



## Evangelos Gikas

**Title:** Professor of Analytical Chemistry

**Sector:** Analytical, Physical and Theoretical Chemistry (Sector I)

**Phone:** +30 210 72 74 850 (office)

**Fax:** +30 210 7274750 (office)

**E-mail :** [vgikas@chem.uoa.gr](mailto:vgikas@chem.uoa.gr)

### Academic Qualifications:

- Ph.D. in Pharmacy (2000), Dept. of Pharmacy, National and Kapodistrian University of Athens (UoA)
- B.Sc. in Pharmacy (1993), Dept. of Pharmacy, University of Patras
- Post graduate studies in Biomimetic technology
- Pharmacist by license (1996)

### Appointments:

- 2020: Professor, Dept. of Chemistry, national and Kapodistrian University of Athens
- 2013-2020 Assistant Professor in Pharmaceutical Analysis, National and Kapodistrian University of Athens, Department of Pharmacy
- 2008-2013 Lecturer in Pharmaceutical Analysis, National and Kapodistrian University of Athens, Department of Pharmacy
- 2005-2007 Lecturer 407 in Pharmaceutical Analysis, Department of Pharmacy, University of Patras
- 2001-2008 Principal investigator Bioanalytical Department - GAIA research centre

### Teaching Activities: (current)

Analytical Chemistry II (Instrumental Analysis)

Postgraduate courses

Bioanalytical methods of Analysis – Clinical Pharmaceutical Analysis

Computational Chemometrics

### Research Interests/Activities: (last 10 years)

- Metabolomics, lipidomics, new methodologies for the chemometric treatment of metabolomics data, basic research in mass spectrometry (fragmentation mechanisms explained by quantum chemistry, novel instrumentation, data evaluation by combination of fragmentation methodologies), development of new chemometric methodologies for/and validation of quantitation methodologies in bulk drug and biological fluids and tissues (brain, CSF, urine, plasma, EBC, cell), metabolism, stability of drugs and formulations, total quality control of herbal pharmaceuticals, applications of multivariate analysis and experimental design in analytical chemistry, large scale experimental design, synthesis of fluorogenic reagents, synthesis of packing materials for frontal affinity chromatography coupled to mass spectrometry (FAC-MS), quantum chemical studies of materials designed for fluorescence derivatization reagents using DFT, ab-initio, molecular dynamics and high-level CASSF calculations

### Scientific Publications/Citations:

- 82 publications in peer review journals (h-index 23, i10 index 48, 1892 citations)

### Top five publications

- “Malignancy grade-dependent mapping of metabolic landscapes in human urothelial bladder cancer: Identification of novel, diagnostic, and druggable biomarkers” Iliou, A., Panagiotakis, A., Giannopoulou, A.F., Benaki, D., Kosmopoulou, M., Velentzas, A.D., Tsitsilonis, O.E., Papassideri, I.S., Voutsinas, G.E., Konstantakou, E.G., Gikas, E., Mikros, E., Stravopodis, D.J. *International Journal of Molecular Sciences*, 21 (5) (2020)
- “Human melanoma-cell metabolic profiling: Identification of novel biomarkers indicating metastasis” Kosmopoulou, M., Giannopoulou, A.F., Iliou, A., Benaki, D., Panagiotakis, A., Velentzas, A.D., Konstantakou, E.G., Papassideri, I.S., Mikros, E., Stravopodis, D.J., Gikas, E. *International Journal of Molecular Sciences*, 21 (7) 2020
- “Acute administration of the olive constituent, oleuropein, combined with ischemic postconditioning increases myocardial protection by modulating oxidative defense”, Maria Tsoumani, Anastasios Georgoulisa, Panagiota-Efstathia Nikolaoua, Ioannis V. Kostopoulos, Theano Dermintzoglou, Ioanna Papatheodorou, Anastasia Zoga, Panagiotis Efentakis, Maria Konstantinou, Evangelos Gikas, Nikolaos Kostomitsopoulos, Andreas Papapetropoulos, Antigone Lazou, Alexios- Leandros Skaltsounis, Derek J.Hausenloy, Ourania Tsitsilonis, Ioulia Tseti, Fabiodi Lisa, Efstathios K. Iliodromitis, Ioanna Andreadou, *Free Radical Biology and Medicine*, <https://doi.org/10.1016/j.freeradbiomed.2021.02.011>
- “Crocus-derived compounds alter the aggregation pathway of Alzheimer’s Disease - associated beta amyloid protein”, Nikolaos Stavros Koulakiotis, Pasi Purhonen, Evangelos Gikas, Hans Hebert, Anthony Tsarbopoulos, Crocus-derived compounds alter the aggregation pathway of Alzheimer’s Disease - associated beta amyloid protein. *Sci Rep* 10, 18150 (2020)., <https://doi.org/10.1038/s41598-020-74770-x>
- “Design of experiments guided multivariate calibration for the quantitation of injectable colistimethate sodium by ultra performance liquid chromatography – High resolution mass spectrometry”, Ioanna Dagla, Anthony Tsarbopoulos, Evagelos Gikas, Talanta, Volume 220, 2020, 121406, ISSN 0039-9140, <https://doi.org/10.1016/j.talanta.2020.121406>

### Selected Distinctions:

- etc. Quantitative study of two indirubin derivatives: 6-Bromoindirubin-3'-oxime (6BIO) and 6-Bromoindirubin-3'-[O-(2-piperazine-1-ylethyl) oxime] (6BIO-pip) in mice plasma by LC-MS/MS. Application in a pharmacokinetic study, J. Tchoumtchoua, M. Halabalaki, E. Gikas, L. Liu, R. Jove, S. Nam, AL Skaltsounis, 62<sup>nd</sup> International Congress and Annual Meeting of the Society for

Medicinal Plant and Natural Product Research - GA2014, 31st August - 4th September 2014, University of Minho, Campus of Azurém, Guimarães, Portugal (Planta Medica 80(16) · October 2014, DOI: 10.1055/s-0034-1394554) Planta Med 2011; 77 - WSI2, DOI: 10.1055/s-0031-1282093, best research work

- A rapid LC- MS method for the simultaneous quantification of Oleuropein and its main metabolite, Hydroxytyrosol, in clinical samples after oral administration of commercial herb medicinal products  
N Lemonakis, M Halabalaki, E Gikas, V Mougios, A Skaltsounis, 59th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research September 4 - 9, 2011 Antalya, Turkey, Planta Med 2011; 77 - WSI2, DOI: 10.1055/s-0031-1282093 best research work
- Development of a Rapid and Sensitive SPE-LC-ESI MS/MS Method for the Determination of Chloramphenicol in Seafood, Evangelos Gikas, Pigi Kormali, Despina Tsipi, and Anthony Tzarbopoulos, J. Agric. Food Chem., 2004, 52 (5), pp 1025–1030, best article of the month – chromatography on line
- C. Moschonas, A.I. Milioni, D. Benaki, M.E. Tsoumani, N. Lemonakis, E. Gikas, A.D. Tselepis, E. Mikros. "Pharmacometabolomics reveal the resistance to clopidogrel". ALPIC: Advanced Learning on Platelets and Thrombosis International Course, March 20-22 2015, Palios Agios Athanasios, Greece. , best research work

#### **Projects and Academic Activities:**

- Supervisor of 20 masters and 2 PhD's
- Writing and Implementing more than 20 local and European funded projects (LIFE, FP7 people Marie Curie)