

Name/Surname

Marcella Trombetta

**Professional Address** 

Via Alvaro del Portillo, 21 - 00128 Rome, Italy

**Phone** 

E-mail

m.trombetta@unicampus.it

Nationality
Place and Date of Birth
Gender

### **Present Academic Position**

01/11/2006 - onward

Professor (Full Professor) of the Academic Discipline CHIM/07 - Principles of Chemistry for Applied Technologies at the University Campus Bio-Medico of Rome (UCBM), Rome (IT) (<a href="www.unicampus.it">www.unicampus.it</a>)

Chairman of the following laboratories belonging to the CIR - Centre of Integrated Research of the UCBM:

- Laboratory of Tissue Engineering, and
- Laboratory of Chemistry for Engineering.

These laboratories belong both to PRABB-Pole of Advanced Research in Biomedicine and Bioengineering (Lazio Region-Italy), and to the National Center of Excellence in Research (COFINLAB 2001) "CEMIN: Center of excellence in nanostructured innovative materials for chemical, physical and biomedical application" (COFINLAB 200, D.M. 17 october 2003 prot. n. 193/20031).

01/11/2013 - onward

Research Coordinator of the Department of Engineering, UCBM.

21/04/2017 - onward

Responsible for the coordination and promotion of Master and Postgraduate Courses of the Department of Engineering at UCBM

01/06/2018 - onward

Coordinator of the Awareness node for enterprises @ UCBM of the Competence Center of the Ministry of Economic Development (IT) "ARTES 4.0 – Industry 4.0 Competence Center on Advanced Robotics and enabling digital Technologies & Systems"

01/01/2011 - onward

Vice-Chairman and Scientific Coordinator of the University Master in "Homeland Security: systems, methods and instruments for security and crisis management" and teacher of "CBRN threats", at UCBM

(http://www.masterhomelandsecurity.eu)

01/06/2019 - onward

Responsible and Coordinator of the "Business Educational Program: Ride Your Tech Revolution, Reshaping skills and knowledge through lifelong learning" at UCBM

01/01/2020 – onward	Director of the Advanced Training Course "Products and Sales Specialist in Laboratory Diagnostic" at UCBM		
Academic Career			
01/03/2003 — 31/10/2006	Associate Professor of the Academic Discipline CHIM/07 - Principles of Chemistry for Applied Technologies at UCBM (IT)		
01/11/2000 – 28/02/2003	Assistant Professor of the Academic Discipline CHIM/07 - Principles of Chemistry for Applied Technologies at UCBM (IT)		
Other Academic and Research Appointments			
01/05/2018 – onward	Member of the DRU - University Research Directorate, governing body of the Integrated Research Center of the UCBM to which all the research activities of the Department of Engineering, Department of Medicine and Surgery and Department of Science and Technology for Humans and the Environment		
10/06/2020 – onward	Commissioner for the academic recruitment field 03/B2 – Principles of Chemistry for Applied Technologies for the National Scientific Qualification (Art. 8, Comma 1, D.D. N. 1531 of 2016) in execution of Jurisdictional measures (D. R. 0000809 of 10-06-2020)		
11/04/2014 – 31/10/2020	President of the Master of Science Degree in Chemical Engineering for a Sustainable Development at UCBM		
01/11/2013 – 31/10/2016	Vice-Dean of the School of Engineering at UCBM		
2015 – onward	Member of "REPRISE - Register of Expert Peer Reviewers for Italian Scientific Evaluation", the register of Italian and foreign independent scientific experts of MIUR - Italian Ministry of University and Research		
01/11/2013 – onward	Member of the Research Scientific Committee of UCBM in charge of addressing and monitoring scientific research and of elaborating the University strategic plan for research development and of guiding the research quality assurance system		
01/01/2011 – 01/01/2013	VQR 2004-2010 - Groups of Experts Evaluation (GEV)/ ANVUR (National Agency for the Evaluation of Universities and Research Institutes; affiliate of ENQA)		
01/01/2011 – onward	Referee activity for the ANVUR-National Agency for the Evaluation of University and Research Institutes		
01/01/2009 – onward	Member of evaluation panel of "COST Action" projects – European Cooperation in the field of Scientific and Technical Research		
30/04/2007 – 28/02/2009	President of a National Panel of Judges for the "National Contest" for the professional habilitation as Engineer (MIUR-Italian Ministry for Education, University and Research)		

01/11/2006 - 31/10/2011 Board Governance of the Centre for Integrated Research – Pole of Advanced Research in Biomedicine and Bioengineering at UCBM 01/01/2005 - onward Referee activity for the project co-financed by MIUR-Italian Ministry for Education, University and Research **National and International Appointments** External Constituent of the "National Health Council" of the Ministry of Health (IT) 17/05/2018 - onward 15/06/2018 - onward Member of the Technical Health Committee, "section for the evaluation of biotechnologies" of the Ministry of Health as expert in Biotechnology of the Department of Civil Protection (DPR 28 March 2013, n. 44) Member of the UNDRR – United Nation Office for Disaster Risk Reduction 01/01/2018 - onward Member of the EFDRR - European Forum on Disaster Risk Reduction 01/01/2018 - onward established by the European Commission and the Council of Europe with the patronage of the United Nations Office for Disaster Risk Reduction (UNISDR) 05/12/2017 - onward Constituent of the "National Committee for the prediction and prevention of major risks" of the Presidency of the Council of Ministers for the sector of the chemical, nuclear, industrial and transports risks (GURI n. 284 of the 05/12/2017) (IT) 25/07/2014 - 03/12/2018 Constituent of the "National Health Council" of the Ministry of Health (IT) 01/2017 - onwardConstituent of the "Technological, industrial and institutional working group in the field of prevention and protection of the environment and population from NBCR risks" of the IAI - Institute for International Affairs (IT) A.Y. 2015-16 – onward Coordinator and teaching staff of the "Specialization Course on Environmental Crime" of the "Scuola Internazionale di Alta formazione per la prevenzione ed il contrasto al crimine organizzato di Caserta" (International School of Higher Education for the Prevention and Countering of Organized Crime of Caserta), Ministry of the Interior (IT) 01/2014 - onward External consultant of the F.L.E.P.-Food Law Enforcement Practitioners, European Forum A.Y. 2012-13 – A.Y. 2016-17. Coordinator and teaching staff of the modules "Environmental Crime" and "Food A.Y. 2020-2021 Crime" of the "Corso di Alta Formazione - Scuola di Perfezionamento per le Forze di Polizia" (Advanced Training Course - School of Specialization for Police Forces) of the Ministry of the Interior (IT) 2014 - onward Trainer of Europol officers in the frame of the EU Policy Cycle for organised and serious international crime "EMPACT-European Multidisciplinary Platform against Criminal Threats", Europol 12/2013 - onward Teaching staff of the "School of the Presidency of the Council of Ministers", School of the Presidency of the Council of Ministers (IT)

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Constituent and co-author of the technological platform for the National Security "SERIT: SEcurity Research in Italy", jointly promoted by CNR and Finmeccanica	
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e ion-DG	
Title of Ph.D. in Chemistry for Engineering with an honourable mention, University of Genoa (IT)	
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21/08/1998 – 21/08/1999	Postdoctoral researcher fellowship at the Université de Caen Normandie (FR), Laboratoire de Catalyse et Spectrochimie (LCS), ISMRA/CNRS, Caen (FR)		
02/02/1998 – 01/06/1998	Ph.D. fellowship at the Departamento de Química Inorgánica, Cristalografía y Mineralogía, Universidad de Málaga, Málaga (ES)		
03/02/1997 – 02/05/1997	Ph.D. fellowship at the Department of Chemical Engineering, Northeastern University of Boston, Boston (MA, USA)		
07/07/1997 – 08/12/1997	Ph.D. fellowship at the Catalysis Research Centre, The Chemistry Department, The University of Reading, Reading (UK)		
Participation to Faculty Board and Teaching Committee of Ph.D., Master and international Schools			
31/07/2017 – onward	Teacher of "Health and security" at the International Course "Security Studies" of the Ministry of Defence at the University LUISS "Guido Carli" (IT)		
A.Y. 2017-18 – onward	Faculty Board of the Ph.D. in "Science and Engineering for Humans and the Environment" at UCBM from cycle XXXIII		
A.Y. 2014-15 – onward	Teaching Committee of the University Master in "Food Law", Tuscia University (IT)		
A.Y. 2013-14 – A.Y. 2016-17	Faculty Board of the Ph.D. in "Bioengineering and Bioscience" at UCBM, Cycles XXIX, XXXI, XXXII		
A.Y. 2011-12 – A.Y. 2012-13	Faculty Board of the Ph.D. in "Sciences of Aging and Tissue Regeneration" at UCBM, Cycles XXVII, XXVIII		
2010 – onward	Teaching Committee of the Ph.D. in "Ceramic Engineering" of the National Institute of Technology, Orissa (India)		
A.Y. 2009-10	Teaching Committee of the <i>International School on Advanced Material Science</i> and Technology "G. Occhialini" 12th Course - Physics and Chemistry in Nanobiotechnology II°, Università Politecnica delle Marche, Ancona (IT)		
A.Y. 2008-09 – A.Y. 2010-11	Faculty Board of the Ph.D. in "Sciences of Organ Plasticity and Tissue Regeneration for Functional Recovery" at UCBM, Cycles XXIV, XXV, XXVI		
A.Y. 2008-09 – A.Y. 2012-13	Faculty Board of the Ph.D. in "Materials for Health, Environment and Energy", University of Rome Tor Vergata, Rome (IT), Cycles XXIV, XXV, XXVI, XXVII, XXVIII		
A.Y. 2006-07 – A.Y. 2012-13	Faculty Board of the Ph.D. in "Biomedical Engineering" at UCBM, Cycles XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII		
A.Y. 2005-06 – A.Y. 2006-07	Teaching Committee of the University Master in "Advanced Technologies for Bone Reconstruction", University of Genoa, Genoa (IT)		

A.Y. 2001-02

Faculty Board of the Ph.D. in "Chemistry, Chemical-Physics with specialization in Science of Ceramic Proceeding and Surface Treatments" of the University of Limoges, Limoges (FR)

### Research Areas and Major Fields

- Development of on-chip tissue culture as models for the discovery of new therapies
- development of cells-on-chip technologies as screening platform for new drugs
- development of cells-on-chip technologies for "in vitro" model of tumour/immune system interaction
- fabrication of biomimetic scaffold for tissue engineering of myocardial, vascular, cartilage and bone tissues, and
- development of technologies and advanced materials for energy applications,
   CBRNE defence and for food safety and defence
- development of systems and technologies for the study and defence by bioterrorism

## Degree of success in national and international project

Since 2000, Principal Investigator, Scientific Coordinator, Head of Research Unit and/or participants of 26 research projects from competitive grants. In particular:

- 18 national funding, and
- 11 international funding.

In the following, the list of the main projects in chronologic order, is reported.

05/01/2021 - onward

Title of the national project: "PISTIS - Innovative Platform for the harmonization of the daily life of weak subjects in the relationship with the advanced age and the interaction with their living space"

Project Coordinator. Altintech S.r.L.

Role: Scientific Coordinator

Partner: PP.ONE S.r.L., University Campus Bio-Medico of Rome

Funding: "Strategic Project 2019" - POR FESR Lazio 2014-2020 - Action "Life

Science", Lazio Innova, Lazio Region (prot. A0320-2019-8116)

16/07/2020 - onward

*Title of the national project:* "PLATFORM – advanced materials, processes and technologies for the implementation, monitoring and functional validation of osteotomy interventions"

Project Coordinator: C.O.T. Cure Ortopediche Traumatologiche S.p.a.

*Role:* Leader of WP: synthesis of ceramic sand glass-ceramics nanomaterials for coating of titanium bone grafts

Partner: NCS-Lab S.r.I., Advanced Medical Engineering Devices (AMED) S.r.I.,

ERFO S.p.A., University Campus Bio-Medico of Rome

Funding: Ministry of Economic Development, sustainable growth fund "Life Sciences" (D.M. 2 August 2019 and D.R. 2 october 2019)

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#### 01/06/2018 - onward

*Title of the national project*: ARTES 4.0 – Industry 4.0 Competence Center on Advanced Robotics and enabling digital Technologies & Systems

Project Coordinator. Sant'Anna School of Advanced Studies Pisa

Role: highly specialized competence center on Industry 4.0 issues with the role of

Coordinator of AWN - Awareness node for companies.

Partner: Scuola Normale Superiore of Pisa, University of Pisa, University of Firenze, University of Siena, School IMT for Advanced Studies Lucca, Università Politecnica delle Marche, University Campus Bio-Medico of Rome, University of Sassari, University of Perugia, Cnr, IIT, LENS and other 146 enterprises

Funding: Ministry of Economic Development

01/10/2017 - 01/10/2018

Title of the national project: "Incremento del TRL della tecnologia CytoMatrix – Cyto+" (Improvement of the TRL of the CytoMatrix – Cyto+ technology)

Project Coordinator: UCBM

Role: Principal Investigator, Project Coordinator

Partners: UCS Diagnostic S.r.I.

Funding: Progetto INTESE: "INnovazione e Trasferimento tEcnologico per Sostenere la fruizione dei risultati della ricerca sul tErritorio" (prot. FILAS-RU-

2014-1193), Lazio Region (IT)

13/12/2015 - 13/12/2018

*Title of the national project*: "COX inhibitors in conjunction with chemotherapy to target multiple myeloma active disease"

Project Coordinator: Università degli Studi di Bari (IT)

Role: Leader of the activity "Microfluidic culture platform" of the Task 3 – Evaluation of the concomitant effect of anti-MM drugs in combination with selective and/or dual COX inhibitors (also bearing a molecular moiety capable to interfere with P-gp) on bone marrow stromal cells (BMSCs) and hMMCLs (co-culture in multi-well plate, and on cell-on-chip device)

Funding: AIRC – Associazione Italiana per la Ricerca sul Cancro, Grant-MFAG 2015. Codice Riferimento: 17566

15/05/2015 - 30/09/2017

*Title of the international project*: "ASKLEPIOS: Actions on food Supplements, faKe genuine (not) food exhibition, e-Learning platform, action on Pesticides, operation In Our Sites and JAD"

*Project Coordinator*: Comando Carabinieri per la Tutela della Salute – Carabinieri NAS (IT)

Role: Leader of the "Operational Activity O.A. 4.10: BACCUS Class: an e-learning platform for training law enforcement officers to combat food crime" Partners: UCBM, Studiare Sviluppo srl (IT), Istituto Superiore di Sanita (IT), Ministero della Salute (IT), Confederazione Nazionale Coldiretti (IT), The Netherlands Food and Consumer Product Safety Authority (NL), Wageningen University & Research Centre (RIKILT) (NL), Belgian Customs and Excise (BE) Funding: EU Commission-EUROPOOL for the EMPACT-European Multidisciplinary Platform against Criminal Threats, under the OAP Counterfeit Goods (EMPACT/01/OAP.2015)

08/03/2014 - 08/03/2017

Title of the national project: "Tecnologie cells-on-chip per lo studio del sistema endocannabinoide in un modello in vitro di interazione tumore/sistema immunitario" (Cells-on-chip technologies for the study of the endocannabinoid system in an in vitro model of tumor/immune system interaction)

Project Coordinator: UCBM

Role: Principal Investigator, Project Coordinator

Partners: UCBM, Università degli Studi di Roma "Tor Vergata" (IT), CNR - Istituto

di Fotonica e Nanotecnologie (IT)

Funding: PRIN 2012 - MIUR, prot. n. 20125NMMLA

01/01/2014 - 31/12/2015

*Title of the international project*: "Understanding the interplay between cancer stem cells and immune system: an innovative cells-on-chip approach"

Project Coordinator: UCBM

Role: Leader of three work packages

Partners: UCBM, Molecular Foundry - Lawrence Berkeley National Laboratories,

Berkeley (USA).

Funding: Italian Ministry of Foreign Affairs in the framework Programme of Scientific and Technological Cooperation with the United States of America

(PGR00183)

01/03/2013 - 01/03/2016

*Title of the international project*: "CIPRNet - Critical Infrastructure Research and Resilience Network"

*Project Coordinator*: Fraunhofer-Gesellschaft zur Förderung der Angewandten Forschung e.V. (DE)

Role: CBRN and chemical threats expert of the Research Unit UCBM Partners: UCBM, ENEA (IT), Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek (NL), Union Internationale des Chemins de fer (FR), Commissariat à l'énergie atomique et aux énergies alternatives (FR), The European Union represented by the European Commission represented by the Joint Research Centre (EU), Stichting Deltares (NL), University of Cyprus (CY), Uniwersytet Technologiczno-Przyrodniczy im. Jana i Jędrzeja Śniadeckich w Bydgoszczy (PL), The University of British Columbia (CA), ACRIS GmbH (CH) Funding: FP7-SEC-2012 (Grant no 312450)

2013 - 2015

Title of the national project: "Modelli cells-on-chip per lo sviluppo di terapie integrate basate su immunoterapia tramite polarizzazione macrofagica: superare la resistenza ai trattamenti convenzionali del comparto staminale nelle neoplasie polmonari non a piccole cellule" (Cell-on-chip models for the development of integrated therapies based on immunotherapy using macrophage polarization: to overcome resistance to conventional stem cell treatments in non-small cell lung cancer)

Project Coordinator: UCBM

Role: co-leader

Funding: Fondazione Guido Berlucchi (IT)

01/09/2012 - 30/04/2014

Title of the international project: "FACIES-Online identification of Failure and Attack on interdependent Critical InfrastructurES"

Project Coordinator: UCBM

Role: CBRN and chemical threats expert

Partners: UCBM, Universidad de Málaga (ES), University of Cyprus (CY), RADIOLABS (University-Industry Consortium - Radio communications

Laboratories) (IT), AIIC (IT)

Funding: EU Commission-DG Home nel framework "Prevention, Preparedness and

Consequence Management of Terrorism and other Security-related Risks"

(HOME/2011/CIPS/AG/4000002115)

01/09/2012 - 28/02/2014

Title of the international project: "SPARC- SPace Awareness foR Critical infrastructures"

*Project Coordinator*: Telespazio a LEONARDO and THALES company SpA (IT) *Role*: Leader of the work package "Analysis of actuated countermesurements in the Logistic and Transportation infrastructures"

Partners: UCBM, IFAC CNR (Institute of Applied Physics Nello Carrara National Research Council) (IT), iTrust Consulting (LUX), NITEL (National Inter-University Consortium for Transport and Logistics) (IT), Space Dynamics Services srl (IT), Università degli studi di Roma "Tor Vergata" (IT)

Funding: EU Commission-DG Home in the framework Prevention, Preparedness and Consequence Management of Terrorism and other Security-related Risks (CIPS) (HOME/CIPS/2011/AG/4000002119)

01/03/2013 - 01/03/2016

Title of the international project: "STRUCTURES - Strategies for The impRovement of critical infrastrUCTUre Resilience to Electromagnetic attacks" *Project Coordinator*: I.D.S. - Ingegneria Dei Sistemi - S.p.A. (IT) *Role*: CBRN and chemical threats expert of the Research Unit UCBM *Partners*: UCBM, Ecole Polytechnique Federale de Lausanne (CH), Haute Ecole Specialisee de Suisse Occidentale (CH), University of York (UK), Montena Technology SA (CH), Helmut Schmidt Universitat Universitat der Bundeswehr Hamburg (DE), Gottfried Wilhelm Leibniz Universitaet Hannover (DE), Bergische Universitaet Wuppertal (DE), Rheinmetall Waffe Munition GMBH (DE), Universiteit Twente (NL), Istituto Superiore Mario Boella sulle tecnologie dell'informazione e delle telecomunicazioni (IT), Navigate Consortium (IT) *Funding*: FP7-SEC-2011 (Grant no 285257)

08/03/2012 - 07/03/2015

Title of the national project: "Materiali bioartificiali e scaffold biomimetici per la terapia a base di cellule staminali nella rigenerazione del miocardio" (Bioartificial materials and biomimetic scaffolds for a stem cells-based therapy for myocardial regeneration)

Project Coordinator. Politecnico di Torino (IT) Role: component of the Research Unit UCBM

Partners: UCBM, Università degli Studi di Napoli "Federico II" (IT)

Funding: FIRB 2010 "Futuro in Ricerca" – MIUR, prot. n. RBFR10L0GK 003

#### 10/01/2012 - 31/12/2013

Title of the international project: "REFIRE-REference implementation of interoperable indoor location & communication systems for FIrst REsponders" *Project Coordinator*: Intelligence for Environment & Security - IES Solutions SrI (IT)

Role: CBRN and chemical threats expert of the Research Unit UCBM Partners: UCBM, Ministero dell'Interno - Dipartimento dei Vigili del Fuoco, del Soccorso Pubblico e della Difesa Civile (Fire Brigade, Public Aid and Civil Defence) (IT), BECAR s.r.l. – Beghelli Group (IT), Indicod-Ecr Services (IT), RADIOLABS (University-Industry Consortium - Radio communications Laboratories) (IT)

Funding: EU Commission-DG Home in the framework Prevention, Preparedness and Consequence Management of Terrorism and other Security-related Risks (CIPS) (HOME/2010/CIPS/AG/033)

#### 17/10/2011 - 17/10/2013

Title of the national project: "Ottimizzazione del processo fototermocatalitico zolfoammonio per la produzione di idrogeno" (Optimization of the photothermocatalytic sulfur-ammonia process for hydrogen production)

Project Coordinator: Università degli Studi di Torino (IT)

Role: Head of the Research Unit "Decomposizione termica per via solare del solfato d'ammonio in presenza di un ossido metallico" (Thermal decomposition by solar energy ammonium sulphate in the presence of a metal oxide)

Partners: UCBM, Università degli Studi del Piemonte Orientale (IT), Università degli Studi di Messina (IT)

Funding: PRIN 2009 - MIUR, prot. n. 2009BLNJC5 002

#### 06/05/2011 - 05/05/2014

*Title of the international project*: "BACCUS: comBAting food Crime by strengthening law enforcement Cooperation"

*Project Coordinator*: Comando Carabinieri per la Tutela della Salute – Carabinieri NAS (IT)

Role: Scientific Coordinator and Leader of two work packages

Partners: UCBM, ASAE-Autoridade de Segurança Alimentar e Económica Órgão de Polícia Criminal (PT), NVWA-Nederlandse Voedselen Warenautoriteit Ministerie van Economische Zaken (NL), FSAI-Food Safety Authority of Ireland (IE), FORMEZ-FORMEZ-PA Centro servizi, assistenza, studi e formazione per l'ammodernamento delle P.A. (IT)

Funding: EU Commission-DG Home in the framework of Prevention and Fight against Crime Programme, sector Operational law enforcement cooperation including Joint Investigation Teams - JITs (HOME/2010/ISEC/AG//JIT-002)

18/10/2010 - 18/10/2014

Title of the national project: "Sviluppo del Centro Integrato di Ricerca dell'Università Campus Bio-Medico di Roma quale polo di eccellenza per la ricerca di base in biomedicina e bioingegneria e potenziamento della sua rete di ricerca scientifica, tecnologica e industriale a livello nazionale e internazionale" (Development of the Integrated Research Center of the Campus Bio-Medico University in Rome as center of excellence for basic research in biomedicine and bioengineering and enpowerment of its national and international scientific, technological and industrial research network)

Project Coordinator: UCBM

Role: Head of the Research Unit "Tissue engineering for the regenerative

medicine"

Funding: FIRB 2006 - MIUR, prot. n. RBAP06SPK5

01/01/2011 - 31/12/2012

*Title of the international project*: "Modulating angiogenesis in the regeneration of osteo chondral tissue"

Project Coordinator: UCBM

Role: Leader of WP 1 - Synthesis of biomaterials and scaffolds fabrication Partners: UCBM, Stem Cell Research Center, University of Pittsburgh Medical

Center, Pittsburgh (USA)

Funding: Italian Ministry of Foreign Affairs in the framework Programme of Scientific and Technological Cooperation with the United States of America

(PGR00072)

07/04/2009 - 06/06/2010

*Title of the international project*: "SECUFOOD: SECUrity of the European FOOD supply chain"

Project Coordinator: UCBM

Role: Scientific Coordinator and Leader of three work packages

Partners: UCBM, Universidad de Navarra (ES), European Business Associates srl (IT), Istituto Superiore di Sanità - ISS (IT), Comando Carabinieri per la tutela della Salute – Carabinieri NAS (IT)

Funding: EU Commission-DG Home, in the framework Prevention, Preparedness and Consequence Management of Terrorism and other Security-related Risks (CIPS) (JLS/2008/CIPS/022)

30/01/2006 - 29/02/2008

Title of the national project: "Materiali ibridi organici/inorganici da assemblaggio di unita' molecolari nanostrutturate per applicazioni multifotoniche" (Hybrid organic/inorganic materials for multiphotonic applications via assembling of nanostructured molecular units)

Project Coordinator: Università degli Studi di Roma "Tor Vergata" (IT)
Role: Head of the Research Unit "Caratterizzazione strutturale e superficiale di
materiali ibridi organico-inorganici, per applicazioni multifotoniche, mediante
assemblaggio di unità molecolari nanostrutturate via spettroscopie FT-IR ed ATR"
(Structural and surface characterisation of organic-inorganic nanostructured hybrid
materials, for multiphotonic applications, via FT-IR and ATR spectroscopies)
Partners: UCBM, Università degli Studi di Padova (IT), Università degli Studi di
Trento (IT), Università degli Studi di Sassari (IT)

Funding: PRIN 2005 – MIUR, prot. n. 2005039071\_004

2003 - 2006

Title of the national project: Centro di Eccellenza Nazionale "CEMIN-Centro di Eccellenza Materiali Innovativi Nanostrutturati per Applicazioni Chimiche Fisiche e Biomediche" (National Center of Excellence in Research "Center of excellence in nanostructured innovative materials for chemical, physical and biomedical application")

Project Coordinator: Università degli Studi di Perugia (IT)

Role: Head of two work packages "Sintesi e proprietà di sistemi a geometria confinata: sistemi lamellari meso- e macroporosi" (Synthesis and properties of confined geometry systems: meso- and macroporosis lamellar systems) and "Sintesi e proprietà sistemi nanostrutturati, sia di natura organica che inorganica" (Synthesis and properties of both organic and inorganic nanostructured systems) Funding: National Center of Excellence in Research COFINLAB 2001 - MIUR, code CLAB01P7BR, D.M. 17 october 2003 prot. n. 193/2003

2002 - 2005

Title of the national project: "NUME - Sviluppo di membrane protoniche composite e di configurazioni elettrodiche innovative per Celle a Combustibile con elettrolita polimerico" (Developement of composite protonic membranes and of innovative electrode configurations for polymer electrolyte fuel cells) Project Coordinator: Università degli Studi di Roma "La Sapienza" (IT) *Role*: sub-contractor for the characterization of the composite protonic membranes

Partners: Università degli Studi di Roma "La Sapienza" (IT), Università degli Studi di Genova (IT), Università degli Studi di Camerino (IT), Università degli Studi di Pavia (IT), Università degli Studi di Bologna (IT), Università degli Studi di Perugia (IT), Università degli Studi di Padova (IT), CNR (IT)

Funding: FISR 2002 – MIUR (prot. n. 14)

16/12/2002 - 14/01/2005

Title of the national project: "Preparazione di materiali ibridi organico-inorganici tramite assemblaggio di unità molecolari nanostrutturate" (Preparation of hybrid organic-inorganic materials via assembling of nano building blocks) Project Coordinator. Università degli Studi di Roma "Tor Vergata" (IT) Role: member of the Research Unit UCBM "Caratterizzazione strutturale e superficiale di materiali ibridi organico-inorganici nanostrutturati via spettroscopie FT-IR ed ATR" (Structural and surface characterisation of organic-inorganic nanostructured hybrid materials via FT-IR and ATR spectroscopies) Partners: UCBM, Università degli Studi di Trento (IT), Università degli Studi di Padova (IT). Università degli Studi di Sassari (IT) Funding: PRIN 2002 - MIUR prot. n. 2002035342 002

2001 - 2003

Title of the national project: "ALEX: artificial liver for extracorporeal xenoassistance".

Project Coordinator. Azienda Ospedaliera di Padova, Padova (IT)

Role: Head of a working group

Partners: UCBM, Università degli Studi di Padova (IT), Università degli Studi di Roma "La Sapienza" (IT), Loyola University (USA), University of Miami (USA) Funding: Regione Veneto - Ricerca finalizzata 881/99 - Ministero della Salute

2000 - 2004

*Title of the international project*: "ALTEA-Anomalous Long Term Effects in Astronauts. A probe on the influence of cosmic radiation and microgravity on the central nervous system during long flyghts"

Project Coordinator. Università degli Studi di Roma "Tor Vergata" (IT) Ruolo: sub-contractor, head of the work package "Development of ionoconducting membranes for biomedical applications"

Partners: Università degli Studi di Roma "Tor Vergata" (IT), University Stony Brook (NY, USA), Berkeley University (USA), Brookhaven National Laboratories (USA), Institute for BioMedical Problems (RU), Moscow State Engineering Physics Institute (RU), Russian Space Corporation (RU), Royal Institute of Technology (SE), GSI/Biophysik (DE), ASI, Università degli Studi di Genova (IT), Università degli Studi di Trieste (IT), Università degli Studi di Firenze, LNF-INFN Frascati, INFN Perugia

Funding: ESA - European Space Agency

### **Honours and Awards**

2011

International Award "Sebetia-Ter", Silver Plaque of the President of the Italian Republic for professional standing and contributions to the advanced research in biomedicine and bioengineering

2013

The Canova Club's "R.O.S.A. Award" (Risultati Ottenuti Senza Aiuti - Results Obtained Without Help), special "Critics Award" for having achieved remarkable and prestigious goals with my own skills and commitment

# Personal skills and competences

Mother tongue(s)

Other language(s)

Self-assessment European level (\*)

**English** 

**French** 

Spanish

Italian

Understanding <sup>(*)</sup>		Speaking <sup>(*)</sup>		Writing <sup>(*)</sup>
Listening	Reading	Spoken interaction	Spoken production	
C2 Proficient	C2 Proficient	C2 Proficient	C2 Proficient	C2 Proficient
User	User	User	User	User
C2 Proficient	C2 Proficient	B2 Proficient	B2 Proficient	B1 Independent
User	User	User	User	User
B2	B2 Independent	B2	B2	B2 Independent
Independent	User	Independent	Independent	User
User		User	User	

<sup>(\*)</sup> Common European Framework of Reference (CEF) level

# Evaluation of the research quality

Scopus H-index = 40

Scopus Citations = 4273

Pubblications at https://www.scopus.com/authid/detail.uri?authorld=7003928503

Top Italian Scientist (Google Scholar):

H-index = 43 Citations: 5526 i 10-index = 93

Pubblications at https://scholar.google.it/citations?user=CLNMipQAAAAJ&hl=it

#### **Patents**

1. Crescenzi A, Trombetta M, Taffon C, Rainer A, Mozetic P, Costantini M, Santoro A (2016)

Materiale poroso per l'inclusione di preparati citologici, procedimento per l'ottenimento dello stesso e suo uso

Pat. N. 102016000111352

2. Centola M, Marsano A, Rainer A, Martin I, Vadala G, Trombetta M, Denaro V (2013)

Materiale bioattivo per la rigenerazione della cartilagine e procedimento per l'ottenimento dello stesso

Pat. N. IT RM20120246

3. Trombetta M, P Romagnoli, S Licoccia (2006)

Method for preparing a polymeric biocompatible system for the pharmacological release by topic use and use of said system

Pat. N. WO2006006054

### Signature

I certify that the information provided in the above Curriculum Vitae is true and correct to the best of my knowledge.

I authorise the handling of my personal data pursuant to the Personal Data Protection Code – European Regulation (UE) n. 2016/679

In witness whereof,

Rome (IT), 20 May 2021

Marcella Trombetta