded)
- XV. **The Hydrolysis of ammonia borane by using Amberlyst-15 supported catalysts for hydrogen generation**  
ÖZGÜR D., Simsek T., ÖZKAN G., Akkus M. S., ÖZKAN G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.23, pp.10765-10772, 2018 (SCI-Expanded)
- XVI. **Power-Law Kinetic Models for Synthesis of Ammonia Borane**  
ÖZGÜR D., ÖZKAN G.  
INTERNATIONAL JOURNAL OF CHEMICAL KINETICS, vol.49, no.12, pp.875-883, 2017 (SCI-Expanded)
- XVII. **Application of Response Surface Optimization Technique to the Preparation of Cathode Electrode for the Molten Carbonate Fuel Cell**  
ÖZKAN G., Gemicı S., Erkey C., Basarir E., ÖZKAN G.  
JOURNAL OF THE CHEMICAL SOCIETY OF PAKISTAN, vol.39, no.3, pp.361-365, 2017 (SCI-Expanded)
- XVIII. **Determination of optimal synthesis conditions of porous styrene divinyl benzene copolymer beads in the presence of the ammonia borane**  
ÖZKAN G., ÖZKAN G., Ince E., Bildi O.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.32, no.1, pp.1-7, 2017 (SCI-Expanded)
- XIX. **Novel 2D micro-porous Metal-Organic Framework for hydrogen storage**  
Ozturk Z., KÖSE D. A., ŞAHİN Z. S., ÖZKAN G., ASAN A.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.28, pp.12167-12174, 2016 (SCI-Expanded)
- XX. **Synthesis and characterization of solid electrolyte structure material (LiAlO<sub>2</sub>) using different kinds of lithium and aluminum compounds for molten carbonate fuel cells**  
ÖZKAN G., Ergencoglu V. I., ÖZKAN G.  
INDIAN JOURNAL OF CHEMICAL TECHNOLOGY, vol.23, no.3, pp.227-231, 2016 (SCI-Expanded)
- XXI. **Experimental and simulation study on structural characterization and hydrogen storage of metal organic structured compounds**

- Ozturk Z., ÖZKAN G., KÖSE D. A., ASAN A.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.19, pp.8256-8263, 2016 (SCI-Expanded)
- XXII. **The effect of water/ethanol mol ratio to H<sub>2</sub> yield and selectivity for hydrogen production from reforming of ethanol with the Pd-NiO, Ni-Cu-Pd/activated carbon catalysts** Etanolden Pd-NiO, Ni-Cu-Pd/Aktif karbon katalizörleri ile H<sub>2</sub> üretiminde su/ethanol mol oranının hidrojen verimi ve seçimliliğine etkisi  
Şahbudak B., ÖZKAN G., Özkan G.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.31, no.2, pp.417-424, 2016 (SCI-Expanded)
- XXIII. **THE EFFECT OF WATER/ETHANOL MOL RATIO TO H-2 YIELD AND SELECTIVITY FOR HYDROGEN PRODUCTION FROM REFORMING OF ETHANOL WITH THE Pd-NiO, Ni-Cu-Pd/ACTIVATED CARBON CATALYSTS**  
Sahbudak B., ÖZKAN G., ÖZKAN G.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.31, no.2, pp.417-424, 2016 (SCI-Expanded)
- XXIV. **Combined experimental and theoretical investigation of characterization and hydrogen storage properties of Zn(II) based complex and composites**  
Ozturk Z., ÖZKAN G., ASAN A., KÖSE D. A.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.17, pp.5907-5915, 2015 (SCI-Expanded)
- XXV. **Synthesis and Characterization of Molten Carbonate Fuel Cell Anode Materials**  
Ozkan G., Ozkan G., Iyidir U. C.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.37, no.22, pp.2487-2495, 2015 (SCI-Expanded)
- XXVI. **Hydrogen storage properties of mono- and bidentate MOF structured orotate complexes**  
Ozturk Z., Kose D. A., Asan A., Ozturk B., Andac O., Ozkan G.  
JOURNAL OF MATERIALS RESEARCH, vol.29, no.2, pp.215-220, 2014 (SCI-Expanded)
- XXVII. **Active carbon-supported Ni, Ni/Cu and Ni/Cu/Pd catalysed steam reforming of ethanol for the production of hydrogen**  
ÖZKAN G., Gok S., ÖZKAN G.  
CHEMICAL ENGINEERING JOURNAL, vol.171, no.3, pp.1270-1275, 2011 (SCI-Expanded)
- XXVIII. **The prediction of SO<sub>2</sub> removal using statistical methods and artificial neural network**  
Ozkan G., Ucan L., Ozkan G.  
NEURAL COMPUTING & APPLICATIONS, vol.19, no.1, pp.67-75, 2010 (SCI-Expanded)
- XXIX. **Synthesis and characterization of licoo 2 used as cathode material in secondary lithium batteries** İkincil lityum pillerinde katot aktif maddesi olarak kullanılan licoo 2'in sentezi ve karakterizasyonu  
Özçelik E., ÖZKAN G.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.21, no.3, pp.423-425, 2006 (SCI-Expanded)
- XXX. **Effect of temperature and gas flow rate on SO<sub>2</sub> sorption in a reactor with periodic liquid flow and active carbon**  
Guru M., Ozkan G., Murathan A., Öksüz İ.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.14, no.5, pp.400-405, 2005 (SCI-Expanded)
- XXXI. **Removal of sulphur dioxide in a periodically operating trickle-bed reactor with activated carbon bed**  
Ucan H., Ozkan G., Bicer A., Pamuk V.  
PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, vol.83, pp.47-49, 2005 (SCI-Expanded)
- XXXII. **CO<sub>2</sub> adsorption on porous NiO as a cathode material for molten carbonate fuel cells**  
Ozkan G., Ozcelik E.  
JOURNAL OF POWER SOURCES, vol.140, no.1, pp.28-33, 2005 (SCI-Expanded)
- XXXIII. **Adsorption and wet oxidation of methanol on Pt/pumice catalyst**  
Ozkan G.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.13, pp.1518-1520, 2004 (SCI-Expanded)

- XXXIV. **Application of Box-Wilson optimization technique to the partially oriented yarn properties**  
Ozkan G., Urkmez G., Ozkan G.  
POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING, vol.42, no.3, pp.459-470, 2003 (SCI-Expanded)
- XXXV. **Combustion of a high ash and sulfur containing lignite in a pilot circulating fluidized bed combustor and its pollution characteristics**  
Ozkan G., Dogu G.  
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.41, no.1, pp.11-15, 2002 (SCI-Expanded)
- XXXVI. **A moment technique for adsorption rate on metal surfaces of supported catalysts CO adsorption on Pt-Al<sub>2</sub>O<sub>3</sub> washcoated monolith**  
Dogu G., Ozkan G., Dogu T.  
CHEMICAL ENGINEERING JOURNAL, vol.84, no.3, pp.429-435, 2001 (SCI-Expanded)
- XXXVII. **A dynamic study on axial dispersion and adsorption in catalytic monoliths**  
Ozkan G., Dogu G.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.36, no.11, pp.4734-4739, 1997 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Examination of a Hazardous Waste Disposal Plant in the Context of Occupational Health and Safety**  
Ercan M., Özkan G., Çalışkan T. D., Özkan G.  
WSEAS TRANSACTIONS ON COMPUTERS, vol.21, pp.200-210, 2022 (Peer-Reviewed Journal)
- II. **Investigation of synthesis of sodium aminodiborane in one step and its reaction kinetics**  
AKKUŞ M. S., ÖZKAN G.  
Molekul, vol.15, no.3, pp.219-277, 2020 (Scopus)
- III. **Combined Experimental And Molecular Simulation Study On The Hydrogen Storage Properties Of Cu II And Ni II Metal Organic Compounds**  
ÖZTÜRK Z., ÖZKAN G., KÖSE D. A., ASAN A.  
Hacettepe Journal of Biology and Chemistry, vol.43, no.1, pp.1-8, 2015 (Peer-Reviewed Journal)
- IV. **Porous metal organic Cu II complex of L Arginine synthesis characterization hydrogen storage properties and molecular simulation calculations**  
ASAN A., ÖZKAN G., ÖZTÜRK Z., KÖSE D. A.  
Hittite Journal of Science and Engineering, vol.1, no.1, pp.1-4, 2014 (Peer-Reviewed Journal)
- V. **The prediction of chemical oxygen demand (COD) or suspended solid (SS) removal using statistical methods and the artificial neural network in the sugar industrial wastewaters**  
Özkan G., Akin B. a., ÖZKAN G.  
ARPN Journal of Engineering and Applied Sciences, vol.8, no.12, pp.978-983, 2013 (Scopus)
- VI. **Atık sulardan civanın dolgulu yataklarda giderilmesi,**  
Murathan A. M., Gürü M., Özkan G.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.15, no.1, pp.113-119, 2002 (ESCI)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Hydrogen production from hydrolysis of ethylenediamine bisborane over mono-bimetallic Pd-Co catalysts and CeO<sub>2</sub>/ZrO<sub>2</sub> as supports**  
GEZGEN S., MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
7th International Hydrogen Technologies Congress, Elazığ, Turkey, 10 May 2023
- II. **Catalytic Hydrolysis of Ethylenediamine Bisborane with Pd/Ni Foam Catalyst**  
ŞAHİN E., KALKAN K., DURMAZ Ö., ANGI O. S., MURATHAN H. B., ÖZKAN G.  
2nd International Conference on Engineering and Applied Natural Sciences, Konya, Turkey, 15 October 2022

- III. **Efficient Hydrolytic Dehydrogenation Of Ethylene Diamine Bisborane Over Pd-Ni-Zr-B Catalyst in the Ethylene Diamine Media**  
MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
23rd World Hydrogen Energy Conference, İstanbul, Turkey, 26 June 2022
- IV. **Catalytic Hydrolysis of Hydrazine Borane Using Nano Structured Titania Supported Pd Catalyst**  
BAYRAM Ö., ANGI O. S., MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
3rd International Hydrogen Energy Conference and Exhibitions, Turkey, 14 June 2021
- V. **Catalytic Hydrolysis of Ethylenediamine Bis Borane with Nano-structured Pd/TiO<sub>2</sub> Catalyst**  
ANGI O. S., MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
3rd International Hydrogen Energy Conference and Exhibitions, Turkey, 14 June 2021
- VI. **Material Anode Cell Fuel Carbonate Molten a as Additive Ni<sub>2</sub>B of I**  
Başarır E., ÖZKAN G., ÖZKAN G.  
12th International Exergy, Energy and Environment Symposium (IEEES-12), Doha, Qatar, 20 - 24 December 2020
- VII. **Sodium from Generation Hydrogen for performance Catalytic Situ-In B-Ni-Zr and B-N Mixtures Their and Borane Ammonia, B**  
lim d., ÖZKAN G., ÖZKAN G.  
12th International Exergy, Energy and Environment Symposium (IEEES-12), Doha, 20 - 24 December 2020
- VIII. **Rh-Based Ternary Catalyst for the Catalytic Dehydrogenation of Hydrazine Borane as an Chemical Hydrogen Storage Material**  
GÜRLÜK M. R., ÖZKAN G., ÖZKAN G.  
6th International Conference on New Trends in Chemistry, İstanbul, Turkey, 17 - 18 November 2020, vol.1, pp.65
- IX. **The Hydrolysis of Tert-Butylamine Borane By Using Ni-Zr-B Catalyst for Hydrogen Production**  
Murathan H. B., Özkan G.  
6th International Conference on New Trends in Chemistry, İstanbul, Turkey, 17 October 2020
- X. **Investigation of the Effect of the Initial Reactant Molar Ratio on the Synthesis of Sodium Amidoborane and Its Hydrogen Capacity**  
ÖZKAN G., AKKUŞ M. S., ÖZKAN G.  
4 th International Hydrogen Technologies Cong, 20 - 23 June 2019
- XI. **Investigation of Parametric Synthesis Conditions of n-Butylamine Borane as Hydrogen Storage Materia**  
Murathan H. B., ÖZKAN G., ÖZKAN G.  
4 th International Hydrogen Technologies Congress, 20 - 23 June 2019
- XII. **Hydrogen Generation from Sodium Borohydride, Ammonia Borane and Their Mixtures Using Ni-B-Zr In-Situ Catalyst**  
Lim D., ÖZKAN G., ÖZKAN G.  
(IHTEC-2019), (24-26 June 2019) Trakya University, Edir, 20 - 23 June 2019
- XIII. **Hydrazine Borane Synthesis for Hydrogen Storage Applications**  
gürlük m. r., ÖZKAN G., ÖZKAN G.  
4th International Hydrogen Technologies Congr, 20 - 23 June 2019
- XIV. **Investigation of Parametric Synthesis Conditions of n-Butylamine Borane as Hydrogen Storage Material**  
MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
4th International Hydrogen Technologies Congress, Edirne, Turkey, 20 - 23 June 2019
- XV. **Investigation of the Synthesis Conditions of the Hydrogen Storage Material: n-Butylamine Borane**  
MURATHAN H. B., ÖZKAN G., ÖZKAN G.  
Uluslararası Bor Sempozyumu, Nevşehir, Turkey, 17 - 19 April 2019
- XVI. **Yüksek Hidrojen Depolama Kapasitesine Sahip Amonyak Boranın Sentezi ve Karakterizasyonu**  
KIZILTAŞ R., ÖZKAN G., ÖZGÜR D., SÜRDEM S.  
International Symposium on Boron, Nevşehir, Turkey, 17 - 19 April 2019
- XVII. **The Effects Of Operating Conditions On The Hydrogen Production From Sodium Borohydride Using Box-Wilson Optimization Technique,**

- ÖZKAN G., AKKUŞ M. S., ÖZKAN G.  
9Th International Conference On Hydrogen Production (ICH2P), 16 - 19 July 2018
- XVIII. **Effect of Molar Ratio of Water / Ethanol on Hydrogen Selectivity in Catalytic Production of Hydrogen Using Steam Reforming of Ethanol,**  
ÖZKAN G., ÖZKAN G., Şahbudak b.  
9Th International Conference On Hydrogen Production (ICH2P) Za, 16 - 19 July 2018
- XIX. **Power Law Kinetic Model For Synthesis of Sodium Amidoborane**  
AKKUŞ M. S., ÖZKAN G., ÖZKAN G.  
16th International Conference On Clean Energy (Icce-2018), 9 - 11 May 2018
- XX. **Anode Electrolyte Development And System Integration For Molten Carbonate Fuel Cell**  
ÖZKAN G., Gemici S., ÖZKAN G.  
16th International Conference On Clean Energy (Icce-2018), 9 - 11 May 2018
- XXI. **High Yield Hydrogen Production from Sodium Borohydride by Non-Catalytic Steam Reforming:A Parametric Study**  
Akkuş M. S., Murathan H. B., ÖZGÜR D., ÖZKAN G., ÖZKAN G.  
2nd International Hydrogen Technologies Congress, 15 - 18 March 2017
- XXII. **Hydrogen Production from the Methanolysis of Ammonia Borane by Pd-Co/Al<sub>2</sub>O<sub>3</sub> Coated Monolithic Catalyst**  
MURATHAN H. B., ÖZKAN G., AKKUŞ M. S., ÖZGÜR D., ÖZKAN G.  
2nd International Hydrogen Technologies Congress, 15 - 18 March 2017
- XXIII. **Hydrogen Generation From the Dehydrogenation of ammonia Borane by Using Amberlyst-15 Supported Catalyst**  
ÖZGÜR D., Şimşek T., ÖZKAN G., Akkuş M. S., ÖZKAN G.  
2nd International Hydrogen Technologies Congress, 15 - 18 March 2017
- XXIV. **High Yield Hydrogen Production From Sodium Borohydride By NonCatalytic Steam Reforming: A Parametric Study**  
AKKUŞ M. S., MURATHAN H. B., ÖZGÜR D., ÖZKAN G., ÖZKAN G.  
2nd International Hydrogen Technologies Congress, 15 - 18 March 2017
- XXV. **Energy storage key component ammonia borane catalytic hydrolysis and kinetic parameters**  
ÖZKAN G., ŞİMŞEK T., ÖZGÜR D., MURATHAN H. B., AKKUŞ S., ÖZKAN G.  
22nd International Congress of Chemical and Process Engineering, Prague, 27 - 31 August 2016
- XXVI. **Energy Storage Key Component Ammonia Borane: Catalytic Kinetic Parameters**  
ÖZKAN G., Şimşek T., ÖZGÜR D., MURATHAN H. B., AKKUŞ M. S., ÖZKAN G.  
22nd International Congress of Chemical and Process Engineering, 27 - 31 August 2016
- XXVII. **Energy Storage Key Component Ammonia Borane Catalytic Kinetic Parameters**  
ÖZKAN G., Şimşek T., ÖZGÜR D., Murathan H. B., ÖZKAN G., Akkuş M. S.  
19th Conference of Process Integration, Modelling Saving and Pollution Reduction 28-31 August, PRES 2016, 27 - 31 August 2016
- XXVIII. **The Effect of Operating Conditions and Supports on Ni Cu Cs**  
ÖZKAN G., Şahbudak B., ÖZKAN G.  
PRES 2016, 19th Conference of Process Integration, Modelling Saving and Pollution Reduction, 27 - 31 August 2016
- XXIX. **Amonyak boranın Pd-Co/Al<sub>2</sub>O<sub>3</sub> katalizörü eşliğinde katalitik metanolizi ile hidrojen üretimi ve kinetiği**  
MURATHAN H. B., AKKUŞ M. S., ÖZKAN G., ÖZKAN G.  
12. Ulusal Kimya Mühendisliği Kongresi, İzmir, Turkey, 23 - 26 August 2016
- XXX. **Sodyum bor hidrürün buhar fazı hidrolizinde sıcaklık ve derişimin hidrojen verimine etkisi**  
AKKUŞ M. S., ÖZKAN G., MURATHAN H. B., ÖZKAN G.  
12. Ulusal Kimya Mühendisliği Kongresi, İzmir, Turkey, 23 - 26 August 2016
- XXXI. **Amonyak Boranın Pd Co Al<sub>2</sub>O<sub>3</sub> Katalizörü Eşliğinde Katalitik Metanolizi ile Hidrojen Üretimi ve Kinetiği**



Murathan H. B., ÖZKAN G., Akkuş M. S., ÖZKAN G.

12. Ulusal Kimya Mühendisliği Kongresi (UKMK-2016), Turkey, 23 - 27 August 2016

- XXXII. **Hidrojen Depolama Maddesi Olarak Sodyum Amido Boranın Sentez Koşullarının Belirlenmesi**  
Akkuş M. S., ÖZKAN G., ÖZKAN G.  
12. Ulusal Kimya Mühendisliği Kongresi (UKMK-2016), Turkey, 23 - 27 August 2016
- XXXIII. **The effect of operating conditions and supports on Ni-Cu-Cs three metallic catalyst for steam reforming of ethanol to the production of hydrogen**  
ÖZKAN G., Şahbudak B., Özkan G.  
22nd International Congress of Chemical and Process Engineering, CHISA 2016 and 19th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, PRES 2016, Prague, Czech Republic, 27 - 31 August 2016, vol.2, pp.1140-1141
- XXXIV. **Determination of Optimum Production Conditions of Casting Slurry in the Manufacture of Molten Carbonate Fuel Cell Electrodes with the Tape Casting Technique**  
ÖZKAN G., Gemici S., Basarir E., ÖZKAN G.  
19th International Conference on Process Integration, Modeling and Optimization for Energy Savings and Pollution Reduction (PRES), Prague, Czech Republic, 27 - 31 August 2016, vol.52, pp.871-876
- XXXV. **Hydrogen storage property of Metal Organic Co II orotato complex**  
B o., ÖZTÜRK Z., ASAN A., ÖZKAN G., KÖSE D. A.  
E-MRS 2015 Fall Meeting, 14 - 18 September 2015
- XXXVI. **FARKLI AMONYUM TUZLARI ve SODYUM BOR HİDRÜRDEN AMONYAK BORAN SENTEZİ VE KAŞILAŞTIRILMASI**  
ÖZGÜR D., ÖZKAN G.  
27. Ulusal Kimya Kongresi, Turkey, 23 - 28 August 2015, vol.1, pp.301
- XXXVII. **2D Metal Organik Yapılı Cu TMA Phen H<sub>2</sub>O 3H<sub>2</sub>O Kompleksinin Yapısal Özellikleri Ve Hidrojen Depolama Kapasitesinin Belirlenmesi**  
ÖZTÜRK Z., ÖZKAN G., ASAN A., KÖSE D. A., ŞAHİN O.  
27. Ulusal Kimya Kongresi, Turkey, 23 - 28 August 2015, pp.792
- XXXVIII. **Hidrojen Depolama Maddesi Olarak Sodyum Amido Boran Sentezi Ve Depolama Verimliliği**  
Meryem Sena A., Vural M., ÖZKAN G.  
27. Ulusal Kimya Kongresi, Turkey, 23 - 28 August 2015, pp.300
- XXXIX. **Experimental and Simulation Study on Structural Characterization and Hydrogen Storage of Metal Organic Structured Compound**  
ÖZTÜRK Z., ÖZKAN G., KÖSE D. A., ASAN A.  
6th International Conference on Hydrogen Production, 3 - 06 May 2015
- XL. **LEWİS ASİT BAZ YERDEĞİŞTİRME REAKSİYONU VE AMONYAK BORAN ÜRETİMİ**  
ÖZGÜR D., ÖZKAN G.  
11. Ulusal Kimya Mühendisliği Kongresi, Turkey, 2 - 05 September 2014
- XLI. **Production of hydrogen from ammonia borane with amberlyst supported catalyst**  
ÖZGÜR D., ÖZKAN G.  
11. Ulusal Kimya Mühendisliği Kongresi, Turkey, 2 - 05 September 2014
- XLII. **Alumina Supported Catalyst For Hydrogen Production From Ammonia Borane In Liquid Phase**  
tayyibe ş., ÖZGÜR D., ÖZKAN G., ÖZKAN G.  
13th International Conference on Clean Energy, 8 - 12 June 2014
- XLIII. **The Effect of Temperature and Initial Concentration on Synthesis of Ammonia Borane**  
ÖZGÜR D., ÖZKAN G.  
13th International Conference on Clean Energy, 8 - 12 June 2014
- XLIV. **Atık Sulardan Cıvanın Uzaklaştırılması**  
MURATHAN A. M., GÜRÜ M., ÖZKAN G.  
XIII: Ulusal Kimya Kongresi, Samsun, Turkey, 31 August - 04 September 1999, pp.455

## Supported Projects

ÖZKAN G., ANGI O. S., Project Supported by Higher Education Institutions, Etilendiamin Bisboranın Katalitik Buhar Fazı Dehidrojenasyonu, 2021 - 2022

ÖZKAN G., MURATHAN H. B., Project Supported by Higher Education Institutions, Alkil Amin Boranların Üretimi ve Dehidrojenasyon Karakteristiği, 2018 - 2021

Özkan G., ÖZGÜR D., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Amonyak Boran Sentezi ve Dehidrojenasyonu, Ulusal Bor Araştırma Enstitüsü (BOREN),Proje Kodu: 2018-31-06-30-004, Proje Yürütücüsü, 2020., 2018 - 2020

ÖZKAN G., MURATHAN A. M., OKUR M., TAŞDEMİR H. M., Project Supported by Higher Education Institutions, Kimya Mühendisliği Laboratuvarlarının Deney Düzeneklerinin Yenilenmesi ve Geliştirilmesi, 2015 - 2016

Özgür D., Özkan G., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Hidrojen Üretimi İçin Polimer Destekli Katı Faz Katalitik Amonyum Boran Üretim Koşulları ve Kinetiğinin Belirlenmesi, 2011 - 2013

ÖZKAN G., Project Supported by Higher Education Institutions, ŞERİT DÖKME TEKNİĞİ İLE ERİMİŞ KARBONAT YAKIT HÜCRESİ ELEKTROTLARININ HAZIRLANMASI KOŞULLARININ BELİRLENMESİ, 2010 - 2013

ÖZKAN G., Project Supported by Higher Education Institutions, Egzoz gazlarında azot oksitlerin monolitik katalizörlerde adsorpsiyonu ve indirgenmesi, 2001 - 2002

## Patent

ÖZKAN G., ÖZGÜR D., İKİ AŞAMALI YÜKSEK SAFLIKTA AMONYAK BORAN (NH<sub>3</sub>BH<sub>3</sub>) ÜRETİM METODU, Patent, CHAPTER C Chemistry; Metallurgy, 2016

## Scientific Refereeing

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, National Scientific Refreed Journal, April 2022

## Metrics

Publication: 88

Citation (WoS): 215

Citation (Scopus): 309

H-Index (WoS): 11

H-Index (Scopus): 12

## Non Academic Experience

ÖZMAK Makina San.