

Aliko Kokka

Contact

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Education

- 02/2017– 02/2023 PhD in Environmental Engineering
School of Chemical and Environmental Engineering, Technical University of Crete, Chania
Subject: “*Hydrogen (H₂) production via catalytic steam reforming of propane and liquefied petroleum gas (LPG)*”
Supervisor: Associate Professor Paraskevi Panagiotopoulou
- 10/2015– 02/2017 MSc in Environmental Engineering
School of Chemical and Environmental Engineering, Technical University of Crete, Chania
Subject: “*Synthesis, characterization and application of nitrogen and silver doped TiO₂ catalysts*”
Supervisor: Associate Professor Paraskevi Panagiotopoulou
- 10/2009– 10/2015 Diploma in Environmental Engineering
School of Chemical and Environmental Engineering, Technical University of Crete, Chania
Subject: “*Nutrient recovery from sewage sludge filtrates by struvite precipitation*”
Supervisor: Professor Evan Diamadopoulos
Degree: 7.37
- 2009 High school Degree
High School of M.N. Raptou, Larissa
Degree: 19.3

Research Experience

- 10/2018– 11/2021 Participation in the research project: “*Development and demonstration of complete process for the production of electrical energy from fuel cells through intermediate production of H₂ via LPG steam reforming*” (project code: T1EDK-02442) Co-financed by the European Union and Greek national funds through the Operational Program Competitiveness, Entrepreneurship and Innovation, under the call RESEARCH–CREATE–INNOVATE, 2018- 2021.
Coordinator: Associate Prof. Paraskevi Panagiotopoulou.

Publications in international peer-reviewed scientific journals

1. Kokka, A., Ramantani, T., Yentekakis, I. V., & Panagiotopoulou, P. (2022). Catalytic performance and in situ DRIFTS studies of propane and simulated LPG steam reforming reactions on Rh nanoparticles dispersed on composite $M_xO_y-Al_2O_3$ (M: Ti, Y, Zr, La, Ce, Nd, Gd) supports. *Applied Catalysis B: Environmental*, 316, 121668.
2. Kokka, A., Petala, A., & Panagiotopoulou, P. (2021). Support Effects on the Activity of Ni Catalysts for the Propane Steam Reforming Reaction. *Nanomaterials*, 11(8), 1948.
3. Kokka, A., Ramantani, T., & Panagiotopoulou, P. (2021). Effect of operating conditions on the performance of Rh/TiO₂ catalyst for the reaction of LPG steam reforming. *Catalysts*, 11(3), 374.
4. Kokka, A., Katsoni, A., Yentekakis, I. V., & Panagiotopoulou, P. (2020). Hydrogen production via steam reforming of propane over supported metal catalysts. *International Journal of Hydrogen Energy*, 45(29), 14849-14866.
5. Kokka, A., Ramantani, T., Petala, A., & Panagiotopoulou, P. (2020). Effect of the nature of the support, operating and pretreatment conditions on the catalytic performance of supported Ni catalysts for the selective methanation of CO. *Catalysis Today*, 355, 832-843.

Publications in peer-reviewed scientific conferences

1. A. Kokka, T. Ramantani, I.V. Yentekakis and P. Panagiotopoulou, "A study of propane and LPG steam reforming over Rh/ $M_xO_y-Al_2O_3$ (M: Ti, Y, Zr, La, Ce, Nd, Gd) catalysts", 16th Panhellenic Catalysis Symposium, Chania, 20-22 October 2022.
2. A. Kokka, A. Petala and P. Panagiotopoulou, "Effect of the support nature on the activity of Ni catalysts for the propane steam reforming reaction", 13th Panhellenic Scientific Conference in Chemical Engineering, Patras, 02-04 June 2019.
3. A. Kokka, T. Ramantani, I.V. Yentekakis and P. Panagiotopoulou, "A comparative study of propane and propane/butane steam reforming activity of Rh catalysts supported on composite $M_xO_y-Al_2O_3$ carriers", 5th EuChemS Conference on Green and Sustainable Chemistry (5th EuGSC), Online conference, 26-29 September 2021.
4. A. Kokka, T. Ramantani, I.V. Yentekakis and P. Panagiotopoulou, "Effect of alkali promotion on the activity of Ru/TiO₂ catalysts for the production of H₂ via propane steam reforming", 12th International Conference on Hydrogen Production, ICH2P-2021, Online conference, 19-23 September, 2021.
5. A. Kokka, T. Ramantani and P. Panagiotopoulou, "Effect of operating conditions on the activity and stability of 0.5% Rh/TiO₂ catalyst in structured or unstructured form for the LPG steam reforming reaction", 1st Online Conference of Young Scientists "Mineral Resources-Environment-Chemical Engineering", Kozani, 26-28 February 2021.
6. A. Kokka and P. Panagiotopoulou, "Effect of operating conditions on the catalytic performance of supported Rh catalysts for the reaction of LPG steam reforming", 11th International Conference on Environmental Catalysis, Manchester, UK, 6- 9 September 2020.

7. A. Kokka, I. V. Yentekakis and P. Panagiotopoulou, “Effects of physicochemical properties of supported metal catalysts on their activity for the production of H₂ via steam reforming of propane”, 11th International Conference on Environmental Catalysis, Manchester, UK, 6- 9 September 2020.
8. A. Kokka and P. Panagiotopoulou, “Hydrogen production via steam reforming of LPG over supported metal catalysts”, 14th European Congress on Catalysis, EuropaCat 2019, Aachen, Germany, August 18-23 2019.
9. A. Kokka and P. Panagiotopoulou, “Hydrogen production via propane steam reforming reaction over supported metal catalysts”, 12th Panhellenic Scientific Conference in Chemical Engineering, Athens, May 29-31 2019.
10. A. Kokka, T. Ramantani, A. Petala and P. Panagiotopoulou, “Effect of the nature of the support, operating and pretreatment conditions on the catalytic performance of supported Ni catalysts for the selective methanation of CO reaction”, 12th Panhellenic Scientific Conference in Chemical Engineering, Athens, May 29-31 2019.
11. A. Kokka, P. Panagiotopoulou and E. Diamadopoulos, “Photocatalytic degradation of emerging organic contaminants over nitrogen and silver doped TiO₂ catalysts”, Crete 2018: 6th International Conference on Industrial and Hazardous Waste Management, Chania, Greece, September 4-7 2018.
12. A. Kokka and E. Diamadopoulos, “A comparison of methods for nutrient recovery from sewage sludge filtrates by struvite precipitation”, SMICE2018: International Conference on Sludge management in circular economy, Rome, Italy, May 24-26 2018.

Languages

Greek	Native
English	Certificate of Competency in English, University of Michigan

Digital Skills

Knowledge of software, programs and programming languages:

- Windows (excellent level)
- Microsoft Office, OriginPro (excellent level)
- HSC Chemistry, Minitab, AutoCAD, arcGIS (basic level)
- MATLAB, FORTRAN, C (basic level)