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Professor of Analytical Chemistry
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	<p>Education</p> <p>B.Sc. in Chemistry, University of Athens (1971) Ph.D. in Chemistry (Analytical Chemistry), University of Athens (1976) D.Sc. in Analytical Chemistry, University of Athens (1982) Post Doctoral studies at the University of Illinois, Urbana (1976-77)</p>
	<p>Research Field of Interest</p> <ol style="list-style-type: none">1. Electroanalytical techniques2. Applications of microcomputers in analytical instrumentation3. Flow injection analysis4. Reaction rate methods5. Chemometrics
	<p>Teaching</p> <p>Undergraduate: Instrumental Analysis, Chemical Instrumentation - Microcomputers</p> <p>Graduate: Analytical Chemistry, Advanced Analytical Chemistry, Chemometrics, Electroanalytical Chemistry (Potentiometry, Voltammetry)</p>
	<p>Book Authorship</p> <ol style="list-style-type: none">1. "Problems in Analytical Chemistry" (Athens, 1984, in Greek, 2 co-authors)2. "Special Topics in Analytical Chemistry" (Athens, 1989, in Greek, 3 co-authors)3. "Problems Solving in Analytical Chemistry" (Pergammon Press, 1989, in English, 3 co-authors)4. "Chemical Instrumentation - Microcomputers" (Athens, 1991, in Greek, 2nd ed 2002)5. "Instrumental Analytical Techniques" (Athens, 1992, in Greek, 1 co-author).6. "English-Greek and Greek-English Dictionary of Chemical and Related to Chemistry Terms (Athens, 2005)
	<p>Selected Papers</p> <p>(1) A. ECONOMOU, G. VOLIKAKIS, C. E. EFSTATHIOU: "Virtual Instrumentation for Electroanalytical Measurements", Journal of Automated Methods & Management in Chemistry, 21(2), 33-38 (1999).</p> <p>(2) P. SOLICH, C. K. POLYDOROU, M. A. KOUPPARIS, C. E. EFSTATHIOU: "Computer-Aided Fluorimetric Flow Injection Analysis for Dissolution Testing of Pharmaceuticals", Biomedical Chromatography, 13, 113-114 (1999).</p> <p>(3) J. DOLEJSOVA, P. SOLICH, C. K. POLYDOROU, M. A. KOUPPARIS, C. E. EFSTATHIOU: "Flow Injection Fluorimetric Determination of 1,4-Benzodiazepins in Pharmaceutical Formulations after Acid Hydrolysis", Journal of Pharmaceutical and Biomedical Analysis, 20, 357-362 (1999).</p>

- (4) G. J. VOLIKAKIS, C. E. EFSTATHIOU:** "Determination of Rutin and Other Flavonoids by Flow-Injection/Adsorptive Stripping Voltammetry Using Nujol-Graphite and Diphenylether-Graphite Paste Electrodes", *Talanta*, **51**, 775-785 (2000).
- (5) P. SOLICH, C. K. POLYDOROU, M. A. KOUPPARIS, C. E. EFSTATHIOU:** "Automated Flow-Injection Spectrophotometric Determination of Catecholamines (Epinephrine and Isoproterenol) in Pharmaceutical Formulations Based on Ferrous Complex Formation", *Journal of Pharmaceutical and Biomedical Analysis*, **22**, 781-789 (2000).
- (6) E. G. COOKEAS, C. E. EFSTATHIOU:** "Flow-injection/Pulse Amperometric Detection of Ephedrine at a Cobalt Phthalocyanine Modified Carbon Paste Electrode", *Analyst*, **125**, 1147-1150 (2000).
- (7) C. E. EFSTATHIOU:** "On the Sampling Variance of Ultradilute Solutions", *Talanta*, **52**, 711-715 (2000).
- (8) A. ECONOMOU, P. R. FIELDEN, C. E. EFSTATHIOU:** "Virtual Instrumentation for Stripping Voltammetry on the Rotating Disk Electrode", *Instrumentation Science and Technology*, **28(5)**, 379-386 (2000).
- (9) P. SOLICH, C. K. POLYDOROU, M. A. KOUPPARIS, C. E. EFSTATHIOU:** "Automated Flow Injection Fluorimetric Determination and Dissolution Studies of Bumetanide in Pharmaceuticals", *Analytica Chimica Acta*, **438(1-2)**, 131-136 (2001).
- (10) M. I. PRODRMIDIS, P. G. VELTSISTAS, C. E. EFSTATHIOU, M. I. KARAYANNIS:** "Amperometric Detection of Periodate Using a Graphite Electrode Modified with a Novel α -Keggin-Type Silicotungstic Acid Salt and Determination of Ethylene Glycol in Anti-Freeze Fluids", *Electroanalysis*, **13**, 960-966 (2001).
- (11) A. ECONOMOU, S. D. BOLIS, C. E. EFSTATHIOU, G. J. VOLIKAKIS:** "Virtual Electroanalytical Instrument for Square Wave Voltammetry", *Analytica Chimica Acta*, **467**, 179-180 (2002).
- (12) E. P. TSAOUSOULOU, S. D. BOLIS, C. E. EFSTATHIOU:** "A Monte Carlo Simulation for the Prediction of Precision of Absorbance Measurements with a Miniature CCD Spectrometer", *Journal of Automated Methods & Management in Chemistry*, **25(2)**, 35-42 (2003).
- (13) C. E. EFSTATHIOU:** "SpecScan: A Utility Program for Generating Numerical Data from Printed Forms of Spectra and Other Signals", *Journal of Chemical Education*, **80**, 1093-1094 (2003).
- (14) P. G. VELTSISTAS, M. I. PRODRMIDIS, C. E. EFSTATHIOU:** "All-Solid-State Potentiometric Sensors for Ascorbic Acid by Using a Screen-Printed Compatible Solid Contact", *Analytica Chimica Acta*, **502**, 15-22 (2004).
- (15) R. SALTZER, T. MITCHEL, P. MIMERO, M. KARAYANNIS, C. EFSTATHIOU, A. SMITH, M. VALCARCEL:** "Analytical Chemistry in The European Education Area", *Analytical and Biological Chemistry*, **381**, 33-40 (2005).
- (16) E. M. AVDIKOS, M. I. PRODRMIDIS, C. E. EFSTATHIOU:** "Construction and Analytical Applications of a Palm-sized Microcontroller-Based Amperometric Analyzer", *Sensors and Actuators B: Chemical*, **107**, 372-378 (2005).
- (17) G. J. VOLIKAKIS, C. E. EFSTATHIOU:** "Fast Screening of Total Flavonols in Wines, Tea-infusions and Tomato Juice by Flow Injection/Adsorptive Stripping

Voltammetry", *Analytica Chimica Acta*, **551**, 124-131 (2005).

(18) S. D. BOLIS, P. C. CHARALAMBOUS, C. E. EFSTATHIOU, A. G. MANTZILA, C. A. MALAMOU, M. I. PRODRONIDIS: "Monitoring of the Avidin-Biotinylated Dextran Interaction on Au and Ti/TiO₂ Electrode Surfaces Using a Charge Integrating Device", *Sensors and Actuators B: Chemical*, **114**, 45-57 (2006).

(19) C. E. EFSTATHIOU: "Estimation of Type I Error Probability from Experimental Dixon's "Q" Parameter on Testing for Outliers within small Size Data Sets", *Talanta*, **69(5)**, 1068-1071 (2006).

(20) M. F. DOUSIKOU, M. A. KOUPPARIS, C. E. EFSTATHIOU: "Determination of Catalase-Like Activity in Plants Based on the Amperometric Monitoring of Hydrogen Peroxide Consumption Using Carbon Paste Electrode Modified with Ruthenium(IV) Oxide", *Phytochemical Analysis*, **17**, 255-261 (2006).

(21) C. KOKKINOS, A. ECONOMOU, I. RAPTIS, C. E. EFSTATHIOU, T. SPELIOTIS: "Novel Disposable Bismuth-Sputtered Electrodes for the Determination of Trace Metals by Stripping Voltammetry", *Electrochemistry Communications*, **9**, 2795-2800 (2007).

(22) C. KOKKINOS, A. ECONOMOU, I. RAPTIS, C. E. EFSTATHIOU: "Lithographically-Fabricated Disposable Bismuth-Film Electrodes for the Trace Determination of Pb(II) and Cd(II) by Anodic Stripping Voltammetry", *Electrochimica Acta*, **53**, 5294-5299 (2008).

(23) D. V. STERGIU, M. I. PRODRONIDIS, C. E. EFSTATHIOU: "On The Possibility of a pH-metric Determination of Ozone", *Electrochemistry Communications*, **10**, 252-265 (2010).

(24) S. HELALI, A. ABDELGHANI, N. JAFFREZIC-RENAULT, P. N. TRIKALITIS, C. E. EFSTATHIOU, M. I. PRODRONIDIS: "On-site Monitoring of Fish Spoilage Using Vanadium Pentoxide Xerogel Modified Interdigitated Gold Electrodes", *Electrochimica Acta*, **55**, 4256-4260 (2010).

(25) E. G. FARMAKI, N. S. THOMAIDIS, C. E. EFSTATHIOU: "Artificial Neural Networks in Water Analysis: Theory and Applications", *International Journal of Environmental Analytical Chemistry*, **90(2)**, 85-105 (2010).

(26) M. I. KARAYANNIS, C. E. EFSTATHIOU: "Self-assessment and Controlled Examination in Analytical Chemistry by EChemTest", *Analytical and Bioanalytical Chemistry*, **400(10)**, 3181-3185 (2011)



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