



Nikolaos (Nikos) KONOFAOS
Professor
Aristotle University of Thessaloniki
Greece

SHORT CURRICULUM VITAE

Major Career Achievements

- Fulbright Research Scholar, Electrical & Computer Engineering Department University of Maryland, College Park, 2013-2014.
- Director, SEMPHy Lab, Department of Informatics, AUTH, 2019-2024.
- Chairman of the Ionian Islands Regional Committee of Grammar Schools, Ministry of Education, Greece, 2021-2025).
- Member of the National Council of Technology Education (TEI section) of Greece, 2014-2015.

Scientific Databases Indexing:

- *Researcher ID: A-9410-2012*
- *Google Scholar: citations?user=rC2jKLOAAAAJ*
- *Scopus ID: authid/detail.uri?authorId=7004028669*

Curriculum Vitae

Personal

Date and place of birth: 11th of April 1965, Corfu, Greece.

Family Status: Married, three children.

Nationality: Greek.

Current Occupation: Professor of *Physics of Electronics and Microelectronics* at the Department of Informatics, Aristotle University of Thessaloniki, Greece.

Professional Address: Department of Informatics, Aristotle University of Thessaloniki, Biology Bld, AUTh main campus, Thessaloniki, GR 54124, Greece,

email: nkonofao@csd.auth.gr,

tel: +30-2310991929.

URL: <https://users.auth.gr/nkonofao/>

Studies/Degrees Obtained.

1993: Ph.D. Electrical and Electronic Engineering, University of Bradford, United Kingdom.

1987: **Physics Degree**, Department of Physics, University of Ioannina, Greece.

Miscellaneous

Languages: GREEK (Mother language), ENGLISH (Fluent), SPANISH (Very good), GERMAN (Good).

Hobbies: Indoor sports, football, watching films, travelling.

Research Interests

- Quantum computing devices and quantum circuits.
- Micro and Nano-electronic devices and circuits.
- Design and simulation of VLSI devices and circuits in nano-scale.
- Semiconductor optoelectronic devices, sensors circuits.

Research Record & Publications

- **Over 60** Refereed SCI Journal papers.
- **4** chapters in research edited volumes (books).
- **Over 40** articles in refereed international conference proceedings.
- **Over 40** extended abstracts in international conferences.
- **26** papers in Greek national conferences proceedings.
- Hirsch Index: Web of Science: $\langle h \rangle = 17$, Scopus = $\langle h \rangle = 18$, Google Scholar $\langle h \rangle = 20$

Selected Recent Publications Relevant to Quantum Technologies

- D. Ntalaperas and Nikos Konofaos, "Encoding two qubit logical states and quantum operation using the energy states of a physical system", *Technologies*. 2022; 10(1):1.
- K Prousalis, AA Iliadis, EK Evangelou, N Konofaos, "Noise investigation in a spin-based four-qubit GaAs block of self-assembled quantum dots", *AIP Advances* 11 (6), 065126, 2021.
- K Prousalis, N Konofaos, "A Quantum Pattern Recognition Method for Improving Pairwise Sequence Alignment", *Scientific Reports* 9 (1), 7226, 2019.
- Dimitrios Ntalaperas, Konstantinos Giannakis and Nikos Konofaos, "A Quantum Cellular Automata Type Architecture with Quantum Teleportation for Quantum Computing", *Entropy* 21(12), 1235, 2019.
- Konstantinos Prousalis, Agis Iliadis, Nikos Konofaos, "Quantum recovery protocols for stabilizer codes: Deterministic Monte-Carlo simulation", *AIP Advances*, Volume 8, Issue 6, p. 065008, 2018.
- K.Prousalis & N.Konofaos, "Quantum Pattern Recognition for Local Sequence Alignment", *IEEE Global Communications Conference: Workshops: Quantum Communications and Information Technology*, 2017, 4-9 December 2017 Singapore, proceedings edited by IEEE, an. 978-1-5386-3920-7, 2017.

Academic Teaching & Theses Supervision

Master's Courses: 5 Courses taught since 2012.

Undergraduate Courses: 7 courses taught since 2012, including *Quantum Computing*.

Academic Textbooks.

- "Basic Electronics", by N. Konofaos, published by the University of Patras Academic Editions, Patras 2004 (in Greek, 2nd edition under preparation).
- "Renewable Energy Sources", by N. Konofaos, published by the University of Ioannina, Ioannina 2002 (in Greek, 2nd edition finished).
- Official translation under licence, from English to Greek, of the textbook: "CMOS Analog and Digital Circuits" by Kang and Leblebici, 3rd edition, 2003, McGraw Hill (in Greek, edited by Tziola Editions, 2007).
- Official translation under licence, from English to Greek, of the textbook: "Microelectronics", by Jaeger Richard - Blalock Travis, 4th Edition, (in Greek, edited by Tziola Editions, 2013).

Distinctions and awards

- Fulbright scholarship 2013-2014. Fulbright Research Fellow, Electrical & Computer Engineering Department, University of Maryland, College Park.
- Best poster award, 2nd International Conference on Microelectronics Microsystems and Nanotechnology, Athens, Greece, 14-17 November 2004.
- Scholarship for university undergraduate studies and for entry results, Greek Institute of Scholarships (IKY), 1983-1984.

PhD Theses, Master's and Diploma supervision

Post docs: 1

Current PhD Students: 5

Completed PhDs: 2

Master's: Supervisor of more than 15 Master students.

Diploma: Supervisor of more than 30 final year student projects.

Editorial board membership

- Editor, "Cogent Engineering", Taylor & Francis, 2018-today.
- Associate Editor, "Micro & Nano Letters", IET, 2018-today.
- Editor, "Applied Sciences-Quantum Science & Technology Section", MDPI, 2020-today
- Guest editor for Microelectronic Engineering, Elsevier, for articles presented in the "Micro & Nano 2018" Conference.

Administration and relevant activities

- Member of the National Council of Technology Education (TEI section) of Greece, 2014-2015.
- Director, SEMPHY Lab, Department of Informatics, AUTH, 2019-2024.
- Director, Section B, Department of Informatics, AUTH, 2019-2021, member of the Department Council for the same period.
- Head of the Supervising Council of the 1st Grammar High-School of Thessaloniki, 2019-2021.
- Chairman of the Ionian Islands Regional Committee of Grammar Schools, Ministry of Education, Greece, 2021-2025)
- Member of the AUTH Research Committee as Department representative (2017-2020).

Funded Programs

- Principal Investigator (PI) in 2 and participation as senior researcher in several *research funded programs* from the Greek Secretariat for Research & Technology (EPET II, PENED (2), HRACLEITOS etc).
- Participation in one EU funded educational program (Leonardo da Vinci).

- Participation in two national funded educational programs (EPEAEK, KALLIPOS).
- Participation in one national funded development program (EPET II).

Conference Committees:

- General Co-Chair, «The Micro & Nano 2018 Conference», 5-7 Nov 2018, Thessaloniki, Greece.
- Co-chair, Technical Program Committee, "Euromicro Conference on Digital System Design (DSD)", Chalkidiki, Greece, August 2019.
- Co-organizer, special session: «Special Session on Quantum Artificial Intelligence (QAI)», 10th Hellenic Conference on Artificial Intelligence, Patras, Greece, 9-15 July 2018.
- Member, Scientific Committee of the *ISDRS 2016*, 7-9 December 2016, Bethesda, Maryland, USA.
- Member of the local organizing committees of 3 International conferences held in Thessaloniki.
- Member of the Technical Program Committees of more than 8 International Conferences worldwide (ISQED, ICECS, MOCAST, etc) since 2004.

March 2022

Nikos Konofaos