

## CURRICULUM VITAE

**Name:** Albano Augusto Cavaleiro Rodrigues de Carvalho

**Nationality:** Portuguese

**Born:** Tondela, Portugal at 21<sup>st</sup> May 1958

**Marital Status:** Married, 2 boys (29 and 23 years old)



### **Scientific degrees:**

2002 – Aggregation, Materials Science, Faculty of Sciences and Technology of Coimbra University

1990 – PhD, Materials Science, Faculty of Sciences and Technology of Coimbra University.

1986 – MSc, Materials and Fabrication Processes, University of Porto.

1981 – BSc, Mechanical Engineering, Faculty of Sciences and Technology of Coimbra University.

**Actual position:** Full Professor in Materials Science of the Mechanical Engineering Department of the Faculty of Sciences and Technology of Coimbra University (DEM-FCTUC), since May 2005.

- Vice-Director (area of Research Centres and Projects) of FCTUC since January 2010
- Head of the research group “Surface Engineering Group” of the “Centre for Mechanical Engineering of the University of Coimbra” since 2009.
- Head of the “Surface Modification Unit” in the “IPN - Instituto Pedro Nunes” (Institute of interface between the University and Industry with an enterprises incubator) from 2006
- Head of the Laboratory LED&Mat in IPN from July 2011

### **Previous positions:**

2000 (Mar) – 2005 (Apr) – Associate Professor, DEM-FCTUC

1990(Out.) – 2000 (Mar) – Auxiliar Professor, DEM-FCTUC

1986(Jun) – 1990(Oct) – Research Assistant, DEM-FCTUC.

1981(Nov) – 1986(Jun) – Lecturer, DEM-FCTUC.

### **Main research areas:**

Materials and Surface Engineering, Structural transformations, Deposition and characterization of thin films, Tribology, Nanocrystalline materials, Electrolytes Fuel Cells, Biomaterials

### **Other research areas:**

Hard coatings, Mechanical characterization of thin films (depth sensing indentation), Corrosion and oxidation behaviour of thin coatings, Self-lubricating coatings.

### **Participation in scientific meetings:**

Participation in more than 120 national and international events, such as conferences, congresses, workshops and fairs. In more than 35 he presented invited lectures.

He integrated the Scientific Committee, Organizing Committee or Advisory Committee of more than 40 scientific events. In 3 cases he was also member of the Editorial Committee.

### **Participation in R&D projects:**

Participation in more than 30 research projects from which was responsible in more than 20. Now is leading 2 national funded projects and is responsible at Portugal for 3 international

projects from the 7th Framework Programme of EU. Companies are integrated in the consortiums of these projects.

**Other activities:**

- Supervising: 16 Post Docs (12 concluded), 13 PhDs (8 concluded) and 25 MSc students
- Participation in the evaluating committees of scientific applications – 10 aggregations, 30 PhDs and 30 MSc
- Member of scientific associations: Portuguese Society of Microscopy, Portuguese Society of Materials, American Association for the Development of Science, American Vacuum Society, Society of Vacuum Coaters; American Society of Mechanical Engineering, Royal Society of Chemistry
- Member of the working group "WG 5 - Methods of Test of Ceramic Coatings" of the European Committee of Standards.
- Projects reviewer for the Portuguese Science Foundation (FCT – Materials Engineering and Mechanical Engineering panels), EUREKA, GROWTH (EU - 5<sup>th</sup> and 6<sup>th</sup> framework programmes).
- Projects reviewer for national funding agencies in different countries: Switzerland, Czech Republic, France, Hong Kong, Romania, Hungary, Cyprus, Slovenia
- Referee of several papers of the following journals: “Applied Physics Letters”; “Scripta Materialia”, “Plasma Processing & Polymers”; “Surface and Coatings Technology”, “Vacuum”, “Applied Surface Science”, “Materials Science Forum”, “Thin Solid Films”, “Key Engineering Materials”, “Advanced Engineering Materials”, “Journal of Vacuum Science & Technology A”, “Journal of the Serbian Chemical Society”, “Nanotechnology”, “Acta Materialia”, “Journal of European Physics – D”, “Journal of Applied Physics”, “Materials Chemistry and Physics”, “Journal of Alloys and Compounds”,
- Member from Portugal in the Joint European Committee on Plasma Surface Engineering.
- Representing SOPORVAC (Vacuum Portuguese Society) in IUVSTA (The International Union of Vacuum Science, Techniques and Applications) for the triennium 2001-2004.
- Member of the Executive Committee of FEMS – Federation of European Materials Societies – from 2015.

**Publications**

**Books:** - A. Cavaleiro and J.T. De Hosson, Nanostructured Coatings, Russian Version of the original published by Springer Verlag; Ed. Technosphaera, Moscow, Russia, 2011, 750 pages.

**Papers:** More than 250 papers published from which about 230 in international journals of SCI. About 2500 citations and H index: 25.