# Alessandro Lavacchi Ph.D.

Staff Researcher and Head of the Electron Microscopy Facility Institute for Chemistry of OrganoMetallic Compounds (ICCOM) National Research Council (CNR) Florence Research Area, Via Madonna del Piano, 50019 – Sesto Fiorentino (FI) - Italy. *Tel:* 00390555225250; *Fax:* 00390555225203; *E-mail:* alessandro.lavacchi@iccom.cnr.it Researcher ID: A-6114-2011

## A. Education

- ♦ 1998 University of Florence (ITALY) Chemistry M. Sc.
- ♦ 2003 University of Florence (ITALY) Materials Science Ph.D.

#### B. Academic and Professional Appointments

•	2014 -	Head of the Electron Microscopy Facility of the Florence Research Area of the National Research Council (CNR) – Florence – Italy.
٠	2010 -	Staff Researcher – Institute for the Chemistry of Organo-Metallic Compounds (ICCOM) of the National Research Council (CNR). Florence – Italy.
٠	2007-2010	Research assistant (Part-time ) - INSTM (National Interuniversity Consortium of Materials Science and Technology) – Florence – Italy.
•	2003-2007	Postdoc (Part-time) - INSTM (National Interuniversity Consortium of Materials Science and Technology). – Florence – Italy.

2000-2010 Radiation safety and R&D consultant – Self-employed – Florence – Italy.

## C. Awards

- Visitor Scientist RSC International Incoming Visit project "Phase Field Modelling of Electrochemical Systems" with Dr. Savko Malinov from the Queen's University of Belfast, School of Mechanic and Aerospace Engineering, June – September 2007.
- Marie Curie Fellowship at QUILL (Queen University Ionic Liquid Laboratory). Supervisors Prof. Chris Hardacre and Prof. Ken Seddon - Queen University of Belfast (UK) - 9 May– 9 August 2002.

## D. Publications, Conferences and Patents

- More than 50 publications in international journals (WoS h-index 17).
- More than 15 refereed conference proceedings.
- 1 scientific book monograph and 2 book chapters.
- 2 invited and 3 keynote talks at international conferences.
- More than 80 conference contributions.
- 1 European patent (EP2330233 A1).

## E. Most Recent Funding

- The 7<sup>th</sup> framework EU project (DECORE Direct ElectroChemical Oxidation Reaction of Ethanol) aimed at the exploitation of the high temperature electrochemical oxidation of ethanol for energy production has Dr. Lavacchi as research unit coordinator and dissemination and exploitation manager. 2013-2016 (249.600 Eur)
- A research contract with Bluclad s.r.l and the University of Florence for the development of cyanide free electroplating solutions - 2014 (150.000 Eur)
- A research contract with Belenos LTD. And ICCOM CNR has Alessandro Lavacchi as Scientific Manager. Such a project aims at developing direct alcohol fuel cells as portable energy sources for electronic devices, as well as to exploit the potential of sodium-borohydride as a storage system for on-demand hydrogen generation. 2012-2013 (75.000 Eur)

#### F. Memberships (Societies and Professional Bodies)

- 2014 IAOEES (International Academy of Electrochemical Energy Science Member of the Board Committee of the division "Electrochemical Energy Fundamentals")
- 2014 EMS (European Microscopy Society)
- 2007 SCI (Italian Chemical Society)
- 2007 ECS (Electrochemical Society)

#### G. Editorial Activities

- May 2013 Editor-in-Chief of *Coatings* a peer reviewed journal edited by MDPI Switzerland.
- 2010-2013 Associated Editor of *Coatings* a peer reviewed journal edited by MDPI Switzerland.

#### H. <u>Teaching</u>

- "Surface Analysis Technique", University of Siena, School of Science (8 hours course) Spring 2009
- "Elements of Material Science" University of Firenze, School of Architecture (24 hours course) Fall 2008 and Fall 2009
- "Science and Technology of Innovative Materials", University of Firenze, School of Architecture (48 hour course) - Spring 2008 and Spring 2009