Theodore Christopoulos, Short CV

Theodore Christopoulos is a professor of Analytical Chemistry at the Department of Chemistry of the University of Patras and a collaborating faculty member at the Institute of Chemical Engineering Sciences of the Foundation for Research and Technology Hellas (ICE/FORTH). He received a Bachelor of Pharmacy with Honors from the University of Athens (1982), a PhD in Chemistry (Honours) from the University of Athens (1987) and a Postdoctoral Diploma in Clinical Chemistry from the University of Toronto (1991). He has obtained the Specialty of Clinical Chemistry in Greece, Canada and the USA. He worked as a postdoctoral researcher at the University of Toronto and then as a professor of Chemistry and Biochemistry at the University of Windsor, Ontario, Canada. In 1998 he was a visiting professor at Harvard University. His published scientific work includes 120 papers in peer-reviewed international journals, 14 chapters in international journals and the publication of 2 international textbooks. Among other distinctions, he has been awarded the Grannis award for "Excellence in Research and Scientific Publication" from the U.S. National Academy of Clinical Biochemistry (1997). In 2022 he received the "Panagiotis Kanellopoulos" Outstanding Research Publication Award from the University of Patras. He has given numerous lectures, as an invited speaker, in international forums (Universities, Research Institutes and Scientific conferences). His research activity covers areas such as the utilization of nanotechnology in the development of biosensors and analytical methods, microanalytical chips (chips), fluorometric, bio(chemi)luminometric, and electroanalytical techniques as well as DNA, RNA and protein analysis techniques. The applications of his research activities focus on the Healthcare and Food Sectors and include disease diagnosis/monitoring, pathogen detection, pharmacogenomics, pharmaceutical analysis as well as food authenticity assessment.

Selected publications

1. Christopoulou N-M, Mamoulaki V, Mitsiakou A, Samolada E, Kalogianni DP, Christopoulos TK. Screening method for the visual discrimination of olive oil from other vegetable oils by a multispecies DNA sensor. *Analytical Chemistry*, **2024**; 96: 1803−1811

2. Christopoulou N-M, Figgou E, Kalaitzis P, Kalogianni DP, Christopoulos TK. Multiallelic DNA sensors for molecular traceability of olive oil varietal origin. *Sensors & Actuators: B. Chemical*, **2024**; 406: 135423

3. Kalligosfyri PM, Tragoulias SS, Tsikas P, Lamprou E, Christopoulos TK, Kalogianni DP. Design and validation of a three-dimensional printer-based system enabling rapid, low-cost construction of the biosensing areas of lateral flow devices for immunoassays and nucleic acid assays. *Analytical Chemistry*, **2024**; 96(1): 572–580

4. Christopoulou N-M, Kalogianni DP, Christopoulos TK. Macromolecular crowding agents enhance the sensitivity of lateral flow immunoassays. *Biosensors & Bioelectronics* **2022**; 218: 114737

5. Christopoulou N-M, Kalogianni DP, Christopoulos TK. Posidonia oceanica (Mediterranean tapeweed) leaf litter as a source of fluorescent carbon dot preparations. *Microchemical Journal*, **2021**; 161: 105787.

6. Sapountzi EA, Tragoulias SS, Kalogianni DP, Ioannou PC, Christopoulos TK. Lateral flow devices for nucleic acid analysis exploiting quantum dots as reporters. *Analytica Chimica Acta*, **2015**; 864: 48-54