# CURRICULUM VITAE

of

# John P. Makris



2024



# CURRICULUM VITAE

# Personal Data:

*Surname*: Makris

*Name*: John

*Father's name:* Panayiotis

<u>Date of birth</u>: 10<sup>th</sup> of June, 1966 <u>Birthplace</u>: Athens

Sex: male Nationality: Hellenic

*Family status:* married, two daughters

**Present position:** Tenure Full Professor on Measurements Technologies with emphasis to

Seismoelectromagnetism, at Department of Electronic Engineering, School of Engineering, Hellenic Mediterranean University, Crete,

Greece

Office Address: Institute of Physics of the Earth's Interior and Geohazards,

Hellenic Mediterranean University Research & Innovation Center

<u>Street</u>: Romanou <u>No</u>: 3 <u>Suburb</u>: Chalepa

Zip-Code: GR73133 City: Chania Region: Crete Island

*Country*: Greece

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#### Studies:

- 1985–1990: Department of Physics, School of Science, National and Kapodistrian University of Athens. BSc in Physics.
- 1992: Microelectronics Department of Hellenic Center of Productivity (EL.KE.PA).

  Certificate in: "Use and Applications of Microcontrollers".
- 1990-1997: PhD entitled: "Electromagnetic Study of the Geoelectric Structure of an Area Sensitive to the Detection of pre-Seismic Electric Signals", Department of Physics, School of Science, National and Kapodistrian University of Athens, 223 pages, ND 12847, National Archive of PhD Theses of National Documentation Centre, doi: 10.12681/eadd/12847(http://hdl.handle.net/10442/hedi/12847 in greek)
- 23-27/07/2003: Hellenic Laboratories Association (HellasLab) and N.C.S.R. "Demokritos", "Metrology Accreditation, Tools to achieve Laboratory Reliability" (1st cycle).
- **05-09/12/2005**: Hellenic Laboratories Association (HellasLab) and N.C.S.R. "Demokritos", "Metrology Accreditation, Tools to achieve Laboratory Reliability" (2<sup>nd</sup> cycle).
- 16-17/03/2006: Greek Research & Technology Network (GRNET) and University of Crete, "Introduction to Enabling Grids for E-science in Europe (EGEE)".
- **18–20/12/2006**: Greek Research & Technology Network (GRNET) and Technical University of Athens, "Grid Applications".
- **26-27/05/2014**: MISTRAS HELLAS A.B.E.E. "Non-Destructive Tests with Acoustic Emissions".

#### Foreign Languages:

Fluent in English both verbal and writing and French.

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# Scientific Focus Areas and Research Interests:

- Physics of the Earth's Interior.
- Electromagnetic Methods in Geophysics.
- Seismic Electric, Magnetic and Electromagnetic Phenomena; Earthquake Prediction Research.
- Sensors and Transducers.
- Measuring and Data Acquisition Systems.
- Measurements, Telemetry and Instrumentation.
- Micro-controllers and Computer Technologies for Measurements.
- Metrology and Accreditation.

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#### Educational and Research Service:

October 1991-June 1994: Teacher of Physics Experiments (primary level) at the private school "Ellinogermaniki Agogi" (Hellenic-German Education) <a href="https://www.ea.gr/en">https://www.ea.gr/en</a>.

February 1992-February 1997: Doctoral Researcher at the Section of Condensed Matter Physics, Department of Physics (<a href="https://en.phys.uoa.gr/">https://en.phys.uoa.gr/</a>), School of Science of the National and Kapodistrian University of Athens for scientific and technical supervision and support of the VAN Telemetric Network for Earthquake Prediction Research and analysis of electric, magnetic and electromagnetic data.

February 1997-April 1998: Postdoctoral Researcher at the Solid Earth Physics Research University Institute (S.E.P.I <a href="http://www.sepi.edu.gr/">http://www.sepi.edu.gr/</a>) for scientific and technical supervision and support of the VAN Telemetric Network for Earthquake Prediction Research and analysis-interpretation of electric (Seismic Electric Signals, SES), magnetic and electromagnetic data and for the design and development of telemetric measureremet systems. Responsible for conducting geoelectromagnetic research with emfasis to Magnetotellurics.

*April 1998-December 2002:* Visiting Assistant Professor at the Technological Educational Institute of Crete, Department of Electronics and Department of Natural Resources and Environment, teaching Physics, Metrology, Physics of Electronics, and Electronic Measurements.

October 1998–February 2001: Educator at the Institute of Vocational Training of Chania (<a href="https://giekchan.sites.sch.gr/home/">https://giekchan.sites.sch.gr/home/</a>), teaching Analogue Electronics, Digital Electronics, Microcontrollers, Automations, and Environmental Geology.

November 1998-July 2005: Visiting Assistant Professor at the Technological Educational Institute of Crete, Department of Telecommunications and Computer Networks (Lifelong Learning Programme of Selected Studies) Electronics and Department of Natural Resources and Environment, teaching Special Topics in Physics, Analogue Electronics, Electromagnetic Waves Propagation, Data Acquisition Systems, and Electronic Components.

*March 2001–February 2003:* Visiting Assistant Professor at University of Crete, School of Social Sciences, Department of Economics (<a href="https://economics.soc.uoc.gr/en">https://economics.soc.uoc.gr/en</a>), teaching Computers I and II.

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February 2003- May 2019: Senior Researcher at Technological Research Center of Crete, Head of the Institute of Natural Resources and Natural Hazards (09-12-2005 till 14-02-2015).

*December 2002-October 2008:* Assistant Professor at Department of Electronics, Technological Educational Institute of Crete.

> Senior scientist at Research Laboratory of Geophysics and Seismology.

*October 2008-October 2016:* Associate Professor at Department of Electronic Engineering, School of Applied Sciences, Technological Educational Institute of Crete, Head of the Department (01-09-2008 till 31-08-2012).

> Senior scientist at Research Laboratory of Geophysics and Seismology.

October 2016-May 2019: Full Professor on Measurements Technologies with emphasis to Seismoelectromagnetism, at Department of Electronic Engineering, School of Applied Sciences, Technological Educational Institute of Crete.

> Senior scientist at Research Laboratory of Geophysics and Seismology.

May 2019-April 2024: Research Director at Institute of Physics of the Earth's Interior and Geohazards (<a href="https://earth-phys.hmu.gr/">https://earth-phys.hmu.gr/</a>), Hellenic Mediterranean University Research & Innovation Center.

May 2019-today: Full Professor on Measurements Technologies with emphasis to Seismoelectromagnetism, at Department of Electronic Engineering, School of Engineering, Hellenic Mediterranean University (<a href="https://ee.hmu.gr/en/home/">https://ee.hmu.gr/en/home/</a>).

As faculty of Hellenic Mediterranean University (former Technological Educational Institute of Crete) during my service (2003-today) I lectured undergraduate courses in Physics of Electronics, Analysis of AC Circuits, Digital Circuits, Analogue Electronics, Electronic Measurements, Metrology and Sensors, Electronics of Measuring Systems, Measurement Technologies and Instrumentation, Micro-computers, Micro-controllers, Environmental Statistics, and Introduction to Geophysics.

Supervisor of more than 30 diploma theses, and academic supervisor of more than 20 students in their final practical training.

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## Advanced Teaching Experience:

Lecturer at Socrates Programme: Erasmus – Intensive Programme entitled "Optoelectronics, Lasers and Applications – OLA-Crete 2006" (Grant Agreement No 29099-IC-1-2004-1-GR-ERASMUS-IPUC-3), 10-22 July 2006, Chania, Dept. of Electronics, T.E.I. of Crete, giving lectures on "Introduction to Optoelectronics I & II".

Lecturer at Socrates Programme: Erasmus – Intensive Programme entitled "Optoelectronics, Lasers and Applications – OLA-Crete 2007" (Grant Agreement No 29099-IC-2-2005-1-GR-ERASMUS-IPUC-3), 20-31 August 2007, Chania, Dept. of Electronics, T.E.I. of Crete, giving lectures on "Introduction to Optoelectronics I & II".

Lecturer at Lifelong Learning Programme: Erasmus – Intensive Programme entitled "*Optoelectronics, Lasers and Applications – OLA-Crete 2008*" (Grant Agreement No 3/2007), 1-11 July 2008, Chania, Dept. of Electronics, T.E.I. of Crete, giving lectures on "Introduction to Optoelectronics I & II".

Lecturer at European Seismological Commision 31<sup>st</sup> General Assembly (ESC 2008) Young Seismologist Training Course (YSTC) on "Active Tectonics and Seismicity", 2-7 September 2008, Chania, Lab of Geophysics & Seismology, T.E.I. of Crete, giving lecture on "Magnetotelluric (MT) Studies and Seismotectonics".

Lecturer at Lifelong Learning Programme: Erasmus – Intensive Programme entitled "An Introduction to Organic Electronics & Applications – Or.E.A. 2010", (Grant Agreement No 8/29099-1-GR1-ERA10-01967), 5-16 July 2010, Chania, Dept. of Electronics, T.E.I. of Crete, giving lectures on "Semiconductor Physics".

Lecturer at Lifelong Learning Programme: Erasmus – Intensive Programme entitled "An Introduction to Organic Electronics & Applications – Or.E.A. 2011", (Grant Agreement No 14/2010-1-GR1-ERA10-04407), 4-15 July 2011, Chania, Dept. of Electronics, T.E.I. of Crete, giving lectures on "Semiconductor Physics".

Lecturer at Postgraduate MSc Programme Studies "Plasma Physics and Applications", 2014-2015 winter semester, Dept. of Electronics, T.E.I. of Crete, giving lectures on "Digital Signal Processing".

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Lecturer at Erasmus + HE Staff Mobility for Teaching (Grant Agreement No 1-EL01-KA103-022620), 27-31 March 2017, ODISEE University College, Gent, Belgium, giving lecture on "Measurement Methodologies for Earthquake Prediction Research".

Lecturer at Postgraduate MSc Programme Studies "Geoenvironmental Resources & Risks", Dept. of Natural Resources and Environment, T.E.I. of Crete:

- 2014-2015 winter semester, giving lectures on "Research Methodology, Computing and Practice".
- 2016-2017 winter semester, giving lectures on "Geophysical Prospecting-Methods
   Environmental Applications".
- 2018-2019 winter semester, giving lectures on "Geophysical Prospecting-Methods
   & Environmental Applications".
- 2018-2019 spring semester, giving lectures on (i) "Advanced Geophysics and Seismology", and (ii) "Advanced Topics in GeoResources & Natural Hazards".

Lecturer at Postgraduate MSc Programme Studies "Telecommunication and Automation Systems", Dept. of Electronic Engineering, Hellenic Mediterranean University:

- 2018-2019 spring semester, giving lectures on "Advanced Topics on Measuring Systems. Smart Sensors".
- 2019-2020 winter semester, giving lectures on "Technologies of Non-Destructive Testing & Control".
- 2019-2020 spring semester, giving lectures on "Advanced Topics on Measuring Systems. Smart Sensors".

# Supervisor or Mentor of the MSc theses:

- ✓ "Design and development of a data acquisition and transmission system for Self-Potential tomography in geophysical exploration" by Binieris K., 2002, MSc Programme in *Data Communication Systems*, Technological Educational Institute of Athens, and Brunel University (UK).
- ✓ "Study of Electric, Magnetic and Electromagnetic Signals in a Seismogenic Region" by Pentaris F., 2009, MSc Programme in *Communication Systems Engineering*, University of Portsmouth (UK).

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- ✓ "Smart Management System of Home's Electrical Installation for Persons with Disabilities", by Koutsikos Ch., 2014, MSc Programme in *Product Design and Manufacturing*, Technical University of Crete.
- ✓ "Multiparametric Study of Extreme weather events that took place in Greece during the period 2000-2019", by Vardoulaki M., 2021, MSc Programme in *Geoenvironmental Resources & Risks*, Hellenic Mediterranean University.
- ✓ "Research on the Catastrophic Wildfire of July 23<sup>rd</sup>, 2018, at Apokoronas Municipality, Chania, Crete", by Kafataki M., 2021, MSc Programme in *Geoenvironmental Resources & Risks*, Hellenic Mediterranean University.
- ✓ "Study of Water Well Drilling Techniques, with Application in Western Crete and Combined Finds Analysis", by Saridaki E., 2021, MSc Programme in *Geoenvironmental Resources & Risks*, Hellenic Mediterranean University.
- Mentor of the PhD thesis entitled "Digital Signal Processing for Structural Health Monitoring of Buildings" by Pentaris F., 1/2011-12/2014, Faculty of Engineering and Design, Department of Electronic and Computer Engineering, Brunel University (UK).
- Supervisor of Postdoctoral Research entitled "Magnetotellurics in Studying Geodynamics of the HEllenic Arc", 12/2011-12/2014, Department of Natural Resources and Environment, Technological Educational Institute of Crete.

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# Administrative - Responsibility Positions:

- Director of Electronics Section and member of Department's Board of Directors,
   Department of Electronics Engineering, Technological Educational Institute of
   Crete, for the academic years 2003-2004, 2004-2005, 2005-2006, 2006-2007 and
   2007-2008.
- Head of the Department of Electronics Engineering, and member of Senate of the Technological Educational Institute of Crete, for the academic years 2008-2009, 2009-2010, 2010-2011, 2011-2012. Vice Head of the Department of Electronics Engineering, for the academic years 2004-2005, 2005-2006, 2006-2007 and 2007-2008.
- Director of Electronics Section and member of Department's Board of Directors,
   Department of Electronics Engineering, Technological Educational Institute of
   Crete, for the academic years 2003–2004, 2005–2006, 2006–2007 and 2007–2008.
- Head of the Institute of Natural Resources and Natural Hazards and member of the Administrative Council of the Technological Research Center of Crete, during the period 09.12.2005 till 14.02.2015.
- Member of the Unit of Quality Assurance of the Technological Educational Institute of Crete, for the period 2014-2017.
- Director of the Master Degree Progamme in Geoenvironmental Resources & Risks,
   Hellenic Mediterranean University, for the period 01.09.2019 till 31.08.2021.

During my service, participation in numerous secondary committees and boards for programme studies, faculty elections, equipment procurements etc of the Hellenic Mediterranean University (former Technological Educational Institute of Crete).

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## Scientific-Research Activities:

- I. Period 1987-1998:
- ❖ Design and development (hardware, software) of customized, multi-channel, integrated telemetric acquisition systems with real-time preliminary processing insitu for the collection of electrotelluric data and detection of Seismic Electric Signals (SES). Datalogger programming, error correction algorithms and statistical analysis of raw-data. Energy harvesting for effective/uninterrupted powering of field stations.
- Optimization of wired digital telemetry. Participation in optimization experiments for wireless telemetric networking based on RF and satellite communications.
- Scientific and technical supervision of the VAN Telemetric Network for Earthquake Prediction Research (V.A.N. group, Solid Earth Physics Research University Institute, National and Kapodistrian University of Athens). Data Center of the VAN Telemetric Network: upgrade and optimize its operations (data storage, database, data processing and analysis, displaying, recording/plotting of data).
- Collaboration and participation in geophysical electric, magnetic, and electromagnetic surveys in Greece with scientific groups from:
  - Société de Prospection et d' Études Géothermiques, S.P.E.G, magnetotellurics (MT) at Keratea (Attiki, Greece).
  - Seismological Department of Uppsala University, magnetotellurics at Loutraki (Korinthos, Greece).
  - Earthquake Research Institute of Tokyo University and Faculty of Science of Kanazawa University, magnetotellurics at Ioannina (Epirus, Greece).
  - Earthquake Prediction Research Center and Tokai University, dipole-dipole arrays at Ioannina (Epirus) in the frame of *R.I.K.E.N.*-project (for earthquake prediction research and for the study of the Earth's geoelectric structure in Greece and Japan).
  - Solid Earth Physics Institute, MT-surveys and magnetic prospections in the vicinity of the stations of the VAN Telemetric Network (Greece).

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- Institute of Geophysics, Polish Academy of Science, ELF-MT and magnetic prospections (by means of torsion photoelectric magnetometers) at remote sites in central Greece. Investigation of SES propagation modes/paths.
- ❖ Installation and operation of radioelectric stations at Loutraki (Korinthos, Greece) (one of them in collaboration with a scientific group from the Laboratoire de Géophysique, Commissariat à l' Énergie Atomique) at Zakynthos Island and at Kea Island, Greece.
- ❖ Operation and maintenance of the telemetric network consisting of four radioelectric stations across Crete Island for the study of VLF and VHF electromagnetic anomalies possibly associated with earthquakes, in collaboration with the Department of Electronics, Technological Educational Institute of Athens.

# II. Period 1999-2010:

- ❖ Installation and operation of a preliminary seismological network at western Crete for the study of the regional seismicity, in collaboration with the Department of Geophysics and Geothermics, Faculty of Geology, School of Sciences of the National and Capodistrian University of Athens.
- ❖ In order to study seismoelectromagnetic phenomena related to earthquakes, installation, operation, and data analysis and modeling of ULF magnetic and electromagnetic stations at remote sites in western Crete, a seismically active region, in collaboration with the scientific groups from the St. Petersburg Filial of Institute of Terrestrial Magnetism Ionosphere and Radiowave Propagation, Russian Academy of Sciences (SPbF IZMIRAN) and the LVIV Centre, Institute of Space Research, National Academy of Sciences and National Space Agency of Ukraine.
- ❖ Participation in extended geophysical study of Yalova area, Marmara Earthquake Zone, Turkey after the devastating Izmit earthquake M7.4 on 17/08/1999, Application of VES, ERT, SRT and HVSR methods by the Institute of Natural Resources and Natural Hazards, Technological Research Center of Crete.
- Aiming to study seismo-ionospheric precursory effects, installation, operation, and data analysis of a VLF Omega station at Chania (Laboratory of Geophysics and Seismology, T.E.I. of Crete) in collaboration with scientists from University of Electro-Communications, Dept. of Electronic Engineering, Electronics Information

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- Engineering Division and Chubu University, College of Engineering, Dept. of Electronic Engineering, Institute of Science and Technology Research.
- ❖ Installation, operation, scientific and technical supervision of the advanced telemetric Seismological Network of Crete (HC-SNC) for continuous monitoring the seismicity of the South Aegean and the front of the Hellenic Arc, Laboratory of Geophysics & Seismology, Technological Educational Institute of Crete. Telemetric networking by means of MPLS/IP-VPN over ADSL wired broadband connections, as well as using a satellite platform (IP VSAT) with a central private hub-station and satellite remote nodes single-hop connected via Hellas Sat II.
- ❖ Magnetotelluric (MT) and Transient Electromagnetics (TEM) investigation in the vicinity of the installation sites of HC-SNC's seismological stations.
- ❖ Installation, operation and technical supervision of an RCS-5B Chirpsounder HF-Receiver (5-30MHz) at Chania (Laboratory of Geophysics and Seismology, T.E.I. of Crete) to conduct oblique-incidence ionospheric soundings, in collaboration with Department of Geomagnetism, Aeronomy and Environmental Geophysics, Upper Atmosphere Physics Unit, Istituto Nazionale di Geofisica e Vulcanologia (INGV).
- ❖ Study iononosperic scintillation and monitoring TEC fluctuations (maybe correlated with seismic activity): installation, operation and supervision of an GISTM GPS receiver at Chania (Laboratory of Geophysics and Seismology, T.E.I. of Crete), Crete in the frame of Mediterranean Ionosphere with Real-time Tomography, in collaboration with Department of Geomagnetism, Aeronomy and Environmental Geophysics, Upper Atmosphere Physics Unit, Istituto Nazionale di Geofisica e Vulcanologia (INGV).

#### II. Period 2011-today:

Thorough geoelectromagnetic study, Magnetotelluric (MT) and Transient Electromagnetics (TEM), of Crete and the South Aegean in collaboration with the University of Oulu, Department of Physical Sciences (Finland), the Consiglio Nazionale delle Ricerche, Istituto di Metodologie per l'Analisi Ambientale and the Università of Bari Aldo Moro, Department of Earth and Geo-Environmental Science (Italy), the CSIC Barcelona Center for Subsurface Imaging, Institute of Marine Sciences

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- (Spain) and the National & Kapodistrian University of Athens, Department of Geology & Geoenvironment.
- Design and development of a cost-effective, yet efficient, wireless Structural Health Monitoring (SHM) network for buildings (T.E.I. of Crete and Brunel University).
- ❖ Deployment, across Crete Island, and continuous operation of GPS stations for real-time monitoring of the crustal deformation.
- A couple of seismoelectromagnetic stations installed and continuously operated for the period 2013-2015 in the south front of the Hellenic Arc (Omalos plateau, W. Crete and Laerma, Rhodes Island) to detect precursory seismoelectric anomalies and study seismoelectromagnetic signatures.
- ❖ The Hellenic Seismological Network of Crete (HC-SNC) of Institute of Physics of the Earth's Interior and Geohazards, Hellenic Mediterranean University Research & Innovation Center (IPEIG-HMURIC) completely upgraded and expanded in the frame of HELPOS project (Hellenic Plate Observing System) aiming to unify distributed seismic networks in Greece into one comprehensive Research Infrastructure (Hellenic Unified Seismic Network, HUSN).
- ❖ Strong Ground Motion Sensor Network installed and continuously operated by IPEIG-HMURIC in the metropolitan area of Chania (Crete, Greece) studying earthquakes shaking and provide earthquake hazards information to support civil protection.

#### Scientific Collaborations (past and current):

- ♦ University of California at Berkeley, Applied Geophysics, USA
- ♦ Société de Prospection et d' Études Géothermiques, France
- University of Uppsala, Department of Earth Sciences, Sweden
- ♦ Earthquake Prediction Research Center, Japan
- ♦ University of Tokai, Japan
- ♦ Polish Academy of Science, Institute of Geophysics, Poland
- ◆ Commissariat à l' Énergie Atomique, Laboratoire de Détection et de Géophysique, France

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- Russian Academy of Sciences, St. Petersburg Filial of Institute of Terrestrial Magnetism Ionosphere and Radiowave Propagation (SPbF IZMIRAN), Russia
- ◆ National Space Agency of Ukraine, Centre of Institute of Space Research, National Academy of Sciences, Ukraine
- ♦ University of Electro-Communications, Dept. of Electronic Engineering, Japan
- ◆ Chubu University, College of Engineering, Dept. of Electronic Engineering, Institute of Science and Technology Research, Japan
- ◆ Istituto Nazionale di Geofisica e Vulcanologia, Dept. of Geomagnetism, Aeronomy and Environmental Geophysics (INGV), Project Unit "Upper Atmosphere Physics", Italy
- ◆ Istituto Nazionale di Geofisica e Vulcanologia, Dept. of Geomagnetism, Aeronomy and Environmental Geophysics (INGV), Project Unit "Measurements and Methods in Environmental Geophysics", Italy
- Consiglio Nazionale delle Ricerche, Istituto di Metodologie per l'Analisi Ambientale, (CNR-IMAA), Italy
- University of Basilicata, School of Engineering, Italy
- Università of Bari Aldo Moro, Department of Earth and Geo-Environmental Science, Italy
- Barcelona Center for Subsurface Imaging, Institute of Marine Sciences (Consejo Superior de Investigaciones Científicas, CSIC), Spain
- University of Oulu, Department of Physical Sciences, Finland
- ◆ Technological Educational Institute of Athens, Department of Electronic Engineering, Greece
- ♦ Foundation for Research and Technology, Institute of Computer Science, Greece
- ♦ National Observatory of Athens, Institute of Geodynamics, Greece
- ♦ Aristotle University of Thessaloniki, Department of Geology, Greece
- National and Kapodistrian University of Athens, Department of Geophysics-Geothermics, Greece
- University of West Attica, Department of Electrical and Electronic Engineering, Greece
- University of West Attica, Department of Surveying and Geoinformatics

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#### Scientific Projects:

- 1) Research Project 89ED247 [1/5/1991-1/5/1993] with title: "Temporal Variation of the Ground Resistivity at an Area of Western Greece", in the frame of the Programme in "Strengthening the Research Manpower" (PENED '89), General Secretariat for Research and Technology.
  - Budget: 24,944.97 €.
- 2) Research Project EPOC-0045-CT91 [1/12/1991-30/11/1993] with title: "Seismic Electric Signals (SES)", in the frame of the European Programme on Climatology and Natural Hazards, (EPOCH), 2<sup>nd</sup> Framework Programme, Directorate General XII for Science, Research and Development, Commission of the European Union.
  - Total Budget (7 partners): 652,091 €.
- 3) Research Project EV5V-0439-CT94 [1/6/1994-31/5/1996] with title: "Short-Term Earth-quake Prediction Measurements in Greece at Sites Sensitive to Observation of Seismic Electric Signals (SES)", in the frame of the Environment Programme, Phase II, 1993-1994, 3<sup>rd</sup> Framework Programme, Directorate General XII for Science, Research and Development of the Commission of the European Union.
  - Total Budget (5 partners): 232,070.53 €.
- 4) Research Project No 388 [1/1/1995-31/12/1997] with title: "Installation of a Telemetric Network for Earthquake Prediction with Multidisciplinary Measurements at Epirus Region, Greece", in the frame of Operational Programme for "Research and Technology" (EPET II, Sub-Programme 1, 1st Announcement: 1994-1996), General Secretariat for Research and Technology, Ministry of Development.
  - Total Budget (4 partners): 1,332,155.54 € | ours: 732,819.93 €.
- 5) Research Project INTAS-99-1102 [1/6/2000-30/11/2003] with title: "Study of the ULF Electromagnetic Phenomena Related to Earthquakes (SUPRE)", INTAS, International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union, NIS.
  - Total Budget (6 partners): 120,000 € | ours: 14,000 €.
- 6) Research Project PIU-ID-MERP-2002-0001, [11/11/2002-31/12/2005], Budget Line B 7-411, with title: "Twinning Between the Municipalities of Komotini and Yalova To-

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wards Disaster Preparedness and Management" in the frame of the Programme "Marmara Earthquake Rehabilitation Programme (MERP)" supported by the European Union and the Ministry by the Prime Minister of Turkey.

Total Budget (9 partners): 3,600,000 € | ours: 313,260 €.

- 7) Research Project 2000 ΣΕ 01330005 [2003-2005] with title: "Contribution to Seismic Hazard Evaluation Observing Seismic and ULF-Electromagnetic Effects" in the frame of Joint Research and Technology Programmes 2001-2003, Greece Russia (P.D.E.-E.P.A.N., Measure 4.3.6.1), collaboration of Technological Educational Institute of Crete with Institute of Physics, St. Petersburg University.
  - Total Budget (2 partners): 11,738.81 €.
- 8) Research Project [2003-2005] with title: "European Research Observatory of South, (EROS): Phase A Geophysical Observatory" in the frame of Joint Research and Technology Programmes 2001-2003, Greece Italy (P.D.E.-E.P.A.N., Measure 4.3.6.1), collaboration of Technological Educational Institute of Crete with Istituto Nazionale di Geofisica e Vulcanologia (INGV).
  - Total Budget (2 partners): 20,176.08 €.
- 9) Research Project [2003-2005] with title: "Development of an Expert System for the Monitoring, Management & Protection of the Natural Landscape & Environmental Resources of the Island of Crete (EMERIC)" in the frame of the Regional Programme of Innovative Actions 2000-2006 "Crete Innovative Region (CRINNO)", European Regional Development Fund, and Greece.
  - Total Budget (8 partners): 300,000 € | ours: 53,000 €.
- 10) Research Sub-Project No 2.2.15 [1/4/2004-31/12/2007] with title: "Multiparametric Space-Temporal Estimation of Seismic Risk in the front of the Hellenic Arc. Application in the Protection of the Old City Venecian Harbour of Chania", of the Project (MIS 86455) Archimedes I: "Support of Research Teams of Technological Educational Institute of Crete", in the frame of Operational Programme for "Education and Initial Vocational Training" (O.P. "Education") one of the 3<sup>rd</sup> Community Support Framework's 24 Operational Programmes (2000-2006) in Greece, co-financed by the European Social Fund, the European Regional Development Fund, and Greece.

Budget: 57,294 €.

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- 11) Research Sub-Project No 2.2.17 [1/4/2004-31/12/2006] with title: "Solution of Non-Linear Problems of Geophysical Prospection, Atmospheric Pollution Diffusion and Electromagnetic Waves Propagation on Platforms of Parallel Processing", of the Project (MIS 86455) Archimedes I: "Support of Research Teams of Technological Educational Institute of Crete", in the frame of Operational Programme for "Education and Initial Vocational Training" (O.P. "Education") one of the 3<sup>rd</sup> Community Support Framework's 24 Operational Programmes (2000-2006) in Greece, co-financed by the European Social Fund, the European Regional Development Fund, and Greece. Budget: 49,669 €.
- 12) Research Sub-Project No 2.6.6 [1/4/2004-31/12/2006] with title: "Development of Contemporary Integrated Methodologies for Pollution Control in Landfills", of the Project (MIS 86455) Archimedes I: "Support of Research Teams of Technological Educational Institute of Crete", in the frame of Operational Programme for "Education and Initial Vocational Training" (O.P. "Education") one of the 3<sup>rd</sup> Community Support Framework's 24 Operational Programmes (2000-2006) in Greece, co-financed by the European Social Fund, the European Regional Development Fund, and Greece. Budget: 47,583 €.
- 31) Research Sub-Project No 2.2.7 [1/4/2004-31/12/2007] with title: "Study Design of Smart Antennas with Computational Electromagnetism Techniques and Pilot Development Operation of Digital Radio Station DAB at Chania", of the Project (MIS 86455) Archimedes I: "Support of Research Teams of Technological Educational Institute of Crete", in the frame of Operational Programme for "Education and Initial Vocational Training" (O.P. "Education") one of the 3<sup>rd</sup> Community Support Framework's 24 Operational Programmes (2000-2006) in Greece, co-financed by the European Social Fund, the European Regional Development Fund, and Greece. Budget: 48,749 €.
- 14) Principale Investigator (PI) of the Research Sub-Project No 2.2.4 [1/6/2005-31/12/2007] with title: "Unified Technological & Methodological Approach of the Geoelectromagnetic Study of Western Crete" of the Project Archimedes II (MIS 99954): "Support of ReseaFund, Teams of Technological Educational Institute of Crete", in the frame of Operational Programme for "Education and Initial Vocational Training" (O.P. "Education") one of the 3<sup>rd</sup> Community Support Framework's 24 Operational Programmes

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(2000-2006) in Greece, co-financed by the European Social Fund, the European Regional Development Fund, and Greece.

Budget: 60,000 €.

System for Seismic Hazard Monitoring and Treatment at the front of the Hellenic Arc. Application to the cities Chania & Heraklion, Crete (TALOS)", Thematic Section 6: "Structured Environment and Treatment of Seismic Hazard", Programme "Partnerships of Research and Technological Development", Measure 1.2 "Familiarization of Enterprises with New Technologies, Boost of Innovation", Axis 1, Regional Operational Programme of Crete (PEP Crete 2000–2006) in the frame of 3<sup>rd</sup> Community Support Framework (2000–2006), European Regional Development Fund, and General Secretariat for Research and Technology.

Total Budget: 835,000 € | ours: 174,000 €.

16) Research Project No. A.1.020 [1/6/2006-31/10/2008] with title: "Methodology Integration of EO Techniques as Operative Tool for Land Degradation Management and Planning in Mediterranean Areas (MILDMAP-MEDIA)", Measure 3.3 "Management, prevention and reduction of natural risks: drought, desertification, fires, earthquakes etc.", Priority Axis 3 "Integrated and Sustainable Management of Cultural and Natural Resources and of Landscapes and Risk Management", EU Community Initiative Programme INTERREG IIIB ARCHIMED 2000-2006, European Regional Development Fund, and Greece.

Total Budget (9 partners): 1,329,460.80 € | ours: 242,681.60 €.

17) Partner Responsible (co-PI) at Research Project No. A.1.034, [1/6/2006-31/10/2008] with title: "Advanced Techniques for Seismic Risk Reduction in Mediterranean Archipelago Regions (SE RISK)", Measure 3.3 "Management, prevention and reduction of natural risks: drought, desertification, fires, earthquakes etc.", Priority Axis 3 "Integrated and Sustainable Management of Cultural and Natural Resources and of Landscapes and Risk Management", EU Community Initiative Programme INTERREG IIIB ARCHIMED 2000-2006, European Regional Development Fund, and Greece.

Total Budget (8 partners): 1,256,655.49 € | ours: 633,728.53 €.

18) Research Project No. 031874, [1/6/2006-30/11/2008] with title: "<u>Cyber-Infrastructure</u> for Civil Protection Operative Procedures (<u>CYCLOPS</u>)", 6<sup>th</sup> Framework Programme,

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FP6 (2002-2006), Specific Support Action "Research Infrastructure – Communication Network Development".

Total Budget (7 partners): 825,000 € | ours: 100,000 €.

19) Principale Investigator (PI) of the Research Project PE10 (2589) [15/12/2011-15/12/2014] with title: "Magnetotellurics in Studying Geodynamics of the Hellenic Arc (MT-GEAR)", Action "Support of Postdoctoral Researchers", funded by the Operational Programme for "Education and Lifelong Learning", and General Secretariat for Research and Technology of Greece.

Budget: 150,000 €.

20) Partner Responsible (co-PI) at the Research Project [1/6/2012-31/10/2014] with title: "Assessment Methodologies for Controlling Land Degradation Processes and Impacts on the Environment (PRO-Land)" in the frame of the Asse VII "Energia e Sviluppo Sostenibile" funded by Programma Operativo FESR Basilicata 2007 2013, European Regional Development Fund, Italy, and Greece.

Total Budget (2 partners): 290,000 € | ours: 30,000 €.

21) Principale Investigator (PI) of the Research Sub-Project No 23 [1/7/2012-30/11/2015] with title: "Technologies Coalescence for Holistic Seismoelectromagnetic Research (Lithosphere-Atmosphere-Ionosphere Coupling) - TECH-SEM" of the Project Archimedes III (MIS 380353) "Support of Research Teams at Technological Educational Institute of Crete", funded by the Operational Programme for "Education and Lifelong Learning" (Partnership Agreement 2007-2013, European Social Fund).

Budget: 100,000 €.

22) Research Sub-Project No 9 [1/3/2012-30/11/2015] with title: "Interdisciplinary Multi-Scale Research of Earthquake Physics and Seismotectonics at the Front of the Hellenic Arc (IMPACT-ARC)" of the Project Archimedes III (MIS 380353) "Support of Research Teams at Technological Educational Institute of Crete", funded by the Operational Programme for "Education and Lifelong Learning" (Partnership Agreement 2007-2013, European Social Fund).

Budget: 100,000 €.

23) Research Sub-Project No 13 (1/3/2012-30/9/2015) with title: "Interdisciplinary Study for Exploring, Understanding and Management of Groundwater Resources. Pilot

June 2024 20/32 Field Investigation Northwest and Central Crete (AQUADAM)" of the Project Archimedes III (MIS 380353) "Support of Research Teams at Technological Educational Institute of Crete", funded by the Operational Programme for "Education and Lifelong Learning" (Partnership Agreement 2007-2013, European Social Fund).

Budget: 100,000 €.

- 24) Research Project (MIS 380208) [1/9/2012-30/11/2015] with title: "Thalis T.E.I. of Crete Integrated Approach in Interpretation of Seismicity Using Innovative Methodologies of Fracture Mechanics and of Seismological Data Processing, along with Non Extensive Statistical Physics Application to the Geodynamic System of the Hellenic Arc (SEISMO FEAR HELLARC)", funded by the Operational Programme for "Education and Lifelong Learning" (Partnership Agreement 2007-2013, European Social Fund). Budget: 600,000 €.
- 25) Co-Principale Investigator (co-PI) of Research Action [1/12/2017-31/12/2021] with title: "Hellenic Plate Observing System (HELPOS)" (MIS 5002697), after the Invitation 039 "Reinforcement of the Research and Innovation Infrastructure", in the frame of the Operational Programme "Competitiveness, Entrepreneurship & Innovation 2014-2020" (EPAnEK), European Regional Development Fund, and Greece.

  Total Budget (7 partners): 3,965,842.99 € | ours: 249,919.60 €.
- 26) Co-Principale Investigator (co-PI) of Research Action [28/6/2018-27/12/2021] with title: "Integrated Earthquake Early Warning System for Industrial Site Applications (ARIS)" (MIS 5030439), in the frame of the Single RTDI State Aid Action "Research-Create Innovate" (1st Cycle)", funded by the Operational Programme "Competitiveness, Entrepreneurship & Innovation 2014-2020" (EPAnEK), European Regional Development Fund, and Greece.

Total Budget (5 partners): 1,000,000 € | ours: 100,000 €.

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# Talks in Conferences:

- ✓ International Conference on "Measurements and Theoretical Models of the Earth's Electric Field Variations Related to Earthquakes", 6-8/2/1990, University of Athens, Athens, Greece.
- ✓ 3<sup>rd</sup> International Conference of the Zakynthian Studies Society on "Zakynthos at the Hellenic Arc, Geology-Earthquakes-Prediction, 1953-1993", 23-24/10/1993, Intellectual Centre of the Zakynthian Municipality, Zakynthos Island.
- ✓ 12<sup>th</sup> International Wroclaw Symposium and Exhibition on "*Electromagnetic Compatibility*", 28/6-1/7/1994, Wroclaw Technical University, Institute of Telecommunications, Wroclaw, Poland.
- ✓ European Seismological Commission (E.S.C.), XXIV General Assembly, 19-24/9/1994, University of Athens, Athens, Greece.
- ✓ International Workshop on "Seismo-Electromagnetics" (I.W.SE), 3-5/3/1997, University of Electro-Communications, Chofu, Tokyo, Japan.
- ✓ 1997 Spring Meeting of American Geophysical Union (A.G.U), Mineralogical Society of America and Geochemical Society, 27-30/5/1997, Baltimore Convention Center, Baltimore Maryland, United States of America.
- ✓ 29<sup>th</sup> General Assembly of International Association of Seismology and Physics of the Earth's Interior (I.A.S.P.E.I), 18-28/8/1997, Geophysical Laboratory, Aristotle University of Thessaloniki, Thessaloniki, Greece.
- ✓ 2<sup>nd</sup> International Workshop on "Electric, Magnetic and Electromagnetic Methods in Seismology and Volcanology", 22-24/9/1999, Department of Electronics, Technological Educational Institute of Crete, Chania, Greece.
- ✓ 5<sup>th</sup> WSEAS (World Scientific and Engineering Academy and Society) International Conference on "Mathematics and Computers in Physics", 13-15/10/2003, Rethymno, Crete I., Greece.
- ✓ IV International Workshop on "Magnetic, Electric and Electromagnetic Methods in Seismology and Volcanology", 5-9/9/2004, La Londe les Maures, France.
- ✓ 2005 WSEAS (World Scientific and Engineering Academy and Society) International Conference on "Engineering Education", 8-10/07/2005, Athens, Greece.
- ✓ I.E.E.E.'s International Conference on "Computer as a Tool" (EUROCON 2005), 21-24/11/2005, Sava Center, Belgrade, Serbia and Montenegro.
- ✓ Meeting "Electronics & Geophysics", Invited Speaker, 3/03/2006, T.E.I. of Athens.

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- ✓ VI International Conference "Problems of Geocosmos" (Geocosmos 2006), Invited Speaker, 23-27/05/2006, St. Petersburg, Russia.
- ✓ 13<sup>th</sup> International Congress of the Geological Society of Greece, 5-8/9/2013, Chania, Crete, Greece.
- ✓ 2<sup>nd</sup> International Conference "The Knowledge Triangle in the Service of Civil Protection SafeChania 2015", 10-12/6/2015, Chania, Crete, Greece.

#### Member of:

- Greek Physicists Union.
- American Geophysical Union.
- European Geosciences Union.
- Institute of Electrical & Electronic Engineers, I.E.E.E.
- I.E.E.E.'s Geoscience and Remote Sensing Society.
- I.E.E.E.'s Instrumentation and Measurements Society.

#### Other Distinctions:

- Referee at Acta Geophysica (Springer), Annals of Geophysics (INGV), Tectonophysics (Elsevier), Advances in Space Research (Elsevier), Computers & Geosciences (Elsevier), Natural Hazards and Earth System Sciences (Copernicus), Measurement Science and Technology (Institute of Physics), Journal of Geophysics and Engineering (Institute of Physics), European Journal of Physics (Institute of Physics), Physica Scripta (Institute of Physics), Machine Learning: Science and Technology (Institute of Physics), IEEE Transactions on Geoscience and Remote Sensing, International Journal of Geophysics (Hindawi) and WSEAS Transactions on Advances in Engineering Education.
- ✓ Guest Editor at International Journal of Geophysics (Hindawi).
- ✓ Associate Editor of "Proceedings of the 2005 WSEAS International Conference on Engineering Education, Vouliagmeni, Athens, Greece, July 8-10", (Editors D.Triantis & F.Vallianatos), ISBN 960-8457-28-9.

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# **PUBLICATIONS**

#### A. At International Journals:

- 1. P.Varotsos, K.Eftaxias, M.Lazaridou, G.Antonopoulos and **J.Makris**. <u>1994</u>. "Recent VAN results", *Jishin (Journal of the Seismological Society of Japan)*, <u>17</u>, pp. 18-26, part of ISSN: 09125779, (in japanese).
- 2. P.Varotsos, K.Eftaxias, M.Lazaridou, G.Antonopoulos, **J.Makris** and J.Poliyiannakis. <u>1996</u>. "Summary of the five principles suggested by Varotsos et al. (1996) and the additional questions raised in this debate", *Geophys. Res. Lett.* <u>23</u>, *No. 11*, *pp. 1449-1452*, *part of ISSN: 00948276*, *doi: 10.1029/96GL01437*.
- 3. P.Varotsos, K.Eftaxias, M.Lazaridou, K.Nomikos, N.Sarlis, N.Bogris, **J.Makris**, G.Antonopoulos and J.Kopanas. 1996. "Recent earthquake prediction results in Greece based on the observation of Seismic Electric Signals", *Acta Geophysica Polonica*, XLIV, No. 4, pp. 301-328, part of ISSN: 00015725.
- **4.** P.Varotsos, K.Eftaxias, M.Lazaridou, N.Bogris and **J.Makris**. <u>1998</u>. "Note on the extension of the SES sensitive area at Ioannina station, Greece", *Acta Geophysica Polonica*, <u>XLVI</u>, No. 1, pp. 55-60, part of ISSN: 00015725.
- 5. P.Varotsos, N.Sarlis, K.Eftaxias, M.Lazaridou, N.Bogris, J.Makris, A.Abdulla and P.Kapiris. 1999. "Prediction of the 6.6 Grevena-Kozani earthquake of May 13, 1995", *Phys. Chem. Earth* (A), 24, No. 2, pp. 115-121, part of ISSN: 14641895, doi: 10.1016/S1464-1895(99)00006-X.
- 6. **J.Makris**, N.Bogris, and K.Eftaxias. <u>1999</u>. "A new approach in the determination of characteristic directions of the geoelectric structure using Mohr circles", *Earth Planets Space*, <u>51</u>, *No. 10*, pp. 1059-1065, part of ISSN: 18805981 13438832, doi: 10.1186/BF03351579.
- 7. F.Vallianatos and J.Makris. 2000. "On the tectonoelectric zonation in the Hellenic Arc", *Phys. Chem. Earth* (A), 25, No. 3, pp. 307-313, part of ISSN: 14641895, doi: 10.1016/S1464-1895(00)00048-X.
- 8. W.Kanda, M.Uyeshima, **J.Makris**, Y.Orihara, H.Hase, T.Nagao and S.Uyeda. <u>2000</u>. "Electric field polarization around Ioannina VAN station, Greece, inferred from a resistivity mapping", *Phys. Earth Planet. Inter.*, <u>119</u>, *No. 3-4*, *pp. 269-283*, *part of ISSN: 00319201*, *doi: 10.1016/S0031-9201(00)00138-2*.
- 9. J.P.Makris. 2001. "Properties of the geoelectric structure that promote the detection of electrotelluric anomalies. The case of Ioannina, Greece", *Ann. Geofis.*, 44, No. 2, pp. 313-324, part of ISSN: 03652556.
- **10**. **J.P.Makris**, A.S.Savvaidis and F.K.Vallianatos. <u>2002</u>. "MT-data analysis from a survey in the Mygdonia Basin (N. Greece)", *Ann. Geofis.*, <u>45</u>, *No. 2*, *pp. 303-311*, *part of ISSN: 15935213*.
- 11. G.Hloupis, M.Moisidi, F.Vallianatos, J.Stonham, **J.Makris** and D.Triantis. <u>2003</u>. "Application of CLEAN algorithm in incomplete mictrotremors recordings", in Special Issue on "Optimization, Simulation, Modeling and Control in Systems Sciences", WSEAS Transactions on Circuits and Systems, <u>2</u>, Issue 3, July 2003, pp. 557-560, part of ISSN: 11092734.

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- 12. J.P.Makris, F.K. Vallianatos and I.O. Vardiambasis. 2003. "Tensor decomposition resolves geoelectrical structure modeling ambiguities in Mohr Circle topology", in Special Issue on "Optimization, Simulation, Modeling and Control in Systems Sciences", WSEAS Transactions on Circuits and Systems, 2, Issue 3, July 2003, pp. 561-568, part of ISSN: 11092734.
- 13. L.Telesca, V.Lapenna, F.Vallianatos, **J.Makris** and V.Saltas. <u>2004</u>. "Multifractal features in short-term time dynamics of ULF geomagnetic field measured in Crete, Greece", *Chaos, Solitons & Fractals*, <u>21</u>, No. 2, pp. 273-282, part of ISSN: 09600779, doi: 10.1016/j.chaos.2003.10.020.
- 14. G.Hloupis, D.Triantis, F.Vallianatos, J.Makris and J.Stonham. <u>2004</u>. "Detection of short period transients in geophysical signals using wavelet transform", WSEAS Transactions on Communications, <u>3</u>, Issue 3, July 2004, pp. 904-909, part of ISSN: 11092742.
- 15. G.Hloupis, M.Moisidi, F.Vallianatos, J.P.Makris, J.Stonham and D.Triantis. <u>2004</u>. "Application of CLEAN algorithm in incomplete mictrotremors recordings", *Bulletin of the Geological Society of Greece, vol. XXXVI/3, pp. 1279-1288, part of ISSN: 04389557*.
- 16. F. Vallianatos, J.Makris, V.Saltas, L.Telesca, and V.Lapenna. 2004. "Monofractal and multifractal analysis in short-term time dynamics of ULF geomagnetic field measured in Crete, Greece", Bulletin of the Geological Society of Greece, vol. XXXVI/3, pp. 1298-1307, part of ISSN: 04389557.
- 17. M.Moisidi, F.Vallianatos, **J.Makris**, P.Soupios and I.M.Nikolintaga. <u>2004</u>. "Estimation of seismic response of historical and monumental sites using microtremors: A case study in the ancient Aptera, Chania (Greece)", *Bulletin of the Geological Society of Greece, vol. XXXVI/3, pp. 1441-1450, part of ISSN: 04389557.*
- 18. I.O.Vardiambasis, G.Liodakis, G.Karonis and J.P.Makris. 2004. "Studying electromagnetic scattering by dielectric cylinders: An engineering electromagnetics' exercise at the Technological Educational Institute of Crete", WSEAS Transactions on Advances in Engineering Education, 1, Issue 1, November 2004, pp. 77-82, part of ISSN: 17901979.
- 19. I.O.Vardiambasis, G.Liodakis, E.Zaoutis, J.P.Makris, I.Kaliakatsos, G.Glentis, and V.Zacharopoulos. 2004. "Digital audio broadcasting simulation: a microwave communications' exercise at the Technological Educational Institute of Crete", WSEAS Transactions on Advances in Engineering Education, 1, Issue 1, November 2004, pp. 90-93, part of ISSN: 17901979.
- **20.** F. Vallianatos, **J.Makris**, V.Saltas, L.Telesca, and V.Lapenna. <u>2006</u>. "An investigation of the 1/f<sup>α</sup> long-range fluctuations in short-term time variability of ULF geomagnetic data", *Communications in Nonlinear Science and Numerical Simulation*, <u>11</u>, No. 6, pp. 745-758, part of ISSN: 10075704, doi: 10.1016/j.cnsns.2004.12.005.
- 21. A.Konstantaras, M.R.Varley, F.Vallianatos, J.P.Makris, G.Collins, and P.Holifield. 2006. "Hybrid adaptive filter development for the minimisation of transient fluctuations superimposed on electrotelluric field recordings mainly by magnetic storms", in Special Issue on "Seismo-tectonic electromagnetic effects, precursory phenomena and seismic hazard" (P.F.Biagi and M.Contadakis, Eds), Natural Hazards and Earth System Sciences, 6, Issue 6, pp. 955-959, part of ISSN: 16849981 15618633, doi: 10.5194/nhess-6-955-2006.
- **22**. V.Saltas, F.Vallianatos, P.Soupios, **J.P.Makris**, and D.Triantis. <u>2007</u>. "Dielectric and conductivity measurements as proxy method to monitor contamination in sandstone", *Journal of Hazardous*

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- Materials, <u>142</u>, No. 1-2, pp. 520-525, part of ISSN: 03043894, doi: 10.1016/j.jhaz-mat.2006.08.051.
- 23. A.Konstantaras, M.R.Varley, F.Vallianatos, J.P.Makris, G.Collins, and P.Holifield. 2007. "Detection of weak Seismo-Electric Signals upon the recordings of the electrotelluric field by means of neuro-fuzzy technology", *IEEE Geoscience and Remote Sensing Letters*, 4, No. 1, pp. 161-165, part of ISSN: 1545598X, doi: 10.1109/LGRS.2006.887068.
- 24. P.M.Soupios, P.Georgakopoulos, N.Papadopoulos, V.Saltas, A.Andreadakis, F.Vallianatos, A.Sarris, and J.P.Makris. 2007. "Use of engineering geophysics to investigate a site for a building foundation", *Journal of Geophysics and Engineering*, 4, No. 1, art. no. 011, pp. 94-103, part of ISSN: 17422132 17422140, doi: 10.1088/1742-2132/4/1/011.
- 25. A.Konstantaras, J.P.Makris, F.Vallianatos, and M.R.Varley. 2007. "On the electric field transient anomaly observed at the time of the Kythira M=6.9 earthquake on January 2006", in Special Issue on "Seismo-tectonic electromagnetic effects and precursory phenomena" (M.Contadakis, and P.F.Biagi Eds), Natural Hazards and Earth System Sciences, 7, Issue 6, pp. 677-682, part of ISSN: 16849981 15618633, doi: 10.5194/nhess-7-677-2007.
- 26. E.A.Kokkinos, E.Michalodimitrakis, Th.Hohlidaki, E.Fotinopoulou, and **J.Makris**. 2007. "Tool development for analysis of WCDMA radio measurements and investigation of EcNo and RSCP values before drop call", *WSEAS Transactions on Electronics*, 4, *Issue 12*, *December 2007*, pp. 261-267, part of ISSN: 11099445.
- 27. A.Konstantaras, F.Vallianatos, M.R.Varley, and J.P.Makris. 2008. "Soft-computing modelling of seismicity in the southern Hellenic Arc", *IEEE Geoscience and Remote Sensing Letters 5, No. 3, pp. 323-327, part of ISSN: 1545598X, doi: 10.1109/LGRS.2008.916069.*
- 28. B.Zolesi, G.Fontana, L.Perrone, M.Pietrella, V.Romano, G.Tutone, A.Belehaki, I.Tsagouri, S.S.Kouris, F.Vallianatos, J.P.Makris, and M.J.Angling. 2008. "A new campaign for oblique-incidence ionospheric sounding over Europe and its data application", *Journal of Atmospheric and Solar-Terrestrial Physics*, 70, Issue 6, pp. 854–865, part of ISSN: 13646826, doi: 10.1016/j.jastp.2007.02.015.
- 29. A.Konstantaras, G.N.Fouskitakis, J.P.Makris, and F.Vallianatos. 2008. "Stochastic analysis of geoelectric field singularities as seismically correlated candidates", in Special Issue on "Earthquakes Precursors and Seismic Hazard" (P.F.Biagi and M.Contadakis, Eds), Natural Hazards and Earth System Sciences, 8, Issue 6, pp. 1451-1462, part of ISSN: 16849981 15618633, doi: 10.5194/nhess-8-1451-2008.
- 30. M.Pietrella, L.Perrone, G.Fontana, V.Romano, A.Malagnini, G.Tutone, B.Zolesi, Lj.R.Cander, A.Belehaki, I.Tsagouri, S.S.Kouris, F.Vallianatos, **J.Makris**, and M.Angling. <u>2009</u>. "Oblique-incidence ionospheric soundings over Central Europe and their application for testing now casting and long term prediction models", *Advances in Space Research*, <u>43</u>, *Issue 11*, pp. 1611-1620, part of ISSN: 02731177, doi: 10.1016/j.asr.2008.01.022.
- 31. A.Settimi, M.Pezzopane, B.Zolesi, M.Pietrella, C.Bianchi, C.Scotto, E.Zuccheretti and **J.Makris**. 2013. "Testing the IONORT-ISP system: a comparison between synthesized and measured oblique ionograms", *Radio Science*, 48, pp. 167-179, part of ISSN: 1944799X 00486604, doi: 10.1002/rds.20018.

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- 32. G.Hloupis, I.Papadopoulos, J.P.Makris, and F.Vallianatos. 2013. "The South Aegean Seismological Network HSNC", *Advances in Geosciences*, 34, pp. 15–21, part of ISSN: 16807359 16807340, doi: 10.5194/adgeo-34-15-2013.
- 33. F.P.Pentaris, J.Stonham, and J.P.Makris. 2013. "A novel approach of Structural Health Monitoring by the application of FFT and wavelet transform using an index of frequency dispersion", *International Journal of Geology*, 7, pp. 39-48, Corpus ID: 18347947, part of ISSN: 19984499.
- **34.** F.P.Pentaris, J.Stonham, and **J.P.Makris**. <u>2014</u>. "A cost effective wireless structural health monitoring network for buildings in earthquake zones", *Smart Materials and Structures*, <u>23</u>, *Issue 10*, 105010 (11pp), part of ISSN: 1361665X 09641726, doi: 10.1088/0964-1726/23/10/105010.
- 35. C.P.Evangelidis, N.Triantafyllis, M.Samios, K.Boukouras, K.Kontakos, O.-J.Ktenidou, I.Fountoulakis, I.Kalogeras, N.S.Melis, O.Galanis, C.B.Papazachos, P.Hatzidimitriou, E.Scordilis, E.Sokos, P.Paraskevopoulos, A.Serpetsidaki, G.Kaviris, V.Kapetanidis, P.Papadimitriou, N.Voulgaris, I.Kassaras, G.Chatzopoulos, I.Makris, F.Vallianatos, K.Kostantinidou, C.Papaioannou, N.Theodoulidis, B.Margaris, S.Pilidou, I.Dimitriadis, P.Iosif, M.Manakou, Z.Roumelioti, K.Pitilakis, E.Riga, G.Drakatos, A.Kiratzi, G.-A. Tselentis. 2021. "Seismic waveform data from Greece and Cyprus: integration, archival, and open access", Seismological Research Letters, 92, No. 3, pp. 1672–1684, part of ISSN: 0895-0695, doi: doi.org/10.1785/0220200408.
- **36**. G.Chatzopoulos, I.Papadopoulos, F.Vallianatos, **J.P.Makris**, M.Kouli. <u>2021</u>. "Strong ground motion sensor network for civil protection rapid decision support systems", *Sensors*, <u>21</u>, *No.* 8, *April* 2021, art.no. 2833, part of ISSN: 1424-8220, doi.org/10.3390/s21082833.
- 37. M.Kouli, S.Peleli, V.Saltas, **J.P.Makris**, F.Vallianatos. <u>2021</u>. "Robust satellite techniques for mapping thermal anomalies possibly related to seismic activity of March 2021, Thessaly earthquakes", *Bulletin of the Geological Society of Greece*, *58*, *pp.105-130*, *part of ISSN: 2529-1718* (in print: 0438-9557), doi: doi.org/10.12681/bgsg.27058.

#### B. At Scientific Monographs:

- 1. J.Kopanas, G.Antonopoulos, **J.Makris**, K.Eftaxias and V.Hadjicontis. <u>1994</u>. "Detection of the SES vertical component", in "Electromagnetic Phenomena Related to Earthquake Prediction" (Eds M. Hayakawa and Y. Fujinawa), published by Terra Scientific Pub, Tokyo, 677p, pp. 25-36, part of ISBN: 4887041136.
- 2. I.M.Polygiannakis, **J.Makris**, G.Antonopoulos and K.Eftaxias. <u>1994</u>. "Cancellation of magnetotelluric noise using methods for analysing and predicting chaotic time-series", *Session on 2<sup>nd</sup> of June 1994 of Academy of Athens (announcement by Academician Prof. K. Alexopoulos), Proceedings of Academy of Athens, 69, pp. 102-112 (in greek).*
- 3. M.Kefalas, J.Kopanas, G.Antonopoulos, **J.Makris**, K.Eftaxias and K.Nomikos. <u>1995</u>. "High Sampling Rate Datalogger System for Measurements of Earth's Electric Field Variations", *in "Telemetry"*, published by Institute of Technological Education (I.T.E.), Athens, Greece, pp. 86-92 (in greek).
- 4. P.Varotsos, M.Lazaridou, K.Eftaxias, G.Antonopoulos, **J.Makris** and J.Kopanas. <u>1996</u>. "Short Term Earthquake Prediction in Greece by Seismic Electric Signals", *in "A Critical Review of*

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- VAN: Earthquake Prediction from Seismic Electric Signals" (Ed. Sir J. Lighthill), published by World Scientific Pub, London, 376p, pp. 29-76, part of ISBN: 9810225423.
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