

CURRICULUM VITAE



SURNAME : KALOGIROU

FIRST NAME : EFSTRATIOS

DATE OF BIRTH : 24/7/1969, Mytilene, Greece

MARITAL STATUS : Married, 2 children

PROFESSION : Dr. Chemical Engineer

PROFESSION ADDRESS : 11, Davaki st.
Kareas - Vironas, 162 33 Athens, Greece
Tel: (+30 210) 7656426
Fax (+30 210) 7656980
e-mail: synergia@synergia.com.gr
www.wtert.gr

MILITARY DUTIES : Performed

EDUCATION :

- 1 st Public High School of Vironas, Athens. Grade Mark of Certificate of Studies: **19**, "Excellent" (Mark range 0-20).
- Graduate of the Polytechnic School of Aristotle University of Thessaloniki (**five** years duration). Department of Chemical Engineering. Grade Mark: **8** "Very Good" (Mark range 0-10). Graduated on March 21st, 1994.

- **Ph.D.** (since 07-12-2001) at the National Technical University of Athens, Department of Chemical Engineering, in the section of "Materials Science and Techniques", in the scientific region of "Physical Chemistry", under the supervision of Professor F. Roubani-Kalantzopoulou. Grade Mark: "Excellent". Title of the Ph.D. dissertation: ***"Mathematical Models for the Determination of Different Physicochemical Quantities Related with Air Pollution, Using the Reversed-Flow Gas Chromatography Technique"***.

- **Research Associate** in Earth Engineering Center of **Columbia University**, U.S.A., (<http://www.seas.columbia.edu/earth>), in the scientific fields: potable water resources, ozone sterilization technologies, energy recovery from solid wastes

FOREIGN LANGUAGES :

- English.

UNIVERSITY STUDIES :

- Preliminary study on production unit of NaClO₂.
- Technicoeconomical Plant Design on Biomass Pyrolysis.

SCIENTIFIC WORKS :

- Authorship of **book** with title: **"Drinking Water and Human Health (trace elements and trace organics)"**, published on 1994 by Papatotiriou Books Corporation, 35 Stournari st., Athens, Tel: 3302980-2. This book is part of the course: **"Quality Characteristics and Water Treatment"**, which is taught since 1995 as an Environmental Course (six months duration), at the Department of Chemical Engineering, in Aristotle University of Thessaloniki (second edition at 1999).

- Authorship of the **theoretical part (mathematical model)** of the Laboratory Course which is taught at the Department of Chemical Engineering, in National Technical University of Athens, with title: "Measurement of Physicochemical Parameters in Catalytic Reactions, with Reversed-Flow Gas Chromatography".

SELECTED SCIENTIFIC PUBLICATIONS :

- **E. Kalogirou**, N Themelis, P. Samaras, A. Karagiannidis, St. Kontogianni, «Fly Ash Characteristics From Waste-to-Energy Facilities and Processes For Ash Stabilization», ISWA World Congress 2010, Hamburg , Germany, 15-18 November 2010

- Publication in the Technic Annals, **Technical Chamber of Greece**:
A.Karagiannidis, **E.Kalogirou**, K.Psomopoulos, N.Themelis "Waste-to-Energy in United States of America - An analysis on the current situation", pp. 97-116, March-April 2010
- Publication in the International Scientific Journal **Waste Management & Research**:
A. Papageorgiou, A. Karagiannidis, R. Barton and **E. Kalogirou**, "Municipal Solid Waste management scenarios for Attica and their Greenhouse Gas emission impact" , Waste Management& Research, Vol. 27, No. 9, 928-937, 2009
- **E. Kalogirou**, «Waste to Energy: Solution for Greek MSW», 17th NAWTEC Conference, Chantilly VA, 18-20 May 2009, USA
- **E. Kalogirou**, N.J.Themelis, «Waste management in Greece and potential for waste - to – energy», ISWA Beacon Conference - Strategic Waste Management Planning in SEE, Middle East and Mediterranean Region, Novisad, Serbia, 10th December 2009
- **E. Kalogirou**, « Waste to energy solution for municipal solid waste», 2nd International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) & SECOTOX Conference, 21-26 June 2009
- « The Final Solution of Athens MSW Problem», Dr. Efstratios Kalogirou, President Synergia, 3rd ISWA/Greece Conference, 30-31 October 2009
- «APCRs From Waste-to-Energy Facilities and Processes For Ash Stabilization» C. Vavva, E. Voutsas, P. Samaras, **E. Kalogirou**, D. Tasios, 3rd ISWA/Greece Conference, 30-31 October 2009
- Publication in the International Scientific Journal **Chromatographia**:
F. Roubani-Kalantzopoulou, **E. Kalogirou**, A. Kalantzopoulos, H. Metaxa, R. Thede, N.A. Katsanos and V. Sotiropoulou : "A Differential Method for the Analysis of Chemical Kinetics Results Based on Reversed-Flow Gas Chromatography", *Chromatographia*.1997, **46**, 161-169.
- Publication in the Russian Journal **Physical Chemistry**:
H. Metaxa, **E. Kalogirou** and F. Roubani-Kalantzopoulou : "A Physicochemical Study of the Influence of Ethene and Ethyne on Various Marbles", *Rus. J. Phys. Chem.*, 1999, **73**, No 1, 112-116.
- Publication in the International Scientific Journal **Physical Chemistry**:
N.A. Katsanos, E. Iliopoulou, F. Roubani-Kalantzopoulou and **E. Kalogirou** :

" Probability Density Function for Adsorption Energies over Time on Heterogeneous Surfaces by Inverse Gas Chromatography" J. Phys. Chem. B, 1999, **103**, 10228-10233.

• Publication in the International Scientific Journal **Computational Mechanics** :

"F. Roubani-Kalantzopoulou, I. Bassiotis, **E. Kalogirou**, N.A. Katsanos, E. Iliopoulou and A. Arvanitopoulou: "Measurements and Models in Heterogeneous Physicochemical Processes in the Atmosphere", J.W.S. Longhurst, C.A. Brebbia, H. Power (eds)., *Air Pollution VIII*, Computational Mechanics, WIT Press, U.K., 2000, 667-676.

• Publication in the International Scientific **Journal of Chromatography A** :
E. Kalogirou, I. Bassiotis, Th. Artemiadi, S. Margariti, V. Siokos, F. Roubani - Kalantzopoulou : " Experimental Adsorption Isotherms Based on Inverse Gas Chromatography", J. Chromatogr.A., 2002, **969**, 81-86.

Presentation of Synergia the Permanent Environmental Committee of the Greek Parliament

On Thursday, January 29 of 2009 , Dr. Efstratios Kalogirou, Chair of SYNERGIA (WTERT/Greece), was invited by the Permanent Environmental Committee of the Greek Parliament (Chair: Mr. Kyriakos Mitsotakis) to make a presentation on the advantages of WTE for Greece and the consequent need to alter the present national master plan for waste management. The meeting was attended by representatives of the major parties and by Mr. Nikitas Kaklamanis, Mayor of Athens, who among else, also made a presentation. The SYNERGIA presentation was received favorably and many questions were addressed to Dr. Kalogirou. At the end of the meeting, Mr. Mitsotakis stated that this matter was of great importance to Greece and would be followed up by the Environmental Committee. The meeting was recorded and broadcast on the channel of the Parliament of Greece on February 3, 2009.

Presentations in WTERTs (WASTE TO ENERGY RESEARCH & TECHNOLOGY COUNCIL)

1. «*Problems and opportunities in implementing WTE in the smaller E.U. nations*, by Prof. Avraam Karagiannidis, Aristotle University of Thessaloniki and Dr. Efstratios Kalogirou», Proceedings of WTERT/2008 Bi-annual meeting, Columbia University, New York , 16-17 October 2008
2. «*Sustainable Waste Management*» , 1st FORUM SYNERGIA, Dr. Efstratios Kalogirou, President Synergia , "Thermal Treatment of MSW with Energy Recovery", Athens, 19th June, 2009

3. «*Waste To Energy for MSW*», Dr. Efstratios Kalogirou, President Synergia, Evgenidio, 10-11 November 2009, 14th Energy Conference, IENE
4. «*Sustainable Waste Management, SYNERGIA*», Presentation of Synergia in Cyprus , Cyprus University of Technology, 19th December 2009
5. «*Targets and Action of WTER/Greece*», 2nd Forum Synergia, Dr. Efstratios Kalogirou, President Synergia Integrated MSW Management: Recycling & Energy Recovery, EIE, Athens , 10th June, 2010
6. «*Waste to Energy Status in Europe*», (in cooperation with WTER Brazil), Dr. Efstratios Kalogirou, President Synergia, Rio de Janeiro, Brazil 05th-6th October 2010
7. «*WTER-Greece: Waste Management in Greece & Potential for Waste-To-Energy*», Dr. Efstratios Kalogirou, President SYNERGIA, Proceedings of WTER/2010 Bi-annual meeting, Columbia University, New York , 7-8 October 2010
8. «*Waste Management in Balkan Region*», Dr. Efstratios Kalogirou, President SYNERGIA , 1st Annual Meeting WtERT Germany, Brno, Czech Republic 12-14 October 2010
9. «*Waste to Energy: Development and Business Opportunities* Dr. Efstratios Kalogirou, President Synergia 25-27th November 2010, B2B, IENE

AWARDS

- **Thomaidio Award** from the National Technical University of Athens for the Science Progress (January, 2000).

WORK EXPERIENCE :

- Two years experience in Installation and Commissioning of Waste Water Treatment Plant of Argos, Naflpio, N Kios
- Two years experience in Business Center for Attica Air Pollution (mathematical modeling for dispersion of atmospheric pollution, MIUU, UAM)

- Six years Design, Construction and Optimization of the operation of a state of the art compact system for drinkable water and internal air purification-sterilization with ozone technology KFT-X88-C (in cooperation with a Shanghai based, Chinese company, specialized in ozone applications, more details in www.cftcn.com). The machine is certified according to European Union Certificates (CE, RoHS & ISO 9001/2000) and is distributed worldwide as a household water and air sterilization equipment.
- Expert of Greek Court Appraisals in Chemistry, Chemical Engineering, Environmental Engineering (Water, Wastewater and Municipal Solid Waste Treatment (emphasis in Waste to Energy, Marine Lubricants and Oils)

MEMBERSHIP IN SCIENTIFIC SOCIETIES :

- President in Waste To Energy Research & Technology Council (WTERT) for Greece (Synergia, www.wtert.gr)
- Member in the U.S. WTERT Advisory Board (WTERT, www.wtert.org , USA)
- Member of Working Group Energy Recovery of ISWA
- Member of the Technical Chamber of Greece, membership serial no.67833.
- Member of the Panhellenic Society of Chemical Engineers.