

CURRICULUM VITAE

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GEORGIOS A. VOKAS

Dr. Engineer NTUA, Dipl. Electrical Engineer NTUA

Off. +30 210 53.81.180, Mob.+30 6936.570.771, E-mail: gvokas@uniwa.gr



EDUCATION

Undergraduate Studies: National Technical University of Athens (N.T.U.A.) - Faculty of Electrical and Electronic Engineering - Graduation date: Dec.1989.

Postgraduate Studies: July 1990 - November 1995 worked as a post-graduate student at N.T.U.A. in the field of Renewable Energy Sources.

PhD Dissertation thesis: "Photovoltaic Systems Simulation and Analysis of the Problems caused to the Electric Grid power quality", Dec.1995 - with Honors.

Web links: Research Gate: https://www.researchgate.net/profile/Georgios_Vokas
Linked-In: <https://www.linkedin.com/in/georgios-vokas-b0a30426/>

ACADEMIC PROFESSIONAL STATUS

7th/18-today: **Professor** in University of West Attica, Electrical & Electronics Engineering Department (EEED-UNIWA). Field: Power Electronics in Renewable Energy Applications.

9th/21-today: **Director of the B' Sector** (Electrical Industrial Devices & Automation) of EEED-UNIWA.

3rd/18-6th/18: **Associate Professor** in University of West Attica, Electrical & Electronics Engineering Department. Field: Power Electronics in Renewable Energy Applications.

2014-2nd/18: **Associate Professor** in Piraeus University of Applied Sciences (TEI Piraeus) Electronics Engineering Department. Field: Power Electronics in Renewable Energy Applications.

2009-today: **Head of the Power Electronics Laboratory** in Piraeus University of Applied Sciences (TEI Piraeus) /Electronics Department dealing with: Power Converters, Energy Storage and Management Applications in RES.

2015-3rd/18: **Director of the A' Sector** (*Electronics & Computers*) of Electronics Engineering Department.

2007-2014: **Assistant Professor** in Piraeus University of Applied Sciences (TEI Piraeus) /Electronics Engineering Department. Field: Power Electronics in Renewable Energy Applications.

1998-2009: **Lecturer** of the post graduate course "Energy Storage Technologies and Techniques, Photovoltaics & Rational Use of Energy", Piraeus University of Applied Sciences (PUAS) & OPEN University UK.

2009-today: **Lecturer** of the post-graduate course **MSc in Energy**, established by PUAS & Herriot Watt University covering the area "Power Electronics in RES and their use in Smart Grids". Also, he is supervisor of Master degree theses of "MSc in Energy".

2016-today: **Lecturer** of the post-graduate course **MSc in Interconnected Electronic Systems**, established by PUAS covering the area "Interconnection of RES in classical & Smart Grids". Also, he is supervisor of Master degree theses in this course.

2016-today: **Lecturer** of the post-graduate course **MSc in Management & Optimization of Energy Systems**, established by PUAS covering the area "Operation & Maintenance of Photovoltaic Systems". Also, he is supervisor of Master degree theses in this course.

FREE-LANCE ENGINEER PROFESSIONAL STATUS

- 1990-today:** **Electrical Engineer (Free Lance)** offering high level technical consultant services in numerous of energy projects (RES, Energy Saving) in licensing, design, installation, project management and O&M issues. He has designed, supervised, and connected more than 40MW of grid-connected Photovoltaic projects as well as 80MW wind projects. Specialized also in Power Quality issues in Industries and Complex Electromechanical Installations.
- 2013-10/'16:** **Technical Director** of SYNERGIA SA – Operation & Maintenance of 30MW Photovoltaic Power Plants of various Investors. Also responsible for all ISO 9001 procedures.
- 2012-10/'16:** **Technical Director** of ENERGOPIISI SA – Supervision of engineering studies, licenses procedures, installation and grid connection of 18MWp Photovoltaic Power Plants. Owner: 3-Gorges Chinese Group (CTG).
- 2011-2012:** **Director** of TESCO/SOLARWATT – German Photovoltaic Panels Producer/Supplier. Responsible for: B2B - Development of new sales network & Marketing strategies.
- 2007-2011:** **General Manager** of Conergy EPE Greece (Photovoltaic indirect sales business B2B). Also, Director Sales & Marketing of Conergy Greece Group (after the merge of Conergy Ltd, Suntechnics Ltd, Epuron Ltd). During the cooperation with Conergy Greece, the B2B & B2C Sales were tripled every year reaching a total of 26MWp at 2010 (2010 Budget ca 40MEuro). Main Tasks: General Management & Sales.
- 2001-2007:** **Head of Energy Department** of Actions 2.1.3, 6.1.1 of the European Operational Program of Competitiveness in Energy projects – ELANET (Hellenic Development Company) within the 3rd European Community Support Framework (ECSF). EU Funds adsorption >95%.
Completion of 145 investment projects - Budget ca. 150M€. Main tasks:
- ◆ *Support of private sector energy project proposals in ECSF*
 - ◆ *Provision of high quality Management in their implementation*
 - ◆ *Complete Auditing and Supervision of projects for successful on-time implementation*
 - ◆ *Responsible for Ethical compliance of the Energy Department*
- 1997-2000:** **Project Manager and Technical Auditor** in ELANET responsible for the European Operational Energy Program (100 projects - Budget ca. 100 M€). The Measures in which investments take place are similar to those of the Operational Energy Program.
Among the Measures of the OPERATIONAL ENERGY PROGRAM are:
- * *Solar (PV), Wind (WG) and Hydroelectric (HYDRO) energy production,*
 - * *Hybrid PV-Batteries-Diesel powering mobile telecommunication repeater stations,*
 - * *Rational use of Energy in Industry and Large buildings,*
 - * *Implementation of alternative fuels (Natural Gas, LNG) in Industry and Cogeneration*

ACADEMIC EXPERIENCE

Since 1990 has taught and supervised the following subjects in Institutes such as NTUA, Piraeus Univ. of Applied Sciences (PUAS), University of West Attica and 2 Masters courses in PUAS (MSc in Energy & Interconnected Electronic Systems):

- Renewable Energy Sources & alternative fuels
- Power Electronics & Smart Grids
- Energy Storage: Technologies & Techniques
- Electronics: Theory and Design
- Photometry - Illumination Techniques Laboratory
- Rational Use of Energy, Energy Saving Techniques

FOREIGN LANGUAGES

ENGLISH: "Proficiency" Level

GERMAN: "Kleinsprachdiplom" Level

MAIN RUNNING PROJECTS

- 2021-today:** **Pilot Project for enhancing Reforestation and achieving the National Reforestation targets**, Ministry of Energy & Environment, Budget 6,2M€.
- 2020-today:** **Installation of 880kWp PV system at UNIWA: the 1st Green University**, Budget 1,7M€.
- 2020-today:** **1st Hybrid Electric Vessel of Greece & Green Ports development**. Connection of 2 Ports (Aegio-Ag.Nikolaos), with transformation of the Vessel “**e-Spirit**” combining RES and H₂.

RESEARCH ACTIVITIES, PAPERS

- Since 1989 he has successfully worked as a main researcher or a member of the research group in **fifteen (15)** research projects in the fields of RES, Energy Storage, Power Quality, Power Electronics and Rational Use of Energy.
- Since 1989, **one hundred forty two (142)** papers have been published in International Journals & International Conferences and **fifteen (15)** articles in Technical Journals in the aforementioned areas, reaching **1070 Google Scholar citations**.
- General Chair of TMREES Conference Series (*Technologies & Materials for Renewable Energy, Environment and Sustainability*).

INTERNATIONAL COOPERATIONS

- **Lorraine University – Metz/France:** Since Nov.2016 established cooperation on RES-Smart Grids-Power Electronics based on ERASMUS+. Member of one PhD Committee 2019-2021.
- **Lebanon University – Beirut/Lebanon:** Since April 2015 cooperation on RES-Smart Grids-Power Electronics based on ERASMUS+. Participation in co-organization of 5 International Conferences.

MEMBER OF ORGANIZATIONS

1. Technical Chamber of Greece (TEE), member.
2. National Chamber of Electrical and Mechanical Engineers of Greece, member.
3. Hellenic Association of Photovoltaic Companies (HELAPCO), as General Secretary ('09-'11) promoting the Greek solar market, lobbying with Ministries, Public Organizations and Authorities.
4. Athletic Sports Club “Academia Oplomachias” (Fencing club), President ('97-'06), MoB '07-'13).
5. Non-Profit Organization of Orphan Girls Protection in “St. Anna”, Vice President (6th 2018 – today).

MAIN SCIENTIFIC INTERESTS

His research interests include:

- SMART GRIDS & OPTIMIZATION SCHEMES FOR ENERGY PLANNING USING RENEWABLE ENERGY SOURCES (RES)
- CIRCULAR ECONOMY AND RATIONAL USE OF ENERGY IN INDUSTRY AND BUILDING SECTOR
- ENERGY STORAGE IN SMART GRIDS FOR HIGH RES PENETRATION
- ELECTROMOBILITY WITH RES AND INDUCTION CHARGING
- POWER QUALITY OF ELECTRIC POWER SYSTEMS
- ENERGY STRATEGIES AND ENVIRONMENTAL ISSUES USING RES
- WAYS FOR INCREASING THE EFFICIENCY (PR OPTIMIZATION) OF PV PARKS
- MEASURING ELECTRICAL CHARACTERISTICS OF GRID CONNECTED PV SYSTEMS
- FEASIBILITY STUDY, ENERGY MANAGEMENT & DESIGN OF LARGE SCALE PV PARKS
- DESIGN & CONSTRUCTION OF 3-PHASE 6-PULSE CONTROLLED RECTIFIERS / INVERTERS
- EXPERIMENTAL SIMULATION OF PV STATIONS USING POWER ELECTRONIC CIRCUITS