# **Dr Christos Tsamis (M)**

Director of Research, Inst. of Nanoscience & Nanotechnology Group Leader of "Energy Harvesting & Autonomous Sensors"

Christos Tsamis received his Physics diploma from the National & Kapodistrian University of Athens in 1989 and his PhD degree from Aristotle University of Thessaloniki in 1996. Since 1996 he joined the Institute of Microelectronics (now Inst. of Nanoscience & Nanotechnology) at the National Center for Scientific Research "Demokritos" where he is currently "Director of Research". He is leading the group on "Energy Harvesting and Autonomous Sensors". His research interests focus on Micro- and Nanofabrication technologies for Microsystems for devices and sensors, Nanostructured materials and devices for Energy harvesting, Chemical Sensors, flexible electronics and Thermal processes for microand nanodevices. He is/was Scientific Responsible and/or Coordinator for several National and EU projects in the above topics, attracting a total funding of 2.0 MEuros, and has participated in several others as a key researcher. He acts as reviewer for international journals and Conferences. He was General Conference Chairman for EUROSENSORS XXV that took take place in Athens (4-7 September 2011), as well as co-Chairman or Member of the Organizing Committee for International and National Conferences. He acts as a evaluator for the EU (H2020), the General Secretariat for Research and Technology, the Serbian Ministry of Science and Technological Development, the Polish National Science Centre. He has supervised seven PhDs and several MSc theses. He is the author or co-author of over 200 publications in peer-reviewed International Journals, Conference Proceedings, and contributions in International Conferences. He has edited 3 Conference Proceedings Volumes. During 2006-2013 he was Head of Education at NCSR "Demokritos" and during 2012-2013 he was also heading the Public Relations and Press Office at NCSR "Demokritos".

#### 2. RESEARCH GRANTS

Project	Start	Duration (months)	Budget (KEuros)
"Development of Autonomous Atmospheric Recorder of Electrical Field for Ships" (EFOS), National Project, GSRT, T1ΕΔΚ-02289	11/2020	30	200
"Perpetual power supply for IoT" (PERPS), National Project, GSRT, T1ΕΔΚ-00360	10/2018	44	140
"Experimental and theoretical study of magnetic strain-gated transistors based on semiconducting nanowires", A. Bardakas (State Scholarships Foundation – IKY)	4/2018	36	29
"A multi parametric measurement and control system implemented on flexible substrates with printed technologies", D. Barmpakos, Industrial PhD Fellow, Stavros Niarchos Foundation	8/2017	48	46.4
"Smart Packaging using electronic sensors on flexible substrates for the activation of food bioactive compounds encapsulated with innovative methods", M. Stramarkou, Industrial PhD Fellow, Stavros Niarchos Foundation	8/2017	48	46.4
"Development of 3D metal oxide nanoarchitectures for Nanopiezo- phototronic devices, A. Kerasidou (State Scholarships Foundation - IKY)	3/2017	24	26
Nanostructured Thermoelectric Systems for Green Transport & Energy Efficient Applications, NANTOTEG, EU ENIAC	7/11	42	220
"Development of Innovative sensor systems offering distributed intelligence – MEMSENSE", National Funds and European Regional Development Funds, NSRF 2007–2013, contract no. 45	5/2009	36	195
"Development of MOSFET type Chemical Sensors for Wireless Sensor", National Project, GSRT- ENTEP 05EP032	6/2006	24	93.6
"Micromechanical sensors for monitoring food safety and quality"  National Project, GSRT- PENED-03 ED630	11/2005	26	179
"Optimization of Internal Combustion Engines through real time analysis	6/2004	36	20

of exhaust gases", National Project, Ministry of Education			
"Food quality and Safety with Microsystems", GOODFOOD IST 30129, IP	1/2004	42	360
"Front End Models for Silicon Future Technology", FRENDTECH IST 2000-	9/2001	36	360
30129			
"Nanostructured oxides, bimetals and polymers on silicon for application	2/2002	24	13.8
in gas sensors", National Project, Bilateral Hellenic-Ukraine			
"Materials for applications in gas sensors", National Project, GSRT-	1/2000	18	155.5
PENED-99 ED449			

#### 3. EDUCATIONAL ACTIVITIES

- MSc course, "Advanced Studies in Physics- Physics and Technology of Materials-Photonics", Physics Dept., University of Patras (2020-)
- MSc course in "Microsystems and Nanodevices", National Technical Univ. of Athens: "Simulation at the micro- and nanoscale" (2003-2012)
- MSc course in "Microelectronics", Dept. of Informatics and Telecommunications, Univ. of Athens :
- "Microsystems and Sensors" (2010-2017), "Process and device modeling" (2003-2006), "VLSI technology" (1998-2001), "Physics of Semiconductor Devices" (1999-2000)
- I supervise/supervised eight PhD theses and I have participated to three as member of the advisory committee.

### 4. CONFERENCE ORGANIZATION / COMMITTEE MEMBER

- General Conference Chair, 25<sup>th</sup> Anniversary EUROSENSORS XXV, September 4-7, 2011 (Athens, Greece)
- Co-chair, 35th Panhellenic Conference on Solid State Physics and Materials Science, September 26-29, 2021 (Virtual Conference)
- Co-chair, "SPIE Security & Defense 2014, Unmanned/Unattended Sensors and Sensor Networks X", September 22-25, 2014 (Amsterdam, The Netherlands)
- Co-chair, "SPIE-Microtechnologies", 24-26 April 2013 (Grenoble, France)
- Co-chair, "The Business of Nanotechnology", Symposium PP, MRS 2008 Spring Meeting, March 2008 (San Francisco, USA)
- Member of the organizing committee: ESSDERC 2009, "Microelectronics-Microsystems-Nanotechnology"- MMN 2004, "Simulation of Semiconductor Processes and Devices" SISPAD 2001, "Microelectronics-Microsystems-Nanotechnology"- MMN 2001, "Microelectronics in Greece"

## **5. SCIENTIFIC ACTIVITIES**

- Honorary Member of the International Steering Committee of EUROSENSORS Conferences
- Proposal Evaluator for General Secretariat for Research and Development (GSRT-Greece)
- Proposal Evaluator for Ministry of Science and Technological Development, Republic of Serbia
- Proposal Evaluator for the Polish National Science Centre, Poland
- Reviewer in International Journals (IEEE Sensors Journal, Sensors and Actuators A, Electrochemical and Solid-State Letters, J. of Applied Physics, J. of the American Chemical Society, Springer "Microsystem Technologies", Microelectronics Engineering)
- Reviewer in International Conferences (MNE 2008-2021, SPIE 2005-2011, EUROSENSORS)
- Member of the committee for «Technologies for Life Long Learning» in the framework of «Greek Technology Platforms»

**Number of Journal Publications: 96** 

Number of Citations: 947, h-index:17 (Scopus)

**Google Scholar**: <a href="https://scholar.google.com/citations?user=tifbwYgAAAAJ&hl=en">https://scholar.google.com/citations?user=tifbwYgAAAAJ&hl=en</a>

(Citations:1376, h-index:20, i10-index:39)

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