

Curriculum Vitae

Family Name: Castro

First Name: Fernando.

Date of Birth: 19th June 1959

Nationality: Portuguese

Education/ Professional Studies:

Institution: University of Porto

Date From/To: 1982

Degree/ Diploma: Graduation in Metallurgical Engineering

Institution: University of Minho

Date From/To: 1988

Degree/ Diploma: PhD

Language skills : (From 1 (notions) to 5 (excellent) for competence) (*=mother tongue)

<u>Language</u>	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
English	4	5	4
French	5	5	5
Spanish	5	5	3
German	2	2	2
Italian	3	3	1
Portuguese	*	*	*

Membership of Professional bodies:

Portuguese Society of Engineers, since 1983

Other Professional bodies:

- TMS: The Metallurgical Society
- ASM: American Society for Materials
- SPM: Portuguese Society for Materials
- CIM: Canadian Institution of Mining and Metallurgy
- APESB: Portuguese Sanitary and Environmental Engineering

Board of Professional bodies:

- Portuguese Society of Engineers, since 1983 till 2004

Other skills:

Environmental Engineering: waste treatment and environmental evaluation

Materials Engineering: Expertise on steels, cast irons, brasses, bronzes, lead, tin and aluminium alloys. Expertise on ceramics, in view of restoration of historical archaeological goods, like ceramic tiles, kitchenware, glazed materials and masonry materials. Expertise on analytical chemistry of materials for restoration purposes.

Present Position within the organisation:

Catedratic Professor

Head of the Applied Metallurgy Group

Head of CVR – Centre for the Valorisation of Residues

Director of LAQ – Laboratory of Chemical Analysis

Professional experience Record (relevant to the proposal):

Analytical studies in more than 100 ceramic and metallic collections, like archaeological findings, masonry materials and paints. Research on the provenance of archaeological ceramic fragments based on the chemical characterisation.

Location : University of Minho

Date : 1996-98

Position : Head of Department t of Mechanical Engineering

Responsibilities : Director of the Mechanical Engineering Department at University of Minho

Date : 1994-

Director of LAQ – Laboratory of Chemical Analysis

Responsibilities : Director of a service and research laboratory at University of Minho

Date : 1999-2003

Position : Head of Centre for the Development of Non Ferrous Metals

Responsibilities : Director of the research centre at University of Minho

Date : 2002-

Position : Head of CVR – Centre for the Valorisation of Residues

Responsibilities : Management of the research centre

Publications (most relevant in the last five years):

In the area of the proposal

MUSEU NACIONAL DE SOARES DOS REIS - *Itinerário da faiança do Porto e Gaia*, ISBN 972-776-098-8, Porto, Julho de 2001, Chapter 5 - "Caracterização Química e Microestrutural de Faianças Portuguesas", pp. 167-178. (Book edited in portuguese and english versions)

Penaferez (Gijón). El Castillo de Curiel y su territorio, Capítulo "Análisis Químico de Muestras Cerámicas", pp. 389-390, Ayuntamiento de Gijón, VTP Editorial, ISBN 84-89880-77-8, 2003 (Book Published in spanish)

F. CASTRO, *Bases de dados analíticos sobre cerâmicas antigas portuguesas – interesse para a investigação arqueológica*, XII Congresso da Sociedade de Arqueologia Brasileira, Setembro de 2003. (complet text in the proceedings of the conference)

Other areas

VILARINHO, D. SOARES, F. CASTRO - *Phase equilibria of the Al-Cu-Zn system for compositions close to brass alloys*, Journal of Phase Equilibria, Vol. 24, nº3, 2003, pp. 236-239

M. MAGALHÃES, J.E. SILVA, F. CASTRO, J.A. LABRINCHA – *Effect of experimental variables on the inertization of galvanic sludges in clay-based ceramics*, Journal of Hazardous Materials, 106B, 2004, pp 139-147

J.M. MAGALHÃES, J.E. SILVA, F. CASTRO, J.A. LABRINCHA – *Role of the mixing conditions and composition of galvanic sludges on the inertization process in clay-based ceramics*, Journal of Hazardous Materials, 106B, 2004, pp 169-176

C. VILARINHO, D. SOARES, F. CASTRO – *Contribution to the knowledge of the Cu-Sn-Zn system for compositions close to brass alloys*, Journal of Alloys and Compounds, 379 (2004), pp. 161-165

C. Vilarinho, D. Soares, J. Barbosa, F. Castro - *Leaching of brass tap in long-term direct contact with water*. Materials Science Forum, Vol. 455-456 (2004), p. 839-843

D. Soares, C. Vilarinho, J. Barbosa, R. Silva, M. Pinho, F. Castro - *Effect of the Bi content on the mechanical properties of a Sn-Zn-Al-Bi solder alloy*. Materials Science Forum, Vol. 455-456 (2004), p. 307-311

J. MAGALHÃES, J.E.SILVA, F. CASTRO, J.A. LABRINCHA, *Physical and chemical characterisation of metal finishing industrial wastes*, Journal of Environmental Management, Vol. 75, pp. 157-166, 2005

J. MAGALHÃES, J.E.SILVA, F. CASTRO, J.A. LABRINCHA, *Kinetic study of the immobilization of galvanic sludge in clay-based matrix*, Journal of Hazardous Materials, Vol. B121, pp. 69-78, 2005

C. VILARINHO, J.P. DAVIM, D.SOARES, F. CASTRO, J. BARBOSA – *Influence of the chemical composition on the machinability of brasses*, Journal of Materials Processing Technology, Vol. 170, pp. 441-447, 2005

J.E.SILVA, D.SOARES, A.P. PAIVA, J.A. LABRINCHA, F. CASTRO – *Leaching behaviour of a galvanic sludge in sulphuric acid and ammoniacal media*, Journal of Hazardous Materials, Vol. B121, pp. 195-202, 2005