Prof. Eng. PAOLO VERONESI

EDUCATION and EMPLOYEMENT

- 1998 - Bachelor degree *summa cum laude* in Materials Engineering at the University of Modena and Reggio Emilia - Italy;
- 2001 - PhD degree in Materials Engineering; thesis title: " Study, design and development of new applicators and processes for the microwave assisted heat treatment of materials"
- 2001 - 2004 Post-doctoral position at the University of Modena and Reggio Emilia, Dept. of Materials and Environmental Engineering; topic: "Microwave assisted surface and thermal treatments of silicatic glasses and glass-matrix composites"
- 2005-2014: Assistant professor of Metallurgy at the University of Modena and Reggio Emilia (Italy)
- 2014-now: Associate professor of Materials Science and Technology at the Dept. of Engineering "Enzo Ferrari", Modena (Italy)
- 2015-now: President of the master Degree in "Materials Engineering" at the Dept. of Engineering "Enzo Ferrari", Modena (Italy)

AFFILIATION AND PARTECIPATION TO TECHNICAL COMMITTEES and EDITORIAL BOARDS

- Member of: Italian Ceramic Society, AMPERE (Association for Microwave Power in Europe for Research and Education), Italian Metallurgical Association
- Member of: the technical committees IEC - CT27 and CEI CT27 (Italy) - Electroheat, the European technical committee 01 of Ampere, Safety of industrial applications and EMC, AIM-Powder metallurgy: 2003-now
- Member of the editorial board of the "Journal of Microwave Power and Electromagnetic Energy", "Trattamenti e Finiture" and of the Council of Asian Science Editors (CASE)

RESEARCH and DIDACTIC ACTIVITY

His research activity is mainly focussed on the thermal applications of microwaves, trying to develop new processes or to enhance materials properties. He is also active in the ceramic field, in particular as far as composite materials and refractory materials are concerned. During last decade he has been using commercial electromagnetic modelling software (Concerto 3.5, Comsol Multyphisics) in order to design new microwave applicators for high and low temperature heat treatments and microwave plasmas. Recently, he dedicated intensively to the development of microwaves applications to metals, high entropy alloys and intermetallics.
His research activity lead to many collaborations, either National or International, mainly regarding dielectric heating and materials processing. He is author of more than 110 papers published on Italian and international journals, as well as of 8 Italian and international patents. He participated to relevant conferences concerning microwave heating, ceramic materials and metals, where he presented the results of his research activity.
A detailed list of publications can be accessed here: http://orcid.org/0000-0003-3095-6495

During last decade he has been Visiting Scientist at the Dept. of Material Science and Metallurgical Engineering, Sunchon National University (Korea); Visiting Scientist at the Universität Bayreuth

(D), Fakultat for Angewandte Naturwissenschaften, Lehrstuhl fur Werkstoffverarbeitung, in the framework of COST Action D10; Visiting Scientist at the Department of Materials, Imperial College, London (U.K.), in the framework of the "Joint Project Grant scheme" financed by the Royal Society.

During last five years he has been involved as co-beneficiary of many LIFE+ projects: LIFE10 ENV/IT/000419 - WASTE3, involving the recycling of copper metallurgy waste using also microwave heating and for microwave applications; LIFE11 ENV/IT/036 - Low Resources Low Energy, involving the manufacturing of eco-friendly ceramic products (responsible of Unit); LIFE12 ENV/IT/000678- ReTSW-SINT, regarding the recycling of thermal spray waste in sintered products; LIFE13 ENV/IT/000593 - Titanium life in titanium hands, regarding the recycling of Ti turnings using microwave assisted combustion synthesis (responsible of Unit).