Stylianos J. Kouridakis, PhD
PhD, Electrical and Computer Engineering

Lecturer in Telecommunications Section
Technological Educational Institute of Crete, Department of Electronics,
Branch of Chania, Crete, Greece

Curriculum Vitae

1. Personal Information

Last name:	Kouridakis
First Name:	Stylianos
Father's Name:	John
Birth Place:	Piraeus, Greece
Birth Date:	9 April 1956
Family Status:	Married, 2 children
Military Duties:	Fulfilled, Hellenic Air forces (1983-1985)
Phones:	+30 2821023051
Fax:	+30 2821023003
E-mails:	kouridakis@chania.teicrete.gr, stkourid@otenet.gr

2. Education

2/02:	PhD in Telecommunication Systems Engineering, National Technical University of Athens (NTUA), Dept. of Electrical and Computer Engineering.
3/92:	MSc in Electrical and Computer Engineering, National Technical University of Athens (NTUA), Dept. of Electrical and Computer Engineering (Telecommunications Engineer)
2/83:	Degree on Mathematics, University of Patras
92-93:	Computer, Microprocessors, microcontrollers and Automatic Control Seminars participant

3. Research Experience

- "Advanced Methods on NMR Imaging on Biomedicine" (4/92–8/93), National Technical University of Athens (NTUA), Athens, Greece
- "Influence of propagation conditions in the quality and availability of high rate digital signals in Troposphere" (5/92-8/92), NTUA Athens, Greece
- "Infrastructure development in Biomedical Technology" (4/93-8/93), NTUA Athens, Greece
- "Biomedical Effects of Electromagnetic Fields" COST Project 244 (93-96), NTUA Athens, Greece
- "Thermal imaging camera development" in EPET II-NOVISYS project within the framework of collaboration between Hellenic Aerospace Industry and NTUA Athens, Greece.

- "Development of a Communication Network in ELF-ULF region of Electromagnetic Waves" (2002-2006) in collaboration with NTUA and Greek Navy.

Research Objectives

My research activities span the design, simulation and built of systems and units involving tools and techniques in applications in the following scientific fields:

- **Wireless communication** including rf preamps and power amplifiers, oscillators, PLL units, Digital Synthesizers, modulation and modulators /demodulators, antenna synthesis
- **Radar**
- **Digital communications**
- **Analogue and digital signal processing**
- **Telemetry and optoelectronics** including rf, sonar and laser systems
- **Automation control systems / Robotics** involving embedded microcontrollers, electromechanical sensors (proximity, movement, acceleration, temperature, pressure, light, etc), electro pneumatic systems.
- **Power electronics**
- **Renewable Energy Sources**
- **Bioengineering**

4 Industrial and Professional Experience

Hellenic Aerospace Industry (HAI), Department of Research and Development in Optoelectronics (1995-2000). My activities were the development and prototyping of the following:

- high efficiency Switching Mode Power Supplies (SMPS)
- wired / wireless communication data modem
- medium power pulsed laser electronics
- photo receiver/amplifier for laser applications
- Portable CW and Pulsed Laser unit for advanced telemetry applications.
- Thermal Imaging Camera
- Upgrade of telecommunication management system on AWACS aircrafts
- Support of RADAR system of F-16 aircrafts.

National Technical University of Athens (NTUA), Dept. of Electrical and Computer Engineering (1992 – 2005). My activities were the design and development state of the art electronic units and systems for research applications or Lab support as:

- An advanced, high sensitivity Electric and Magnetic Field Meter Unit for 50 Hz applications
- a PLL frequency synthesizer with 200,000 channels of 1kHz step, in UHF region
- automatic tuned, special designed surface antennas for MRI applications

- LF signal generators for Lab support with advanced protection design
- Power supplies with controlled amplitude modulated output voltage and current
- High Power RF transmitter in ELF / VLF regions
- Low Noise RF receivers

Naval experience with the support and service of automation, telecommunication and navigation systems, on big oil or cargo ships.

5. Teaching Experience

- **Lecturer,** Department of Electronics, Technological Educational Institute (TEI) of Crete, Branch of Chania, Crete 2006-now. Teaching lessons include Telecommunication systems (Analogue and Digital), Radar systems, Signal and Image Processing.
- **Visiting Assistant Professor,** Department of Electrical Engineer, TEI of Piraeus, 2003-2005 teaching Digital Systems.
- **Lecturer,** Department of Electrical Engineer, TEI of Piraeus, 1999-2003, on Digital Systems.
- **Lecturer,** Department of Bioengineering, TEI of Athens, 2000-2005.
- **Lab Assistant,** Laboratory of Electronics and Telecommunications, Dept. of Electrical and Computer Engineering, NTUA, 1994-1996
- **Lecturer,** Laboratory of Electronics and Telecommunications, Hellenic Naval Academy, Piraeus, Greece, 1994-1996
- Teaching in many seminars

6. Conference Proceedings and Publications

- S. J. Kouridakis "*Making Infrared spectrum visible with infrared cameras: Advantages and applications*" Presented at the 4th International Conference of Non Destructive Testing (ICNDT) (Chania, Crete, Greece, 11-14 October,2007)
- S. J. Kouridakis "*Methods of detection buried or submerged metallic objects using Electromagnetic Fields of Low Frequencies (LF) and Extremely Low Frequencies (ELF)*" Presented at the 4th International Conference of Non Destructive Testing (ICNDT) (Chania, Crete, Greece, 15-18 October,2003)
- S. J. Kouridakis "*Structure and management of Energy Flow in a complex Electric Energy System using solar and wind energy renewable power sources*" Presented at the 5th National Conference of Non Destructive Testing (NTUA, Athens, Greece, 18-19 November,2005)
- S. J. Kouridakis "*A Modern Device Design for measurements and telemonitoring of Electric and Magnetic Fields in 50 Hz Power Lines*" Presented at COST Project 244 on "Biomedical Effects of Electromagnetic Fields", (NTUA, Athens, 24-28 March 1995, pp37-41)
- D.Yova, K.Kassis, S. J. Kouridakis, N. Uzunoglou et al "*Case control Study and Assessment of Electromagnetic Field Exposure in relation to*

Childhood Brain Tumors" Presented at COST Project 244 on "Biomedical Effects of Electromagnetic Fields", (NTUA, Athens, 10-12 December 1993, pp173-189)

- N. K. Uzunoglou, S. J. Kouridakis "*Radiation of Very Low and Extremely Low Frequencies (VLF & ELF) by a Natural Antenna based on an Island or a Peninsula Structure*" Radio Science Bulletin, No 308, March 2004, pp. 7-12.

- PhD thesis: "*Techniques of transmitting and receiving Electromagnetic Signals of Extremely Low frequencies and Nuclear Magnetic Resonance for MRI*", February 2002, NTUA, Department of Electrical and Computer Engineering, Greece. Supervisor: N. K. Uzunoglou (NTUA Prof.)

- Diploma thesis entitled "*Design and construction of a PLL synthesiser with 200,000 channels of 1kHz step, in UHF region based on a microcontroller*" March 1992, NTUA, Department of Electrical and Computer Engineering, Greece. Supervisor: N. K. Uzunoglou (NTUA Prof.)

7. Professional Memberships

Member of TCG (Technical Chamber of Greece)
Member of Hellenic Society of Non Destructive Testing (HSNDT)

8. Languages

Greek (mother Tongue) and English.