

## Dr. APOSTOLIDOU Eleni, MSc, PhD

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## **Education and training**

1986 Doctorat de l'Université Paris VI, University Pierre et Marie Curie, Paris,

France

1983 Diplôme d'Etude Approfondies de Chimie Appliquée – Chimie Industrielle

(D.E.A), University Pierre et Marie Curie, Paris, France.

1982 Maîtrise de Chimie, University Reims, France.

## Work experience

- In September 2019 to day I was elected as a professor in the Chemistry Department, IHU.
- From 2014 2016, I teach as a visiting Professor at Technische Hochschule Nürnberg Georg Simon Ohm, Germany.
- From 2012 2017, Lecturer in the MSc in Water Resources of the Mediterranean" of the Eastern Macedonia and Thrace Institute of Technology in Kavala Greece; Teaching Green Technologies and Desalination Techniques.

- From 2005 to 2008, Vice President of Technological Educational Institute of Kavala (TEI KAVALAS).
- From 2001 to 2004 Leading hand in the Mechanical Engineering Department.
- In September 1993 I was elected as a professor in the Department of Mechanical Engineering of T.E.I. Kavalas, since then I have been involved in teaching subjects in Renewable Energy Resources, Conservation of Energy and Transfer of Hearting.
- From 1987 to 1993 employed as an Assistant Professor in the Mechanical Engineering Department at Technical Educational Institute (T.E.I.), subjects in Renewable Energy Resources, conservation of Energy, transfer of Heating and Chemical Technology.
- From 1999 to this date, I teach as a visiting Professor at the University of Pierre et Marie Curie (Paris VI) in the Department of Masters Degree (D.E.A. Chimie Appliquee et Genie des Procedes Industriels).
- During the schooling year of 1999-2000, I am visiting Professor at the University of Marseille III (France), to fourth year students (Maitrise), with subject "The role of the environmental energy resources to the environment".
- From 1987 to 1997, I was associated as Organizational Director in the Department of New Technology and the seminar confrences in Renewable Energy Resources for the Hellenic Productivity Center (H.P.C.), Department of Kavala.
- From September 1986 to August 1987, I was employed for MICROTEX HELLAS
   S.A. contracted for the organization and productional facilities for the photovoltaic components and frameworks for the manufacturing, agricultural and housing use.
- From the schooling year 1984-85 to 1985-86, I teaching <u>spectroanalysis</u> with plasma (ICP-AES), at the University of Pierre et Marie Curie, Paris VI (Ecole Nationale Superieure de Chimie), Department of (Genie) Chemistry.

## **Personal Skills and Competences**

Mother tongue Greek

Other languages French (Understanding/ Speaking/ Writing)

**English** (Understanding/ Speaking/ Writing)

### Organizational Skills and competences

- From 2016 today, Director in International Summer School on Photovoltaic Systems and Emerging Technologies (I3SE). Collaboration INES and HEI Lille <a href="http://summerschool.chem.ihu.gr/">http://summerschool.chem.ihu.gr/</a>.
- Responsible program Erasmus+, Chemistry Department.

- Since 1987 Director of the Alternative Energy Resources and Heat transfer Laboratory
  of Chemistry Department. The activities of the Laboratory include a) Students' tutorial,
  lab exercises and dissertations b) Students' practical work c) research activities
  through participation and/ or coordination of national, bilateral and competitive
  European projects and d) extension services.
- Major member of the project EPEE 1 work experience for the students of T.E.I.
   Kavalas.
- Team leader in the subjects of Thermodynamic Organization of production for the Department of Mechanical Engineering from 1.9.1994 31.8.1998 and to 1998 2000 as assistant 1.9.2000 31.8.2001.
- Ordinal observational committee member of the projects of EPEAK T.E.I. Kavalas from 1996 till to 2005.
- Activity coordinator ECTS (European Credit Transfer System) of T.E.I. Kavalas from 1.9.2001 till to 2007.
- Team coordinator of the Socrates program for Mechanical Engineering Department from 1.9.1999 till today.

### **Membership of Professional Organisations/Networks**

- Member of the Institute of Solar Energy.
- Membre of Club Maîtrise de l'Environnement Energie Enseignement (cm 3e).
- Member of the Association of Greek Chemists.
- Member of the Association Women in Science (AWIS).
- Member of The Society of Petroleum Engineers (SPE International)

## **Research/ Action Projects (Contracts)**

- Research program "Genie des Procedes et Protection de l'environment", which has been undertaken by the program ALFA (Amerique Latine Formation Academique" by the EE in cooperation with the Educational Institutes of France, Sweden, Mexico και Venezuela, ALFA N° ALF/B7-3011/94.04-5.0112.8.
- Research program "ECO-CAMPUS: Energy Environment network of European universities and research centers", which has been undertaken by the program THERMIE by the EE EE in cooperation with the Educational Institutes of France, Finland, Portugal, και Denmark, Contract N° XVII STR 1006 96 Fr.
- Research program "GOVERNET Governance tools for sustainable local development and networking which has been undertaken by the program INTERREG IIIB CADSES by the EE in cooperation with the Regione Veneto, Italy.
- Research program "RURENER" Network of small rural communities for energetic-neutrality by the program Intelligent Energy, Contract N°EIE/07/547/SI2.499065.

- Research program "Thalis" " Production of biohydrogen from algae mono cells" ,project 3566, University of Crete.
- Research program Arximidis Vertical integrated process of biodiesel production from microalgae (Microalgae cultivation, biodiesel production, quality control, biodiesel combustion, carbon life cycle calculation), TEI Kavalas.

## **Diploma in patents**

In February 1986 I obtained from the (European Patent Office), the diploma with subject on (the procedure of how to obtain crystal of silicon for photovoltaic applications), No 87102751, 2/07/04, 1987.

#### **Publications**

- Grigorios Iordanou, Eleni Apostolidou, , 'Experimental studies coupled by Computational Fluid Dynamic (CFD) findings for the of Heat Transfer enhancement in Flat Plate Solar Water Collectors', IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), ISSN: 2278-1684,p-ISSN: 2320-334X, Volume 11, Issue 3 Ver. III 50-57.
- K. Dermentzis, D. Marmanis, A. Christoforidis, N. Kokkinos and E. Apostolidou 'Removal of nickel phthalocyanine dye from wastewater using photovoltaic electrocoagulation", 12th International Conference on Fundamental and Applied Aspects of Physical Chemistry, 22-26 Sept., Serbia, Belgrade.
- G. Iordanou, E. Apostolidou "Development of a Mathematical Lumped Parameters Model for the Heat Transfer Performance of a Solar Collector", Journal of Engineering Science and Technology Review 6 (3) 5-9
- V. Chatzis, E. Apostolidou, I. Pantelidou and A. Moutzouroglou, "Work-Related Learning In Higher Education Around Europe", in Proceedings of the International Technology, Education and Development Conference (INTED 2008), Valencia, Spain, March 3-5.
- Th. Spanos, V. Simeonov, P. Simeonov, E. Apostolidou, J. Stratis, "Environmetrics to evaluate marine environment quality", Environmental Monitoring Assessment
- P. Faucher, E.V. Apostolidou, Ph. Ballofet, J. Roturier, A. Logkaris, "Implementing energy efficiency programs in the management of European University campuses and research laboratories, the European ECOCAMPUS initiative 10 years later: an analysis of the "Practice What You Preach" paradigm from two case studies in France and Greece respectively", Proceedings of SECOTOX Conference and the International Conference on Environmental Management Engineering, Planning and Economics, Vol. IV, pp. 2877-2886, Skiathos, Greece, June 24-28 2007
- V. Kazana, A. Kazaklis, I. Takos, T. Merou, D. Emmanouloudis, N. Avtzis, M. Lazaridou, E. Apostolidou, M. Partalidou, M. Vafiadis, G. Vardakis, A. Boutsimea, K. Georgiou, "Integrated rural sustainable development Models Simulation and Validation", GOVERNET Final WP5 Report, Veneto Region, Mestre, Italy.

- J. Roturier, A. de Almeida, E. Apostolidou, D. Berbecaru, J.F. Bonnet, R. Cazanescu,
   P. Faucher and al., "ECOCAMPUS": a "Practice What You Preach" European collaboration, Sustainability and University Life, Vol. 8, pp. 129-147.
- P. Faucher, A. de Almeida, E. Apostolidou, D. Berbecaru, D. Bernard, T. Laine, E. Loot, A. Gula, Th. Lamouche, J. Norgard, Ph. Outrequin, J. Roturier, «Implementing energy-efficient and environment-safe programs in the management of European university campuses and research laboratories: Case-studies from the ECOCAPMUS collaboration, ACEEE Conference, August, Asilomar (CA).
- E. Apostolidou, «Production of Photovoltaic Silicon», 4<sup>th</sup> National Conference with subject "Renewable Energy Resources", 6- 8 October, Xanthi, pages 36 – 44 ( Volume B´)
- J. Amouroux, D. Morvan, H. Apostolidou, F. Slootman,"Elaboration de silicium photovoltaique sous plasma reactif", Coll. AFME, Seminaire des contrats materiaux et photopiles, pp. 15-40, 24-25 Oct., France.
- F. Slootman, H. Apostolidou, D. Morvan, J. Amouroux, "Mesure de l'evaporation des imruretes d'un materiau fondu sous plasma par srectrometrie d'emission sur l'interface plasma-bain liquide. Application a la purification du silicium metallurgique", Revue des Hautes Temperatures, No 23, pp 23-28, 1986, France.
- J. Amouroux, D. Morvan, H. Apostolidou, F. Slootman, "Production of photovoltaic grade silicon from metallurgical grade silicon by a plasma purification process", Expended Abst. N° 298 Spring, Meet. Electrochem. Soc., pp. 439-440, 4-9 May, Boston, U.S.A.
- J. Amouroux, D. Morvan, H. Apostolidou, F. Slootman, "The plasma process control by emission spectroscopy in the case of the purification of metallurgical grade silicon", Proc. of 1<sup>st</sup> Int. Conf. on Plasma Scien. and Tech., pp. 226-231, 4-7 June, Beijing, China.
- D. Morvan, H. Apostolidou, F. Slootman, J. Amouroux, J.L. Rouchaud, M. Federoff, "Photovoltaic silicon production by plasma process", 7 th EEC PSEC, pp. 719-725, 27-31 Oct., Seville, Spain.
- J. Amouroux, D. Morvan, H. Apostolidou, F. Slootman, "Plasma reactifs-Purification, analyses", Coll. AFME Materiaux et Photopiles, pp. 23-41, 17-18 Nov., France.
- J. Amouroux, D. Morvan, H. Apostolidou, F. Slootman, P.V. Huong, J.L. Vuotto, M. Fedoroff, J.C. Rouchaud, "Purification of metallurgical grade silicon by a multiphase plasma process. Physical and chemical caracterisation of photovoltaic material",6th European Photovoltaic Solar Energy Conference, pp. 946-950, 15-19 April, London, England.
- J. Amouroux, H. Apostolidou, F. Slootman, D. Morvan, "Experimental and modelisation studies of heat and mass transport phenomena between mother silicon and an argon plasma. Application to the control of a silicon purification process", 7th International Symposium on Plasma Chemistry, 1-5 July, vol. 4,pp.1232-1237, Eindhoven, Netherlands.

- J.Amouroux, F. Slootman, H. Apostolidou, D. Morvan, "Application of emission spectroscopy for control and diagnostic of a plasma refinining process of silicon. Corpelation between spectroscopic mesurement duping purification and properties of the silicon after treatement", Colloge Spectroscopy International, vol. 2, pp 254-255, Sept. 15-21, Federal Republic of Germany.
- J. Amouroux, D. Morvan, H. Apostolidou, F. Slootman,"Utilisation du plasma pour traitement du silicium. Revue, purification, analyse, decapage et traitement de surface", Coll. AFME, Materiaux et photopiles pour la convertion photovoltaique, pp. 331-356, 25-26 Oct., Valbonne, France.
- J. Amouroux, D. Morvan, H. Apostolidou," Traitement sous plasma haute pression et basse pression. Analyse du materiau. Etude économique du procède", Coll. AFME, la filière photovoltaique, pp. 23-42, 17-18 Nov., Valbonne, France.