

CURRICULUM VITAE

PERSONAL DATA

Last Name : RIGAS
Name : PANTELIS
Father's Name : GEORGE
Date of Birth : November 13th, 1960
Place of Birth : Arnea Halkidikis, Greece
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EDUCATION

1972-1975 Arnea Junior High School, Arnea, Halkidiki, June 1975
1975-1978 Harilaou High School, Harilaou, Thessaloniki, June 1978
1978-1982 B.Sc., Aristotle University of Thessaloniki, Thessaloniki, Greece, Chemistry, July 1982 GPA "Excellent" (9.24).
1983-1987 Ph.D., University of Iowa, Iowa City, IA, Analytical Chemistry, July 1987.

PROFESSIONAL PROFILE

7/81-9/81 Trainee, Organic Chemistry Division, F. Hoffmann - La Roche, & Co. Ltd., Basle, Switzerland
7/82 - 10/82 Research Chemist, Organic Chemistry Division, F. Hoffmann - La Roche, & Co. Ltd., Basle, Switzerland
1/83 - 5/85 Teaching Assistant, The University of Iowa, Chemistry Department, Iowa City, USA
6/85 - 7/87 Research Assistant with D.J. Pietrzyk, The University of Iowa, Chemistry Department, Iowa City, USA
8/87 - 5/89 Analytical Chemist, Analytical Research, Abbott Laboratories, North Chicago, USA
9/89 - 11/90 Analytical Chemist, Fuel and Oil Chemical Analysis Lab, Greek Air Force, Mikra, Thessaloniki, Greece
1989 Elected Assistant Professor of Analytical Chemistry, Department of Chemistry, University of Crete (not accepted for personal reasons)
9/90-6/97 Assistant Professor of Chemistry - ACT College/Anatolia Thessaloniki, Greece
10/89-10/02 Managing Director and Founder of RIGAS LABS S.A.
11/02- 3/12 Associate Professor of Instrumental Analysis, -Dept. of Fisheries & Aquaculture Technology, Alexander Technological Educational Institute of Thessaloniki(ATEITH).
3/12-Present Professor of Instrumental Analysis, -Dept. of Fisheries & Aquaculture Technology, Alexander Technological Educational Institute of Thessaloniki.
5/07-6/10 Member of Research Committee, ATEITH.
9/08-8/10 Chair of the Department of Fisheries & Aquaculture Technology
10/09-Present Lecturer: "Advanced Methods of Food Analysis" in Graduate Program "Quality Assurance Systems and Production Management in Food Industry", Dept. of Food Technology of ATEITH
9/10-8/13 Chair of the Department of Fisheries & Aquaculture Technology (ATEITH)
9/13-8/16 Member of Research Committee, ATEITH.
7/15-Present Professor of Instrumental Analytical Chemistry, - Dept. of Food Technology, Alexander Technological Educational Institute of Thessaloniki(ATEITH).

9/15-7/16	Chair of the Department of Fisheries & Aquaculture Technology
7/16-present	Chair of the Department of Fisheries & Aquaculture Technology
2/16-present	Member of Environmental Policy Committee, ATEITH.

SCIENTIFIC PROFILE

Ph.D Thesis

«Iron(II) and Ruthenium(II) 2,2-Bipyridine and 1,10- Phenanthroline Complexes as Ion Interaction Reagents for the Separation and Indirect Detection of Inorganic and Organic Anions by Reverse Phase Liquid Chromatography».

Metal chelates of Fe(II) and Ru(II) with phenanthroline or bipyridine as ligands were studied as mobile phase additives in reverse phase chromatography. Since these complexes have chromophoric, fluorophoric and electrochemical properties indirect detection can be applied for the separation and quantitation of inorganic and organic anions. The origin of the indirect detection was explored as well as the parameters that affect the chromatography, location of system peaks and detection were evaluated in order to achieve the best separations and detection limits.

SCIENTIFIC PROJECTS

1. **"Improved therapeutics and prophylaxis in marine aquaculture through the use of supplementation techniques with live food preys *Brachionus* and *Artemia*"(1990-1992).** Funded by the Commission of the European Communities FAR (Fisheries and Aquaculture Research) , DG-XIV, AQ. 1.94 **-Main Research Team Member**
2. **"Development of a Post Column Derivatization System for Liquid Chromatography (HPLC-PCD)" (1996-1998).** Funded by the Greek General Secretariat for Research and Technology (GSRT). **-Project Coordinator**
3. **"Design, stabilization and development of sugar and ethanol biosensors " (1997-1999).** Funded by the Greek General Secretariat for Research and Technology (GSRT).- **Main Research Team Member**
4. **"Methodology development for analysis of sugars and amino acids with HPLC-PCD" (1998-2001).** Funded by the Greek General Secretariat for Research and Technology (GSRT). **-Project Coordinator**
5. **"Development of protein engineering methods for the production of proteins and various biomolecules of medical and biotechnological importance " (1998-2001).** Funded by the Greek General Secretariat for Research and Technology (GSRT).- **Main Research Team Member**
6. **"Development and construction of two potentiometrically instruments for measuring pH, potential (mV) temperature redox potential (ORP) and ion concentration (ISE)"(2003-2006).** Funded by the Greek General Secretariat for Research and Technology (GSRT). **-Project Coordinator**
7. **"Development and utilization of instruments for the measurement of rheological properties of foods" (2004-2006).** Archimedes I, EPEAK II, Funded by the Greek Ministry of National Education and Religious Affairs. **-Main Research Team Member**
8. **"Development of an integrated system of post-column derivatization" (2004-2007).** Funded by the Greek General Secretariat for Research and Technology (GSRT). **-Project Coordinator**
9. **"Development of analytical methods for the determination of biotoxins. Application of the methods in mussel cultures" (2005-2007).** Archimedes I, EPEAK II, Funded by Greek Ministry of National Education and Religious Affairs.- **Project Coordinator**
10. **"Evaluation of chemical composition and energy value of Greek Foods " (2005-2007).** Archimedes I, EPEAK II, Funded by the Greek Ministry of National Education and Religious Affairs. **- Main Research Team Member**
11. **"Development and manufacture of HPLC columns, reagents and post column derivatization reagents "(2006-2007).** Funded by the General Secretariat for Research and Technology (GSRT). **-Project Coordinator**
12. **"Determination of biogenic amines as criterion of the fish freshness with High performance Liquid Chromatography" (2006-2008).** Funded by the Research Committee, ATEITH.-**Project Coordinator**
13. **"Formulation of biodegradable natural polymers for industrial use as packaging materials" (2006-2008).** Archimedes II, EPEAK II, Funded by the Greek Ministry of National Education and Religious Affairs. **-Main Research Team Member**

14. **"Development of a new generation biosensor for the measurement of reducing sugars in potatoes and assessment of acrylamide formation", Acronym REFLAB, Proposal No.: 031588, (2006-2009).** Funded by the Commission of the European Communities in the VI framework of the CRAFT Programme.-**Main Research Team Member**
15. **"Study, development and applications of fluorescence sensors in the detection of toxic medallions' in the environment by using HPLC combined with Post Column Derivatization." (2007-2009)** PENED, Funded by the Greek General Secretariat for Research and Technology (GSRT).-**Main Research Team Member**
16. **"Rearing goldfish (*Carassius auratus*) of high commercial value. Effect of microalgal carotenoids on skin pigmentation and growth" (2010-2011).** Funded by the Research Committee, ATEITH.-**Main Research Team Member**
17. **" Development of an analytical method for the determination of Tetrodotoxin (TTX); The application of the method for the identification and determination of Tetrodotoxin in the Mediterranean Lagocephalus (pufferfish *Lagocephalus sceleratus*)" (2012-2015).** Archimedes III, Funded by Greek Ministry of National Education and Religious Affairs.- **Project Coordinator**
18. **"Development of novel Angiogenesis-Modulating Pharmaceuticals by screening of natural compounds and synthetic analogues" SYNERGASIA-09ΣΥΝ-21-1078 (2012-2014).** Funded by Greek Ministry of National Education and Religious Affairs. -**Main Research Team Member**
19. **"Improvement of quality characteristics of olive oil by enrichment with olive leaf water extracts" SYNERGASIA-11SYN_2_1923 (2013-2016).** Funded by Greek Ministry of National Education and Religious Affairs. -**Main Research Team Member**

EDUCATIONAL PROJECTS

1. **"Teachers Training in the Use of Information Technologies and Communication in Education "from the Ministry of Education"** (Ref 218741/KG/1-3-2004) (Certification of PC knowledge), Ministry of Education, 2004-2006.- Supervisor
2. **"Student Practical Training of the Department of Fisheries and Aquaculture Technology, Alexander Technological Educational Institute of Thessaloniki",** 1/10/05 to 30/9/08. Co-financing from European Union and National Resources.-Placement-Supervision-Evaluation of Student Practical Training.

PUBLICATIONS

1. **P. G. Rigas and D. J. Pietrzyk,** Liquid Chromatographic Separation and Indirect Detection of Inorganic Anions Using Iron(II)-1,10-Phenanthroline as a Mobile Phase Additive, ***Anal. Chem.***, 1986, 58, 2226-2233.
Citations:46
2. **P. G. Rigas and D. J. Pietrzyk,** Liquid Chromatographic Separation and Indirect Detection of Organic Acids Using Iron(II)-1,10-Phenanthroline as a Mobile Phase Additive, ***Anal. Chem.***, 1987, 59, 1388-1393.
Citations:32
3. **P. G. Rigas, S. J. Arvanitis and D. J. Pietrzyk,** Ion Interaction Chromatographic Separation of Amino Acids Using a Basic-Tetraalkylammonium Salt Mobile Phase, ***J. Liq. Chromatogr.***, 1987, 10(13), 2891-2910.
Citations:11
4. **P. G. Rigas and D. J. Pietrzyk,** Liquid chromatographic separation of analyte anions with iron(II) 1,10-phenanthroline as a mobile-phase additive: origin and parameters in indirect detection, ***Anal. Chem.***, 1988, 60, 454-459.
Citations:31
5. **P. G. Rigas and D. J. Pietrzyk,** Ru(II) Complexes as Ion Interaction Reagents for the Liquid Chromatographic Separation and Indirect Fluorometric Detection of Analyte Anions, ***Anal. Chem.***, 1988, 60, 1650-1654.
Citations:20
6. **D. J. Pietrzyk, P. G. Rigas and D. Yuan,** Separation and Indirect Detection of Alkyl Sulfonates and Sulfates, ***J. Chromatogr. Sci.***, 1989, 27, 485-490.
Citations:30

7. **M. Touraki, P. Rigas, P. Pergantas, Th.Abatzopoulos and C. Kastritsis** Optimizing Bioencapsulation of the Antibiotics Trimethoprim and Sulfamethoxazole in Artemia Nauplii, *Larvi* **91**, Special Publication No 15, Gent, Belgium, 1991, 415-418.
Citations:13
8. **M. Touraki, P.G. Rigas, P. Pergandas and C. Kastritsis**, Determination of Oxytetracycline in the Live Fish Feed Artemia using High Performance Liquid Chromatography with Ultra-Violet Detection, *J. of Chromatography B*, 1995, 663, 167-171.
Citations:23
9. **M. Touraki, P.G. Rigas and C. Kastritsis**, Liposomes Mediated Delivery of Water Soluble Antibiotic to the Larvae of Aquatic Animals, *Aquaculture*, 1995, 136, 1-10.
Citations:43
10. **M. G. Fouskaki, N. A. Chaniotakis and P. G. Rigas** Post Column Derivatization Reactor for High Performance Liquid Chromatography. Characteristics and Applications in Carbohydrates, *Instrumental Methods of Analysis, Modern Trends and Applications*, Greece, 1999, Volume II, 604-608.
Citations:0
11. **Economou, D. G. Themelis, H. Bikou, P. D. Tzanavaras and P. G. Rigas** Determination of Boron in water and pharmaceuticals by sequential-injection analysis and fluorimetric detection, *Analytica Chimica Acta*, 2004, 510, 219-224
Citations:33
12. **K. Zacharis, P. D. Tzanavaras, D. G. Themelis, G. A. Theodoridis, A. Economou and P. G. Rigas**, Rapid spectrofluorimetric determination of lisinopril in pharmaceutical tablets using sequential injection analysis, *Anal. Bioanal. Chem*, 2004, 379, 759-673
Citations:19
13. **P. D. Tzanavaras, C. K. Zacharis, P. Rigas**, Novel automated assay for the quality control of mexiletine hydrochloride formulations using sequential injection and on-line dilution, *J. Pharm. Biomed. Anal.* 2008, 48, 1254-1260
Citations:10
14. **M. Maroulis , I. Monemvasios, E. Vardaka, and P. Rigas**, Determination of domoic acid in mussels by HPLC with post-column derivatization using 4-chloro-7-nitrobenzo-2-oxa-1,3-diazole (NBD-Cl) and fluorescence detection, *J. of Chromatography B*, 2008, 876, 245-251.
Citations:34
15. **Paraskevas D. Tzanavaras, Demetrius G. Themelis and Pantelis Rigas**, Automated zone-sampling dilution by coupling sequential injection analysis to high-throughput HPLC for the direct determination of gemfibrozil, *Journal of Separation Science*, 2009, 32, 1-8.
Citations:14
16. **Menelaou M, Konstantopai A, Lalioti N, Raptopoulou P. C, Psycharis V, Terzis A, Mateescu C, Tsarhopoulos K, Rigas P, Salifoglou A.**, Hydrothermal synthesis and characterization of 2D M(II)-quinat (M = Co,Zn) metal-organic lattice assemblies: Solid-state solution structure correlation in M(II)-hydroxycarboxylate systems, *Inorg. Chem.* , 2010, 49, 11449–11462
Citations:13
17. **Constantinos K. Zacharis, Fotini S. Kika, Paraskevas D. Tzanavaras, Pantelis Rigas, Efstratios R. Kyranas**, Development and validation of a rapid HPLC method for the determination of five banned fat-soluble colorants in spices using a narrow-bore monolithic column, *Talanta*, 2011, 84, 480-486.
Citations:35
18. **Constantinos K. Zacharis, Paraskevas D. Tzanavaras, Panagiotis N. Mouroutis, Pantelis G. Rigas**, NBD-Cl as a post column reagent for primary and secondary amines after separation by ion exchange chromatography, *Anal. Letters*, 2011, 44, 1821-1834.
Citations:8
19. **Pantelis G. Rigas**, Review: Liquid Chromatography-Post-Column Derivatization for Amino Acid Analysis: Strategies, Instrumentation and Applications, *Instrumentation Science & Technology*, 2012, 40, 161-193.
Citations:18
20. **Paraskevas D. Tzanavaras, Theano D. Karakosta, Pantelis G. Rigas, Demetrius G. Themelis, Anastasia Zotou**, Isocratic liquid chromatographic determination of three paraben preservatives in hygiene wipes using a reversed phase core-shell narrow-bore column, *Cent. Eur. J. Chem.*, 2012, 10(5), 1459-1463.
Citations:12

21. **Constantinos K. Zacharis, Theano D. Karakosta, Paraskevas D. Tzanavaras, Pantelis G. Rigas, Demetrius G. Themelis**, Chromatographic behavior of the biologically active proline derivative captopril on particulate, monolithic and core-shell narrow bore columns, *Anal. Methods*, 2012, 4, 4373-4377.
Citations:0
22. **Pantelis G. Rigas**, Post-column labeling techniques in amino acid analysis by liquid chromatography, *Analytical and Bioanalytical Chemistry*, 2013, 405, 7957-7992.
Citations:16
23. **Dimitris Tanis, Patroklos Vareltsis, George Nikolaides, George Minos, Lambros Kokokiris and Pantelis G. Rigas.**, Evaluation of Helically Coiled and Knitted Open Tubular Reactors for the Efficient Post-Column Determination of Tetrodotoxin by High-Performance Liquid Chromatography, *Anal. Letters*, 2017, 2, 271-291 (Published online: 24 May 2016).
Citations:0

Acknowledgements

Demetrius G. Themelis , Paraskevas D. Tzanavaras, Fotini S. Kika, On-line dilution flow injection manifold for the selective spectrophotometric determination of ascorbic acid based on the Fe(II)-2,2'-dipyridyl-2-pyridylhydrazone complex formation, *Talanta*, 2001, 55, 127– 134

Citations:21

MANUSCRIPTS CITATIONS, h-index

- **461** (Source: Google Scholar, Scopus & Web of Science)
- h-index: **13**

REVIEWER (67)/ ADJUDICATIVE REVIEWER (7)

Journal of Ecotoxicology and Environmental Safety (1)
 Journal of Analytical Letters (2)
 Journal of Instrumentation Science and Technology (1)
 Journal of Analytical Methods (14)
 New Journal of Chemistry (3)
 RSC Advances (23)
 Journal of Chromatography A (15)
 Metabolites (1)
 Analytica Chimica Acta (2)
 Food Chemistry (3)
 Journal of Pharmaceutical and Biomedical Analysis (1)
 Journal of Liquid Chromatography & Related Technologies (1)

SCIENTIFIC PRESENTATIONS IN INTERNATIONAL CONFERENCES

1. **Dimitris Tanis, Patroklos Vareltsis, George Nikolaides and Pantelis G. Rigas**, Design Characteristics of a Post-Column Derivatization System for Tetrodotoxin (TTX) Analysis, The 9th International Conference. Instrumental Methods of Analysis. Modern Trends and Applications (IMA 2015), Kalamata, Greece, September 2015.
2. **Pantelis G. Rigas Nikolaides George, Zampaka Vaia, Spiridonakos Nikos, Tsarhopoulos Kostas, Michael Doukakis** NBD-Cl as a Post Column Reagent for Amino and Imino Acids after Separation by Ion Exchange Chromatography, presented at the Pittsburgh Conference, Philadelphia, PA, March, 2013.
3. **George Nikolaidis, Vaia Zampaka, Patroklos Vareltsis, Pantelis G. Rigas**, NBD-Cl as a New Post-Column Reagent for HPLC Analysis of Amino and Imino Acids, The 7th International Conference. Instrumental Methods of Analysis. Modern Trends and Applications, Chania, Greece, September, 2011.
4. **Theodoros Roumeliotis, Martin Hornshaw, Nicolaie E. Damoc, Michaela Scigelova, Thomas Moehring, Pantelis Rigas, Spiros D. Garbis**, Towards a systematic understanding of mechanism-based markers for cancer

- prevention: The functional convergence of ex vivo and in vivo Proteomics, presented at the 58th ASMS Conference on Mass Spectrometry, Salt Lake City, UT, USA, May, 2010.
5. **Constantinos K. Zacharis, Paraskevas D. Tzanavaras, Panagiotis N. Mouroutis, George Nikolaidis, Pantelis G. Rigas**, NBD-Cl as a new post column reagent for HPLC analysis of primary and secondary amines and amino acids, 7th Aegean Analytical Chemistry Days (AACD 2010), Lesvos, Greece, September-October, 2010.
 6. **P. D. Tzanavaras, D. G. Themelis and P. Rigas**, Automated zone-sampling dilution by coupling sequential injection analysis to high-throughput HPLC for the direct determination of gemfibrozil, The 6th International Conference. Instrumental Methods of Analysis. Modern Trends and Applications (IMA 2009), Athens, Greece, October 2009.
 7. **M. Maroulis, I. Monemvasios, K. Tsarhopoulos, P. Rigas**, Novel Method of Determination of Domoic Acid in Mussels by High Pressure Liquid Chromatography and Post Column Derivatization with 4-chloro-7-Nitro-Benzo-2-Oxa-1,3-Diazole (NBD-Cl) presented at the The 5th Conference. Instrumental Methods of Analysis, Modern Trends and Applications, Patra, Greece, October, 2007.
 8. **C. K. Zacharis, P. D. Tzanavaras, D. G. Themelis, G. Theodoridis, A. Economou and P. Rigas**, Rapid spectrofluorimetric determination of lisinopril in pharmaceutical tablets using sequential injection analysis presented at The 3rd International Conference. Instrumental Methods of Analysis. Modern Trends and Applications (IMA 2003), Thessaloniki, Greece, September 2003.
 9. **Georges Dellis, Lazaros Melantinos, Kostas Tsarchopoulos and P. G. Rigas**, Plant Hormones Analysis in Grapes by High Performance Liquid Chromatography, presented at The The 4th Instrumental Methods of Analysis, Modern Trends and Applications, Iraklion, Crete, Greece, October, 2005.
 10. **M. G. Fouskaki, N. A. Chaniotakis and P. G. Rigas**, Post Column Derivatization Reactor for High Performance Liquid Chromatography. Characteristics and Applications in Carbohydrates presented at The 1st Instrumental Methods of Analysis, Modern Trends and Applications, Chalkidiki, Greece, September, 1999.
 11. **N. A. Chaniotakis and P. G. Rigas**, Post Column Derivatization Reactor for High Performance Liquid Chromatography. Characteristics and Applications in Carbohydrates presented at The Pittsburgh Conference, Atlanta, GA, March, 1999.
 12. **P. G. Rigas**, Determination of Amino Acids in Physiological Fluids, presented at The ECOSEP 1, Patra, Greece, May, 1998.
 13. **P. G. Rigas**, Post-column derivatization in micro HPLC, presented at The ECOSEP 1, Patra, Greece, May, 1998.
 14. **M. Touraki, P.G. Rigas, P. Pergantas and C. Kastritsis**, "Liposome mediated delivery of antibiotics in aquacultures" 16th Annual Conference of Hellenic Society of Biological Sciences, Volos, Greece, May, 1994.
 15. **M. Touraki, P. Rigas, P. Pergantas, Th. Abatzopoulos and C. Kastritsis**, "Artemia mediated delivery of antibiotics in aquacultures: Bioencapsulation study of antibiotics Trimethoprim και Sulfamethoxazole", 13th Annual Conference of Hellenic Society of Biological Sciences, Heraklion, Crete, Greece, May, 1991
 16. **M. Touraki, P. Rigas, P. Pergantas, Th. Abatzopoulos and C. Kastritsis**, Optimizing Bioencapsulation of the Antibiotics Trimethoprim and Sulfamethoxazole in Artemia Nauplii, presented at The Larvi 91-Fish & Crustacean Larviculture symposium European Aquaculture Society, Special Publication No 15, Gent, Belgium, 1991.
 17. **P. G. Simonson, P. G. Rigas, S. J. Arvanitis and D. J. Pietrzyk**, Liquid Chromatographic Separation of Amino Acids Using a Basic-Tetraalkylammonium Salt Mobile Phase: Detection Strategies. presented at the 23rd Midwest Regional Meeting of the American Chemical Society, Iowa City, IA, 1988.
 18. **D. J. Pietrzyk, P. G. Rigas and D. Yuan**, Separation of Analyte Anions Using 1,10-Phenanthroline-Metal Complexes as Mobile Phase Additives, presented at the 3rd Chemical Congress of North America & 195th ACS National Meeting, Toronto, Canada, June, 1988.
 19. **D. J. Pietrzyk and P. G. Rigas**, Separation and Indirect Detection of Alkyl Sulfonates and Sulfates, , presented at The Pittsburgh Conference, New Orleans, LA, February, 1988.
 20. **P. G. Simonson, P. G. Rigas, S. J. Arvanitis, D. J. Pietrzyk**, Liquid Chromatographic Separation of Amino Acids Using a Basic-Tetraalkylammonium Salt Mobile Phase: Detection Strategies, presented at the 23rd Midwest American Chemical Society, Midwest Regional Meeting, Iowa City, IA, November, 1988.
 21. **D. J. Pietrzyk and P. G. Rigas**, Separation of Multivalent Anions by Ion Interaction Chromatography, presented at The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) 14th Annual Meeting, Detroit, MI, October, 1987.
 22. **P. G. Rigas and D. J. Pietrzyk**, Indirect Photometric, Fluorescent and Electrochemical Detection in the Chromatographic Separation of Ionic Analytes, , presented at The 11th International Symposium on Column Liquid Chromatography, Amsterdam, Netherlands, June, 1987.

23. **D. J. Pietrzyk and P. G. Rigas**, Strategies for Separation of Free Amino Acids, presented at the 11th International Symposium on Column Liquid Chromatography, Amsterdam, Netherlands, June, 1987.
24. **P. G. Rigas and D. J. Pietrzyk**, Separation and Indirect Fluorescence Detection of Analyte Anions on a Reverse Stationary Phase, presented at The Pittsburgh Conference, Atlantic City, NJ, March, 1987.
25. **P. G. Rigas and D. J. Pietrzyk**, LC Separation of Analyte Anions Using Iron(II)-1,10-Phenanthroline as a Mobile Phase Additive, presented at The 21st Midwest Regional Meeting of the American Chemical Society, Kansas City, MO, November, 1986.
26. **P. G. Rigas, S. J. Arvanitis and D. J. Pietrzyk**, Separation of Free Amino Acids on PRP-1 Using R_4N^+ Mobile Phase Additives, presented at The 21st Midwest Regional Meeting of the American Chemical Society, Kansas City, MO, November, 1986.
27. **D. J. Pietrzyk and P. G. Rigas**, The Separation and Indirect Detection of Organic Acid Analyte Anions on a Reverse Stationary Phase Using Iron(II)-1,10-Phenanthroline as a Mobile Phase Additive, presented at The 10th International Symposium on Column Liquid Chromatography, San Francisco, CA, May, 1986.
28. **S. J. Arvanitis, P. G. Rigas and D. J. Pietrzyk**, Separation of Free Amino Acids on PRP-1 Using R_4N^+ Mobile Phase Additives, presented at The 8th Annual Spring Symposium on Macromolecular Separations, Minneapolis, MN, May, 1986.
29. **P. G. Rigas and D. J. Pietrzyk**, Indirect Photometric Detection of Analyte Anions Using 1,10-Phenanthroline Iron(II) Complex as a Mobile Phase Additive, presented at The Pittsburgh Conference, Atlantic City, NJ, March, 1986.
30. **P. G. Rigas and D. J. Pietrzyk**, LC Separation of Inorganic and Organic Analyte Anions Using Iron(II)-1,10-Phenanthroline and Indirect Photometric Detection, presented at The 190th National Meeting of American Chemical Society, Chicago IL, September, 1985.
31. **D. J. Pietrzyk, T. A. Walker and P. G. Rigas**, LC Separation of Analyte Ions Using Hydrophobic Ions as Mobile Phase Additives, presented at the 9th International Symposium of Column Liquid Chromatography, Edinburg, England, July, 1985.
32. **D. J. Pietrzyk, G. L. Schmitt, P. G. Rigas, T. A. Walker and S. H. Edelmuth**, Chromatographic Strategies for the Separation of Analyte Ions, presented at the 189th National Meeting of the American Chemical Society, Miami Beach, FL, May, 1985.
33. **D. J. Pietrzyk and P. G. Rigas**, LC Separation of Anions Using Iron(II)-1,10-Phenanthroline as a Mobile Phase Additive, presented at The International Chemical Congress of Pacific Basin Societies, Honolulu, Hawaii, December, 1984.

CONFERENCE ARTICLES

1. **P. G. Rigas**, Post Column Derivatization Techniques in HPLC, European Training Program in Microseparation Techniques, Patra, 1998, 400-408.

SCIENTIFIC PRESENTATIONS IN NATIONAL CONFERENCES

1. **T.D. Karakosta, C.K. Zacharis, P.D. Tzanavaras, D.G. Themelis, P.G. Rigas**, Chromatographic behavior of proline derivatives on particulate monolithic and fused core narrow bore columns: determination of captopril in dissolution samples, 15th Hellenic Symposium on Medicinal Chemistry (HelMedChem)", Athens, Greece, May 2012.
2. **P. Rigas**, Analytical methods of biotoxin determination in cell fish, 2nd National Conference in Synchronous Nutritional Challenges for the the safety and Quality of Foods, National Committee of Health and Food Safety (Δ.Ε.Δ.Υ.Τ.), June, 2008.
3. **P. Rigas** Ανάπτυξη αναλυτικών μεθόδων προσδιορισμού βιοτοξινών – εφαρμογή των στον προσδιορισμό βιοτοξινών σε οργανωμένες περιοχές μυδοκαλλιεργειών, ΣΥΝΕΔΡΙΟ ΠΑΡΟΥΣΙΑΣΗΣ ΕΡΕΥΝΗΤΙΚΩΝ ΑΠΟΤΕΛΕΣΜΑΤΩΝ ΤΟΥ ΠΡΟΓΡΑΜΜΑΤΟΣ ΑΡΧΙΜΗΔΗ, Θεσσαλονίκη, Μάρτιος, 2007.
4. **P. Rigas, M. G. Fouskaki and N. A. Chaniotakis**, Post column derivatization techniques) in High Performance Liquid Chromatography (HPLC) applications in carbohydrate analysis, 18th National Chemistry Conference, Piraeus, March, 2001.

5. **M. Touraki, P.G. Rigas, P. Pergantas and C. Kastritsis**, “Τα λιποσώματα ως φορέας αντιβιοτικών στις υδατοκαλλιέργειες” Συνέδριο Ελληνικής Εταιρείας Βιολογικών Επιστημών (ΕΕΒΕ), 18^ο Πανελλήνιο Συνέδριο Ελληνικής Εταιρείας Βιολογικών Επιστημών (ΕΕΒΕ), Βόλος, 1994.
6. **M. Touraki, P. Rigas, P. Pergantas, Th. Abatzopoulos and C. Kastritsis**, “Η Artemia ως φορέας αντιβιοτικών στις υδατοκαλλιέργειες: Μελέτη της βιοεγκύστωσης των αντιβιοτικών Trimethoprim και Sulfamethoxazole”, 13^ο Συνέδριο Ελληνικής Εταιρείας Βιολογικών Επιστημών (ΕΕΒΕ), Ηράκλειο Κρήτης, 1991.

INNOVATION IN DEVELOPMENT AND PRODUCTION OF ANALYTICAL INSTRUMENTS

<u>PRODUCT</u>	<u>YEAR</u>
1. pH Meter Model RI 100	1992
2. Solid Phase Extraction (SPE) cartridges	1994
3. HPLC Columns with Nucleosil & Separon packings	1994
4. HPLC Systems	1995
5. Pressure Module for the HPLC Pumps Marathon I & II	1996
6. HPLC columns with Kromasil packings	1997
7. Prometheus 300 Post Column Derivatization System	1998
8. Prometheus 300 Plus Post Column Derivatization System	2001
9. HPLC gradient control software for Marathon pumps I, II & III	2001
10. Eolos Post Column Derivatization System	2008
11. Development of HPLC Eluents and Post Column Derivatization Reagents	2008
12. Modular PCD System Post Column Derivatization System	2015

PUBLICATIONS WITH POST COLUMN DERIVATIZATION PROMETHEUS 300 PLUS & Modular PCD System

1. **J. Patsias and E. Papadopoulou-Mourkidou**, A Fully Automated System for Analysis of Pesticides in Water: On-line Extraction Followed by Liquid Chromatography-Tandem Photodiode Array/Postcolumn Derivatization/Fluorescence Detection, *Journal of AOAC International*, 1999, 82 No. 4, 968-981.
2. **J. Patsias, A. Papadopoulou and E. Papadopoulou-Mourkidou**, Automated trace level determination of glyphosate and aminomethyl phosphonic acid in water by on-line anion –exchange solid-phase extraction followed by cation-exchange liquid chromatography and post-column derivatization, *Journal of Chromatography A*, 2001, 932, 83-90.
3. **M. Maroulis , I. Monemvasios, E. Vardaka, P. Rigas**, Determination of domoic acid in mussels by HPLC with post-column derivatization using 4-chloro-7-nitrobenzo-2-oxa-1,3-diazole (NBD-Cl) and fluorescence detection, *J. of Chromatography B*, 2008, 876, 245-251.
4. **Constantinos K. Zacharis, Paraskevas D. Tzanavaras, Panagiotis N. Mouroutis, Pantelis G. Rigas**, NBD-Cl as a post column reagent for primary and secondary amines after separation by ion exchange chromatography, *Anal. Letters*, 2011, 44, 1-15.
5. **Dimitris Tanis, Patroklos Vareltsis, George Nikolaidis, George Minos, Lambros Kokokiris and Pantelis G. Rigas.**, Evaluation of Helically Coiled and Knitted Open Tubular Reactors for the Efficient Post-Column Determination of Tetrodotoxin by High-Performance Liquid Chromatography, *Anal. Letters*, 2017, 2, 271-291 (Published online: 24 May 2016).

ORGANIZATION/LECTURING/PARTICIPATION AS A TRAINER OR TRAINEE IN SEMINARS

June 1988	Participated in Inductively coupled plasma spectroscopy course, Perkin Elmer Corporation, Oakbrook, IL, USA.
June 1988	Participated in Business Management Seminar, “Effective Goal Setting” Abbott Laboratories, Lake Forest, IL, USA.
October 1989	“Ion pair chromatography of amino acids-Determination of EDTA and benzalkonium

	chloride in ophthalmic solutions”, Department of Chemistry, University of Crete.
March 1990	Lecturer: “Advanced Analytical Methods in Environmental Chemistry” in three day seminar with subject, “Environment Protection” organized by Technical Chamber of Thessaloniki.
May 1990	Participated in short intensive course on Liposome Technology, The Center for Professional Advancement, Amsterdam, Netherlands.
August 1991	Lecturer: "Dangerous Chemical Materials-Laboratory Safety Regulations" in a three day seminar with subject, “Risk Management” organized by Educational Center DIMITRA, Larissa, Greece.
February 1994	Organizer/Lecturer for seminar with Tremetrics, USA in Thessaloniki with subject “ Gas Chromatography and Special Detectors”.
May 1998	Workshop IV, V & VE: Experimental training in CE, Micro HPLC & microanalysis “Determination of amino acids in Physiologic fluids”, Proceedings of the European Training Program in Microseparation Techniques (ECOSEP 1), Patra.
March 2001	Participated in the 1 st Bremen Dioxin Symposium, ThermoFinnigan MAT GmbH, Germany.
April 2001	Lecturer: “Gas Chromatography-Mass Spectrometry” in a seminar organized by the Department of Food Technology, of A.T.E.I.Th., Greece.
November 2001	Organizer/Lecturer for seminar with Thermo Finnigan, UK in Mediterranean Agronomic Institute of Chania, Crete, with subject “Seminar in Fast GC and GC/MS Applications Something Completely new in LC/MS”, Greece.
Μάρτιος 2005	Lecturer for seminar “Food Safety” with subject “Biotxin Control in Aquatic Species”, DETROP 2005.
November 2005	Organizer/Lecturer for seminar with Thermo Fisher Scientific in Athens with subject “Liquid Chromatography / Mass Spectrometry 1 st User Meeting”, Greece.
October 2007	Organizer/Lecturer for seminar with Thermo Fisher Scientific in Athens & Thessaloniki with subject “Optical Emission Spectroscopy-Metal Analyzers (OES), X-Ray Fluorescence (XRF) , X-RAY Diffraction (XRD) Techniques”, Greece.
November 2007	Organizer/Lecturer for seminar with Thermo Fisher Scientific in Thessaloniki with subject Atomic Element Analysis -Atomic Absorption Spectroscopy (AA)-Inductively Coupled Emission Spectroscopy(ICP-OES)-Inductively Coupled Emission Spectroscopy-Mass Spectrometry (ICP-MS) &CHNS/O Elemental Analysis
November 2007	Organizer/Lecturer for seminar with Thermo Fisher Scientific in Athens with subject “Liquid Chromatography / Mass Spectrometry 2 nd User Meeting”, Greece.
May 2008	Organizer/Lecturer for seminar with Thermo Fisher Scientific & Labmedics in Athens & Thessaloniki with subject “Discrete Automatic Photometric Chemistry Analyzers in Food, Water & Beverages”, Greece.
May 2009	Organizer/Lecturer for seminar with Thermo Fisher Scientific in Athens & Thessaloniki with subject “Trace Elemental Analysis Seminar AA, ICP-OES and ICP-MS”, Greece.
May 2011	Organizer/Lecturer for seminar with Thermo Fisher Scientific in Athens & Thessaloniki with subject “Laboratory Informatic Seminar”, Greece.
Feb 2014	Organizer/Lecturer 3rd Greek Orbitrap User Meeting

ACHIEVEMENTS -AWARDS- MEMBERSHIPS

1. Four consecutive scholarships were awarded by the National Foundation of Scholarships (I.K.Y.) from 1978-1982, for the excellent achievement during the four years of the studies
2. Member «American Chemical Society» - Analytical Division 1984, Chromatography Subdivision 1985.
3. Member «Greek Chemical Society» - 1983.
4. Florence Olson England Scholarship, Department of Chemistry, University of Iowa, 1986.
5. PPD Quality Assurance Operations Award for the “Best Display of Team Work” for the efforts in resolving the Murine/Clear Eyes analytical issues, 1988, Abbot Laboratories, North Chicago, Illinois, USA.
6. HPLC-87 grant for an Oral presentation at 11th International Symposium on Column Liquid Chromatography, 1987.

7. Certified Engineer for Gas chromatography-mass spectrometry systems GCQ & GCQ plus, of Thermo Fisher Scientific, 1997.
8. Certified Engineer for Liquid chromatography-mass spectrometry systems (LC/MS/MS) LCQ, of Thermo Fisher Scientific 1998.
9. Certified Engineer for Atomic Absorption systems (AA) of GBC Scientific, 1999.
10. Certified Engineer for Liquid chromatography-mass spectrometry systems (LC/MS) aQa, of Thermo Fisher Scientific, 1999.
11. Certified Engineer for Gas chromatography-mass spectrometry systems (GC/MS/MS) Polaris Q of Thermo Fisher Scientific, 2001.
12. Certified Engineer for Gas chromatography-high resolution mass spectrometry systems MAT-95XL, MAT 95 XP & MAT-900, MAT-900 Trap, of Thermo Fisher Scientific 2002
13. Certified Engineer for Liquid chromatography-mass spectrometry systems (LC/MS/MS) LTQ Series, of Thermo Fisher Scientific, 2008.
14. Certified Engineer for Liquid chromatography-mass spectrometry systems (LC/MS/MS), LTQ Orbitrap XL of Thermo Fisher Scientific , 2009.
15. Certified Engineer for Liquid chromatography-mass spectrometry systems (LC/MS/MS), TSQ Quantum Series of Thermo Fisher Scientific , 2013.
16. Certified Engineer for Inductively coupled plasma-mass spectrometry systems (ICP/MS), iCAP Q of Thermo Fisher Scientific , 2013.
17. Certified Engineer for Gas chromatography-mass spectrometry systems (GC/MS) iSQ of Thermo Fisher Scientific, 2014.
18. Certified Engineer for Gas chromatography-high resolution mass spectrometry systems DFS, of Thermo Fisher Scientific 2013
19. Certified Engineer for Gas chromatography-mass spectrometry systems iSQ , of Thermo Fisher Scientific, 2014.

BOOKS AND STUDIES

1. Laboratory Experiments in Analytical Chemistry, Department of Fisheries & Aquaculture Technology
2. Dangerous Chemicals - Safety Regulations in Work Environment. Educational Center «ΔΗΜΗΤΡΑ». August 1991.
3. "Freshman Chemistry Laboratory", Laboratory Experiments. American College of Thessaloniki. 1991.
4. Labeling of Toxic Materials – Greek Airforce. 1990.