

KALLIOPI BALTA
Msc Chemical Engineer

Personal Information

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Address : Othonos 65, Kifissia, Athens, Greece

Education

September 1994 - June 1997 | **Master of Science**
Technical University of Crete
School of Production Engineering and Management

September 1986 - June 1993 | **Diploma Degree in Chemical Engineering**
National Technical University of Athens
School of Chemical Engineering

Work Experience

October 2014 - to date | **Laboratory Teaching Staff**
Department of Chemical Sciences, School of Chemical Engineering
National Technical University of Athens

Products and Operations Quality Control Horizontal Laboratory
Main activities:

- Method development, tests and measurements with the following analytical techniques:
 - ❖ *Scanning Electron Microscopy/Electron Dispersive X-Ray Analysis (SEM/EDAX)*
 - ❖ *Liquid Chromatography-Mass spectrometry (LC/MS)*
 - ❖ *Gas Chromatography-Mass spectrometry (GC/MS)*
 - ❖ *Ion Chromatography*
 - ❖ *Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES)*
 - ❖ *Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)*
- Laboratory courses for Undergraduate students: Inorganic Chemistry, Analytical Chemistry, Instrumental Methods of Chemical Analysis, Liquid Fuel.
- Participation in interlaboratory comparisons.
- Tests and measurements for the public and private sector.

November 2005 - October 2014 | **Technical Laboratory Staff**
School of Chemical Engineering, National Technical University of Athens

Environment & Quality of Life Research Unit

Main activities:

- Method development, tests and measurements with the following analytical techniques:
 - ❖ *Scanning Electron Microscopy/Electron Dispersive X-Ray Analysis (SEM/EDAX)*
 - ❖ *Liquid Chromatography-Mass spectrometry (LC/MS)*
 - ❖ *Gas Chromatography-Mass spectrometry (GC/MS)*
 - ❖ *Ion Chromatography*
 - ❖ *Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES)*
 - ❖ *Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)*
- Laboratory courses for Undergraduate students: Physical Methods of Analysis

November 2001 -
November 2005

Technical Laboratory Staff

School of Environmental Engineering, Technical University of Crete

Transport Phenomena and Applied Thermodynamics Laboratory

Main activities:

- Operation and support of the Transport Phenomena and Applied Thermodynamics Laboratory equipment
- Laboratory courses for Undergraduate students:
Environmental Thermodynamics, Heat and Mass Transport Phenomena
- Teaching and application of Super-Pro Designer Software
- Undergraduate and postgraduate thesis supervision

September 1999-
November 2001

Lecturer

School of Sciences, Technical University of Crete

Analytical and Environmental Chemistry Laboratory

Main activities:

Laboratory courses for Undergraduate students: Analytical and Environmental Chemistry, Physical Chemistry

November 1995 -
February 1996

Post Graduate Thesis

Institute für Ökologische Chemie

GSF – Forschungszentrum für Umwelt und Gesundheit, Munich

Measurement of the concentration of toxic substances in soil samples. The list of these substances includes: Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs), Polychlorinated Dibenzo-p-dioxins (PCDDs), Polychlorinated Dibenzofurans (PCDFs) and heavy metals.

Foreign Languages

English: Proficiency in English, University of Michigan

Italian: Diploma di Lingua Italiana

Books

Γκέκας, Β. και Μπαλτά, Κ. «Βιομηχανία Τροφίμων και Περιβάλλον» (Εκδόσεις ΤΖΙΟΛΑ, Θεσσαλονίκη, 2005)

Publications

A. International Journals

D. Martens, K. Balta-Brouma, R. Brotsack, B. Michalke, P. Schramel, C. Klimm, B. Henkelman, K. Oxynos, K.-W. Schramm, E. Diamadopoulos, A. Kettrup *“Chemical Impact of Uncontrolled Solid Waste Combustion to the vicinity of the Kouroupitos Ravine, Crete, Greece.”* Chemosphere, Volume 36, No. 14, pp. 2855-2866, 1998

A.Bimpilas, D.Tsimogiannis, K.Balta-Brouma, , Th.Lymperopoulou, V.Oreopoulou *“Evolution of phenolic compounds and metal content of wine during alcoholic fermentation and storage”,* Food Chemistry 178 (2015) 164-171

M. G. Savvidou, Th. V. Lymperopoulou, D. Mamma, K. P. Balta-Brouma, Th. G. Sotiroudīs, D. Kekos, F.N. Kolīs *“A study on the combined effects of carbon and nitrogen source on high added value products synthesis by Nannochloropsis oceanica CCMP1779 using response surface methodology”,* Biocatal Agric Biotechnol 10 (2017) 298–307

Theopisti Lymperopoulou, Kalliopi Balta-Brouma, Lamprini-Areti Tsakanika, Constantina Tzia, Anna Tsantili-Kakoulidou, Fotios Tsopelas, Identification of lentils (*Lens culinaris* Medik) from Eglouvi (Lefkada, Greece) based on rare earth elements profile combined with chemometrics, Food Chemistry, Volume 447, 2024

B. International Conferences

Balta-Brouma K., Diamadopoulos E., Martens D., Michalke B., Henkelmann B., Oxynos K., Schramm K.-W., Kettrup A. and Brotsack R. *“Environmental Impact of Uncontrolled Solid Waste Combustion in the Kouroupitos Ravine, Crete”,* International Conference *“Protection and Restoration of the Environment III”,* 28-30 August 1996, Chania, Greece, p. 501-508.

Detsi A, Tsopelas F, Prousis KC, Kontogiorgis C, Hadjipavlou-Litina D, Lymperopoulou Th, Mpaltá K, Ochsenkühn-Petropoulou M., *“Antioxidant Properties of Novel Quinolinone-3-Carboxamides Investigated by Spectrophotometric and Electrochemical Techniques”* 6th International Conference *“Instrumental Methods of Analysis-Modern Trends and Applications”* (IMA 2009), 4-8 October 2009, Athens Greece (PB24, page 216)

E. Stournara, M. Roussaki, K. Balta-Brouma, T. Lymperopoulou, P. Kefalas, A. Detsi, *“Structural assignment and isomer differentiation of novel chalcone derivatives using ESI-MSn”,* 7th International Conference

“Instrumental Methods of Analysis - Modern Trends and Applications” (IMA 2011), 18-22 September 2011, Crete, Greece, Abstracts PP108

Th. Lympelopoulou, K. Balta-Brouma, P. Schinas, A. Tzani, M. Elmaloglou, A. Papadopoulos, E.A. Pavlatou, E. Voutsas, A. Detsi, “*Evaluation of the corrosion potential of novel ethanolamine-based biodegradable ionic liquids as potential lubricant*”, 8th International Conference Instrumental Methods of Analysis-Modern Trends and Applications (IMA 2013), P2A-39, 15-19 September 2013, Thessaloniki, Greece

G. Babis, N.A. Stavropoulos, G. Sasalos, Th. Lympelopoulou, K. Balta-Brouma, M. Ochsenkuehn-Petropoulou, P. Foukas, P. Megas “*Tantalum Metallosis in Revision THA. A Case Report*”, 15th European Federation of National Associations of Orthopaedics and Traumatology (EFFORT 2014), Abs.Ref.No 1288, 4-6 June 2014, London, UK

Savvidou M., Lympelopoulou Th., Balta-Brouma K., Anastasiadou P., Machera K., Magoulas K., Kolisis F, “*Comparativestudies on the effects of carbon and nitrate on the production of polyunsaturated fatty acids from different Nannochloropsis strains*”, European Biotechnology Congress 2015, Bucharest, 7-9 May 2015

E.Boli, M.Savvidou, D.Logothesis, Th.Lympelopoulou, K.BaltaBrouma, G.Pappa, V.Louli, E.Voutsas, K.Magoulas Kostis and F. Kolisis, “*Investigation of parameters affecting the harvesting and extraction of Nannochloropsis sp.*”, 28th European Symposium on Applied Thermodynamics: “Everything Flows”, PP69 June 11th-14th 2015, Athens – Greece

M.G. Savvidou, Th.V. Lympelopoulou, K.P. Balta-Brouma, M. Michailidou, K. G.Magoulas, F.N. Kolisis, “*Studies on the synthesis of high added value products from Nannochloropsis oceanicausing chromatographic and mass spectrometry techniques*”, 9th International Conference on Instrumental Methods of Analysis: Modern Trends and Applications, P1-25, Book of Abstracts IMA 2015, p 127 September 2015 Kalamata, Greece

C. National Conferences

A. Μπίμπιλας, Κ. Μπαλτά-Μπρούμα, Θ. Λυμπεροπούλου, , Β. Ωραιοπούλου, «*Μεταβολή συγκέντρωσης μετάλλων και πολυφαινολών κατά τη διαδικασία οινοποίησης κόκκινου κρασιού*», 9ο ΠΕΣΧΜ, 23-25 Μαΐου 2013, Αθήνα, FD 0115

Θ. Λυμπεροπούλου, Κ. Μπαλτά-Μπρούμα, Λ. Α. Τσακανίκα, Μ. Όξενκιουν-Πετροπούλου, «*Προσδιορισμός Ιχνοστοιχείων με ICP-MS και εκτίμηση της αβεβαιότητας των μετρήσεων στο πλαίσιο διεργαστηριακών δοκιμών*», 9ο ΠΕΣΧΜ, 23-25 Μαΐου 2013, Αθήνα, QT0114

Δ. Μιχάλη, Θ. Λυμπεροπούλου, Β. Δρίτσα, Κ. Μπαλτά-Μπρούμα, Κ. Πισσαρίδη, Π. Σχοινάς, Ι. Αναστασοπούλου, «*Προσδιορισμός Συγκέντρωσης Μεταλλικών Ιόντων σε ασθενείς με πλασματοκυτταρικές δυσκρασίες*» 9ο ΠΕΣΧΜ, 23-25 Μαΐου 2013, Αθήνα, CH0187

National and International Scientific Programs

Sustainable use of marine microalgae for the production of biofuels and high-added value biochemicals, EU ERDF 11SYN 48 1590 (NTUA), 2014