

Curriculum Vitae

Angeliki A. Lemonidou

Work Address

Aristotle University of Thessaloniki
Department of Chemical Engineering
54124 University Campus
Thessaloniki, Greece

Tel.: +302310 996273, fax: +302310 996184

Email: alemonidou@cheng.auth.gr

URL: <http://lpt.cheng.auth.gr>

Home Address

Aristophanous str.7
55133 Kalamaria
Thessaloniki, Greece

Tel. +302310 423562

Studies and professional activities

Angeliki A. Lemonidou, is Professor of Chemical Engineering at the Aristotle University of Thessaloniki. She graduated with Bachelor in Chemistry and a GPA equal to 9.05/10.00 (1st in a class of 100 students) from Aristotle University of Thessaloniki in 1979. In 1990 she got her PhD with honors from the Chemical Engineering Department. The thesis entitled "Catalytic steam cracking for ethylene production" was supervised by Prof. Iacovos Vasalos.

She joined Aristotle University from 1980 as research associate and elected as Lecturer in 1992. She then promoted to Assistant Professor, Associate Professor and in 2011 to Professor of Chemical Engineering. From 2007 she is Director of the Petrochemical Technology Laboratory and from September 2011 Head of the Technology section. Prof. Lemonidou is a collaborating faculty member of the Chemical Process Energy Resources Institute (CPERI/CERTH).

During her research career, Prof. Lemonidou has developed long collaborations with universities and research centers in Greece, but also with prestigious international universities, such as the Technical University of Munich (TUM), the Universities of California at Berkeley and Delaware in the USA. Prof. Lemonidou spent her sabbatical in 2008 at Technical University of Munich, Laboratory of Technical Chemistry (Professor Johannes Lercher), at University of Delaware, Department of Chemical Engineering (Professors Dion Vlachos and Mark Barteau) and at University of California Berkeley CA, Department of Chemical Engineering (Professor Enrique Iglesia).

Academic activities

As an active member of the Department of Chemical Engineering Prof. Lemonidou has long teaching experience as tutor in undergraduate courses related with Primary Energy Sources, Chemical Processes for Alternative and Conventional Fuels Production, Natural Gas Engineering and Lab courses for Environmental and Energy processes. She has supervised numerous diploma theses and students projects in undergraduate level. In post graduate level she has supervised 13 PhD theses (5 in progress).

Research activities and expertise

Her research activities are the area of catalysis and more specifically on the development of active and selective nano-structured materials for reactions related to transformation of hydrocarbons and bio-based compounds. Target reactions currently studied are the selective oxidation of alkanes, the sustainable production of hydrogen through advanced steam reforming of natural gas and oxygenated feeds, and the hydrodeoxygenation of glycerol. Expertise lies in the preparation of nanomaterials via advanced

preparation techniques, the structural and morphological characterization using various physicochemical techniques, as well as detailed kinetic and mechanistic studies of catalytic materials under reaction conditions. She has made a substantial contribution with the work of her group on ethane oxidative dehydrogenation and the in-depth study of the Ni-Nb-Ox catalytic materials for the reaction. Her recent contribution also in hydrogen production via steam reforming of natural gas with simultaneous CO₂ capture by developing CaO-based sorbents with high CO₂ fixing capacity and high stability under reforming conditions are commendable.

Publications

Professor A. Lemonidou has published 95 scientific papers in peer reviewed international journals. During the last 5 years, 2010-2014, she published over 40 papers in high impact factor journals. Eight (8) of them published by Elsevier have been included in the lists of the Top 25 Hottest Articles. The scientific work has been presented in national (95) and international conferences (130). She also holds a european patent on a novel efficient process for glycerol conversion.

She is coauthor of five chapters in books (one encyclopedia) and three textbooks in greek.

International acclaim of research activities

Her work has been highly appreciated by the scientific community with over 3300 citations, h-factor 34 (Scopus) and average citation per item (34.96).

She serves(d) as Guest Editor of special issues in *Catalysis Today* (vol 127, 2007) and in *Applied Catalysis B Environmental* (vol 145, 2014). She serves(d) as a member the Editorial Board of the Journal *Applied Catalysis A General* (2004-2007) the open access journal *Catalysis* (2010-2014), "Catalysis for Sustainable Energy" (2012-2014).

She has delivered 8 invited lectures in scientific national and international conferences, 4 in workshops and summer schools and (24) at various Universities and Institutes abroad.

Four of her students have received awards for presentations in national and international conferences with the most recent (PhD student award) in European Congress in Catalysis (Europacat 2013).

Professor Lemonidou has served as member of the organising committees in many national and international conferences. In 2012 she organized (co-chair) an international conference entitled "Advances in catalysis in biomass valorization" as satellite of the International Catalysis Congress, 15ICC.

Research projects

Prof. Angeliki Lemonidou participates(d) in a number of national and EU projects as scientific responsible (21) and researcher(10). Of the 8 projects (total budget 1350 kEuros) that are currently in progress, 5 of them are national (Thalis, SYNERGASIA I and II, Aristeia) 2 of them are funded by EU (FP7 programme) and 1 by the Qatar National Research Foundation.

Memberships

Professor Lemonidou is member of the Greek Catalysis Society and Delegate to the European Federation of Catalysis Societies. She is also member of the American Chemical Society, National Hydrogen Society, National Platform for Biofuels and the platform for Energy.

List of Publications

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16. **A.A. Lemonidou***. I.A. Vasalos, "Carbon Dioxide Reforming of Methane over 5wt% Ni/CaO-Al₂O₃", Appl Catal. A 228 (2002) 227-235
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Patent

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