

CURRICULUM VITAE

EUROPEAN FORMAT



PERSONAL INFORMATION

Name, Surname **Mariarosa Raimondo**
Address **CNR ISTE**
House number, street name, **Via Granarolo, 64**
postcode, city, country **48018 Faenza, Italy**
Telephone **+39 0546 699721**
Fax **+39 0546 46381**
E-mail **mariarosa.raimondo@istec.cnr.it**
Website **www.istec.cnr.it**
Nationality **Italian**
Place and Date of birth **Montorio nei Frentani (CB), 28/06/1965**

WORK EXPERIENCE

CNR position **SENIOR RESEARCHER (LEVEL II)**

2019 – to date Senior Researcher at ISTE

From 2001 – to 2019 Researcher at ISTE

From 1997 to 2001 Temporary research activity at ISTE

From 1995 to 1997 Temporary research activity at IC CNR (Institute of Chromatography, National Research Council Area della Ricerca di Roma-Italy) on pyrolysis gas-chromatography (Py-GC) as tool to control industrial processes catalyzed by pillared clays and zeolites. Design of innovative stationary phase for GC.

May-July 1997 Temporary researcher at the Institute of Physical Chemistry Polish Science Academy (Warsaw) on the development of new chromatographic matrix.

February – April 1996 Temporary researcher at Chemistry Institute University of Exeter (UK) on the development of inorganic LDH (Layered Double Hydroxides) containing bi- and tri-valent metals as chromatographic matrix.

Name and address of employer **Consiglio Nazionale delle Ricerche, Istituto di Scienza e Tecnologia dei Materiali Ceramici CNR ISTE**

Type of business or sector **Materials Science and Technology**

Occupation or position held
Main activities and responsibilities

Senior Researcher, Group leader

Research and development.

Group leader in the field of innovative industrial materials, design of coatings with a controlled wetting behavior for industrial materials. Materials engineering by deposition of fully inorganic or hybrid coatings.

EDUCATION AND TRAINING

Year	1993
Name and type of organisation providing education and training	University of Roma "La Sapienza"
Principal subjects occupational skills covered	Industrial chemistry
Title of qualification awarded	M. Sc. graduation in Industrial Chemistry
Level in National classification	M. Sc degree

RESEARCH ACTIVITIES

Research sectors	Engineering of innovative materials, materials and processes for multifunctional surfaces, thin films and coatings
Recent Scientific Activities.	<p>Scientific activities currently deals with the functionalization of surfaces in order to control their wetting behavior, providing ceramics, metals and alloys of super-hydrophobic, amphiphobic, de-icing, anti-fouling, low-friction performances. Development of multifunctional materials for outdoor or indoor exposure, anti-reflective coatings, new aesthetic effects.</p> <p>Exploitation of waste materials and byproducts to be included in the ceramic production process. Energy efficient materials and systems.</p>
Books and Articles	<p>F. Veronesi, G. Boveri, M. Raimondo, Amphiphobic nanostructured coatings for industrial applications, <i>Materials</i> 12 (2019) 787, DOI: 10.3390/ma12050787</p> <p>A. Cecere, D. De Cristofaro, R. Savino, G. Boveri, M. Raimondo, F. Veronesi, F. Oukara, R. Rioboo, Visualization of liquid distribution and dry-out in a single-channel heat pipes with different wettability, <i>Experimental Thermal and Fluid Science</i> 96 (2018) 234–242, DOI: 10.1016/j.expthermflusci.2018.03.012</p> <p>M. Raimondo, F. Veronesi, G. Boveri, G. Guarini, A. Motta, R. Zanoni, Superhydrophobic properties induced by sol-gel routes on copper surfaces, <i>Applied Surface Science</i> 422 (2017) 1022–1029, DOI: 10.1016/j.apsusc.2017.05.257</p> <p>I. Malavasi, F. Veronesi, A. Caldarelli, M. Zani, M. Raimondo, M. Marengo, Is a knowledge of surface topology and contact angles enough to define the drop impact outcome?, <i>Langmuir</i> 32 (2016) 6255 – 6262, DOI: 10.1021/acs.langmuir.6b01117</p> <p>Alessandro Motta, O. Cannelli, A. Boccia, R. Zanoni, M. Raimondo, A. Caldarelli, F. Veronesi: A Mechanistic Explanation of the Peculiar Amphiphobic Properties of Hybrid Organic–Inorganic Coatings by Combining XPS Characterization and DFT Modeling. <i>Applied Mat. Int.</i> (2015) doi: 10.1021/acsami_5b04376;</p> <p>A. Caldarelli, M. Raimondo, F. Veronesi, G. Boveri, G. Guarini: Sol–gel route for the building up of superhydrophobic nanostructured hybrid-coatings on copper surfaces. <i>Surf. Coat. Tech.</i> 276 (2015) 408-415.</p> <p>F. Veronesi, M. Raimondo, G. Boveri, G. Guarini: “Biomimetic, nanostructured coatings to achieve amphiphobicity on industrial materials”. NANOSMAT Conference, 13-17 September 2015, Manchester (UK).</p> <p>M. Raimondo: “Superhydrophobic and superhydrophilic surfaces: the way for self-cleaning ceramics”. Invited Lecture at CIMTEC Conference, 10-12 June 2014, Montecatini Terme (Italy).</p> <p>M. Raimondo, M. Blosi, G. Guarini, A. Caldarelli, F. Veronesi. “Wetting behavior and remarkable durability of amphiphobic aluminum alloys surfaces in a wide range of environmental conditions”. <i>Chemical Engineering Journal</i> 258 (2014) 101-109.</p> <p>M. Raimondo, A. Caldarelli, M. Blosi, G. Guarini, F. Veronesi. Poster: “Amphiphobic thin films by sol-gel route: wetting performances, functional behavior and stability”. MRS Fall Meeting, Novembre 2013, Boston (USA)</p> <p>M. Raimondo: “Biomimetic nanostructured coatings: superhydrophobic performances and applications” Keynote lecture at 13th ECerS conference Giugno 2013, Limoges (France)</p> <p>Raimondo M., Guarini G., Zanelli C., Marani F., Fossa L., Dondi M., <i>Printing nano TiO2 on large-sized building materials: Technologies, surface modifications and functional behaviour.</i> <i>Ceramics International</i> 38 (2012) 4685-4693.</p> <p>Zanelli C., Guarini G., Raimondo M., Dondi M., <i>The vitreous phase of porcelain stoneware: composition, evolution during sintering and physical properties.</i> <i>Journal of Non-Crystalline Solids</i>, 357 (2011) 3251-3260.</p> <p>Raimondo M., Dondi M., Zanelli C., Guarini G., Gozzi A., Marani F., Fossa L., <i>Processing and properties of large-sized ceramic slabs.</i> <i>Bol. Soc. Esp. Cerám. V.</i>, 49 (2010) 307-314.</p> <p>Raimondo M., Zanelli C., Guarini G., Dondi M., Fabbroni R., Cortesi T., <i>Process of pyroplastic shaping for special-purpose porcelain stoneware tiles.</i> <i>Ceram. Int.</i>, 35 (2009) 1975-84.</p> <p>M. Raimondo, C. Ceroni, M. Dondi, G. Guarini, M. Marsigli, Idema Venturi, C. Zanelli, <i>Durability of clay roofing tiles: the influence of microstructural and compositional variables.</i> <i>J. Eur. Ceram.</i></p>

Soc. 29 (15) (2009) 3121-3128.

M. Dondi, G. Guarini, M. Raimondo, C. Zanelli, *Recycling PV and TV waste glass in clay bricks and roof tiles*. Waste Management, 29 (2009)1945-1951.

M. Raimondo, M. Dondi, D. Gardini, G. Guarini, F. Mazzanti, *Predicting the initial rate of water absorption in clay bricks*. Construction and Building Materials, 23 (7) (2009) 2623-2630.

P. M. Cavalcante, M. Dondi, G. Guarini, M. Raimondo, *Colour performance of ceramic nanoparticles*. Dyes and Pigments, 80 (2) (2009) 226-232.

Zanelli C., Dondi M., Baldi G., Ercolani G., G. Guarini, M. Raimondo, *Glass ceramic frits for porcelain stoneware bodies: effects on sintering, phase composition and technological properties*. Ceram. Int., 34 (2008) 455-465

M. Raimondo, C. Zanelli, F. Matteucci, G. Guarini, M. Dondi, J. A. Labrincha, *Effect of waste glass (TV/PC cathodic tube and screen) on the technological properties and sintering behavior of porcelain stoneware tiles*. Ceramics International, 33 (2007) 615-623.

Dondi M., Labrincha J., Matteucci F., Raimondo M., Zanelli C., *Effect of waste glass (PC/TV screen and cathodic tube) on technological properties and sintering behaviour of porcelain stoneware tiles*. Ceram. Int., 33 (2007) 615-623.

M. Raimondo, M. Dondi, F. Mazzanti, P. Stefanizzi, P. Bondi, *Equilibrium moisture content of clay bricks: the influence of the porous structure*. Buildings and Environments, 42 (2007) 926-932.

Matteucci F., Cruciani G., Dondi M., Raimondo M., *The Role of Counterions (Mo, Nb, Sb, W) in Cr-, Mn-, Ni- and V-doped Rutile Ceramic Pigments. Part 1. Crystal Structure and Phase Transformations*. Ceramics International, 32 (2006) 385-392.

Dondi M., Cruciani G., Guarini G., Matteucci F., Raimondo M., *The Role of Counterions (Mo, Nb, Sb, W) in Cr, Mn-, Ni- and V-doped Rutile Ceramic Pigments. Part 2. Colour and Technological Properties*. Ceramics International, 32 (2006) 393-405.

Dondi M., Ercolani G., Guarini G., Raimondo M., Cavalcante Tenorio P.M., Zanelli C., *Resistance to deep abrasion of porcelain stoneware tiles: key factors*. Ind. Ceram., 25 (2005) 71-78.

Tenorio Cavalcante P.M., Dondi M., Ercolani G., Guarini G., Melandri C., Raimondo M., Rocha e Almendra E., *The influence of microstructure on the performance of white porcelain stoneware*. Ceram. Int., 30 (2004) 953-963.

Dondi M., Guarini G., Raimondo M., Almendra E.R., Cavalcante Tenorio P.M., *The role of surface microstructure on the resistance to stains of porcelain stoneware tiles*. J. Eur. Ceram. Soc., 25 (2005) 357-365.

ADDITIONAL INFORMATION

International collaboration with York University (Canada), Birmingham (UK), Bologna (Italy), Bergamo (Italy), Modena and Reggio Emilia (Italy), UFRJ-Rio de Janeiro (Brasil), Cantabria-Santander (Spagna), UFSCar-Sao Carlos (Brasil).

Scientific responsible of several contract with industries and co-ordinator of research programs.

Editorial Board Member of *The Open Construction and Building Technology Journal*. Reviewer of international, scientific journals.

**TRATTAMENTO DEI DATI
PERSONALI, INFORMATIVA E
CONSENSO**

Il D.Lgs. 30/6/2003, n. 196 "Codice in materia di protezione dei dati personali" regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all'identità personale e al diritto di protezione dei dati personali; l'interessato deve essere previamente informato del trattamento .

La norma in considerazione intende come "trattamento" qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l'organizzazione, la conservazione, la consultazione, l'elaborazione, la modifica, la selezione, l'estrazione, il raffronto, l'utilizzo, l'interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente *curriculum vitae* e nella documentazione della quale fa parte integrante

(*barrare la casella*) **Si, acconsento**