



Name of Faculty	Kyriacos Kalli
Current Employment	Cyprus University of Technology, Electrical Engineering, Computer Engineering and Informatics Department
Past Employment	Cyprus University of Technology, Associate Professor Higher Technical Institute, Lecturer University of Cyprus, Researcher, Special Scientist University of Kent at Canterbury, UK, Research Fellow and Lecturer Fiber and Electro-Optics Research Center, Virginia Tech, USA, Research Scholar
Education	Ph.D. Physics 1992, University of Kent at Canterbury, UK Department of Physics “Investigation of linear and non-linear optical phenomena using high finesse ring resonators” B.Sc. (Hons) Theoretical Physics 1988 University of Kent at Canterbury, UK Department of Physics “Symmetry violations in particle physics”
Research Interest	Bragg grating and optical fibre sensors Femtosecond laser microfabrication of photonic devices in glass, semiconductor and polymers Microfluidics Plasmonics Laser material interactions
Selected funding	2018-2020 Interregional cultural heritage management e-system IRC-HERMES, EU Interreg Balkan-Mediterranean 2013-2017 TRIPOD – Training and Research in Polymer Optical Devices, EU ITN Marie Curie 2014-2018 Advanced fibre laser and coherent source as tools for society, manufacturing and life science - MP1401, EU COST ICT 2012-2014 Exploring high throughput multidimensional on-chip interconnection network topologies and architectures using in-silicon photonic interconnects, RPF Cyprus 2010-2014 Novel and Reliable Optical Fibre Sensor Systems for Future Security and Safety Applications (OFSESA), EU COST ICT 2009-2013 Development of nanoscale-optic and micro-fluidic devices using femtosecond laser, RPF Cyprus 2008-2010 Fabrication of micro-optic devices using femtosecond laser: induced refractive index changes and detailed analytical studies, CUT research project 2008-2011 Photonic Skins for Optical Sensing PHOSFOS EU Project
Selected publications	<ul style="list-style-type: none">▪ 2019, “Femtosecond laser written plane-by-plane Bragg grating sensors in bioresorbable phosphate optical fibres”, A. Theodosiou, D. Pugliese, E. Ceci-Ginistrelli, N. G. Boetti, D. Janner, D. Milanese

and K. Kalli, **IEEE Journal of Lightwave Technology** 37, 2363 - 2369

- 2019, Er/Yb double-clad fibre laser with fs-laser inscribed plane-by-plane chirped FBG laser mirrors, A. Theodosiou, J. Aubrecht, P. Peterka, I. Kasik, F. Todorov, O. Moravec, P. Honzatko, and K. Kalli, **IEEE Photonics Technology Letters** 31, 409-412
- 2019, Low-dimensional nano-patterned surface fabricated by direct-write UV-chemically induced geometric inscription technique, T. Allsop, R. Neal, V. Kundrat, C. Wang, C. Mou, P. Culverhouse, J. D. Ania-Castanon, K. Kalli, D. J. Webb, **Optics Letters** 44, 195 – 198
- 2018, Higher-order cladding mode excitation of femtosecond-laser-inscribed tilted FBGs, A. Ioannou, A. Theodosiou, K. Kalli, C. Caucheteur, **Optics Letters** 43, 2169 – 2172
- 2018, Fiber Bragg gratings in CYTOP fibers embedded in a 3D-printed flexible support for assessment of human–robot interaction force, A. Leal-Junior, A. Theodosiou, C. Díaz, C. Marques, M. J. Pontes, K. Kalli, A. Frizera-Neto **Materials** 11, 2305
- 2018, Methane detection scheme based upon the changing optical constants of a zinc oxide/platinum matrix created by a redox reaction and their effect upon surface plasmons T. Allsop, V. Kundrat, K. Kalli, G. B. Lee, R. Neal, P. Bond, B. Shi, J. Sullivan, P. Culverhouse, D. J. Webb, **Sensors and Actuators B: Chemical** 255, 843 – 853
- 2018, Laser-sculpted hybrid photonic magnetometer with nanoscale magnetostrictive interaction T. Allsop, G. B. Lee, C. Wang, R. Neal, K. Kalli, P. Culverhouse, D. J. Webb, **Sensors and Actuators A: Physical** 269, 545 – 555
- 2017, Direct writing of plane-by-plane tilted fiber Bragg gratings using a femtosecond laser A. Ioannou, A. Theodosiou, C. Caucheteur, K. Kalli, **Optics Letters** 42, 5198 – 5201
- 2017, Plane-by-plane femtosecond laser inscription method for single-peak Bragg gratings in multimode CYTOP polymer optical fiber, A. Theodosiou, A. Lacraz, A. Stassis, C. Koutsides, M. Komodromos, K. Kalli, **IEEE Journal of Lightwave Technology** 35, 5404 – 5410
- 2016, Photonic gas sensors exploiting directly the optical properties of hybrid carbon nanotube localized surface plasmon structures Thomas Allsop, Raz Arif, Ron Neal, Kyriacos Kalli, Vojta Kundrat, Aleksey Rozhin, Phil Culverhouse, and David Webb **Light: Science and Applications (Nature Publishing)** doi:10.1038/lsa.2016.36