VASILEIOS KYRIAKOU, PhD

Assistant Professor of Energy Conversion & Processes @ University of Groningen

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HIGHLIGHTS/ACHIEVEMENTS

- Chemical Engineer with 10 years of experience in catalytic and electrocatalytic processes
- Strong background in materials science and chemical reaction engineering
- Design and development of electrochemical processes for chemical energy storage
- Author of 35 peer-reviewed articles and Review Editor for Frontiers in Environmental Chemistry
- Two of his most recent articles were highlighted by Science, C&EN and Nature Catalysis
- Team-player with successful supervision and motivation of junior researchers

RESEARCH EXPERIENCE

Massachusetts Institute of Technology (MIT), USA 2019-2020

Postdoctoral Fellow at the Nuclear Science and Engineering (NSE) and Materials Science and Engineering (MSE) Departments

Advisor: Prof. Bilge Yildiz

- Elucidation of electron-driven exsolution mechanism of metal nanoparticles in perovskites
- Development and characterization of cells and process systems for H_2O and CO_2 electrolysers

Dutch Institute for Fundamental Energy Research (DIFFER), The Netherlands 2017-2019

Postdoctoral Researcher at the Catalytic and Electrochemical Processes for Energy Applications group

Advisors: Dr. Mihalis N. Tsampas, Prof. Dr. Mauritius C.M. (Richard) van de Sanden

- Research on electrocatalytically active materials for plasma-assisted electrochemical N_2 fixation
- Designed promising electrodes for CO_2 and H_2O high temperature electrolysis
- Studied exsolution of transition metal nanoparticles in perovskite oxides

Centre National de la Recherche Scientifique CNRS), France 2016

Postdoctoral Fellow at the Laboratoire d'Application de la Chimie à l'Environnement, Lyon

Advisor: Dr. Philippe Vernoux

- Investigated the Electrochemical Promotion of Catalysis (EPOC) for alkane activation
- Searched solutions in overpassing the challenges for EPOC's industrial implementation

Chemical Process & Energy Resources Institute (CPERI), Greece 2014-2016

Postdoctoral Associate at the Laboratory of Process Systems Design and Implementation (PSDI)

Advisor: Prof. Michael Stoukides

- Utilized electricity-driven ceramic membrane reactors to shift equilibrium limited chemical reactions, such as ammonia and methanol synthesis, and carbon dioxide hydrogenation
- Developed and fabricated electrochemical cells for methane activation and coal utilization
- Implemented higher scale units for electrochemical processes

University of Western Macedonia, Greece 2013-2014

Postdoctoral Fellow at Laboratory of Process of the Mechanical Engineering Dpt.

Advisor: Prof. George Marnellos

- Identified catalysts for coal gasification from CO_2 and/or steam
- Designed and characterized anodic electrodes for Direct Coal SOFCs

King Abdullaziz City for Science and Technology, Saudi Arabia **2012-2014**

Consultant of the Fuel Cells Laboratory

PI: Dr. Abdullah Al Musa

- Fabricated SOFC/SOEC units as well as trained researchers for experimental studies at KACST
- Searched for new electrocatalysts for liquid hydrocarbon reforming

Aristotle University of Thessaloniki, Greece **2009-2012**

Postgraduate Researcher at the Laboratory of Electrochemical Processes in Chemical Engineering Dpt

- Utilized electricity-driven ceramic membrane reactors to shift equilibrium limited chemical reactions, such as ammonia synthesis
- Fabricated electrochemical cells for methane activation and coal utilization
- Designed and implemented higher scale units for electrochemical processes

EDUCATION

PhD in Electrochemical Engineering, Aristotle University of Thessaloniki (AUTH) **2013**
Dissertation: "Use of Solid State Ionic Conductors for the Study of Methane Reforming and/or Coupling in the Presence of Steam", *Supervisor: Prof. M. Stoukides.*

MSc in Physical Chemistry of Materials and Electrochemistry, AUTH **2012**
Thesis: "Electrocatalytic Synthesis of Ammonia from Steam and Nitrogen at Atmospheric Pressure", *Supervisor: Prof. D. Tsiplakides.*

Diploma in Chemical Engineering, AUTH **2008**
Minored in Environmental Engineering

HONOURS AND AWARDS

- **Interviewed by Science** (https://www.sciencemag.org/news/2019/11/new-reactor-could-halve-carbon-dioxide-emissions-ammonia-production), **Nature Catalysis** (Nature Catal. 2 (2019) 1055) and **C&EN** (November 7, 2019, Appeared In Volume 97, Issue 44) for his concept of an **Electrochemical Haber-Bosch Process** (**Joule, 4 (2020) 1-17**).
- His **ACS Nano (13 (2019) 12996−13005**) article reporting mechanistic studies for metal nanoparticles' exsolution by means of in-situ transmission electron microscopy (TEM) was **the chief editor's choice** in the November 15, 2019 issue of **Science** (**366, 6467 2019) 834**)
- «**Séjours scientifiques de haut niveau**», Scholarship awarded for research in France, **Embassy of France** in Greece, 2016
- Presentation Award (1st prize) in 13th Greek National Symposium on Catalysis, Greece, 2014
- Excellency Award by the Research Committee of Aristotle University, Greece, 2014
- Postgraduate Scholarship by the Chemical Process Engineering Research Institute, Greece, 2009
- Graduate fellowship from Universidad de Castilla - La Mancha, Spain, for school with subject "Trends in Electrochemical Promotion of Catalysis"

RELEVANT PROFESSIONAL EXPERIENCE

Chemistry Laboratory of the Hellenic Army, Greece **2015**

Special Scientist-Chemical Engineer

- Analysis and evaluation of fuels and lubricants for army helicopters and battle vehicles.
- Setting of new analysis instruments and preparation of health and safety protocols in the lab

Unit for waste water management of Mytilene, Greece **2008**

Chemical Engineer trainee

- Analysis and evaluation of waste water of the city of Mytilene.
- Critical evaluation and report on improving the waste water purification process

TEACHING EXPERIENCE

Chemical Engineering Dpt, AUTH **2009-2013**

Teaching assistant for the undergraduate course of Applied Thermodynamics II

Chemical Engineering Dpt, AUTH, **2009-2016**

Supervising Diploma Theses (>20) and PhD Dissertations (3) in the Electrochemical Processes Lab under the high supervision of Prof. M. Stoukides

Tziolas Scientific Publications **2015-2016**

Textbook translations from English to Greek for Engineers

SKILLS

- Written: Drafting research proposals for grants, progress reports and journal publications
- Verbal: Excellent communication skills with > 30 oral presentations in international conferences
- Strong interpersonal skills for interaction with partners and funders
- Experimental Techniques: Analysis with Gas Chromatography, Mass-Spectrometry, Infra-Red Spectrometry. Knowledge of perovskite-based electrode preparation with solid state reactive sintering and combustion methods, characterization SEM, TEM, EDX, XRD, TPO, TPR, XPS, Electrochemical measurements of I-V polarization, AC impedance, cyclic voltammetry
- Proficiency in the use of a personal computer, word-processing applications, and spreadsheet applications
- Design and build experimental apparatus for gas-phase catalytic and electrochemical processes

SUMMARY OF SCIENTIFIC AND RESEARCH ACTIVITY

Refereed Publications (Journals):	**35**
International Conference Proceedings:	**59**
Book translations:	**2**
Research Lectures (at International Meetings, Universities, Research Centers):	**22**
Reviewer in Journals:	**12**
Graduate Students Supervision (under the high supervision of Prof M. Stoukides)	**21**
Citations (Google Scholar citations):	**891**
Articles with >10 citations in the last 5 years)	**17**
Citations in the last 5 years	**741**
h-index:	**14**

JOURNAL REVIEWER

Regular reviewer for scientific journals: Chem, Applied Catalysis B: Environmental, Journal of Power Sources, Journal of Membrane Science, Journal of Electrochemical Society, ChemElectroChem, Journal of CO_2 utilization, International Journal of H_2 energy, Solid State Ionics, Sustainable Energy & Fuels, Ionics, ACS Industrial and Engineering Chemistry, Energy Conversion & Management, Chemical Engineering Research and Design, Frontiers in Environmental Chemistry

PEER-REVIEWED ARTICLES

1. **V. Kyriakou**, D. Neagu, G. Zafeiropoulos, C. Tang, K. Kousi, I. S. Metcalfe, M.C.M. van de Sanden, M.N. Tsampas, "Symmetrical Exsolution of Rh Nanoparticles in Solid Oxide Cells for Efficient Syngas Production from Greenhouse Gases", ACS Catal. 10 (2020) 1278−1288.

2. **V. Kyriakou**, I. Garagounis, A. Vourros, E. Vasileiou, M. Stoukides, "An Electrochemical Haber-Bosch Process", Joule 4 (2020) 1–17.

3. D. Neagu, **V. Kyriakou**, M. Aouine, L. Roiban, C. Tang, A. Caravaca, K. Kousi, I. Schreur-Piet, I. S. Metcalfe, P. Vernoux, M.C.M. van de Sanden, M.N. Tsampas, "In situ observation of nanoparticle exsolution from perovskite oxides; from atomic scale mechanistic insight to new nanostructures", ACS Nano, 13 (2019) 12996−13005.

4. **V. Kyriakou,** D. Neagu, E.I. Papaioannou, I.S. Metcalfe, M.C.M. van de Sanden, M.N. Tsampas, "Co-electrolysis of H_2O and CO_2 on exsolved Ni nanoparticles for efficient syngas generation at controllable H_2/CO ratios" Applied Catalysis B': Environmental 258 (2019) 117950.

5. H. Patel, R.K. Sharma, **V. Kyriakou**, A. Pandiyan, S. Welzel, M.C.M. van de Sanden, M.N Tsampas "Plasma activated electrolysis for cogeneration of nitric oxide and hydrogen from water and nitrogen", ACS Energy Lett. 4 (2019) 2091-2095.

6. C. Athanasiou, I. Garagounis, **V. Kyriakou**, A. Vourros, G.E. Marnellos, M. Stoukides, "Demonstration of Hydrogen Production in a Hybrid Lignite-Assisted Solid Oxide Electrolysis Cell", International Journal of Hydrogen Energy, 44 (2019) 22770-22779.

7. **V. Kyriakou**, I. Garagounis, A. Vourros, G.E. Marnellos, M. Stoukides, "A protonic ceramic membrane reactor for the production of hydrogen from coal steam gasification", Journal of Membrane Science, 553 (2018) 163.

8. M. Konsolakis, N. Kaklidis, **V. Kyriakou**, I. Garagounis, T. Kraia, A. Arenillas, J.A. Menéndez, R. Strandbakke, G.E. Marnellos, "The combined impact of carbon type and catalyst-aided gasification process on the performance of a Direct Carbon Solid Oxide Fuel Cell", Solid State Ionics, 317, (2018) 268.

9. A. Krestou, I. Giozis, G. Maroulis, A. Barbatsis, C. Tsanaktsidis, **V. Kyriakou,** N.E. Kiratzis, "Fabrication of Thin Functional Films by Solution Aerosol Thermolysis (SAT)", ECS Journal of Solid State Science and Technology, 7-11 (2018) 660.

10. A. Krestou, I. Giozis, G. Maroulis, **V. Kyriakou**, C. Tsanaktsidis, N.E. Kiratzis, "Fabrication and Characterization of thin Ceramic Films by Spray Pyrolysis", Materials Today: Proceedings, 5-14 (2018) 27636.

11. J. Díez-Ramírez, P. Sánchez, **V. Kyriakou**, S. Zafeiratos, G.E. Marnellos, M. Konsolakis, F. Dorado, "Effect of support nature on the cobalt-catalyzed CO2 hydrogenation", Journal of CO_2 Utilization 21 (2017) 562.

12. Y. Hajar, V. Di Palma, **V. Kyriakou**, M.A. Verheijen, E.A. Baranova, P. Vernoux, W.M.M. Kessels, M. Creatore, M.C.M. van de Sanden, M.N. Tsampas, "Atomic layer deposition of highly dispersed Pt nanoparticles on a high surface area electrode backbone for electrochemical promotion of catalysis", Electrochemistry Communications 84 (2017) 40.

13. A. Krestou, I. Giozis, G. Maroulis, **V. Kyriakou**, C. Tsanaktsidis, N.E. Kiratzis, "Fabrication of Thin Electrodic Films by Solution Aerosol Thermolysis (SAT)", ECS Transactions. 78-1 (2017) 1839.

14. **V. Kyriakou**, A. Vourros, I. Garagounis, S.A.C. Carabineiro, F.J. Maldonado-Hódar, G.E. Marnellos, M. Konsolakis, "Highly Active and Stable TiO_2 supported Au nanoparticles for CO_2 reduction to CO", Catalysis Communications 98 (2017) 52.

15. J. Díez-Ramírez, **V. Kyriakou**, I. Garagounis, A. Vourros, E. Vasileiou, P. Sanchez, F. Dorado, M. Stoukides, "Enhancement of Ammonia Synthesis on a Co_3Mo_3N-Ag Electrocatalyst in a K-βAl_2O_3 Solid Electrolyte Cell, ACS Sustainable Chemistry & Engineering, 5-10 (2017) 8844.

16. A. Vourros, I. Garagounis, **V. Kyriakou**, S.A.C. Carabineiro, F.J. Maldonado-Hódar, G.E. Marnellos, M. Konsolakis, "Carbon Dioxide Hydrogenation to Methanol over Supported Au nanoparticles: Effect of the support", Journal of CO_2 Utilization, 19 (2017) 247.

17. A. Vourros, **V. Kyriakou**, I. Garagounis, E. Vasileiou, and M. Stoukides, Chemical Reactors with High Temperature Proton Conductors as a Main Component: Progress in the Past Decade, Solid State Ionics 306 (2017) 76.

18. **V. Kyriakou**, I. Garagounis, E. Vasileiou, A. Vourros, M. Stoukides, "Progress in Electrochemical Synthesis of Ammonia", Catalysis Today, 286 (2017) 2.

19. **V. Kyriakou**, I. Garagounis, A. Vourros, E. Vasileiou, A. Manerbino, W.G. Coors, M. Stoukides, "Steam Reforming of Methane at Low Temperatures in a $BaCe_{0.2}Zr_{0.7}Y_{0.1}O_{2.9}$ Proton Conducting Membrane Reactor", Applied Catalysis B': Environmental, 186 (2016) 1.

20. N. Kaklidis, **V. Kyriakou**, G.E. Marnellos, R. Strandbakke, A. Arenillas, J.A. Menéndez, and M. Konsolakis, "Effect of Fuel Thermal Pretreament on the Electrochemical Performance of a Direct Lignite Coal Fuel Cell", Solid State Ionics, 288 (2016) 357.

21. E. Vasileiou, **V. Kyriakou**, I. Garagounis, A. Vourros, A. Manerbino, W.G. Coors, M. Stoukides, "Electrochemical Enhancement of Ammonia Synthesis in a $BaZr_{0.7}Ce_{0.2}Y_{0.1}O_{2.9}$ Solid Electrolyte Cell", Solid State Ionics, 288 (2016) 140.

22. A. Al-Musa, M. Al-Saleh, A. Al-Zahrani, N. Kaklidis, **V. Kyriakou,** G.E. Marnellos, "Iso-Octane Internal Reforming in a Solid Oxide Cell Reactor", Solid State Ionics, 288 (2016) 139.

23. E. Vasileiou, **V. Kyriakou**, I. Garagounis, A. Vourros, A. Manerbino, W.G. Coors, M. Stoukides, "Reaction Rate Enhancement during the Electrocatalytic Synthesis of Ammonia in a $BaZr_{0.7}Ce_{0.2}Y_{0.1}O_{2.9}$ Solid Electrolyte Cell", Topics in Catalysis, 58-18 (2015) 1193.

24. N. Kaklidis, I. Garagounis, **V. Kyriakou**, V. Besikiotis, A. Arenillas, J.A. Menéndez, G.E. Marnellos and M. Konsolakis, "Direct Utilization of Lignite Coal in a Co-CeO_2/YSZ/Ag Solid Oxide Fuel Cell", International Journal of Hydrogen Energy, 40-41 (2015) 14353.

25. M. Konsolakis, G. E. Marnellos, A. Al-Musa, N. Kaklidis, I. Garagounis, **V. Kyriakou**, "Carbon to electricity in a solid oxide fuel cell combined with a catalyzed gasification process", Chinese Journal of Catalysis, 36-4 (2015) 509.

26. E. Vasileiou, **V. Kyriakou**, I. Garagounis, A. Vourros and M. Stoukides, "Ammonia synthesis at atmospheric pressure in a $BaCe_{0.2}Zr_{0.7}Y_{0.1}O_{2.9}$ solid electrolyte cell" Solid State Ionics, 275 (2015) 110.

27. N. Kaklidis, **V. Kyriakou**, I. Garagounis, A. Arenillas, J.A. Menéndez, G.E. Marnellos and M. Konsolakis "Effect of carbon type on the performance of a Direct or Hybrid Carbon Solid Oxide Fuel Cell", RSC Advances, 4 (2014) 18792.

28. I. Garagounis, **V. Kyriakou,** A. Skodra, E. Vasileiou and M. Stoukides, "Electrochemical Synthesis of Ammonia in Solid Electrolyte Cells", Frontiers in Energy Research, 2 (2014) 1.

29. **V. Kyriakou**, I. Garagounis and M. Stoukides, "Steam Electrolysis with Simultaneous Production of C_2 Hydrocarbons in a Solid Electrolyte Cell", International Journal of Hydrogen Energy, 39 (2014) 675.

30. A. Al-Musa, **V. Kyriakou**, M. Al-Saleh, R. Al-Shehri, N. Kaklidis, G.E. Marnellos, "Iso-Octane Internal Reforming in a Solid Oxide Fuel Cell Using Co/CeO_2 as Anodic Composites", ECS Trans. 58-3, (2013) 131.

31. I. Garagounis, **V. Kyriakou** and M. Stoukides, "Electrochemical Promotion of Catalytic Reactions: Thermodynamic Analysis and Calculation of the Limits in Faradaic Efficiency", Solid State Ionics, 231 (2013) 58.

32. **V. Kyriakou**, C. Athanasiou, I. Garagounis, A.Skodra and M. Stoukides, "Production of H_2 in a Proton Conducting Cell with Simultaneous Conversion of Methane to C_2 Hydrocarbons", International Journal of Hydrogen Energy, 37 (2012) 16636.

33. **V. Kyriakou**, C. Athanasiou, I. Garagounis, A. Skodra and M. Stoukides, "Production of C_2 Hydrocarbons and H_2 from Methane in a Proton Conducting Cell", Solid State Ionics, 225 (2012) 219.

34. I. Garagounis, **V. Kyriakou**, C. Anagnostou, V. Bourganis, I. Papachristou and M. Stoukides, "Solid Electrolytes: Applications in Heterogeneous Catalysis and Chemical Cogeneration", Industrial & Engineering Chemistry Research, 50 (2011) 431.

SELECTED CONFERENCE PRESENTATIONS AND LECTURES

1. **V. Kyriakou**, D. Neagu, M.N. Tsampas, "Exsolution of Transition Metal Nanoparticles for Solid Oxide Co-Electrolysis of CO_2-H_2O", Sustainable Industrial Processing Summit & Exhibition, 23-27 October 2019, Paphos, Cyprus.
2. **V. Kyriakou**, D. Neagu, G. Zafeiropoulos,C. Tang, I.S. Metcalfe, M.C.M. van de Sanden, M.N. Tsampas, "Syngas production by Methane-Assisted Co-electrolysis in a symmetrical Cell with exsolved Rh nanoparticles" 22nd International Conference on Solid State Ionics, June 17-22, PyeongChang, Korea.
3. D. Neagu, **V. Kyriakou**, M. Aouine, L. Roiban, C. Tang, K. Kousi, I.S. Metcalfe, P. Vernoux, M.N. Tsampas, "In situ observation of nanoparticle exsolution from perovskite oxides - from mechanistic insight to new nanostructures", 22nd International Conference on Solid State Ionics, June 17-22, PyeongChang, Korea.

4. **V. Kyriakou,** V. Di Palma, A. Pandiyan, Y. Hajar, M. Creatore, E. Baranova, P. Vernoux, M.C.M. van de Sanden, M.N. Tsampas, "Atomic Layer Deposition of Pt Nano-Particles for Electrocatalysis", 25th Topical ISE Meeting, May 12-15, 2019, Toledo, Spain.

5. **V. Kyriakou**, D. Neagu, E. I. Papaioannou, I. Metcalfe, M.C.M. van de Sanden, M.N. Tsampas, "Development of perovskite cathodes with in-situ exsolution of transition metals for the generation of syngas from co-electrolysis of CO_2 and H_2O", 13th European SOFC & SOE Forum 2018, July 3-6, 2018, Lucerne, Switzerland.

6. **V. Kyriakou,** D. Neagu, E. I. Papaioannou, M.C.M. van de Sanden, M.N. Tsampas, "Co-electrolysis of CO_2 and H_2O on Perovskite Fuel Electrodes with Exsolution of Transition Metal Nano-particles", International Symposium on Electrocatalysis, August 29-31, 2018, Szczyrk, Poland

7. **V. Kyriakou,** V. Di Palma, Y. Hajar, M.A. Verheijen, E.A. Baranova, P. Vernoux, W.M.M. Kessels, M. Creatore, M.C.M. van de Sanden, M. Tsampas, "Atomic layer deposition of Pt-nanoparticles for electrochemical promotion of catalysis", Physics, January 23-24, 2018, Veldhoven, The Netherlands

8. **V. Kyriakou,** M.C.M. van de Sanden, M.N. Tsampas, "Co-electrolysis of H2O-CO2 towards syngas in solid oxide cells", Syncat Workshop, April 16-17, 2018, Beijing, China.

9. **V. Kyriakou**, I. Garagounis, A. Vourros, M. Konsolakis, G. Marnellos and Costas Athanasiou, "Hydrogen Production in a Coal-Aided Solid Oxide Electrolysis Cell", 21st International Conference on Solid State Ionics, June 18-23, Padua, Italy.

10. A. Vourros, **V. Kyriakou**, I. Garagounis, E. Vasileiou, M. Stoukides, "Chemical Reactors with High Temperature Proton Conductors as a Main Component", Solid State Protonic Conductors, 18-23 September 2016, Oslo, Norway.

11. E. Vasileiou, **V. Kyriakou**, I. Garagounis, A. Vourros and M. Stoukides, "Electrochemical Ammonia Synthesis at Atmospheric Pressure in a BCZY27 Double Chamber Proton Conducting Cell: The Effect of Periodic Current", 16th International Congress on Catalysis, July 3-8, 2016, Beijing, China.

12. E. Vasileiou, **V. Kyriakou**, I. Garagounis, A. Vourros, A. Manerbino, W.G. Coors and M. Stoukides, "Solid State Ammonia Synthesis Using a $BaCe_{0.2}Zr_{0.7}Y_{0.1}O_{2.9}$ solid electrolyte and a Ni-BCZY electrode", International Workshop on Protonic Ceramic Fuel Cells Status & Prospects, 8-10 July 2015, Bordeaux, France.

13. N. Kaklidis, **V. Kyriakou**, G.E. Marnellos, A. Arellinas, M. Konsolakis, Effect of fuel thermal pretreatment on the electrochemical performance of a direct lignite coal fuel cell", 20th International Conference on Solid State Ionics, Keystone, Colorado, USA, June 14 - 19, 2015.

14. A. Vourros, **V. Kyriakou**, I. Garagounis, M. Konsolakis, Z. Ioakimides, G.E Marnellos, and M. Stoukides, "Methanol synthesis at atmospheric pressure in co-ionic electrochemical membrane reactors", 20th International Conference on Solid State Ionics, Keystone, Colorado, USA, June 14 - 19, 2015.

15. **V. Kyriakou,** A. Al-Musa, N. Kaklidis, M. Al-Saleh, G.E. Marnellos, "Internal Steam Reforming of Iso-Octane on Co-based Anodes in a Solid Oxide Fuel Cell", 11th European SOFC and SOE Forum, 1-4 July, 2014, Lucerne, Switzerland.

16. M. Stoukides, **V. Kyriakou**, A. Skodra, I. Garagounis, E. Vasileiou, "Solid Electrolyte Cells for Hydrogen Production and Ammonia Synthesis", International Conference on Hydrogen Production, February 2-5, 2014, Fukuoka, Japan.

17. **V. Kyriakou,** A. Al-Musa, M. Al-Saleh, R. Al-Shehri, G.E. Marnellos, N. Kaklidis, "Iso-Octane Internal Reforming in a Solid Oxide Fuel Cell Using Co/CeO_2 as Anodic Composites", 224th Electrochemical Society Meeting, 27 October – 1 November 2013, San Francisco, USA.

18. **V. Kyriakou**, M. Konsolakis, G. Marnellos, G. Kaklidis and I. Garagounis, "Direct Utilization Of Carbon-Based Feedstocks in a Cu-Ceo2/YSZ/Ag Solid Oxide Fuel Cell Integrated With A Catalyst-Aided Gasification Process", 19th International Conference on Solid State Ionics, June 2-7, 2013, Kyoto, Japan.

19. **V. Kyriakou**, I. Garagounis and M. Stoukides, "Production of C_2 Hydrocarbons and H_2 from Methane and Steam in a Double Chamber O^{2-} Conducting Cell", 19th International Conference on Solid State Ionics, June 2-7, 2013, Kyoto, Japan.

20. **V. Kyriakou**, C. Athanasiou, I. Garagounis, A. Skodra and M. Stoukides, "Production of C_2 Hydrocarbons and H_2 from Methane in a Proton Conducting Cell", 18th International Conference on Solid State Ionics, July 3-8, 2011, Warsaw, Poland.