PERSONAL INFORMATION

**Dr. Petros Marampoutis** 

Mining and Metallurgical Engineer

PhD on Materials Science and Environment

Sex Male | Date of birth 01/07/1959 | Nationality Greek

Married, 2 children.

**POSITION** 

CEO and partner of Eco-Efficiency Consulting & Engineering Ltd

Eco-Efficiency Consulting & Engineering Ltd provides technical, consulting services to the extractive, metallurgical and chemical industries, institutions, associations, organizations and public services in Greece, in EU and around the world since 2009 on Environment, Materials Life Cycle, Waste Management, REACH and CLP compliance and products certification and on Occupational Health and Safety Strategies. Indicative clients are the European Commission (DG Env), EUROMINES (European Association of Mining Industries, Metal Ores & Industrial Minerals), EuRIC AISBL (European Recycling Industries' Confederation), ECGA(European Carbon and Graphite Association), SEV (Hellenic Federation of Enterprises), Greek Mining Enterprises Association, CUNICO Resources (FENI Industries & Ferronikeli), EURONICKEL, FALCONDO, MYTILINEOS GROUP OF COMPANIES (ALUMIUM OF GREECE, EPALME), LARCO S.A., Public Power Corporation S.A. (PPC), TITAN CEMENT COMPANY S.A., CHALYPS CEMENT COMPANY, ELVAL S.A., ELMIN S.A., Greek Marble S.A., Eldorado group Hellas Gold S.A., Imerys SA (S&B Industrial minerals S.A), HELLENIC PETROLEUM S.A., GALENICA PHARMACAYTICALS S.A, OMEGA PHARMA S.A, Carl Spaeter GmbH, Andina Group S.A., Africa Carbide Industries Ltd, etc.

Additionally Eco-Efficiency Ltd is member of European network of consulting companies and consultants collaborating in European and International projects.

In the field of waste management, Eco-efficiency Ltd. offers services for the implementation of EU and national (Greek) waste legislation and has conducted more than fifty (50) risk assessment and waste management studies

WORK EXPERIENCE

09/2009 - present Managing director Eco-Efficiency and responsible for a group of 6 specialists engineers and scientists,

company employees, in the sectors of chemical products, environmental, waste management and OHS

services

Business or sector: Consulting and Technical Services

09/2005 - 2/2008 Head of International Operations (Sardinia - Italy, Turkey, India, China and Brazil)

 ${\tt S\&B\ Industrial\ Minerals\ S.A.,\ Athens,\ Greece\ Department\ -\ Today\ \ IMERYS\ INDUSTRIAL\ MINERALS}$ 

GREECE S.A.

Business or sector: Manager of raw materials operations

09/2003 – 08/2005 Process Development & Quality Manager

Otavi - S&B Industrial Minerals GmbH (Today IMERYS Group), Neuss, Germany

Business or sector: Manager of raw materials company

12/2000 - 08/2005 Delegate of the Federation of Hellenic Industries (SEV), S&B Industrial Minerals S.A and Greek mining

enterprises in EU Institutions and Associations

Hellenic Federation of Enterprises (SEV), Brussels, Belgium Department, Business Europe, Avenue de

Cortenbergh 168, 1000 Brussels

Business or sector: Delegate of Greek companies at Brussels based associations

09/1990 - 07/2001 Associate Professor of Raw Materials Technology and Quality Control of the Piraeus University of Applied

Sciences (Technological Education Institute of Piraeus).

Piraeus University of Applied Sciences, Athens Greece http://www.teipir.gr/index.php/en/

Teaching and managing projects on Raw materials

09/1995 – 11/2000 Senior Environment, Health and Safety Engineer at EHS Division

S&B Industrial Minerals S.A., Athens, Greece Department (Dissolved)

Business or sector: Senior engineer on EHS

12/1989 – 09/1995 R&D manager

Greek Pollution Control Engineering Co", Athens, Greece Elaborated more than 50 Environmental Impact Assessments.

Business or sector: Senior engineer on Environmental projects

OTHER ACTIVITIES

2007 - present Member of the Supervisory Committee of the Postgraduate Studies in Environmental Geotechnology. Technical

University of Crete, Crete Greece

2013 - 2018	iverniber of the Board of Directors of HSVVIVIA (Helienic Solid Waste Ivianagement Association)
2009 - 2011	Member of the Board of Directors of ELINYAE (Hellenic Institute for Occupational Health and Safety)
2001 - 2006	Substitute member in Group I Section: Employment, Social Affairs and Citizenship (SOC OKE Brussels)
2000 - 2005	Chairman of the Environment Committee of EUROMINES (European Association of Mining Industries, Metal
	Ores & Industrial Minerals) (http://www.euromines.org/)
EDUCATION AND	
TRAINING	DhD in Matellium, Materials Cainnes and Environment
1983 – 1988	PhD in Metallurgy, Materials Science and Environment National Technical University of Athens, Department of Metallurgy and Materials Science Engineering
1977 - 1983	Bachelor and Master in Mining and Metallurgical Engineer
	National Technical University of Athens, Department of Mining and Metallurgical Engineering
1985 - 1989	University of Athens, School of Law Department of Economics & Political Sciences
1995 - 1997	Adizes institute. Education as leadership, team integrator, team problems solver. Senior project manager - 4 months seminar

## PERSONAL SKILLS

Mother tongue(s)
Other language(s)
Communication skills

Greek

English C2, German B2, France A1

Good communication skills gained through my Adizes institute seminars and the experience team leader in projects and European associations:

Organisational / managerial skills Computer skills Driving licence General manager of Eco-Efficiency Itd, Manager of international operations of mining company (S&B Industrial minerals) Chairman of Env. Committee of EUROMINES, and manager of projects

Microsoft Office, Logistic and Managerial Programs

В

RECENT PROJECTS AS PROJECT MANAGER

- Dec 2019-today "Study Supporting the Development of Guidelines for Best Risk Management Approaches in the Extractive Sector". DG ENV project (Service contract 070201/2019/818015/ETU/ENV.B3)
- 2017-today "Study supporting the development of general guidance on the implementation of the Extractive Waste Directive (DG ENV project ENV.B.3/ETU/2017/0039), VITO"s subcontractor managing the tasks (a) the description of waste generated during extraction of metallic ores (b) the overview of substances used for flotation and their potential environmental impact. and (c) developing of some country fact sheet including Greece.
- Jan 2018- May 2019 "Development of a guidance document on best practices in the Extractive Waste Management Plans". DG ENV project (Service contract № 070201/2017/768854/ETU/ENV.B.3). The focus of the project was on (a) the prevention or reduction of waste generation and of its harmfulness, (b) the recovery of waste (by recycling, re-use or reclaiming), as well as (c) the assurance of short- and long-term safe disposal of waste, taking into consideration a systemic life-cycle approach (exploration, design, construction, extraction, processing, rehabilitation and long term stability of the Waste Facilities). The completeness of the project was also based on exchanges of information with the Member States. The establishment of the guidance was based on risk assessment principles, focusing on the objectives of (a) achieving a Circular Economy throughout the whole life-cycle of an extractive operation and (b) the safety of the waste at each stage of the life-cycle of a waste facility.
- 2013-2018 EUROMINES BAT MANAGER, technical consultant and LEADER of a team of 12 representatives of Euromines members reviewing the "Best Available Techniques Reference Document (BREF)" on Management of tailings and Waste-rock in mining activities (MTWR), reporting to the General secretary and the General Assembly of Euromines, representing EUROMINES in all JRC meetings, workshops and communication.
- Scientific and technical support to EuRIC AISBL of the review for the compilation of the BREF reference documents for the Waste Treatment – Mechanical treatment of waste (2016)
- Waste Characterization and management of Gold mining projects.
- Baseline studies for the design and installation of a new hazardous waste facility for Aluminium of Greece
- Waste Characterization Study for «Bauxite Residues» under the established legislative framework for the handling of waste, in order to evaluate the physicochemical, toxicological and eco-toxicological properties of the material (2015).
- Management and evaluation of the leachate during the dehydration process of the Bauxite Residues and total assessment of the mining waste resulting from the Bayer Process (2015)
- · Risk assessment of the mining waste resulting from all in operation or under contraction sites Stratoni,

- Olympiada, Skouries, Perama Hill (Hellas Gold)
- Soil and groundwater baseline study of the new hazardous waste deposition area of Aluminium of Greece (2017)
- Chemical evaluation of treated tailings for the purpose of safe transport provisions in Greece under the scope of ADR and IMDG Code (2013) (ELPE).
- Techno-economic studies on alternative waste management methods for abandoned conveyor belts ( PPC S.A DEI)
- Life cycle management and Raw Material System Analysis for Critical Raw Materials (2015) (EUROMINES)
- Study on the Strategy of developing Occupational Safety and Health improvement practices for Greek enterprises that participated over 100 companies. Development of an electronic version OSH management system for Greek companies with an integration module to HSE/Quality system (2012). (SEV-Hellenic Federation of Enterprises)
- Dissemination of Best practices on Occupational Safety and Health in Greek companies. Implementation of systematic approach on OSH in 100 companies including mining and mineral sites (2014) (SEV)
- Hazardous study and CLP classification based on literature review of Zinc Concentrate, Pb-Concentrate and Arsenopyrite (2014) (Hellas Gold)
- Collection of data and analysis for the production cost and production capacity of all European coal and lignite mines (2014) ( PPC S.A DEI)
- Characterisation of Aluminium drosses from hazardous waste to by-product and preparation and submission of Lead registrant dossier to ECHA (2010) (ELVAL S.A).
- Preparation and submission of Lead registrant dossier for Ferronickel slags (2010) (LARCO S.A).

## **Publications**

- E. Nikolaou, P. Maraboutis, B. Georgalas, A. Xenidis (2012) Methology and Strategic approach of hazard properties for wastes: guidelines, difficulties and possible solutions. 4th International Conference of HSWA "Solid wastes management under crisis: New challenges and perspectives"
- P. Maraboutis, E. Nikolaou, N. Poulimenou (2016) Approaches to determine hazard properties for EU waste classification. 3th International Conference on Protection and Restoration of the Environment
- P. Maraboutis, E. Nikolaou, N. Poulimenou (2016) Key tasks for EU waste classification according to the new legislative framework. 4th International Conference on Sustainable Solid Waste Management
- B. Georgalas, E. Nikolaou, P. Maraboutis, C. Emmanouil and A. Kungolos (2010) Observations on the implementation of the REACH and CLP regulations in the European Industry. Second International Symposium on Green Chemistry for Environment and Health
- E. Nikolaou, **P. Maraboutis**, B. Georgalas (2010) Challenges for the Health and Safety by the implementation of REACH and CLP. 1st Hellenic Conference for Health and Safety.
- E. Nikolaou, **P. Maraboutis**, B. Georgalas (2011) Raw Material shortage: a new challenge for the Industrial sustainable development. 3rd International Conference on Environmental Management, Engineering, Planning and Economics CEMEPE & SECOTOX Conference (Oral Presentation)
- B. Georgalas, P. Maraboutis, E. Nikolaou (2012) End-of waste Regulation challenges and opportunities for Greek businesses in the implementation of the Waste Framework Directive. 4th International Conference of HSWA "Solid wastes management under crisis: New challenges and perspectives"
- P. Maraboutis and B. Georgalas (2010) REACH and CLP: two regulations on chemicals that improve health conditions and safety. Health and safety at work 142 pp 10-14
- Agatzini, A. Kontopoulos, P. Maraboutis, A. Xenidis: "Removal of iron from iron-nickel-cobalt solutions by precipitation and solvent extraction techniques" In Iron Control in Hydrometallurgy, J.E. Dutrizac, A. J.: Monhemius, eds. Ellis Horwood, Chechester 1986, pp. 353-373
- I. Halikia, **P. Maraboutis**: "Influence of ion and neutralization on the rate of iron removal from Fe-Ni-Co solutions", ERZMETALL 45 Nr 3, 1992, pp. 156-163.