

## **PARASKEVI PANAGIOTOPOULOU**

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### **EDUCATION**

- 2001-2006:** Ph.D. in Chemical Engineering, University of Patras, Greece, degree: excellent.  
*Subject: "Development and characterization of novel catalytic materials for the Low temperature Water-Gas Shift reaction and kinetic study".* Supervisor: D.I. Kondarides.
- 2001-2006:** MSc. in Chemical Engineering, University of Patras, Greece, degree: excellent.  
*Subject: "Energy and Environment".* Supervisor: D.I. Kondarides.
- 1996-2001:** Diploma of Chemical Engineer, University of Patras, Greece, degree: 7.39 (advance).

### **PROFESSIONAL EXPERIENCE**

- 2021-:** Associate Professor, School of Environmental Engineering, Technical University of Crete.
- 2014-2020:** Assistant Professor, School of Environmental Engineering, Technical University of Crete.
- 2012-2014:** Senior Postdoctoral Researcher, Catalysis Center for Energy Innovation (CCEI), Department of Chemical and Biomolecular Engineering, University of Delaware, USA.
- 2006-2012:** Post-doctoral Fellow – Researcher, Department of Chemical Engineering, University of Patras, Greece
- 2007-2009:** Employee-Researcher at the HELBIO S.A. Hydrogen and Energy Production Systems (HELBIO is a Greek company, with expertise in the development, design and commercialisation of hydrogen, electricity and heat production systems using fuel cells).

### **EDUCATIONAL EXPERIENCE**

- 2014-2020:** Assistant Professor, School of Environmental Engineering, Technical University of Crete (Teaching of the courses: "Environmental Thermodynamics", "Reaction Engineering (Chemical and Biochemical Processes)", "Field Studies I", "Special Topics of Catalytic surfaces and Catalytic Processes for Environmental Applications", "Advanced air pollutant treatment technologies").
- 2017- : & 2011-2013** Collaborating Educational Staff at the School of Science and Technology of the Open Hellenic University. (Supervisor of one diploma thesis as a part of the Postgraduate Program "Catalysis and Environmental Protection").

- 2011-2012: Adjunct Lecturer, Department of Chemistry, University of Patras (Teaching of two courses: (a) Physical Processes of Chemical Technology and (b) Chemical Processes).
- 2010-2011: Adjunct Lecturer, Department of Business Administration of Food and Agricultural Enterprises, University of Western Greece (Teaching of the course: General and Inorganic Chemistry).
- 2009-2012: Supervisor in collaboration with the professors X.E. Verykios and D.I. Kondarides of five Ph.D. theses at the Department of Chemical Engineering of University of Patras.
- 2002-2012: Supervisor of ten diploma theses at the Department of Chemical Engineering of the University of Patras.
- 2002-2004: Teaching of two courses ("Physical Chemistry" and "Process Dynamics and Control") during the Ph.D. studies, at the Department of Chemical Engineering of the University of Patras.

## **RESEARCH INTERESTS AND ACTIVITIES**

Research activities are focused in the fields of Heterogeneous Catalysis and Photocatalysis and, especially, in materials synthesis and characterization, (photo)catalyst development and evaluation, and investigation of reaction kinetics and mechanisms, with emphasis given in environmental and energy-related applications. Of particular interest is the investigation of the surface chemistry and structure of dispersed metallic systems and of reducible metal oxides and their mixtures.

Primary goals in the field of *Heterogeneous Catalysis* are:

- Production of hydrogen via LPG steam reforming for fuel cells applications.
- Hydrogenation of CO<sub>2</sub> for methane production.
- Production of hydrogen for fuel cells, by reformation of biomass-derived ethanol.
- Development of water-gas shift (WGS) catalysts for fuel processors used in proton exchange membrane (PEM) fuel cell systems.
- Removal of carbon monoxide from hydrogen-rich reformat streams via selective methanation of CO.
- Water-gas shift (WGS) reaction in membrane reactors
- Catalysts development for the conversion of CO<sub>2</sub>-H<sub>2</sub> mixtures into methanol and dimethylether.
- Glycerol reforming for the production of hydrogen, hydrocarbons and higher alcohols.

In the field of *Photocatalysis*, current research activities are focused on:

- Production of hydrogen by photocatalytic reforming of biomass components and derivatives at ambient conditions.
- Investigation of photocatalytic reaction mechanisms.
- Development of novel photocatalyst formulations with improved absorption characteristics in the solar spectral region.
- Photocatalytic treatment of wastewater streams containing emerging micro-contaminants.

### **Laboratorial experience**

- Design, construction and operation of experimental apparatuses and reactors for the investigation of reactions under steady state and transient conditions.
- Preparation and characterization of catalytic and solid materials employing various techniques.
- Analytical techniques:
  - ✓ Gas Chromatography (GC)
  - ✓ Mass Spectrometry (MS)
  - ✓ UV/Visible Spectroscopy
  - ✓ Fourier Transform Infrared Spectroscopy (FTIR)
  - ✓ Diffuse Reflectance Spectroscopy (DRS)
  - ✓ Gas Chromatography/Mass Spectrometry (GC-MS)
  - ✓ X-ray Diffraction (XRD)
  - ✓ TPD, TPR, TPO, Kinetic measurements
  - ✓ Techniques of measurement of total and exposed metallic surface area (BET method, selective chemisorption of gases)
  - ✓ Techniques of analytical chemistry
  - ✓ Operation and usage of laboratorial and mechanical equipment

### **FUNDED RESEARCH**

Coordinator of **1** research project and member of the research group in **10** projects funded by EU and GSRT/HELLAS:

- “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
- “Development and demonstration of complete process for the production of electrical energy from fuel cells through intermediate production of H<sub>2</sub> 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)
- “Production of clean hydrogen for fuel cells by reformation of bioethanol” (BIO-H<sub>2</sub>). ENERGY. Contract No.:ERK6-CT99-00012 (01.05.2001 – 31.07.2001).
- “Optimization of catalytic units of a novel process for the production of electricity from biomass for stationary applications” (PENED 2001). Contract No.: 01ED561 (2001-2005).
- “POMA-Proficient methods of liquid wastes process and gas pollutants inactivation”. Contract No.: 03EAD13 (2003-2004).
- “Production of bio-fuels and energy with fuel cells via hydrogen”. Contract No.: DEL23, (2000-2006).

- “Biomass Resource Use, Innovation and Efficiency-BRIE”, Interreg III C-East, RFO, INNOREF.
- “BIOELECTRICITY: Efficient and clean production of electricity from biomass via pyrolyses oil and hydrogen utilizing fuel”. Contract No.: ENK5-CT2002-00634 (2002-2005).
- “Development and Pilot Plant Demonstration of Hydrogen Production from Solar Energy and Biomass (Waste) Compounds and Derivatives at Ambient Conditions Mediated by Nanostructured Photocatalysts”. E.ON Research Initiative, Contract No.: 2008/24\_DCE-UoPatras (Feb2009 – Jan 2012).
- “Production of Energy Carriers from Biomass By-Products. Glycerol Reforming for the production of Hydrogen, Hydrocarbons and higher Alcohols”. Operational Program “Education and Lifelong Learning” of the National Strategic Reference Framework (NSRF)-Research Funding Program: Thales. Investing in knowledge society through the European Social Fund (2011-2015).
- “New catalytic processes for the production of second generation biofuels” Operational Program “Education and Lifelong Learning” of the National Strategic Reference Framework (NSRF)-Research Funding Program: Thales. Investing in knowledge society through the European Social Fund (2011-2015).

## **PUBLICATIONS**

- |  |    |
|--|----|
| • International Refereed Journals:                     | 47 |
| • Book Chapters  | 2  |
| <i>For details please refer to Appendix (TABLE 1).</i> |    |
| • Presentations in International Conferences:          | 43 |
| • Presentations in National Conferences                | 24 |

## **CITATIONS**

- |  |      |
|--|------|
| • Number of citations:                                 | 3508 |
| <i>For details please refer to Appendix (TABLE 2).</i> |      |
| • Hirsch index ( <i>h</i> parameter)                   | 30   |

## **REFeree IN INTERNATIONAL SCIENTIFIC JOURNALS**

- Referee in 24 international scientific journals (120 articles)  
*For details please refer to Appendix (TABLE 3).*

## **REFeree IN NATIONAL/INTERNATIONAL CONFERENCES PROCEEDINGS**

- EUROPACAT-IX, Salamanca, Spain, August 30- September 4, 2009

- 1st Online Conference of Young Scientists "on" Mineral Resources-Environment-Chemical Engineering, Kozani, 26-28 February 2021

### **MEMBERSHIPS OF EDITORIAL BOARDS**

- Guest Editor for the Special Issue on the "Advances in Biorefinery" of BioMed Research International

### **SEMINARS – INVITED LECTURES**

- «Catalytic Transfer Hydrogenation for Upgrade of Furans», Web-Seminar, November 13, 2013, Catalysis Center for Energy Innovation, University of Delaware, Newark, Delaware, U.S.A.

### **SUPERVISION OF M.Sc./Ph.D THESES**

- (a) Supervision of a Ph.D thesis of the Postgraduate Studies Program of the School of Environmental Engineering, Technical University of Crete:
  1. **Alice Koka**, "Photocatalytic degradation of emerging micro-contaminants contained in wastewater streams with the use of promoted-TiO<sub>2</sub> catalysts" (January 2017-today).
  2. **Athanasios Androulakis**, "Catalytic processes of dry CH<sub>4</sub> reforming and enrichment of syngas in H<sub>2</sub> via the Water-gas Shift reaction" (December 2020-today).
- (b) Supervision of Master of Science (M.Sc.)
  - Diploma theses of the Postgraduate Studies Program of the School of Environmental Engineering, Technical University of Crete:
    1. **Alice Koka**, "Synthseis, characterization and application of nitrogen- and silver-promoted TiO<sub>2</sub> catalysts" (2015-2017).
    2. **Maria Chatzisyneon**, "Catalytic hydrogenation of CO<sub>2</sub> over supported Ru and Ni catalysts" (2017-today).
  - Diploma theses of the Postgraduate Studies Program "Catalysis and Environmental Protection" of the School of Science and Technology of the Hellenic Open University:
    1. **Ioanna Kostoudi**, "Current developments in hydrogen storage in carbonaceous adsorbents" (2011-2012).
    2. **Chrystalla Papakonstantinou**, "Development of methods which rely on technology of membranes for the separation of CO<sub>2</sub> from other gases" (2012-2013).
    3. **Eleni Tsantefski**, "Anti-pollution technologies for the elimination of the emission of gaseous pollutants and suspended particles produced by the combustion of lignite in power plants" (2017-today).
    4. **Spyridon Tsihlias**, "The effect of aerosols as formation of secondary atmospheric particles and ions and as effective catalysts in atmospheric chemical processes and pollution" (2018-2019).
    5. **Anastasios Karatasos**, "Presentation of an integrated hydrogen production unit through steam reforming of natural gas" (2019-2020).

### **SUPERVISION OF DIPLOMA THESES**

- (a) Supervision of Diploma Theses elaborated at the School of Environmental Engineering, Technical University of Crete:

1. **Ioanna-Idyli Betsi-Argyropoulou**, “Structural characterization and reducibility of platinum and nickel catalysts supported on mixed oxides for the reaction of selective oxidation of carbon monoxide in excess of hydrogen” (2014-2015).
2. **Valeria Stefanidi**, “Effect of operating parameters on the photocatalytic degradation of emerging micro-contaminants contained in wastewater streams with the use of silver-promoted TiO<sub>2</sub> catalysts” (2017-today).
3. **Chariton Kapenekakis**, “Investigation of CO<sub>2</sub> methanation reaction over supported Ru and Ni catalysts”(2017-today).
4. **Christos Valiatzas**, “Hydrogen production via steam reforming of propane over supported metal catalysts” (2017-2018).
5. **Konstantina Tsatsalidi**, “Effect of the nature of the support, metal and metallic particle size on the catalytic performance for the reaction of propane steam reforming” (2019-2020).
6. **Alexandra Florou**, «Propane steam reforming over supported Ru and Rh catalysts” (2020).

#### **MEMBER SELECT COMMITTEE**

- **Member of a seven-member committee of one (1)** Ph.D. thesis elaborated at the Department of Chemical Engineering, University of Patras.
- **Member of a five-member committee of two (2)** Ph.D. theses elaborated at the Department of Chemical Engineering (School of Chemical Sciences/ Agricultural Technical School) of the University of Castilla-La-Mancha, Ciudad Real, Spain.
- **Member of a three-member committee of four (4)** Ph.D. theses which are elaborated at the School of Environmental Engineering, Technical University of Crete
- **Member of a three-member committee of thirteen (13)** M.Sc theses elaborated at the School of Environmental Engineering, Technical University of Crete.
- **Member of a three-member committee of thirty three (33) Diploma** theses elaborated at the School of Environmental Engineering, Technical University of Crete

#### **PARTICIPATION IN SEMINARS:**

- 2<sup>nd</sup> EFCATS School on Catalysis, “New Approaches on Catalysis Research and Catalyst Application” Tihany, Hungary, 25-29 September 2002.
- “Production of Hydrogen from conventional fuels and renewable sources”, Patras, Greece, 3-11 May 2004.
- “Fuel Cells in mobile and stationary applications”, Patras, Greece, 13-21 May 2004.
- “Production of Hydrogen from bio-gas, and combustion of it by using fuel cells, for production of electricity with zero emissions”, Patras, Greece, 21-27 May 2004.
- “Catalytic and Photocatalytic Methods for the decomposition of liquid and gas environmental pollutants”, Patras, Greece, 14-25 June 2004.
- Workshop: “Nanostructured Oxide Catalysts Prepared by Non-conventional Methods and Their Characterization”, Valencia, Spain, 4-5 June 2004.
- “Exploitation of research and technological (R&T) knowledge” (PENED 2001 of GSRT/HELLAS), Patras, Greece 21 March-14 June, 2005.

- “Applications of photocatalysis and electrocatalysis on energy and environmental applications”, Patras, Greece, January 2008.

### **LANGUAGES:**

- English (First Certificate in English of University of Cambridge)

### **COMPUTER KNOWLEDGE**

- Certificate of computer knowledge ECDL Hellas A.E (Microsoft Word XP, Microsoft Excel XP, Internet).

### **PROFESSIONAL MEMBERSHIPS**

- Member of the Technical Chamber of Greece (T.C.G.).

### **LIST OF PUBLICATIONS**

#### **A. INTERNATIONAL REFEREED JOURNALS**

- A1. **P. Panagiotopoulou**, D.I. Kondarides, “Effect of morphological characteristics of TiO<sub>2</sub>-supported noble metal catalysts on their activity for the Water-Gas Shift Reaction”, Journal of Catalysis 225 (2004) 327-336.  
<https://doi.org/10.1016/j.jcat.2004.04.030>
- A2. **P. Panagiotopoulou**, D.I. Kondarides, “Effect of the nature of the support on the catalytic performance of noble metal catalysts for the Water-Gas Shift Reaction”, Catalysis Today 112 (2006) 49-52.  
<https://doi.org/10.1016/j.cattod.2005.11.026>
- A3. **P. Panagiotopoulou**, A. Christodoulakis, D.I. Kondarides, S. Boghosian, “Particle size effects on the reducibility of titanium dioxide and its relation to the Water-Gas Shift activity of Pt/TiO<sub>2</sub> catalysts”, Journal of Catalysis 240 (2006) 114-125.  
<https://doi.org/10.1016/j.jcat.2006.03.012>
- A4. **P. Panagiotopoulou**, D.I. Kondarides, “A comparative study of the water-gas shift activity of Pt catalysts supported on single (MO<sub>x</sub>) and composite (MO<sub>x</sub>/Al<sub>2</sub>O<sub>3</sub>, MO<sub>x</sub>/TiO<sub>2</sub>) metal oxide carriers”, Catalysis Today 127 (2007) 319-329.  
<https://doi.org/10.1016/j.cattod.2007.05.010>
- A5. **P. Panagiotopoulou**, J. Papavasiliou, G. Avgouropoulos, T. Ioannides, D.I. Kondarides, “Water-gas Shift activity of doped Pt/CeO<sub>2</sub> catalysts”, Chemical Engineering Journal 134 (2007) 16-22.  
<https://doi.org/10.1016/j.cej.2007.03.054>
- A6. **P. Panagiotopoulou**, D.I. Kondarides, X.E. Verykios, “Selective methanation of CO over supported noble metal catalysts: Effects of the nature of the metallic phase on catalytic performance”, Applied Catalysis A: General 344 (2008) 45-54.  
<https://doi.org/10.1016/j.apcata.2008.03.039>

- A7. **P. Panagiotopoulou**, D.I. Kondarides, "Effects of alkali additives on the physicochemical characteristics and chemisorptive properties of Pt/TiO<sub>2</sub> catalysts", *Journal of Catalysis*, 260 (1) (2008) 141-149.  
<https://doi.org/10.1016/j.jcat.2008.09.014>
- A8. A.C. Basagiannis, **P. Panagiotopoulou**, X.E. Verykios, "Low temperature steam reforming of ethanol over supported noble metal catalysts", *Topics in Catalysis* 51(1-4) (2008) 2-12.  
<https://doi.org/10.1007/s11244-008-9130-z>
- A9. **P. Panagiotopoulou**, D.I. Kondarides, X.E. Verykios, "Selective methanation of CO over supported Ru catalysts", *Applied Catalysis B: Environmental* 88 (2008), 470-478.  
<https://doi.org/10.1016/j.apcatb.2008.10.012>
- A10. C.M. Kalamaras, **P. Panagiotopoulou**, D.I. Kondarides, A.M. Efstathiou, "Kinetic and mechanistic studies of the water-gas shift reaction on Pt/TiO<sub>2</sub> catalyst", *Journal of Catalysis* 264 (2009) 117-129.  
<https://doi.org/10.1016/j.jcat.2009.03.002>
- A11. **P. Panagiotopoulou**, D.I. Kondarides, "Effects of alkali-promotion of TiO<sub>2</sub> on the chemisorptive properties and water-gas shift activity of supported noble metal catalysts", *Journal of Catalysis* 267 (2009) 57-66.  
<https://doi.org/10.1016/j.jcat.2009.07.014>
- A12. **P. Panagiotopoulou**, M. Antoniadou, D.I. Kondarides, P. Lianos, "Aldol condensation products during photocatalytic oxidation of ethanol in a photoelectrochemical cell", *Applied Catalysis B: Environmental* 100 (2010) 124-132.  
<https://doi.org/10.1016/j.apcatb.2010.07.021>
- A13. V. Jiménez, P. Sánchez, **P. Panagiotopoulou**, J.L. Valverde, A. Romero, "Methanation of CO, CO<sub>2</sub> and selective methanation of CO, in mixtures of CO and CO<sub>2</sub>, over ruthenium carbon nanofibers catalysts", *Applied Catalysis A: General* 390 (2010) 35-44.  
<https://doi.org/10.1016/j.apcata.2010.09.026>
- A14. **P. Panagiotopoulou**, D.I. Kondarides, "Effects of promotion of TiO<sub>2</sub> with alkaline earth metals on the chemisorptive properties and water-gas shift activity of supported platinum catalysts", *Applied Catalysis B: Environmental* 101 (2011) 738-746.  
<https://doi.org/10.1016/j.apcatb.2010.11.016>
- A15. **P. Panagiotopoulou**, D.I. Kondarides, X.E. Verykios, "Chemical reaction engineering and catalysis issues in future distributed power generation systems", *Industrial and Engineering Chemistry Research* 50 (2011) 523-530.  
<https://doi.org/10.1021/ie100132g>
- A16. **P. Panagiotopoulou**, D.I. Kondarides, X.E. Verykios, "Mechanistic study of the selective methanation of CO over Ru/TiO<sub>2</sub> catalyst: Identification of active surface species and reaction pathways", *The Journal of Physical Chemistry C* 115 (2011) 1220-1230.  
<https://doi.org/10.1021/jp106538z>



- A17. V. Jiménez, P. Sánchez, **P. Panagiotopoulou**, J.L. Valverde, A. Romero, "Synthesis and characterization of ruthenium supported on carbon nanofibers with different graphitic plane arrangements", *Chemical Engineering Journal*, 168 (2011) 947-954.  
<https://doi.org/10.1016/j.cej.2011.02.024>
- A18. V.M. Daskalaki, **P. Panagiotopoulou**, D.I. Kondarides, "Production of peroxide species in Pt/TiO<sub>2</sub> suspensions under conditions of photocatalytic water splitting and glycerol photoreforming", *Chemical Engineering Journal*.170 (2011) 433-439.  
<https://doi.org/10.1016/j.cej.2010.11.093>
- A19. **P. Panagiotopoulou**, D.I. Kondarides, X.E. Verykios, "Mechanistic aspects of the selective methanation of CO over Ru/TiO<sub>2</sub> catalyst", *Catalysis Today* 181 (2012) 138-147.  
<https://doi.org/10.1016/j.cattod.2011.05.030>
- A20. H. Dimitroula, V.M. Daskalaki, Z. Frontistis, D.I. Kondarides, **P. Panagiotopoulou**, N.P. Xekoukoulotakis, D. Mantzavinos, "Solar photocatalysis in Pt/TiO<sub>2</sub> suspensions for the abatement of emerging micro-contaminants in wastewater", *Applied Catalysis B: Environmental* 117-118 (2012) 283-291.  
<https://doi.org/10.1016/j.apcatb.2012.01.024>
- A21. M. Antoniadou, **P. Panagiotopoulou**, D.I. Kondarides, P. Lianos, "Photocatalysis and photoelectrocatalysis using nanocrystalline titania alone or combined with Pt, RuO<sub>2</sub> or NiO co-catalysts", *Journal of Applied Electrochemistry* 42 (9) (2012) 737-743.  
<https://doi.org/10.1007/s10800-012-0408-2>
- A22. **P. Panagiotopoulou**, X.E. Verykios, "Mechanistic aspects of the low temperature steam reforming of ethanol over supported Pt catalysts", *International Journal of Hydrogen Energy*, 37 (21) (2012) 16333-16345.  
<https://doi.org/10.1016/j.ijhydene.2012.02.087>
- A23. J. Sutton, **P. Panagiotopoulou**, X. Verykios, D.G. Vlachos, "Combined DFT, Microkinetic, and Experimental Study of Ethanol Steam Reforming on Pt", *The Journal of Physical Chemistry C* 117 (9) (2013) 4691-4706.  
<https://doi.org/10.1021/jp312593u>
- A24. **P. Panagiotopoulou**, E.E. Karamerou, D.I. Kondarides, "Kinetics and mechanism of glycerol photo-oxidation and photo-reforming reactions in aqueous TiO<sub>2</sub> and Pt/TiO<sub>2</sub> suspensions". *Catalysis Today* 209 (2013) 91-98.  
<https://doi.org/10.1016/j.cattod.2012.09.029>
- A25. **P. Panagiotopoulou**, C. Papadopoulou, H. Matralis, X. Verykios, "Production of renewable hydrogen by reformation of biofuels", *Wiley Interdisciplinary Reviews: Energy and Environment*, 3 (3) (2014) 231-253.  
<https://doi.org/10.1002/wene.93>
- A26. **P. Panagiotopoulou**, N. Martin, D.G. Vlachos, "Effect of hydrogen donor on liquid phase catalytic transfer hydrogenation of furfural over a Ru/C catalyst", *Journal of molecular catalysis A: Chemical* 392 (2014) 223-228.  
<https://doi.org/10.1016/j.molcata.2014.05.016>

- A27. S.S. Akarmazyan, **P. Panagiotopoulou**, A. Kambolis, C. Papadopoulou and D.I. Kondarides, "Methanol dehydration to dimethylether over  $\text{Al}_2\text{O}_3$  catalysts". Applied Catalysis B: Environmental 145 (2014) 136-148.  
<https://doi.org/10.1016/j.apcatb.2012.11.043>
- A28. G.N. Nomikos, **P. Panagiotopoulou**, D.I. Kondarides and X.E. Verykios, "Kinetic and mechanistic study of the photocatalytic reforming of methanol over  $\text{Pt/TiO}_2$  catalyst", Applied Catalysis B: Environmental 146 (2013) 249-257.  
<https://doi.org/10.1016/j.apcatb.2013.03.018>
- A29. **P. Panagiotopoulou**, D.G. Vlachos, Liquid Phase Catalytic Transfer Hydrogenation of Furfural Over Ru/C Catalyst, Applied Catalysis A: General 480 (2014) 17-24.  
<https://doi.org/10.1016/j.apcata.2014.04.018>
- A30. M. Kourtelesis, **P. Panagiotopoulou**, S. Ladas, X.E. Verykios "Influence of the support on the reaction network of ethanol steam reforming at low temperatures over Pt catalysts". Topics in Catalysis 58 (18) (2015) 1202-1217.  
<https://doi.org/10.1007/s11244-015-0485-7>
- A31. A.V. Mironenko, M.J. Gilkey, **P. Panagiotopoulou**, G. Facas, D.G. Vlachos, B. Xu "[Ring Activation of Furanic Compounds on Ruthenium-Based Catalysts](#)" J. Phys. Chem. C, 2015, 119 (11), pp 6075–6085.  
<https://doi.org/10.1021/jp512649b>
- A32. [I. V. Yentekakis](#), [G. Goula](#), **P. Panagiotopoulou**, [A. Katsoni](#), E. Diamadopoulos, D. Mantzavinos, A. Delimitis "Dry Reforming of Methane: Catalytic Performance and Stability of Ir Catalysts Supported on  $\gamma\text{-Al}_2\text{O}_3$ ,  $\text{Zr}_{0.92}\text{Y}_{0.08}\text{O}_{2-\delta}$  (YSZ) or  $\text{Ce}_{0.9}\text{Gd}_{0.1}\text{O}_{2-\delta}$  (GDC) Supports". Topics in Catalysis 58 (18) (2015) 1228-1241.  
<https://doi.org/10.1007/s11244-015-0490-x>
- A33. M.J. Gilkey, **P. Panagiotopoulou**, A.V. Mironenko, G.R. Jenness, D.G. Vlachos, B. Xu "[Mechanistic Insights into Metal Lewis Acid-Mediated Catalytic Transfer Hydrogenation of Furfural to 2-Methylfuran](#)" ACS catalysis 5 (2015) 3988-3994.  
<https://doi.org/10.1021/acscatal.5b00586>
- A34. **P. Panagiotopoulou**, N. Martin, D.G. Vlachos "Liquid phase catalytic transfer hydrogenation of furfural over homogeneous Lewis acid-Ru/C catalysts" ChemSusChem, 8 (12) (2015) 2046-2054.  
<https://doi.org/10.1002/cssc.201500212>  
**Panagiotopoulou, P.**, Martin, N. and Vlachos, D. G. (2015), [Inside Cover: Liquid-Phase Catalytic Transfer Hydrogenation of Furfural over Homogeneous Lewis Acid–Ru/C Catalysts](#) (ChemSusChem 12/2015). ChemSusChem, 8: 1990. doi:10.1002/cssc.201500748  
<https://doi.org/10.1002/cssc.201500748>
- A35. M.Kourtelesis, **P. Panagiotopoulou**, X.E. Verykios "Influence of structural parameters on the reaction of low temperature ethanol steam reforming over  $\text{Pt/Al}_2\text{O}_3$  catalysts" Catalysis Today 258 (2015) 247-255.  
<https://doi.org/10.1016/j.cattod.2014.12.035>

- A36. I.V. Yentekakis, G. Goula, **P. Panagiotopoulou**, S. Kampouri, M.J. Taylor, G. Kyriakou, R.M. Lambert “Stabilization of catalyst particles against sintering on oxide supports with high oxygen ion lability exemplified by Ir-catalyzed decomposition of N<sub>2</sub>O” *Applied Catalysis B: Environmental* 192 (2016) 357-364.  
<https://doi.org/10.1016/j.apcatb.2016.04.011>
- A37. **P. Panagiotopoulou**, “Hydrogenation of CO<sub>2</sub> over supported noble metal catalysts” *Applied Catalysis A: General* 542 (2017) 63-70.  
<https://doi.org/10.1016/j.apcata.2017.05.026>
- A38. **P. Panagiotopoulou**, X.E. Verykios, “Mechanistic Study of the Selective Methanation of CO over Ru/TiO<sub>2</sub> Catalysts: Effect of Metal Crystallite Size on the Nature of Active Surface Species and Reaction Pathways” *The Journal of Physical Chemistry C* 121 (9) (2017) 5058–5068.  
<https://doi.org/10.1021/acs.jpcc.6b12091>
- A39. M.A. Goula, N.D. Charisiou, G. Siakavelas, L. Tzounis, I. Tsiaoussis, **P. Panagiotopoulou**, G. Goula, I.V. Yentekakis “Syngas production via the biogas dry reforming reaction over Ni supported on zirconia modified with CeO<sub>2</sub> or La<sub>2</sub>O<sub>3</sub> catalysts, ”, *International Journal of Hydrogen Energy* 42 (19) (2017) 13724-13740.  
<https://doi.org/10.1016/j.ijhydene.2016.11.196>
- A40. I. V. Yentekakis, G. Goula, S. Kampouri, I. Betsi-Argyropoulou, **P. Panagiotopoulou**, M. J. Taylor, G. Kyriakou, R. M. Lambert “Ir-Catalysed Nitrous oxide (N<sub>2</sub>O) Decomposition: Effect of Ir Particle Size and Metal–Support Interactions” *Catalysis Letters* 148 (1) (2017) 341-347 .  
<https://doi.org/10.1007/s10562-017-2233-z>
- A41. A. Petala, **P. Panagiotopoulou** “Methanation of CO<sub>2</sub> over alkali-promoted Ru/TiO<sub>2</sub> catalysts: I. Effect of alkali additives on catalytic activity and selectivity”, *Applied Catalysis B: Environmental* 224 (2018) 919-927.  
<https://doi.org/10.1016/j.apcatb.2017.11.048>
- A42. **P. Panagiotopoulou** “Methanation of CO<sub>2</sub> over alkali-promoted Ru/TiO<sub>2</sub> catalysts: II. Effect of alkali additives on the reaction pathway”, *Applied Catalysis B: Environmental* 236 (2018) 162-170.  
<https://doi.org/10.1016/j.apcatb.2018.05.028>
- A43. T. Makropoulou, **P. Panagiotopoulou**, D. Venieri “N-doped TiO<sub>2</sub> photocatalysts for bacterial inactivation in water” *Journal of Chemical Technology and Biotechnology* 93 (9) (2018) 2518-2526.  
<https://doi.org/10.1002/jctb.5639>
- A44. A. Kokka, T. Ramantani, A. Petala, **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”, *Catalysis Today* 355 (2020) 832-843.  
<https://doi.org/10.1016/j.cattod.2019.04.015>

- A45. G. Bamos, P. Bika, **P. Panagiotopoulou**, X.E. Verykios “Reactive adsorption of CO from low CO concentrations streams on the surface of Pd/CeO<sub>2</sub> catalysts”, *Applied Catalysis A: General* 588 (2019) 117305.  
<https://doi.org/10.1016/j.apcata.2019.117305>
- A46. A. Kokka, A. Katsoni, I.V. Yentekakis, **P. Panagiotopoulou** “Hydrogen production via steam reforming of propane over supported metal catalysts” *International Journal of Hydrogen Energy*, 45(29) (2020) 14849-14866.  
<https://doi.org/10.1016/j.ijhydene.2020.03.194>
- A47. M. Hatzisymeon, A. Petala, **P. Panagiotopoulou** “Carbon dioxide hydrogenation over supported Ni and Ru catalysts” *Catalysis Letters*, *in press*.  
<https://doi.org/10.1007/s10562-020-03355-0>

## **Notes**

Article A1 was among the 25 Hottest Articles of Journal of Catalysis for the period of July-September 2004.

<http://top25.sciencedirect.com/subject/chemical-engineering/5/journal/journal-of-catalysis/00219517/archive/1/>

Article A2 was among the Most Cited Articles of Catalysis Today for various periods.

Article A3 και A10 were among the 25 Hottest Articles of Journal of Catalysis for the period of April-September 2009.

<http://top25.sciencedirect.com/subject/chemical-engineering/5/journal/journal-of-catalysis/00219517/archive/22/>

Article A4 was among the 25 Hottest Articles of Chemical Engineering Journal for the period of October-December 2007.

<http://top25.sciencedirect.com/subject/chemical-engineering/5/journal/chemical-engineering-journal/13858947/archive/14/>

Article A17 was among the Top Cited Papers of Chemical Engineering Journal for 2011 and 2012

<http://www.journals.elsevier.com/chemical-engineering-journal/highlighted-articles/congratulations-to-our-most-cited-authors-2011-2012cej/>

Article A28 was among the 25 Hottest Articles of Applied Catalysis A for the period of July-September 2014.

<http://top25.sciencedirect.com/subject/chemical-engineering/5/journal/applied-catalysis-a-general/0926860X/archive/53/>

## **B. BOOK CHAPTERS**

- B1. **P. Panagiotopoulou**, C. Papadopoulou, H. Matralis and X. Verykios (2016) Production of Renewable Hydrogen by Reformation of Biofuels, in *Advances in Bioenergy: The Sustainability Challenge* (eds P. D. Lund, J. Byrne, G. Berndes and I. A. Vasalos), John Wiley & Sons, Ltd, Oxford, UK.

<https://doi.org/10.1002/9781118957844.ch9>

- B2. **Paraskevi Panagiotopoulou** and Xenophon E. Verykios, Metal–support interactions of Ru-based catalysts under conditions of CO and CO<sub>2</sub> hydrogenation , in *Catalysis: Volume 32*, 2020, pp. 1-23 ((eds James Spivey, Yi-Fan Han, Dushyant Shekhawat))

DOI: [10.1039/9781788019477-00001](https://doi.org/10.1039/9781788019477-00001) . From Book Series: [SPR - Catalysis](#)

### C. PRESENTATIONS IN INTERNATIONAL CONFERENCES

- C1. P.C. Panagiotopoulou and D.I. Kondarides, “Noble Metal-Based Water Gas Shift Catalysts for Fuel Cell Applications”, EUROPACAT-VI, Innsbruck, Austria, August 31 – September 04, 2003.
- C2. P. Panagiotopoulou and D.I. Kondarides, “Effects of Physicochemical and Morphological Properties of Supported Noble Metal Catalysts on their Activity for the Water-Gas Shift Reaction”, 13th International Congress on Catalysis, Paris, 11-16 July 2004.
- C3. P. Panagiotopoulou and D.I. Kondarides, “Effect of the nature of the support on the catalytic performance of noble metal catalysts for the Water-Gas Shift Reaction”, 1<sup>st</sup> Conference of the Coordination Action CONCORDE, CO-ordination of Nanostructured Catalytic Oxides Research and Development in Europe, Louvain-la-Neuve (Belgium), January 26-28, 2005.
- C4. P. Panagiotopoulou and D.I. Kondarides, “Development of efficient low-temperature Water-Gas Shift catalysts suitable for fuel cell applications”, The Hydrogen Power Theoretical and Engineering Solutions International Symposium, HYPOTHESIS VI, Habana City, Cuba, 08-12 May, 2005.
- C5. P. Panagiotopoulou and D.I. Kondarides, “Investigation of the Water-Gas Shift reaction over alkali-promoted Pt/TiO<sub>2</sub> catalysts”, EUROPACAT-VII, Sofia, Bulgaria, 28 August – 1 September, 2005.
- C6. P. Panagiotopoulou, A. Christodoulakis, D.I. Kondarides, S. Boghosian, “Effect of crystallite size of titanium dioxide on the reducibility of Pt/TiO<sub>2</sub> catalysts studied by TPR and in-situ Raman techniques”, 2<sup>nd</sup> Conference of the Coordination Action CONCORDE, "CO-ordination of Nanostructured Catalytic Oxides Research and Development in Europe", Thessaloniki, January 26-28, 2006.
- C7. P. Panagiotopoulou, J. Papavasiliou, G. Avgouropoulos, T. Ioannides, D.I. Kondarides, “Water-gas shift activity of doped Pt/CeO<sub>2</sub> catalysts”, XVII International Conference on Chemical Reactors (CHEMREACTOR-17), May 15-19, 2006, Athens-Crete, Greece.
- C8. P. Panagiotopoulou and D.I. Kondarides, “A comparative study of the water-gas shift activity of Pt catalysts supported on single (MO<sub>x</sub>) and composite (MO<sub>x</sub>/Al<sub>2</sub>O<sub>3</sub>, MO<sub>x</sub>/TiO<sub>2</sub>) metal oxide carriers”, Hydrocarbon Catalysis and Catalytic Engineering: Present Status and Perspectives, Sifnos, Greece, June 29-30, 2007.
- C9. P. Panagiotopoulou and D.I. Kondarides, “Identification of Key Physicochemical Parameters which Determine the Water-Gas Shift Activity of Oxide-Supported Platinum Catalysts”, EUROPACAT VIII, Turku, Finland, August 26-31, 2007.
- C10. P. Panagiotopoulou, D.I. Kondarides and X.E. Verykios, “Selective Methanation of CO over Supported Noble Metal Catalysts”, EUROPACAT VIII, Turku, Finland, August 26-31, 2007.
- C11. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios, “Selective Methanation of CO over Supported Noble Metal Catalysts”, 5<sup>th</sup> International Conference on Environmental Catalysis. Belfast, Northern Ireland, August 31-September 3, 2008.

- C12. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios, "Selective methanation of CO over supported noble metal catalysts", EUROPACAT IX, Salamanca, Spain, Aug. 30 – Sep.4, 2009.
- C13. P. Panagiotopoulou, X.E. Verykios, "WGS reaction in a membrane reactor" EUROPACAT-IX, Salamanca, Spain, Aug. 30 – Sep.4, 2009.
- C14. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios "Chemical Reaction Engineering & Catalysis in Future Distributed Power Generation Systems" New Frontiers in Chemical & Biochemical Engineering in Honor of Professors Anastasios Karabelas and Stavros Nychas, Thessaloniki, Greece, November 26-27, 2009.
- C15. V.M. Daskalaki, P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios, "Production of hydrogen by photocatalytic reforming of biomass components and derivatives in aqueous Pt/TiO<sub>2</sub> suspensions", Catalysis for renewable sources: Fuel, Energy, Chemicals, St. Petersburg, Russia, June 28 - July 2, 2010.
- C16. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios "Low temperature steam reforming of ethanol over supported noble metal catalysts", International Conference on Hydrogen Production (ICH2P-2011), Thessaloniki, Greece, June 19 -22, 2011.
- C17. M. Antoniadou, P. Panagiotopoulou, D.I. Kondarides, P. Lianos, "Photocatalysis and photoelectrocatalysis using nanocrystalline titania alone or combined with Pt, RuO<sub>2</sub> or NiO co-catalysts", 9th European Symposium on Electrochemical Engineering (9th ESEE), Chania, Crete, Greece, June 19 - 23, 2011.
- C18. V. Jiménez, P. Sánchez, P. Panagiotopoulou, J.A. Diaz, J.L. Valverde, A. Romero, "Methanation of CO, CO<sub>2</sub> and selective CO methanation in mixtures of CO and CO<sub>2</sub>, over catalysts based on ruthenium supported carbon nanofibres", EUROPACAT-X, Glasgow, Scotland, Aug. 28 – Sep, 2011.
- C19. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios, "Mechanistic aspects of the selective methanation of CO over Ru/TiO<sub>2</sub> catalyst", EUROPACAT-X, Glasgow, Scotland, Aug. 28 – Sep, 2011.
- C20. P. Panagiotopoulou, X.E. Verykios, "Efficient Production of Renewable Hydrogen by Reformation of Ethanol at Low Temperature", World Hydrogen Energy Conference 2012 Toronto, 3-7 June, 2012.
- C21. P. Panagiotopoulou, D.I. Kondarides, "Kinetics and mechanism of glycerol photo-oxidation and photo-reforming reactions in aqueous TiO<sub>2</sub> and Pt/TiO<sub>2</sub> suspensions" 7th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications /SPEA7, Porto, Portugal, June 17-20, 2012.
- C22. M. Antoniadou, P. Panagiotopoulou, D.I. Kondarides, P. Lianos, "Photoelectrocatalysis using nanocrystalline titania alone or combined with various co-catalysts" 7th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications /SPEA7, Porto, Portugal, June 17-20, 2012.
- C23. P. Panagiotopoulou, X.E. Verykios, "Low temperature steam reforming of ethanol over supported Pt catalysts", CAT4BIO Conference, Advances in catalysis for biomass valorization, Thessaloniki, July 8-11, 2012.
- C24. P. Panagiotopoulou, X.E. Verykios, "Low temperature steam reforming of ethanol over supported Pt catalysts", 7<sup>th</sup> International Conference on Environmental Catalysis, Lyon, France, September 2-6, 2012.

- C25. G.N. Nomikos, P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios, "Kinetic and mechanistic study of the photocatalytic reforming of methanol over Pt/TiO<sub>2</sub> catalyst", 7<sup>th</sup> International Conference on Environmental Catalysis, Lyon, France, September 2-6, 2012.
- C26. P. Panagiotopoulou, X.E. Verykios, "Low temperature steam reforming of ethanol over supported noble metal catalysts", Catalysis Club of Philadelphia annual poster contest, October 18<sup>th</sup>, 2012, Wilmington, U.S.A.
- C27. P. Panagiotopoulou and D.G. Vlachos, "Liquid Phase Catalytic Transfer Hydrogenation of Furfural Over Ru/C Catalyst", Science for our Nation's Energy Future, Energy Frontier Research Centers Principal Investigator's Meeting, July 18-19, 2013, Washington, D.C., U.S.A.
- C28. P. Panagiotopoulou and D.G. Vlachos, Catalytic Transfer Hydrogenation for Upgrade of Furans, CCST Annual Research Review, October 10, 2013, University of Delaware, Newark, Delaware, U.S.A.
- C29. P. Panagiotopoulou and D.G. Vlachos, Liquid Phase Catalytic Transfer Hydrogenation of Furfural over Ru/C Catalyst, Catalysis Club of Philadelphia annual poster contest, October 24<sup>th</sup>, 2013, Wilmington, Delaware, U.S.A.
- C30. M. Kourtelesis, P. Panagiotopoulou and X.E. Verykios, Support and crystallite size effects of Pt catalysts for the low temperature steam reforming of ethanol, 13th International Conference on Clean Energy 2014 (ICCE 2014) June 8-12, 2014 Istanbul, Turkey.
- C31. P. Panagiotopoulou, X.E. Verykios, Structural and mechanistic aspects of low temperature steam reforming of ethanol over supported Pt catalysts. 8th International Conference on Environmental Catalysis (ICEC 2014), Asheville, North Carolina August 24-27 2014.
- C32. N. Martin, P. Panagiotopoulou and D.G. Vlachos, Liquid phase catalytic transfer hydrogenation of furfural over homogeneous Lewis acid-Ru/C catalysts, Catalysis Club of Philadelphia annual poster contest, October 16<sup>th</sup>, 2014, Wilmington, Delaware, U.S.A.
- C33. B. Xu, D.G. Vlachos, P. Panagiotopoulou and M. Gilkey, Mechanistic studies on hydrodeoxygenation of furfural to 2-Methyl furan via ring C-H bond activations, 14AIChE Annual Meeting, Atlanta, GA, USA November 16-21, 2014.
- C34. M.J. Gilkey, P. Panagiotopoulou, B. Xu, D.G. Vlachos, Mechanistic Investigation of the Hydrodeoxygenation of Furfural to 2-methylfuran over Ru/C Using Isotopic Labeling Techniques, 24th North American Catalysis Society Meeting, Pittsburgh, Pennsylvania. June 14-19, 2015.
- C35. R.E. Patet, P. Panagiotopoulou, S. Caratzoulas, D.G. Vlachos "Dehydration Reactions in Lewis Acidic Zeolites" 15AIChE Annual Meeting, Salt Lake City, UT, USA November 8-13, 2015.
- C36. M. Kourtelesis, P. Panagiotopoulou and X.E. Verykios, "Influence of the support on the reaction network of ethanol steam reforming at low temperatures over Pt catalysts", French Conference on Catalysis (FCCat), 23-27 May 2016, Frejus, France.
- C37. M.A. Goula, G. Siakavelas, K.N. Papageridis, N.D. Charisiou, P. Panagiotopoulou, and I.V. Yentekakis "Syngas production via the biogas dry reforming reaction over Ni supported on zirconia modified with CeO<sub>2</sub> or La<sub>2</sub>O<sub>3</sub> catalysts" 21<sup>st</sup> World Hydrogen Energy Conference 2016, June 13-16, 2016 Zaragoza, Spain.
- C38. I.V. Yentekakis, G. Goula, P. Panagiotopoulou, S. Kampouri, M.J. Taylor, G. Kyriakou and R.M. Lambert, "Iridium catalyzed N<sub>2</sub>O decomposition: Effect of the Iridium particle

size and metal-support interactions” Crete 2016, September 27-30, 2016, Chania, Greece.

- C39. T. Makropoulou, P. Panagiotopoulou, D. Venieri “N-doped TiO<sub>2</sub> photocatalysts for bacterial inactivation in water” 5th European conference on environmental applications of advanced oxidation processes June 25-29, 2017, Prague, Czech Republic.

#### **D. PRESENTATIONS IN NATIONAL CONFERENCES**

- D1. P. Panagiotopoulou and D.I. Kondarides, “Development of novel catalytic materials for the Low temperature Water-Gas Shift reaction”, 4<sup>th</sup> Pan-Hellenic scientific conference of Chemical Engineering, Patras, 29-31 May, 2003.
- D2. P. Panagiotopoulou and D.I. Kondarides, “Effect of Physicochemical characteristics of supported noble metal catalysts on their activity for the Water-Gas Shift reaction”, 8<sup>th</sup> Pan-Hellenic Symposium of Catalysis, Agia Napa – Cyprus, 30 October - 1 November 2004.
- D3. P. Panagiotopoulou and D.I. Kondarides, “Kinetic study of the Water-Gas Shift reaction over Pt catalyst supported on TiO<sub>2</sub>”, 5<sup>th</sup> Pan-Hellenic scientific conference of Chemical Engineering, Thessalonica – Greece, 26-28 May, 2005.
- D4. P. Panagiotopoulou and D.I. Kondarides, “Effect of the addition of promoters over Pt/TiO<sub>2</sub> catalysts on their activity for the Water-Gas Shift reaction”, 9<sup>th</sup> Pan-Hellenic Symposium of Catalysis, Lefkas – Greece, 6-7 October, 2006.
- D5. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios “Selective Methanation of CO over Supported Noble Metal Catalysts”. 6<sup>th</sup> Pan-Hellenic scientific conference of Chemical Engineering, Athens – Greece, 31 May-2 June, 2007.
- D6. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios “Selective Methanation of CO over Supported Noble Metal Catalysts”, 3<sup>rd</sup> National Conference of Hydrogen Technology, Patras– Greece, 19-20 November 2007.
- D7. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios “Selective Methanation of CO over Supported Noble Metal Catalysts”, 10<sup>th</sup> Pan-Hellenic Symposium of Catalysis, Metsovo – Greece, 2-3 October, 2008.
- D8. P. Panagiotopoulou and X.E. Verykios, “WGS reaction in a membrane reactor”, 7<sup>th</sup> Pan-Hellenic scientific conference of Chemical Engineering, Patras – Greece, 3-4 June, 2009.
- D9. P. Panagiotopoulou, D.I. Kondarides, X.E. Verykios “Mechanistic study of the selective methanation of CO over 5%Ru/TiO<sub>2</sub> catalyst”, 11<sup>th</sup> Pan-Hellenic Symposium of Catalysis, Athens 22-23 October, 2010.
- D10. E. Filipaiou, P. Panagiotopoulou, D.I. Kondarides, “Photocatalytic activity of doped TiO<sub>2</sub> catalysts for the reactions of glycerol oxidation and reforming” 11<sup>th</sup> Pan-Hellenic Symposium of Catalysis, Athens 22-23 October, 2010.
- D11. S.S. Akarmazyan, P. Panagiotopoulou, A. Kambolis, Ch. Papadopoulou, D.I. Kondarides, “Methanol dehydration to dimethylether over Al<sub>2</sub>O<sub>3</sub>-based catalysts”, 11<sup>th</sup> Pan-Hellenic Symposium of Catalysis, Athens 22-23 October, 2010.
- D12. A. Petala, P. Panagiotopoulou, D.I. Kondarides, M. Antoniadou, P. Lianos, “Photocatalysis and Photoelectrocatalysis of Nitrogen doped TiO<sub>2</sub> catalysts”, 12<sup>th</sup> Panhellenic Catalysis Symposium, Chania 25-27 October, 2012.



- D13. P. Panagiotopoulou and D. G. Vlachos, "Liquid Phase Catalytic Transfer Hydrogenation of Furfural over a Ru/RuO<sub>2</sub>/C Catalyst", 13th Panhellenic Catalysis Symposium, Palaioi Agios Athanasios, 16-18 October, 2014.
- D14. M.Kourtelesis, P. Panagiotopoulou, X.E. Verykios, "Influence of structural parameters of Pt/Al<sub>2</sub>O<sub>3</sub> catalyst on ethanol steam reforming reaction at low temperatures", 10th Pan-Hellenic scientific conference of Chemical Engineering, Patras, 4-6 June, 2015.
- D15. G. Goula, A. Katsoni, S. Fanouriakis, G. Palioudaki, C. Papageorgiou, P. Panagiotopoulou, E. Diamantopoulos, I. Yentekakis, "Dry biogas reforming: Effect of the nature of the support on the catalytic performance of single- and bi-metallic iridium catalysts", 10th Pan-Hellenic scientific conference of Chemical Engineering, Patras, 4-6 June, 2015.
- D16. M. Goula, G.I. Siakavelas, N.D. Charisiou K.N. Papageridis, D.G. Avraam, P. Panagiotopoulou, I.V. Yentekakis "Syngas production via the biogas dry reforming reaction over Ni supported on zirconia modified with CeO<sub>2</sub> or La<sub>2</sub>O<sub>3</sub> catalysts. 14th Panhellenic Catalysis Symposium, Patras, 13-15 October, 2016.
- D17. I.V. Yentekakis, G. Goula, I. Betsi-Argyropoulou, M. Chatzisyneon, P. Panagiotopoulou, K. Kousi, D.I. Kondarides, M. Taylor, G. Kyriakou, R.M. Lambert, «Biogass reforming over supported Iridium catalysts: The effect of CeO<sub>2</sub> on the catalytic performance and stability", 14th Panhellenic Catalysis Symposium, Patras, 13-15 October, 2016.
- D18. G. Goula, I. Betsi-Argyropoulou, M. Chatzisyneon, P. Panagiotopoulou, K. Kousi, D.I. Kondarides, M. Taylor, G. Kyriakou, R.M. Lambert, I.V. Yentekakis «Investigation of activity, stability and carbon deposition over Rh supported catalysts for the dry reforming of methane", 14th Panhellenic Catalysis Symposium, Patras, 13-15 October, 2016.
- D19. P. Panagiotopoulou "Investigation of the effect of structural characteristics of metal for the reaction of carbon dioxide hydrogenation" 11th Pan-Hellenic scientific conference of Chemical Engineering, Thessaloniki, 25-27 May, 2017.

# **APPENDIX**

**TABLE 1. Publications in refereed journals and impact factors <sup>(\*)</sup>.**

<b>Journal</b>	<b>Impact Factor (2016)</b>	<b>Number of articles</b>	<b>Article code</b>
Applied Catalysis B: Environmental	16.683	9	A9, A12, A14, A20, A27, A28, A36, A41, A42
ACS Catalysis	12.35	1	A33
Chemical Engineering Journal	10.652	3	A5, A17, A18
ChemSusChem	7.962	1	A34
Journal of Catalysis	7.888	5	A1, A3, A7, A10, A11
Catalysis Today	5.825	6	A2, A4, A19, A24, A35, A44
Applied Catalysis A	5.006	5	A6, A13, A29, A37, A45
International Journal of Hydrogen Energy	4.939	3	A22, A39, A46
Journal of molecular catalysis A	4.397	1	A26
The Journal of Physical Chemistry C	4.189	4	A16, A23, A31, A38
Industrial & Engineering Chemistry Research	3.573	1	A15
Wiley Interdisciplinary Reviews: Energy and Environment	2.922	1	A25
Journal of Chemical Technology and Biotechnology	2.750	1	A43
Catalysis Letters	2.482	2	A40, A47
Topics in Catalysis	2.406	3	A8, A30, A32
Journal of Applied Electrochemistry	2.384	1	A21

<sup>(\*)</sup> Source: ISI Web of Knowledge.

**TABLE 2. Citations of articles A1 – A47, B1-2. (\*)**Note: Until October 2020.

#	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
A1	1	9	14	15	12	18	13	24	18	16	14	11	13	11	15	12	7	223
A2			2	14	14	12	18	22	21	30	14	22	10	15	16	11	7	228
A3				9	13	20	10	19	20	18	12	11	11	16	17	16	15	207
A4					2	6	8	13	10	6	9	11	4	5	2	2	2	80
A5					2	12	14	15	14	15	8	10	14	5	4	6	3	122
A6						8	12	24	13	21	20	28	16	18	19	22	16	217
A7						2	1	9	11	9	7	8	1	10	8	5	4	75
A8						3	7	9	9	7	2	11	11	5	6	6	3	79
A9						3	11	19	19	18	14	19	24	10	17	23	10	187
A10						1	7	19	20	17	13	7	11	14	12	7	9	137
A11							4	13	6	6	16	11	8	15	15	7	8	109
A12								1	3	1	4	2	3	2	1	2	2	21
A13								4	5	8	7	8	9	5	7	10	5	68
A14								3	5	6	5	8	8	5	4	4	4	52
A15									6	3	4	7	3	2	0	2	1	28
A16								5	12	9	19	17	19	11	16	14	18	140
A17									1	1	2	3	0	0	0	0	1	8
A18								2	4	12	8	7	11	12	10	9	7	82
A19									1	7	9	14	15	9	10	9	13	87
A20									1	7	5	5	6	7	8	4	3	46
A21										2	3	1	2	5	2	0	0	15
A22										4	12	10	7	2	3	4	3	45
A23										1	6	14	9	11	9	6	5	61
A24										1	7	12	11	10	8	11	9	69
A25												7	5	3	2	3	3	23
A26											1	14	24	14	22	22	18	115
A27										1	7	11	8	11	16	17	12	83
A28											4	8	11	9	14	11	13	70
A29											1	12	21	20	29	24	22	129
A30												1	0	1	3	4	1	10
A31												1	5	6	5	1	2	20
A32														4	4	9	6	23
A33												3	15	19	29	29	28	123
A34												2	8	10	12	8	10	50
A35												1	6	5	10	6	3	31
A36													2	6	7	4	6	25
A37														0	5	20	25	50
A38														2	4	8	8	22
A39														4	23	22	23	72
A40															3	5	2	10
A41															1	18	20	39

A42																8	15	23
A43																2	6	8
A44																	4	4
A45																	3	3
A46																	1	1
A47																		
B1															1	0	1	2
B2																	1	1
Total	1	9	16	38	43	85	105	201	199	226	233	317	331	319	399	413	388	3323

(\*) Source: Scopus.

**TABLE 3: Referee in international scientific journals**

<b>α/α</b>	<b>JOURNAL</b>	<b>Publisher</b>	<b>Number of articles</b>
1	Applied Catalysis B: Environmental	Elsevier Science BV	52
2	Applied Catalysis A: General	Elsevier Science BV	11
3	Fuel Processing Technology	Elsevier Science BV	4
4	Journal of Chemical Technology & Biotechnology	Wiley	2
5	Water, Air and Soil Pollution	Springer	1
6	Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry	Taylor & Francis	1
7	Catalysis Today	Elsevier Science BV	5
8	ACS catalysis	ACS	7
9	Environmental Science and Technology	ACS	1
10	Catalysis Communications	Elsevier Science BV	11
11	Fuel	Elsevier Science BV	1
12	International Journal of Hydrogen Energy	Elsevier Science BV	7
13	Chemical Reviews	ACS	1
14	Water Science and Technology	<a href="#">IWA Publishing Journals</a>	3
15	Progress in Energy and Combustion Science (PECS)	Elsevier Science BV	1
16	The Journal of Physical Chemistry	ACS	1
17	The Journal of Physical Chemistry Letters	ACS	1
18	Catalysis Science & Technology	Royal Society of Chemistry	2
19	Journal of Molecular Catalysis A: Chemical	Elsevier Science BV	2
20	Surfaces and Interfaces	Elsevier Science BV	1
21	Journal of Catalysis	Elsevier Science BV	1
22	Journal of Applied Chemistry	Hindawi	1
23	<i>Industrial &amp; Engineering Chemistry Research</i>	ACS	1
24	<i>Chemical Engineering Journal</i>	Elsevier Science BV	2
<b>TOTAL</b>			<b>120</b>