



Athanasios Androulakis

Citizenship: Greek

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ACADEMIC BACKGROUND

- **2019:** Diploma of Chemical Engineer, University of Patras, Greece.
- **2021:** PhD Candidate, Department of Chemical and Environmental Engineering, Technical University of Crete. Thesis title: Catalytic processes of dry CH₄ reforming and enrichment of syngas in H₂ via the water-gas shift reaction.

WORKING EXPERIENCE

Research Interests

My research activities are focused in the area of heterogeneous catalysis, in particular the study of new catalysts and the investigation of the mechanism of catalytic reactions. My laboratory experience involves the design, construction and operation of experimental apparatus and reactors for the study of heterogeneous catalytic reactions and the preparation and characterization of catalysts by various technical methods.

Preparation and characterization of catalysts

Characterization techniques:

- X-Ray Diffraction (XRD)
- Brunauer-Emmett-Teller method (BET)
- Diffuse Reflection Spectroscopy (DRS)
- Gas Chromatography
- Liquid Chromatography

Preparation techniques:

- Wet-impregnation
- Co-precipitation

Participation in Research Programs and Projects

- Development and pilot scale demonstration of an innovative, effective and eco-friendly process for the production of clean hydrogen and electrical power generation from biogas” (project code:T1EDK-00955) Co-financed by the European Union and Greek national funds through the Operational Program Competitiveness, Entrepreneurship and Innovation, under the call RESEARCH–CREATE–INNOVATE, 2021-2024.

Publications in scientific journals

- Paraskevi Panagiotopoulou, Athanasios Androurakis, Ioannis Yentekakis, " Dry reforming of methane over supported Rh and Ru catalysts: Effect of the support (Al_2O_3 , TiO_2 , ZrO_2 , YSZ) on the activity and reaction pathway" Accepted for publication in the International Journal of Hydrogen Energy

Participation in scientific meetings-conferences

- 13th Panhellenic Chemical Engineering Scientific Conference, June 2-4, 2022, Patra, Greece.
"Dry reforming of methane for hydrogen production on supported metal catalysts: Effect of the nature of the metal and the carrier", A. Androurakis, I. Yentekakis, P. Panagiotopoulou
- 16th Panhellenic Symposium of Catalysis, October 20-22, Greece, Chania, Greece.
"Effect of the nature of the metal and the carrier on the catalytic activity and the mechanism of the dry methane reforming reaction on supported metal catalysts", A. Androurakis, I. Yentekakis, P. Panagiotopoulou

IT KNOWLEDGE

- UniSim Software
- Origin Software
- Microsoft Office
- Matlab Software
- Fortran Programming Language

SPOKEN LANGUAGES

First Language: Greek

Foreign Language: English (Excellent knowledge, Proficiency)

Certificates of English language proficiency:

- Michigan Institute of English Language (Good Knowledge, Lower)
- State Certificate of Language Proficiency (Good Knowledge, Lower)
- City & Guilds English Language Institute (Excellent Knowledge, Proficiency)