

ΒΙΟΓΡΑΦΙΚΟ ΣΗΜΕΙΩΜΑ



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ΠΑΛΑΙΟΤΕΡΕΣ ΘΕΣΕΙΣ

2005-2011: Ωρομίσθιος Καθηγητής
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2005 – 2006: Μεταδιδακτορικός Ερευνητής
με θέμα “Σχεδιασμός, Παρασκευή και Χαρακτηρισμός ηλεκτροκαταλυτών για ηλεκτροχημικά στοιχεία καυσίμου SOFC άμεσης τροφοδοσίας αιθανόλης ”
Τμήμα Μηχανολόγων Μηχανικών
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2004 – 2005: Υπεύθυνος Έργου
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Central Greece Planing Co. – Βόλος.

1997 – 2004: Υποψήφιος Διδάκτορας
Θέμα: “Χρήση Αιθανόλης για Παραγωγής Ηλεκτρικής Ισχύος σε Ηλεκτροχημικά Στοιχεία Καυσίμου”
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ΣΠΟΥΔΕΣ

19/2/2004: ΔΙΔΑΚΤΟΡΙΚΟ ΔΙΠΛΩΜΑ (PhD)
Διδακτορικό Δίπλωμα (Ph.D.)
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Βαθμολογία: Άριστα

1997: ΠΤΥΧΙΟ ΜΗΧΑΝΟΛΟΓΟΥ ΜΗΧΑΝΙΚΟΥ

Τμήμα Μηχανολόγων Μηχανικών Βιομηχανίας του Πανεπιστημίου Θεσσαλίας
Θέμα Διπλωματικής Εργασίας: “Μελέτη της επίδρασης κραματικών στοιχείων κατά την επιφανειακή σκλήρυνση χαλύβων με δέσμη Laser”
(Επιβλέπων: Δρ. Γρηγόρης Χαϊδεμενόπουλος)
Βαθμός Διπλωματικής Εργασίας: Άριστα (10/10)
Βαθμός Πτυχίου: 7.74/10

ΞΕΝΕΣ ΓΛΩΣΣΕΣ

Αγγλικά
2007: ECPE Michigan Proficiency in English

1997: Test of English as a Foreign Language (TOEFL) Grade: 590/660

1989: First Certificate of Cambridge

Ελληνικά

ΥΠΟΤΡΟΦΙΕΣ

1/1/2005 – 31/6/2006: Ίδρυμα Κρατικών Υποτροφιών (ΙΚΥ)

Υποτροφία για την εκπόνηση Μεταδιδακτορικής Έρευνας στην Ελλάδα

2000: Ευρωπαϊκή Ένωση

Για τη συμμετοχή στο,

Euroconference on New and Renewable Energy Systems'', Madeira-Portugal, 19-24 June/2000

2000: Organization for Ionics, University of Kiel, Germany

Για τη συμμετοχή στο,

7th Euroconference on Science and Technology of Ionics, Calcatoggio-Corsica-France,

October 1-7/2000.

1999: Organization for Ionics, University of Kiel, Germany

Για τη συμμετοχή στο,

6th Euroconference on Science and Technology of Ionics, Cetraro-Calabria, Italy,

September 12-19/1999

ΕΚΠΑΙΔΕΥΤΙΚΗ ΕΜΠΕΙΡΙΑ

2005-2011

Τμήμα Μηχανολογίας, ΤΕΙ Δυτικής Μακεδονίας, Κοζάνη

Ωρομίσθιος Καθηγητής στα μαθήματα

- Μηχανές Εσωτερικής Καύσης I και II
- Θερμοδυναμική
- Μηχανολογικές Εγκαταστάσεις I και II (Ανελκυστήρες, Φυσικό Αέριο, Πυρόσβεση, Πυροπροστασία, Θέρμανση – Κλιματισμός, Ύδρευση, Αποχέτευση)
- Ατμολέβητες και Ατμοστρόβιλοι
- Ανυψωτικές και Μεταφορικές Μηχανές

2010

Καλύτερος Εργαστηριακός Καθηγητής σύμφωνα με την αξιολόγηση των φοιτητών μεταξύ 16 υποψηφίων.

2010

Δεύτερος Καλύτερος Θεωρητικός Καθηγητής σύμφωνα με την αξιολόγηση των φοιτητών μεταξύ 31 υποψηφίων.

ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΔΙΕΘΝΗ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ - ΕΤΕΡΟΑΝΑΦΟΡΕΣ

J1. Methane Catalytic and Electrocatalytic Combustion over Perovskite Type Oxides Deposited on YSZ, S. Douvartzides, G. Dimoulas and P. Tsiakaras, *Studies in Surface Science and Catalysis*, 119, 93-98, 1998.

Αναφέρεται στις εργασίες,

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2. Peña M.A., Fierro J.L.G., Chemical structures and performance of perovskite oxides, *Chemical Reviews* 101 (7), pp. 1981-2017 2001
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J3. Ethanol Utilization in Solid Oxide Fuel Cells: A Thermodynamic Approach, P. Tsiakaras, A. Demin, S. Douvartzides and N. Georgakakis, *Journal of Ionics*, 5, 206-212, 1999.

Αναφέρεται στις εργασίες,

1. Goula M., Kontou S., Zhou W., et al., Hydrogen production over a commercial Pd/Al₂O₃ catalyst for fuel cell utilization, *Ionics*, 9 (3-4), pp. 248-252 2003

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Αναφέρεται στις εργασίες,

1. Garagounis I., Kyriakou V., Anagnostou C., Bourganis V., Papachristou I., Stoukides M., Solid electrolytes: applications in heterogeneous catalysis and chemical cogeneration, *Industrial and Engineering Chemistry Research*, 50 (2), pp. 431-472, 2011
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Αναφέρεται στις εργασίες,

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1. Wang R., Wei B., Wang H., Ji S., Key J., Zhang X., Lei Z., An effective electrocatalyst for ethanol oxidation: Pt-modified IrCu alloy nanoparticle, *Journal of Ionics*, 17 (7), pp. 595-601, 2011
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1. Tang Z., Monroe J., Dong J., Nenoff T., Weinkauff D., Platinum-Loaded NaY Zeolite for Aqueous-Phase Reforming of Methanol and Ethanol to Hydrogen, *Industrial and Engineering Chemistry Research*, 48 (5), pp. 2728-2733, 2009
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3. Kirillov S., Tsiakaras P., Romanova I., Adsorption and oxidation of methanol and ethanol on the surface of metallic and ceramic catalysts, *J Mol Struct* 651, pp. 365-370, 2003

J8. Performance of a SOFC Powered with External Ethanol Steam Reforming, S. Douvartzides, and P. Tsiakaras, *Journal of Ionics*, 7, 425-429, 2001.

J9. Thermodynamic and Economic Analysis of a Steam Reformer – Solid Oxide Fuel Cell System Fed by Natural Gas and Ethanol, S. Douvartzides, and P. Tsiakaras, *Energy Sources*, 24(4), 365-373, 2002.

Αναφέρεται στις εργασίες,

1. Morgensen D., Grunwaldt J.-D., Hendricksen P.V., Dam-Johansen K., Nielsen J.U., Internal steam reforming in solid oxide fuel cells: Status and opportunities of kinetic studies and their impact on modelling, *Journal of Power Sources*, 196 (1), pp. 25-38, 2011
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5. Song S., Tsiakaras P., Recent progress in direct ethanol proton exchange membrane fuel cells (DE-PEMFCs), *Applied Catalysis B: Environmental*, 63 (3-4), pp. 187-193, 2006
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J10. The Oxidation of Ethanol over Pt Catalyst-Electrodes Deposited on ZrO₂ (8 mol% Y₂O₃). P. E. Tsiakaras, S. L. Douvartzides, V. A. Sobyanyin and A. K. Demin. *Solid State Ionics*, 152-153, 721-726, 2002.

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11. Stancovski V., Methods and apparatus for controlling catalytic processes, including the deposition of carbon based particles, *US Patent 12/463,492*, 2009
12. Marnellos G. and Stoukides M., Catalytic studies in electrochemical membrane reactors, *Solid State Ionics*, 175(1-4), 597-603, 2004.

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1. Stancovski V., Suib S.L., Hu B., Methods and apparatus for the synthesis of useful chemicals, *US Patent 7,964,084*, 2013
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3. Stancovski V., Methods and apparatus for controlling catalytic processes, including catalyst regeneration and shoot elimination, *US Patent 7,950,221*, 2011
4. Garagounis, I., Kyriakou, V., Anagnostou, C., Bourganis, V., Papachristou, I., Stoukides, M., Solid electrolytes: Applications in heterogeneous catalysis and chemical cogeneration, *Industrial and Engineering Chemistry Research* 50 (2), pp. 431-472, 2011
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10. Wang, Z.-B., Yin, G.-P., Lin, Y.-G., Synthesis and characterization of PtRuMo/C nanoparticle electrocatalyst for direct ethanol fuel cell, *Journal of Power Sources* 170 (2), pp. 242-250, 2007
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3. Faro M.L., Frontera P., Antonucci P.L., and Arico A.S., Ni-Cu based catalysts prepared by two different methods and their catalytic activity toward the ATR methane, *Chemical Engineering Research and Design*, 93, pp. 269-277, 2015
4. Faro M.L., Reis R.M., Saglietti G.G.A., Sato A.G., Ticianelli E.A., Zignani S.C., and Arico A.S., Nickel-Copper/Gadolinium doped Ceria (CGO) composite electrocatalyst as a protective layer for a solid oxide fuel cell anode fed with ethanol, *ChemElectroChem*, 1 (8), pp. 1395-1402, 2014
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9. Halinen M., Thomann O., Kiviahio J., Effect of Anode off-gas Recycling on Reforming of Natural Gas for Solid Oxide Fuel Cell Systems, *Fuel Cells*, 12 (5), pp. 754-760, 2012.
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- electrical power generation and carbon capture, *Chemical Engineering Research and Design*, 90 (12), pp. 2223-2234, 2012.
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C1. Methane Catalytic and Electrocatalytic Combustion over Perovskite Type Oxides Deposited on YSZ

S. Douvartzides (προφορική παρουσίαση), G. Dimoulas and P. Tsiakaras

5th Natural Gas Conversion Symposium

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C2. Catalytic Behavior of $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.8}\text{Fe}_{0.8}\text{O}_3$ Perovskite-type Oxide Thin Films Deposited on YSZ During the Reaction of Ethanol Combustion

S. Douvartzides, C. Athanasiou, N. Georgakakis and P. Tsiakaras

5th Euroconference on Science and Technology of Ionics

Benalmadena-Costa, Spain, September 13-20/1998.

C3. Catalytic Combustion of Ethanol in SOFC's

S. Douvartzides, D. Milionis, N. Georgakakis and P. Tsiakaras

National Conference for the applications of the Renewable Energy Sources

NT University of Athens, November 30th-December 2nd/ 1998

C4. Catalytic and Electrocatalytic Oxidation of Ethanol over $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_3$ Perovskite-type Catalyst

S. Douvartzides and P. Tsiakaras,

12th International Conference on Solid State Ionics

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C5. Reaction Kinetics of the Catalytic Combustion of Light Hydrocarbons (Ethylene) in Fixed Bed Reactor

S. Douvartzides, N. Georgakakis and P. Tsiakaras

6th Conference on Environmental Science and Technology

Pythagorion-Samos, Greece, August 30th – September 2nd/1999.

C6. Design and Development of Perovskite-type Catalyst for Low Temperature Combustion: The Cases of CH_4 and CO Combustion

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C7. Catalytic and Electrocatalytic Combustion of Methane in Solid Electrolyte Fuel Cells S.

Douvartzides (προφορική παρουσίαση), K. Kiriakopoulos and P. Tsiakaras

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C8. Ethanol Utilization in Solid Electrolyte Electrochemical Cells: A Thermodynamic Approach

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C9. Fuel Cell Technology for Clean Power Production

S. Douvartzides (προφορική παρουσίαση), A. Chouliaras, K. Poulianitis and P. Tsiakaras

2nd Balkan Conference on Industrial Pollution

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C10. Electrochemical Promotion of Polycrystalline Pt Catalyst during the Oxidation of Ethanol.

S. Douvartzides (προφορική παρουσίαση), K. Kyriakopoulos and P. Tsiakaras

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C11. Performance of a SOFC Powered with External Ethanol Steam Reforming.

S. Douvartzides (προφορική παρουσίαση), and P. Tsiakaras

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C12. Ethanol and Methane Fueled SOFCs: A Comparative Study.

S. Douvartzides (προφορική παρουσίαση), and P. Tsiakaras

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C17. Electricity from ethanol fed Solid Oxide Fuel Cells

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F. A. Coutelieiris, S. Douvartzides and P. Tsiakaras

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C20. Energy and exergy analysis of a Solid Oxide Fuel Cell plant fueled by ethanol and methane

S. Douvartzides, F. A. Coutelieiris, W. Zhou, Q. Xin and P. Tsiakaras

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F. A. Coutelieiris, A. K. Demin, S. Douvartzides and P. Tsiakaras

1st International Exergy, Energy and Environment Symposium

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