

- Personal details** **FIRST NAME :** Ilaria
SURNAME : Cacciotti
NATIONALITY : Italian
ADDRESS: University of Rome "Niccolò Cusano", INSTM RU, Via Don Carlo Gnocchi 3, 00166 Rome-Italy
e-mail: ilaria.cacciotti@unicusano.it
- Studies**
- International and Interfaculty Master Course of Second Level in "Protection against CBRNe events" (IV Cycle, Academic Year 2012-2013)
 Votation: 110/110 summa cum laude
 - Second Level Master Course in "Forensic Genetics" (III cycle, Academic Year 2011-2012)
 Thesis topic: "Extraction of ancient DNA from bones:state of the art, applications and prospectives"
 Votation: 110/110 summa cum laude
 - Ph.D in Materials Engineering (XXIII cycle, Academic Year 2009-2010)
 Thesis topic: "Novel nanostructured ceramics, glass-ceramics and composites for biomedical and catalytic applications"
 Awards: - *European Biomaterials and Tissue Engineering Doctoral Award (EDA), ESB (European Society of Biomaterials)*
 - *Ph.D Thesis Award 'Marco Ramoni 2011'*
 - *Ph.D Thesis Award 'AIMAT 2012'*
 - Master of Science in Medical Engineering (5 years) (100/100 summa cum laude with special mention and recommendation for publication) (Academic Year 2005-2006)
 Dissertation topic: "Synthesis and characterization of hydroxyapatite and tricalcium phosphate nanopowders for bone tissue engineering"
 Award: Master of Science Award 'Fondazione Raeli' 2007
 X International Award "Giuseppe Sciacca"
- Current position**
- May 2014-present**
 Associate Professor (SSD ING-IND/22) of Materials Science & Technology and Biomaterials & Tissue Engineering at University of Rome "Niccolò Cusano"
- Regional Secretary of the Youth Committee for UNESCO (Lazio)
- Erasmus + Coordinator for Engineering Area at University of Rome "Niccolò Cusano"
- Responsible of the Materials and Chemistry laboratories
- November 2015-present**
 Member of the Board of PhD. Course in "Industrial and Civil Engineering"
- January 2014-present**
Invited Member of Expert Committe for National Science Foundation (NSF)
- Invited Member of Expert Committe for Canada Foundation for Innovation (CFI) and the Government of Quebec
- Scientific-Technical Expert for projects submitted in the RIS3 Campania
- Expert peer reviewers for italian scientific evaluation-MIUR
- Responsibilities of Framework Agreement**
- *Framework Agreement UNICUSANO-INSTM*
 - *Framework Agreement UNICUSANO-CREA*
 - *Framework Agreement UNICUSANO-Istituto Superiore di Sanità (ISS)*

- *Framework Agreement UNICUSANO-University of Rome Tor Vergata-Physics/Materials Science Department*

Work Experiences

September 2013-May 2014

Assistant Professor at University of Rome "Niccolò Cusano"

March 2014- April 2014

Incarico per l'erogazione della docenza inerente la seguente disciplina: La Diffrazione applicata a Restauro dei BB.CC., nell'ambito del Progetto "L'Innovazione tecnologica nel Restauro dei Beni Culturali", Soggetto attuatore: Iciet Engineering Srl - Comune di svolgimento: Castelli (TE)

April 2013-May 2014

Post-doc at Enterprise Engineering Department of University of Rome 'Tor Vergata', INSTM Research Unit.

Project: CARIPLO 2012

Project title: "*Magnetic nanoparticle filled conductive polymer composites for emi reduction*"

May 2012- March 2013

Post-doc at Industrial Engineering Department of University of Rome 'Tor Vergata', INSTM Research Unit.

June 2011- April 2012

Post-doc at Industrial Engineering Department of University of Rome 'Tor Vergata', INSTM Research Unit.

Fellowship: *L'ORÉAL-UNESCO Italy for Women and Science 2011-IX Edition*

Project: "*Bioresorbable nanospheres and microspheres loaded with human neurons as dopamine release systems: development of a potential innovative therapy for the Parkinson disease treatment*"

November 2010-May 2011

Post-doc at Chemical Science and Technology Department of University of Rome 'Tor Vergata', INSTM Research Unit.

February 2005-December 2005

Student collaboration contract at University of Rome "Tor Vergata"
University of Rome 'Tor Vergata', Rome-Italy.

Education Training

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March 2016

Seminar S06 - La corretta interpretazione dei tracciati termoanalitici - GTAP™
organized by Mettler Toledo
10th March 2016, *Hotel Antonella*, Pomezia, Rome-Italy.

February 2016

Seminar S02 - La buona pratica di pipettaggio - GPP™
organized by Mettler Toledo
23rd February 2016, *Hotel Antonella*, Pomezia, Rome-Italy.

October 2015

Workshop "Tecniche analitiche di spettroscopia molecolare per il settore agroindustriale"
organized by Thermo Scientific™ and Antaris™ II FT-NIR Analyzer
27th October 2015, Centro di Ricerca per la Frutticoltura (CREA FRU), Rome-Italy.

Seminar S03 GEP di Roma "Buona pratica di misura del pH-GEP™"

organized by METTLER TOLEDO and Ordine dei Chimici LUAM (Lazio, Umbria, Abruzzo e Molise)

20th October 2015, Pick Center, Rome-Italy

July 2015

"Nuovi orientamenti per la protezione e la sicurezza del lavoro nei laboratori scientifici, didattici e di ricerca"

LABOZETA (La sicurezza nel laboratorio)

7th July 2015, Great Hall "F. Cacace", Dipartimento di Chimica e tecnologie del farmaco, University of Rome "Sapienza", Rome-Italy

November 2014

Corso "D.Lgs. 230/95: disciplina delle attività lavorative con utilizzo di sorgenti radiogene" (durata di 8 ore)

5th November 2014, Centro Gestione Sicurezza "Futura", Via Cambridge, snc - 00133 Roma

April 2014

"The thermal analysis for the characterization of polymers and composites with practical demonstrations by DSC and DEA"

NETZSCH

10th April 2014, Hotel "Antonella", Pomezia-Italy

March 2014

"Corso di formazione in materia di sicurezza e salute nei luoghi di lavoro: RISCHIO CHIMICO"

27th March 2014, University of Rome "Tor Vergata"

February 2013-December 2013

International and Interfaculty Master of Second Level in "Protection against CBRNe events" (IV Cycle, Academic Year 2012-2013)

University of Rome "Tor Vergata"

School of Engineering (Department of Industrial Engineering)-School of Medicine (Department of Biomedicine and Prevention)

in collaboration with Esercito Italiano, Corpo Nazionale dei Vigili del Fuoco, ISSI (Istituto Superiore di Sanità), ENEA (Ente Nazionale Energia e Ambiente), INGV (Istituto Nazionale Geofisica e Vulcanologia), COPIT (Comitato Parlamentare per l'Innovazione Tecnologica), CRATI, SCIRE.

November 2013

- Seminar *"Investigation and Criminology"* by Dr. Roberta Bruzzone
- 9th November 2013, University of Rome "Tor Vergata", in the context of International and Interfaculty Master of Second Level in "Protection against CBRNe events", Rome-Italy.

July 2013

- *RECONnet Workshop: La bonifica dei siti contaminati: aggiornamento tecnico su tematiche di rilievo nazionale*
- 4th July 2013, INAIL, Auditorium, Rome, Italy

May 2013

Course JCBRN Def CoE

"Introduction to the International CBRN Training Curriculum Course"

20th-24th May 2013, Excellent Center NATO, Vyskov, Czech Republic

January 2012-December 2012

Master of Second Level in "Forensic Genetics" (first in the admission graduatory)

University of Rome "Tor Vergata"

School of Medicine and Surgery- Chairs of Medical Genetics and Forensic Medicine

in collaboration with the State Police Scientific Division, Orga Bio Human S.r.l., Applied Biosystems

July-August 2012

Internship Master of Second Level in "Forensic Genetics"

University of Rome "Tor Vergata"

Centro di Eccellenza per lo Studio del Rischio Genomico in Patologie Complesse Multifattoriali

Department of Biopathology and Diagnostic Imaging

School of Medicine- Human Genetics

30th July- 3rd August 2012

June 2012

- *Workshop "TEM & SEM samples preparation"*

20th June 2012, organised by *MEDIA System & Fischione Instruments*, in collaboration with *University of Rome "Roma Tre", Faculty of Engineering*, LIME Laboratory, Rome-Italy

- *"CMS3-Cell Model Systems Summer School"*

11th-15th June 2012, Congress Room CNR-ISM "Tor Vergata", Rome-Italy

May 2012

Nanomaterials for practitioner

28th May 2012, University of Rome "Roma Tre", Faculty of Engineering, Rome-Italy

November 2011

- *"Course about the protection towards radiative sources" ("Corso D.Lgs. 230/95 disciplina delle attività lavorative con utilizzo di sorgenti radiogene")*

14th November 2011, University of Rome "Tor Vergata", Rome-Italy

- *"2011 ROADSHOW Particle Characterization"*

Alfatest e Malvern Instruments

14th November 2011, Hotel "Antonella", Pomezia-Italy

12th November 2011

X International Award "Giuseppe Sciacca"-

Young Students: Sector Economy-Research and Development

Aula Magna della Pontificia Università Urbaniana – Città del Vaticano, Rome-Italy

September 2011

XXX Bioengineering School

Neuroinformatica

19th-23rd September 2011, Sede Estiva dell'Università di Padova, Brixen (BZ)-Italy

March 2011

- *"Giornata sulla Microfluorescenza"*

Bruker Italia, 22nd March 2011, Milano-Italy

June 2010

- *"Seconda Giornata della Ricerca di Ateneo: Biotecnologie a Tor Vergata"*

Aula Fleming, Facoltà di Medicina e Chirurgia, 16th June 2010, Rome-Italy

- *"Seminar on Esperienze applicative e Soluzioni strumentali per la Caratterizzazione di sistemi Micro e Nanometrici: Dimensione - Morfologia – Reologia"*

Dipartimento di Chimica e Tecnologie del Farmaco, in collaboration with Alfatest and Malvern Instruments, Aula D - Plesso 'Giorgio Tecce', University of Rome 'La Sapienza', 24th June 2010, Rome-Italy.

September 2007- June 2009

English Courses *"General English"* and *"Business English"* at 'Wall Street Institute'

Completed Levels: *MASTERY Level* (C2 secondo il Quadro Comune di Riferimento Europeo) for

"General English" Course

MASTERY Level (C2 secondo il Quadro Comune di Riferimento Europeo) for

"Business English" Course

April 2009

"Workshop on Nanoindentation Technologies"

University of Rome 'Rome3', 24th April 2009, Rome-Italy.

September 2008

14th National School of Materials Science

"Tecnologie Convergenti per i Materiali: Problematiche nella Scienza, Energia e Ambiente"

Brixen, Sede Estiva Università di Padova, 22nd-30th September 2008, Brixen (BZ)-Italy.

July 2008

15th CIRMIB BIOMATERIALS SCHOOL and EXPERTISSUES SCHOOL & WORKSHOP
"Strategies and Materials for regenerative medicine: Focus on Bone and Cartilage"
Hotel Continental Terme, 07th-11th July 2008, Ischia Porto (NA)-Italy.

September 2007

"Sviluppi e prospettive delle attività di ricerca nel network europeo KMM"
Accademia Nazionale dei Lincei, 28th September 2007, Rome-Italy.

July 2007

Abilitation to the engineer profession (chartered engineer) (2nd session 2007)

June 2007

Master of Science Award 'Fondazione Raeli' 2007

May 2007

- "Mechanical and tribological properties characterisation of thin films and thick coatings"
University of Rome 'Roma Tre', Rome-Italy.
- "Presentation of novel Malvern Instruments systems for powders granulometric, shape, chemical mapping analyses"
17th May 2007, Rome-Italy.

February 2007

Training course on "Protection rules against ionizing radiations"
Chemical Science and Technology Department, University of Rome 'Tor Vergata', 22nd February 2007, Rome-Italy.

October 2006

Seminar on FT-IR, NIR, Raman and TD-NMR spectroscopies
5th October 2006, Rome-Italy.

Certamen Ciceroniarum Arpinas, 19th Edition

September 2019

Visiting Professor at University of Craiova (Romania)
Department of Dental Materials, Faculty of Dentistry, University of Medicine and Pharmacy, in the group of Prof. Prof. dr. Horia Octavian Manolea, Vice-Dean

July 2019

Lecture and Organizer in the context of the Summer school 2019: "Trauma in Neurosurgery"
15-27 July 2019, Lucian Blaga University of Sibiu (Romania)
(<https://www.facebook.com/brainitErasmus/>; <http://grants.ulbsibiu.ro/brainit/>) -
Lecture Titles:

"Biomaterials, scaffolds and platforms for bone tissue regeneration"

"Biomaterials, technologies and devices for cranioplasty"

December 2018

Visiting Professor at University of Alicante
Departamento de Química Analítica, Nutrición y Bromatología, in the group of Prof. M. Carmen Garrigos Selva and Prof. Alfonso Jimenez

November 2018

Visiting Professor at University of Las Palmas de Gran Canaria-
Mechanical Engineering Department, in the group of Prof. Mario Domingo Monzón Verona

August 2010-November 2010

Visiting Researcher at Center for Material and Fibre Innovation
Institute for Technology Research and Innovation (ITRI)
Geelong Technology Precinct, Geelong Campus at Waurn Ponds, Deakin University, Geelong, Victoria, Australia

Subject of the research project: "Production and characterization of titania and titanate nanofibers and

Research experiences

nanotubes by the combination of electrospinning technique and sol-gel process”.

January 2009-April 2009

Stage INSTM-Piezotech

Visiting Researcher at **Kyoto Institute of Technology (KIT)**-Piezotech, Kyoto, Japan

Subject of the research project: “*Spectroscopic characterization of (i) rare earth-doped ceramic and polymeric fibrous mats obtained by electrospinning and (ii) bioglasses and glass-ceramics prepared by sol-gel*”.

Awards

National Scientific Qualifications

13/01/2020: National Scientific Qualification as Full Professor (SSD CHIM/07) (judgment: excellent)

20/12/2019: National Scientific Qualification as Full Professor (SSD CHIM/03) (judgment: excellent)

16/09/2019: National Scientific Qualification as Full Professor (SSD ING-IND/22) (judgment: excellent)

30/01/2014: National Scientific Qualification as Associate Professor (SSD ING-IND/22) (judgment: excellent)

2019

BIOREMED Excellence Award

2019 International Seminar on Biomaterials and Regenerative Medicine (BIOREMED 2019), 26th-28th September 2019, Craiova, Romania.

Best Poster Award for the contribution “Ilaria Benucci, Caterina Mazzocchi, Claudio Lombardelli, Ilaria Cacciotti, Marco Esti, Prevention of haze formation in pomegranate juice by continuous multi-enzymatic treatment”

18th International Conference “Life Sciences for Sustainable Development”, 26th-28th September 2019, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Romania.

Top Peer Reviewer 2019, powered by Publons

for placing in the top 1% of reviewers in Materials Science on Publons global reviewer database.

Top Peer Reviewer 2019, powered by Publons

for placing in the top 1% of reviewers in Cross Field on Publons global reviewer database.

2018

SRB Excellence Award

for relevant contribution into the field of biomaterials, tissue engineering and medical devices

8th International Conference on Biomaterials, Medical Devices and Tissue Engineering (BIOMMED 2018), 27th-29th September 2018, Cluj-Napoca, Romania.

Featured Article and Cover Page

Manuela Scarselli, Francesca Limosani, Maurizio Passacantando, Franco D’Orazio, Michele Nardone, Ilaria Cacciotti, Fabiana Arduini, Eric Gautron, Maurizio De Crescenzi, “**Influence of Iron catalyst in the Carbon Spheres Synthesis for Energy and Electrochemical Applications**”, *Advanced Materials Interfaces* 5[16] (2018), 1800070.

Ilaria Cacciotti, Laura Chronopoulou, Cleofe Palocci, Adriana Amalfitano, Monica Cantiani, Massimo Cordaro, Carlo Lajolo, Cinzia Callà, Alma Boninsegna, Donatella Lucchetti, Patrizia Gallenzi, Alessandro Sgambato, Giuseppina Nocca, Alessandro Arcovito, **Drug Delivery System Affects 18-β-Glycyrrhetic Acid Cytotoxicity On Oral Carcinoma Cell Line**, *Nanotechnology* 29[28] (2018) 285101 (11pp).

26th September 2016

Good Energy Award 2016-VII Edition

(in occasion of 16^o Italian Energy Summit, 26th-27th September 2016, Sole24Ore Building, Milan, Italy)

Awards NO PROFIT Sector to UNESCO Youth Committee-Lazio for the project “*UNESCO in the school for the sustainability*”

July 2015

- Certificate of Excellence in Reviewing (in recognition of an outstanding contribution to the quality of the journal) (*Materials and Design* 2015)

17th February 2014

Young Researcher Award Elsevier" Materials Science and Engineering C" 2014
(in occasion of the TMS 2014 143rd ANNUAL MEETING & EXHIBITION, 16th-20th February 2014, San Diego Convention Center, San Diego, California)
17th February 2014, *Mission Beach ABC Room, Manchester Grand Hyatt, San Diego, California, USA*

2013

- Top Cited Author for 2011 and 2012 for the paper Cacciotti I., Bianco A., Pezzotti G., Gusmano G., **Synthesis, thermal behaviour and luminescence properties of rare earth doped titania nanofibers**, *Chemical Engineering Journal*, 2011, Volume 166, pp. 751-764

- Certificate of Excellence in Reviewing (in recognition of an outstanding contribution to the quality of the journal) (*Materials Chemistry and Physics* 2013)

18th September 2012

Ph.D. thesis award 'AIMAT 2012'
(in occasion of the 11th Congress AIMAT (Associazione Italiana Ingegneria dei Materiali) 2012
16th-19th September 2012, *GAETA (LT) - Hotel Summit*)

8th May 2012

30 Beautiful stories Under 35 in Lazio: A talent is forever
YOUNG INTERNATIONAL FORUM
"La Pelanda" Testaccio-Rome, Italy

2011

Featured Article and Cover Page
Cacciotti I., Bianco A., Pezzotti G., Gusmano G., **Synthesis, thermal behaviour and luminescence properties of rare earth doped titania nanofibers**, *Chemical Engineering Journal*, 2011, Volume 166, pp. 751-764

12th November 2011

*X International Award "Giuseppe Sciacca"-
Young Students: Sector Economy-Research and Development*
Aula Magna della Pontificia Università Urbaniana – Città del Vaticano, Rome-Italy

21st September 2011

Ph.D. Thesis Award 'Marco Ramoni'
(in occasion of the *XXX Bioengineering School*, 19th-23rd September 2011, Sede Estiva dell'Università di Padova, Brixen (BZ)-Italy)
Motivation: "*to have developed innovative, reliable and reproducible methodologies for the synthesis of calcium phosphate nanopowders and bioglasses and for the fabrication of electrospun bioresorbable nanocomposites for biomedical applications in the field of the tissue engineering and regenerative medicine.*"

6th September 2011

European Biomaterials and Tissue Engineering Doctoral Award (EDA), ESB (European Society of Biomaterials) Award
(in occasion of the *24th European Conference on Biomaterials (ESB)*, 4th-8th September 2011, *Convention Centre Dublin (CCD)*, Dublin-Ireland)
Motivation: "*The Award is a proof of quality and an added value for the CV of the young scientist, stating that the person has a clear European/international dimension in his/her PHD work, that provides an extra benefit in his/her professional career in industry or academia.*"

30th May 2011

Award "L'ORÉAL-UNESCO Italy for Women and Science 2011-IX Edition"
Project: "*Bioresorbable nanospheres and microspheres loaded with human neurons as dopamine*

release systems: development of a potential innovative therapy for the Parkinson disease treatment
University of Milan, Milan-Italy'

19th May 2011

8th CCT Award "Best Oral Presentation for Young Researchers"

Title: "*Sol-gel derived RKKP glass-ceramics: microstructure, sintering behaviour and biological evaluation*"

13th Annual Seminar & Meeting, *Ceramics, cells and tissues, International Congress on Bioceramics, Surface-reactive biomaterials as scaffolds and coatings: interactions with cells and tissues*

17th-20th May 2011, Faenza (RA)-Italy

Motivation: *'for the high quality and originality of the scientific content, logical pathway exhibited by the research work, the technological and individual potential, likelihood of the technology transfer, and standard of the oral and visual presentation'*

21st June 2007

Master of Science Award 'Fondazione Raeli' 2007

Foreign languages

English: Good knowledge of written and spoken english language

English courses "*General English*" and "*Business English*" at 'Wall Street Institute'

Completed Levels: *MASTERY Level* (C2 secondo il Quadro Comune di Riferimento Europeo) for

"General English" Course

MASTERY Level (C2 secondo il Quadro Comune di Riferimento Europeo) for

"Business English" Course

Informatic skills

- Optimal Knowledge of MICROSOFT OFFICE package
- Good Knowledge of software AUTOCAD
- Good Knowledge of languages MATLAB/ FORTRAN/ C++

Research interests and activities

- **Biomedical applications in the tissue engineering sector and for drug-delivery**

Bioceramics

- ✓ Synthesis and characterization of bioglass and bioactive glass ceramics of conventional and innovative compositions by sol-gel process
- ✓ Synthesis and characterization of pure and substituted calcium phosphates nanostructured powders via wet precipitation
- ✓ Ceramic foams based on hydroxyapatite and wollastonite composites starting from ceramic fillers and preceramic polymers

Biopolymers

- ✓ Processing of synthetic and biologically-derived bioresorbable polymers by electrospinning technique
- ✓ Processing of micro- and nano-spheres and capsules based on hydrogels for cellular encapsulation and drug-delivery
- ✓ Processing of luminescent polymers doped with RE salts and organometallic compounds
- ✓ Processing of polymeric blends from co-solutions by electrospinning
- ✓ Processing of nanocomposites based on bioresorbable polymers (e.g. PCL, PLLA,

PHBV...) and bioceramics (e.g. HAp, CaP, BG) by electrospinning

- **Energetic and catalitic applications**

Ceramic nanofibers and nanotubes

- ✓ Fabrication of pure and doped ceramic nanofibers (*i.e.* TiO_2 , ZnO , Al_2O_3 , $BaTiO_3$) by traditional electrospinning set-up
- ✓ Fabrication of ceramic nanotubes by coaxial electrospinning (core-shell set-up)
- ✓ Synthesis and characterisation of ceramic short fibers by liquid-liquid dispersion emulsion methodology
- ✓ Synthesis and characterisation of composites at high dielectric constant

Ceramic coatings by sol-gel process

- ✓ Fabrication and characterisation of TCO (transparent conductive oxide) coatings by dipping
- ✓ Fabrication and characterisation of transparent hydrophobic coatings on ceramic and glass substrates by sol-gel spraying
- ✓ Characterisation of arc-PVD derived coatings for corrosion protection of several kinds of austenitic and martensitic steels

- **Dielectric polymers, ceramics and composites**

- ✓ Synthesis and characterisation of dielectric powders by sol-gel process
- ✓ Fabrication and characterisation of dielectric polymeric and hybrid films by solvent casting and spin coating

- **Applications in the food packaging sector**

- ✓ Production and characterisation of polymeric and composite films and fibers based on biodegradable and/or compostable polymers (e.g. polylactide, chitosan, polyhydroxyalkanoates, polycaprolactone...) and porous and/or dense nanoparticles (e.g. nanoclay, silica, diatomite..), possibly functionalised with antioxidant and antimicrobial agents via chemi/physi-sorption.
- ✓ Design and production of multilayer and sandwich structures, composed of alternate films and fibrous mats

- **Application in the sensing sector**

- ✓ Production and characterisation of films and fibers for the immobilization and stabilization of enzymes for the selective sensing of specific analytes, such as pesticides, nerve gases, bacteria and viruses.
- ✓ Production and characterisation of modifiers able to make the work electrode of electrochemical sensors selectively sensible to specific analytes.

Patents

Applications of the following patents for registration:

1) N°: 0001420293 (domanda N RM2013A000572)

Patent date: 05/01/2016

Deposition date: 18/10/2013

Publication date: 19/04/2015

Title: "Microsfere di idrogeli di polimeri polisaccaridici contenenti cellule neurali secernenti dopamina,

procedimento per la loro preparazione e loro usi in campo medico."

Inventors: Giuseppa Pistritto, Alessandra Bianco, Ilaria Cacciotti, Claudia Ceci

Assignee: INSTM (100%)

2) N°: RM2013A000224
Data di deposito: 15/04/2013
Titolo: "Materiale per capsule, capsula precaricata per la produzione di bevande a infusione e un relativo metodo di fabbricazione "
Inventori: Francesca Nanni, Ilaria Cacciotti, Gianni Linari, Roberto Nigro, Federica Trovalusci, Vincenzo Tagliaferri

3) N°: RM2014A000636
Filing date: 04/11/2014
Publication date: 05/05/2016
Title: "Mescole in gomma per porzioni di pneumatico - rubber compounds for tyre portions"
Inventors: Ludovica Caliano, John House, Francesca Nanni, Ilaria Cacciotti, Francesca Romana Lamastra
Assignee: Bridgestone Corporation

4) N°: 102017000074199
Filing date: 03/07/2017
Title: "Procedimento per la produzione di nicotina a partire da rifiuti urbani e relativo sistema di attuazione"
Inventors: Ilaria Cacciotti, Stefano Guarino
Assignee: University of Rome Niccolò Cusano

5) Pub. No.: WO2019008477
International Application No.: PCT/IB2018/054791
International Filing Date: 28/06/2018
Publication Date: 10/09/2019
Title: "PROCESS FOR PRODUCING NICOTINE FROM URBAN WASTE AND RELEVANT IMPLEMENTATION SYSTEM"
Inventors: Ilaria Cacciotti, Stefano Guarino
Assignee: University of Rome Niccolò Cusano

Technical skills and competences

Several year experience in laboratory activities:

- Wet chemistry
- Synthesis of inorganic materials by precipitation and titolation
- Synthesis by sol gel process
- Chemical functionalization of particles and fibers
- Films by sol-gel processes (dip coating and spin coating)
- Production of fibers and tubes by electrospinning technique
- Preparation of short fibers by emulsion
- Production of capsules and spheres by extrusion, cross-linking and emulsion routes.

Excellent experience and practical knowledge of the following characterisation techniques:

- ✓ Optical Microscopy
- ✓ Fluorescence Microscopy
- ✓ Scanning Electron Microscopy (FE-SEM) equipped with EDS
- ✓ X-ray diffraction analysis (XRD and HT-XRD) for powder, thin films and bulk samples
- ✓ Infrared spectroscopy (FT-IR, ATR)
- ✓ UV-Vis spectroscopy
- ✓ Raman spectroscopy
- ✓ High performance liquid chromatography (HPLC)
- ✓ Optical properties measurements (photoluminescence and cathodoluminescence)
- ✓ Rheometer
- ✓ Thermal analysis (TG-DTA, DSC)
- ✓ Mechanical characterization (universal tensile test machine, Vickers and Knoop microhardness)
- ✓ Dynamico-mechanical thermoanalysis (DMTA)
- ✓ Porosimetry and specific surface area measurements (Hg-porosimetry and N₂ absorption)

- ✓ Electrospinning set-up (conventional and coaxial)
- ✓ Tests *in vitro* in simulated body fluids (SBF) in CO₂ incubator
- ✓ Dynamic viscosimetry and conductimetry

**Institutional
Teaching
Experiences**

& A.Y. 2019-2020

Associate Professor of the Materials Science and Technology (9CFU) and of Biomaterials & Tissue Engineering (9CFU) Courses at the bachelor degree in Industrial Engineering (Curricula Biomedical, Management, Electronic, Agroindustrial and Mechanical) and in Civile Engineering, at the University of Rome "Niccolò Cusano".

Seminar (invited):

17-18/10/2018: "*Biomateriali e sistemi biomimetici e multifunzionali per la medicina rigenerativa e l'ingegneria dei tessuti*", in the context of the VI Course Biomateriali (BIOMAT2019): "*Biomateriali, metodiche di rigenerazione tissutale e strumentazione per la realizzazione di dispositivi utilizzati in odontoiatria, chirurgia maxillo-facciale e ortopedia*", Rome 17th-18th October 2019, organised by ISTITUTO SUPERIORE DI SANITÀ "Dipartimento di Tecnologie e Salute", in collaboration with Serialem Management & Consulting in Sanità e ENCON Engineering & Consulting.

A.Y. 2018-2019

Associate Professor of the Materials Science and Technology (9CFU) and of Biomaterials & Tissue Engineering (9CFU) Courses at the bachelor degree in Industrial Engineering (Curricula Biomedical, Management, Electronic, Agroindustrial and Mechanical) and in Civile Engineering, at the University of Rome "Niccolò Cusano".

Seminar (invited):

11-12/10/2018: "*Membrane elettrofilate per applicazioni in medicina rigenerativa e nell'ingegneria dei tessuti*", in the context of the V Course Biomateriali (BIOMAT2018): "*Biomateriali e metodiche di rigenerazione tissutale in odontoiatria, chirurgia maxillo-facciale e ortopedia*", Rome 11th-12th October 2018, organised by ISTITUTO SUPERIORE DI SANITÀ "Dipartimento di Tecnologie e Salute", in collaboration with Serialem Management & Consulting in Sanità e ENCON Engineering & Consulting.

A.Y. 2017-2018

Associate Professor of the Materials Science and Technology (9CFU) and of Biomaterials & Tissue Engineering (9CFU) Courses at the bachelor degree in Industrial Engineering (Curricula Biomedical, Management, Electronic, Agroindustrial and Mechanical) and in Civile Engineering, at the University of Rome "Niccolò Cusano".

Seminar (invited):

26-27/10/2017: "*Cementi innovativi per applicazioni in odontoiatria, chirurgia maxillo-facciale e ortopedia*", in the context of the IV Course Biomateriali (BIOMAT2017): "*Tecnologie innovative in odontoiatria, chirurgia maxillo-facciale e ortopedia*", Rome 26th-27th October 2017, organised by ISTITUTO SUPERIORE DI SANITÀ "Dipartimento di Tecnologie e Salute", in collaboration with Serialem Management & Consulting in Sanità e ENCON Engineering & Consulting.

A.Y. 2016-2017

Associate Professor of the Materials Science and Technology (9CFU) and of Biomaterials & Tissue Engineering (9CFU) Courses at the bachelor degree in Industrial Engineering (Curricula Biomedical, Management, Electronic, Agroindustrial and Mechanical) and in Civile Engineering, at the University of Rome "Niccolò Cusano".

Seminar (invited):

20-21/10/2016: "*Drug delivery e incapsulamento cellulare: materiali, dispositivi, meccanismi di rilascio e interazione con le cellule.*", in the context of the III Course "*BIOMATERIALI: Applicazioni di rigenerazione tissutale in odontostomatologia e ortopedia*", Rome 20th-21st October 2016, organised by ISTITUTO SUPERIORE DI SANITÀ "Dipartimento di Tecnologie e Salute", in collaboration with Serialem Management & Consulting in Sanità e ENCON Engineering & Consulting.

A.Y. 2015-2016

Associate Professor of the Materials Science and Technology (9CFU) and of Biomaterials & Tissue Engineering (9CFU) Courses at the bachelor degree in Industrial Engineering (Curricula Biomedical, Management, Electronic, Agroindustrial and Mechanical) and in Civile Engineering, at the University of Rome "Niccolò Cusano".

Seminar (invited):

10/11/2015: "*Tissue engineering and regenerative medicine in dentistry and maxillofacial surgery: materials, technologies and interaction with cells*" In the context of the Course "*Biomaterials evolution in dentistry and maxillofacial surgery*", Rome 09th-10th November 2015, organised by ISTITUTO SUPERIORE DI SANITÀ "Dipartimento di Tecnologie e Salute", in collaboration with Serialem Management & Consulting in Sanità e ENCON Engineering & Consulting

A.Y. 2014-2015

Associate Professor of the Materials Science and Technology (9CFU) and of General Chemistry (9CFU) Courses at the bachelor degree in Industrial Engineering and in Civile Engineering, at the University of Rome "Niccolò Cusano".

A.Y. 2013-2014

Lecturer of the General Chemistry Course (9CFU) at the bachelor degree in Industrial Engineering and in Civile Engineering, at the University of Rome "Niccolò Cusano".

Seminar (invited):

03/10/2013: "*Bioceramics: properties, synthesis methodologies, applications and clinical cases*" In the context of the Course "*Biomaterials: applications in medical devices and regeneration methods- Present and Future*", Rome 03rd-04th October 2013, organised by ISTITUTO SUPERIORE DI SANITÀ "Dipartimento di Tecnologie e Salute", in collaboration with Serialem Management & Consulting in Sanità e ENCON Engineering & Consulting

A.Y 2012-2013

Lecturer of the General Chemistry Course (9CFU) at the bachelor degree in Mechanical Engineering and in Civile Engineering, at the University UniCusano of Rome.

A.Y 2012-2013

Exercitations, seminars and lessons for the following courses at University of Rome 'Tor Vergata':

Construction and Architectural Engineering (course: Technology of Materials and Applied Chemistry)

Medical Engineering (course: Science and Technology of Biomaterials)

Mechanical Engineering (course: Science and Technology of Materials)

Materials Science and Technology (course: Materials for biomedical devices)

Materials Science and Technology (course: Composites and Ceramics)

Orthopedic Techniques (course: Science and Technology of Materials)

Cardiovascular perfusion and cardiocirculatory physiopatology techniques (course: Science and Technology of Materials)

A.Y 2011-2012

Exercitations, seminars and lessons for the following courses at University of Rome 'Tor

Vergata’:

Construction and Architectural Engineering (course: Technology of Materials and Applied Chemistry)

Medical Engineering (course: Science and Technology of Biomaterials)

Mechanical Engineering (course: Science and Technology of Materials)

Materials Science and Technology (course: Materials for biomedical devices)

Materials Science and Technology (course: Composites and Ceramics)

Orthopedic Techniques (course: Science and Technology of Materials)

Cardiovascular perfusion and cardiocirculatory physiopatology techniques (course: Science and Technology of Materials)

A.Y 2010-2011

Exercitations, seminars and lessons for the following courses at University of Rome ‘Tor Vergata’:

Medical Engineering (course: Science and Technology of Biomaterials)

Materials Science and Technology (course: Materials for biomedical devices)

Cardiovascular perfusion and cardiocirculatory physiopatology techniques (course: Science and Technology of Materials)

A.Y 2009-2010

Exercitations, seminars and lessons for the following courses at University of Rome ‘Tor Vergata’:

Medical Engineering (course: Science and Technology of Biomaterials)

Materials Science and Technology (course: Materials for biomedical devices)

Cardiovascular perfusion and cardiocirculatory physiopatology techniques (course: Science and Technology of Materials)

A.Y 2008-2009

Exercitations, seminars and lessons for the following courses at University of Rome ‘Tor Vergata’:

Medical Engineering (course: Science and Technology of Biomaterials)

A.Y 2007-2008

Exercitations, seminars and lessons for the following courses at University of Rome ‘Tor Vergata’:

Medical Engineering (course: Science and Technology of Biomaterials)

A.Y 2006-2007

Exercitations, seminars and lessons for the following courses at University of Rome ‘Tor Vergata’:

Medical Engineering (course: Science and Technology of Biomaterials)

- Member of the examination committee

- Member of the graduate degree committee

- Member of Ph.D. Examination Procedure at University of Erlangen-Nuremberg Cauerstr. Erlangen, Germany (Doctoral Examination Procedure of Wei Li, 29/07/2015)

- Member of Committee for RTD-A Competition (SSD ING-IND/16) (05/06/2015)

- Member of Committee for Fellowship Competition (SSD ING-IND/13) (23/02/2018)

Supervisor of Ph.D Students (Ph.D Course in Industrial Engineering)

November 2015-now

- PhD Student: Ilaria Campioni

Cycle: XXXI

University: University of Rome Niccolò Cusano

Department: Engineering

Group: Materials Science & Engineering, Biomaterials Group

Project: *"Design, simulation, production and characterisation of biomedical devices and scaffolds by 3D printing technique for dental and maxillofacial applications"*

November 2016-now

- PhD Student: Federica Nigro

Cycle: XXXII

University: University of Rome Niccolò Cusano

Department: Engineering

Group: Materials Science & Engineering, Biomaterials Group

Project: *"Sviluppo di alimenti funzionali di tipo postbiotico per l'alimentazione di categorie di persone ad elevata vulnerabilità patologica"*

November 2019-now

- PhD Student: Luca Lazzarini

Cycle: XXXV

University: University of Rome Niccolò Cusano

Department: Engineering

Group: Materials Science & Engineering, Biomaterials Group

Project: *"Development of innovative, multifunctional and eco-sustainable composite systems"*

Supervisor of Erasmus + Students

June 2015-August 2015

- Erasmus + Student: Cristina Elena Poenaru

University: University POLITEHNICA of Bucharest

Faculty: Engineering

Department: Materials Science & Engineering, Biomaterials Group

Project: *"Mechanical characterisation of innovative dental implants"*

- Erasmus + Student: Claudia Georgiana Milea

University: University POLITEHNICA of Bucharest

Faculty: Engineering

Department: Materials Science & Engineering, Biomaterials Group

Project: *"Re-use of sea shell particles for the production of biopolymeric matrix composites and for the hydroxyapatite synthesis"*

Supervisor of Erasmus + Students

June 2017-September 2017

- Erasmus + Student: Daniela Gheorghita

University: University POLITEHNICA of Bucharest

Faculty: Engineering

Department: Materials Science & Engineering, Biomaterials Group

Project: *"Fabrication and characterisation of composite fibers"*

- Erasmus + Student: Ghițică Alexandra

University: University POLITEHNICA of Bucharest

Faculty: Engineering

Department: Materials Science & Engineering, Biomaterials Group

Project: *"Preparation and characterisation of composite films"*

Supervisor of Erasmus + Students

June 2018-September 2018

- Erasmus + Student: Andrei Nuta

University: University POLITEHNICA of Bucharest

Faculty: Engineering

Department: Materials Science & Engineering, Biomaterials Group

Project: " *Preparation and characterisation of fibrous mats*"

Supervisor of Erasmus + Students

May 2019-July 2019

- Erasmus + Student: Ancuta Barbu

University: University POLITEHNICA of Bucharest

Faculty: Engineering

Department: Materials Science & Engineering, Biomaterials Group

Project: " Substituted hydroxyapatites for composites used as bone substitutes."

- Erasmus + Student: Isabela Adriana Ciuntuc

University: University POLITEHNICA of Bucharest

Faculty: Engineering

Department: Materials Science & Engineering, Biomaterials Group

Project: " Substituted hydroxyapatite for coatings on magnesium"

Supervisor of Visiting Researchers

PhD.: Marina Ramos

University: University of Alicante

Faculty: Science

Department: Analytical Chemistry, Nutrition and Food Science, Food Science & Engineering

Group: Nanomaterials and Polymer Analysis

Project: "*Preparation and characterisation of natural fibers based on the use of orange waste*"

Period: November 2017-December 2017

Supervisor of Visiting PhD. Students

PhD. Student: Ignacio Solaberrieta

University: University of Alicante

Faculty: Science

Department: Analytical Chemistry, Nutrition and Food Sciences

Research Group: NANOBIOPOL – Research group on Polymers and Nanomaterial Analysis

Project: "New encapsulation strategies for the protection of active principles extracted from aloe vera agro wastes "

Period: September 2018-December 2018

PhD. Student: Farhad Garavand

University: University of Tehran

Faculty: Agricultural Engineering and Technology

Department: Food Science & Engineering

Project: "*Preparation and characterisation of compostable films based on poly(lactic acid) and fruit waste extracts for applications in the food packaging*"

Period: March 2016-September 2016

PhD. Student: S. Amir S. Moslemi

University: University of Tabriz, Tabriz, I.R. Iran

Faculty: College of Agriculture

Department: Food Science & Technology

Project: "*Formulation, production and characterization of multifunctional polymeric and composite systems*"

Period: June 2018-March 2019

Supervisor of Visiting Students

Student: Nooshin Vahedikia

University: University of Tehran

Faculty: Agricultural Engineering and Technology

Department: Food Science & Engineering

Project: "*Preparation and characterisation of alginate and fruit waste extract based composites*"

for applications in the food sector"
Period: March 2016-September 2016

Supervisor for degree thesis

Supervisor of around 70 theses.

**Affiliations
Scientific
Associations**

to

- Italian Interuniversity Consortium on Materials Science and Technology (INSTM)
- Italian Society of Materials Engineering (AIMAT)
- Biomaterials Italian Society (SIB)
- European Society for Biomaterials (ESB)
- Center for Regenerative Medicine (CIMER)
- International Association of Advanced Materials
- Metallurgy Italian Society (AIM-Associazione Italiana Metallurgia)
- American NanoSociety
- Athens Institute for Education and Research (ATINER)
- Società Ticinese delle Scienze Biomediche e Chimiche (STSBC)
- IDBN Italian Digital Biomanufacturing Network
- Mediterranean Institute of Fundamental Physics (MIFP)

Editorial activities

Editor for books:
"Advanced Biodegradable Polymers and Composites for Food Packaging", Special Issue volume published in *Polymers*, MDPI, 2019
(https://www.mdpi.com/journal/polymers/special_issues/biodegradable_polymers_composites_for_food_packaging)

- *"Patient-tailored biomimetic scaffold constructs for bone regeneration"*, Special Issue volume published in *Applied Science-MDPI*, 2020
(https://www.mdpi.com/journal/applsci/special_issues/Patient_tailored)

'Bone and biomaterials for bone tissue engineering', Special Issue volume published in *Key Engineering Materials, Trans Tech Publication (TTP) Inc.*, 2013

'Nanomaterials and Nanotechnologies in Biomedical and Tissue Engineering', Special Issue volume to be published in *Journal of Nanomaterials, Hindawi Publishing Corporation*, 2015, In Press.

Member of Editorial Board:

American Research Journals of Materials Science, Inc.

Annals of Food Processing and Preservation

Applied Science-MDPI

Applied Surface Science Advances-Elsevier

Archives in Biomedical Engineering & Biotechnology (ABEB)

Biointerface Research in Applied Chemistry

Biomaterials and tissue engineering bulletin (ISSN 2393 - 0586)

Biomedical glasses-DE GRUYTER OPEN

Chemical Review and Letters

Chemical Science Communications

Frontiers in Biomaterials

Elyns Journal of Material Science and Techniques

Journal of Polymer Science and Engineering

General Chemistry

International Journal of Emerging Science and Engineering

International Journal of Engineering and Advanced Technology(TM) (IJEAT)

International Journal of Innovative Science and Modern Engineering
International Journal of Innovative Technology and Exploring Engineering
International Journal of Management and Humanities
International Journal of Nanomaterials, Nanotechnology and Nanomedicine
Modern Approaches on Material Science (MAMS)-Associate Editor
Nanomedicine and Nanotechnology Journal
Open Journal of Materials Science (Bentham Science)
Portico Journal of Chemistry - PJC
Recent Patents on Materials Science (Bentham Science)
Reviews on Advanced Materials Science
Scientific Journal International (SJI): Chemical & Bioengineering
The Open Materials Science Journal-Bentham Open
Trends in Technical & Scientific Research (TTSR)
World Journal of Textile Engineering and Technology

Member of Technical Program Committee for the *2nd International Conference on Biomedical Engineering and Biotechnology (ICBEB 2013)*, Wuhan, China, 11th-13th October 2013

Member of Committee for the "I Giovani e la Scienza- Fast Award 2015"
11th-13th April 2015, Milan-Italy

Member of Technical Program Committee for the *7th Annual International Conference on Material Science and Engineering (ICMSE2019)*, April 19-20, 2019 / Wuhan, Hubei, China

Member of Technical Program Committee for the *4th International Conference on Biomedical Engineering and Biotechnology (ICBEB 2015)*, Shanghai, China, 18th-20th August 2015

Member of Technical Program Committee for the *3rd International Conference on Biomedical Engineering and Biotechnology (ICBEB 2014)*, Beijing, China, 25th-28th September 2014

Member of Technical Program Committee for the *2nd International Conference on Biomedical Engineering and Biotechnology (ICBEB 2013)*, Wuhan, China, 11th-13th October 2013

Invited Reviewer for National Science Foundation (NSF)

Invited Reviewer for *2014 Global Conference on Polymer and Composite Materials (PCM 2014)*, Ningbo, China, 27th-29th May 2014

Invited Reviewer for *2015 Global Conference on Polymer and Composite Materials (PCM 2015)*, Beijing, China, 16th-18th May 2015

Reviewer for International journals

Acta Biomaterialia
Advanced Engineering Materials
Advanced Science
Advances in Colloid and Interface Science
Advanced Powder Technology
AIMS Agriculture and Food
Annals of Environmental Science and Toxicology
Applied Clay Science
Applied Physics A: Materials Science & Processing
Applied Surface Science
Arabian Journal of Chemistry
Bioelectrochemistry
Bioengineering-MDPI
Biofabrication
Bioceramics Development and Applications (Medical Science)
Biointerphases
Biomacromolecules
Biomaterials Science-RSC Publishing
Biomedical Glasses

Biomedical Materials
Biomed Research International
Biomimetics-MDPI
Carbon
Cellulose
Ceramics International
Chemical Engineering & Technology
Chemical Engineering Journal
Colloids and Surfaces A: Physicochemical and Engineering Aspects
Colloids and Surfaces B: Biointerfaces
Current Opinion in Biomedical Engineering
Desalination and Water Treatment Science and Engineering Displays
European Polymer Journal
Fibers and Polymers
Food Chemistry
Food Hydrocolloids
Frontiers Bioengineering
Hazardous Materials
Fibers and Polymers
International Journal of Applied Ceramic Technology
International Journal of Applied Glass Science
International Journal of Biological Macromolecules
International Journal of Industrial Chemistry
International Journal of Molecular Science-MDPI
International Journal of Physical Sciences
International Journal of Polymeric Materials and Polymeric Biomaterials
Iranian Journal of Chemistry and Chemical Engineering (IJCCE)
Journal of Alloys and Compounds
Journal of Applied Biomaterials & Functional Materials
Journal of Applied Crystallography
Journal of Biomaterials Applications
Journal of Biomedical Materials Research Part A
Journal of Biomedical Materials Research Part B
Journal of Functional Biomaterials
Journal of Industrial and Engineering Chemistry
Journal of Inorganic and Organometallic Polymers and Material
Journal of Inorganic Materials
Journal of Luminescence
Journal of Materials Chemistry B
Journal of Materials Science
Journal of Materials Science and Engineering B
Journal of Materials Science and Engineering C
Journal of Micromechanics and Microengineering
Journal of Microencapsulation
Journal of Nanomaterials
Journal of Nanoscience and Nanotechnology
Journal of non-crystalline solids
Journal of Physics D: Applied Physics
Journal of Polymer Engineering-DE GRUYTER
Journal of Porous Materials
Journal of the American Ceramic Society
Journal of The Minerals, Metals & Materials Society (JOM) (TMS)
Journal of Thermal Analysis and Calorimetry
Journal of the Royal Society Interface
Journal of Tissue Engineering and Regenerative Medicine
Journal of Zhejiang University-SCIENCE A
Marine Drugs-MDPI
MATEC Web of Conferences
Materials-MDPI
Materials & Design
Materials Characterization

Materials Chemistry and Physics
Materials Express
Materials Horizon
Materials Letters
Materials Research
Materials Research Express
Materials Science and Engineering B
Materials Science and Engineering C
Medical Engineering & Physics
Mediterranean Journal of Chemistry
Microencapsulation
Molecules
Nanomaterials-MDPI
Nanoscience and Nanotechnology Letters
Nanotechnology
New Journal of Chemistry
Optical Materials
Optics and Laser Technology
Physical Chemistry Chemical Physics
Polymer Bulletin
Polymer Engineering & Science
Polymer International
Polymers-MDPI
Polymers for Advanced Technology
Powder Technology
Precision Engineering
Process Biochemistry
Research on Chemical Intermediates
Sensors-MDPI
Sensors & Actuators: B. Chemical
Smart Materials and Structures
SOJ Materials Science and Engineering
Spectroscopy Letters
Sustainability-MDPI
Thin Solid Films

Chairman/President of International Conferences of

- 2021 “2nd CET (Cells and extracellular templates for damaged and lost tissues)”, 23-25 June 2021, Rome-Italy
- 2020 International Conference on Materials and Nanomaterials (MNs-20), 27-29 July, Rome-Italy

Conference Chair

- 2019 2019 Session Chair of 2019 International Conference on Materials and Nanomaterials (MNs-19), 17-19 July, Paris. Session Materials for Industry
- 2019 CELLS AND EXTRACELLULAR TEMPLATES, 20-22 June 2019, Milan-Italy. Session 1: bone scaffolding and drugs
- 2018 Advances in Bioceramics - 7th International Congress on Ceramics, 17-21 June 2018, Brazil.
- 2017 International Conference Tissue regeneration: advanced ceramics and composites, Genova-Italy.
- 2017 International Seminar on Biomaterials and Regenerative Medicine (BIOREMEDI2017)-Today's research for tomorrow, Timișoara-România.
- 2017 XIV Convegno Nazionale AIMAT 2017, Ischia Porto-Italy.
- 2016 EMN Meeting on Biomaterials 2016, Phuket, Thailand.

Invited Talks/Keynote-Plenary Lectures

- 2019 **Plenary Lecture**, “Biomimetic and multifunctional composites as platforms for regenerative medicine: from the material formulation to the supports realization”, *International Seminar on Biomaterials and Regenerative Medicine (BIOREMEDI2019)*, 26-28 September 2019, Craiova-Romania. (“BIOREMEDI Excellence Award”).
- 2019 **Plenary Lecture**, “Nanostructured biomimetic composite systems as platforms for biomedical and food applications”, *2019 International Conference on Materials and Nanomaterials (MNs-19)*, 17-19 July, Paris
- 2018 **Keynote Lecture**, “Innovative biomimetic fibrous membranes for tissue

engineering”, *8th International Conference on Biomaterials, Medical Devices and Tissue Engineering* (BIOMMEDD 2018), 27-29 September 2018, Cluj-Napoca, Romania. (“SRB Excellence Award” for relevant contribution into the field of biomaterials, tissue engineering and medical devices).

- 2018 **Invited Lecture**, “Novel bioactive ceramic and glass-ceramic compositions for bone regeneration”, *7th International Congress on Ceramics-Advances in Bioceramics*, 17-21 June 2018, Brazil
- 2017 **Invited Lecture**, “Innovative bioactive ceramics, glass-ceramics and composites for bone regeneration”, *“Tissue regeneration: advanced ceramics and composites”*, 19-20 October 2017, Genova-Italy
- 2017 **Keynote Lecture**, “Electrospun fibrous mats as promising platforms for regenerative medicine”, *International Seminar on Biomaterials and Regenerative Medicine-Todays research for tomorrow medicine*, 5-8 October 2017, Timisoara, Romania.
- 2016 **Invited Lecture**, “Biopolymers based multifunctional composite systems by electrospinning technique”, *International Conference on Sustainable Bioplastics-Bioplastics: A Genuine Alternative*, 10-11 November 2016, Alicante, Spain.
- 2016 **Invited Lecture**, “Biomimetic systems as promising platforms for bone tissue regeneration: nanostructured bioactive ceramics, glass-ceramics and composites”, *EMN meeting on biomaterials*, 4-7 April 2016, Phuket, Thailand
- 2015 **Invited Lecture**, “Nanostructured bioactive ceramics, glass-ceramics and composites: synthesis, characterisation and applications for bone regeneration”, *6th International Seminar on Biomaterials & Regenerative Medicine*, 17-20 September 2015, Oradea-Romania.
- 2015 **Invited Lecture**, “Innovative materials for biomedical applications”, *5th Molecular Materials Meeting @ Singapore 2015*, 3-5 August 2015, Singapore.

Member of Scientific/Organizing/Technical Committee of Conferences

- *2021 INTERNATIONAL CONFERENCE ON CHEMISTRY, 23-24 April 2021, AMSTERDAM-NETHERLANDS.*
- *2021 International Conference on Material Science and Nanotechnology, 8-9 March 2021, Osaka-Japan.*
- *“8th Global Summit and Expo on Pollution Control” during August 24-25, 2020, Prague-Czech Republic. (Member of Organizing Committee)*
- *“International Conference on Material Science & Nanotechnology”, 08-10 June 2020, Double Tree by Hilton, Beijing, Beijing, China. (Member of Organizing and Scientific Committee)*
- *Material Science Congress, March 23-24, 2020, Rome, Italy (Member of Organizing and Scientific Committee)*
- *The 5th International Conference on Low Carbon Asia & Beyond (ICLCA19), 15-17 October 2019, Ho Chi Minh City, Vietnam (Member of Reviewers Panel)*
- *“International Seminar on Biomaterials and Regenerative Medicine” (BIOREMED2019), 26-28 September 2019, Craiova-Romania (Member of Scientific Committee)*
- *1st Annual International Meeting of Orthopaedic Research (MOR-2019), 26th-28th September 2019, Warsaw (Polonia) (Member of Scientific Committee)*
- *INTERNATIONAL CONFERENCE AND EXHIBITION ON MATERIALS & ENGINEERING 2019: Future Challenges and Advanced Innovations in Materials, 26-28 September 2019, Hilton Garden Inn Houston Westbelt, Houston, USA. (Member of Scientific Committee)*
- *2019 International Conference on Materials and Nanomaterials (MNs-19), 17th-19th July, Paris (Member of Organizing and Scientific Committee)*
- *Rotomolding, Thermoforming and Blow-molding, (RTS 2019), 10 - 12 July 2019 - Paris – France (Member of Scientific Committee)*
- *CELLS AND EXTRACELLULAR TEMPLATES (CET 1), 20th-22nd June 2019, Milan-Italy. (Member of Scientific Committee)*
- *4th International Congress on Biomaterials & Biosensors” (BIOMATSEN2019), May 12-18,*

2019, Oludeniz, Fethiye/Mugla-TURKEY (Member of Scientific Committee)

- 7th Annual International Conference on Material Science and Engineering (ICMSE2019), April 19-20, 2019 / Wuhan, Hubei, China (Member of Scientific Committee)
- 2018 6th Congresso del Gruppo Nazionale di Bioingegneria, Milano-Italy, 25th-27th June 2018, Milano-Italy (Member of Technical Program Committee)
- 1st International Conference on Physical Chemistry and Functional Materials (PCFM 2018), 19-21 June 2018, Firat University in Elazığ, Turkey (Member of Scientific Committee)
- INTERNATIONAL CONFERENCE ON CERAMICS AND COMPOSITE MATERIALS, 14-15 May, 2018, Rome, Italy. (Member of Scientific Committee)
- Agro-Industrial Engineering: from the research to the applications, 9 February 2018, Niccolò Cusano University, Rome-Italy (ORGANIZER)
- International Conference and Exhibition on Materials & Engineering (Materials 2018) Feb 7-9, 2018 San Diego, USA (Member of Scientific Committee)
- 42 International Conference and Expo on Advanced Ceramics and Composites (ICACC 2018)-SYMPOSIUM 5: Next Generation Bioceramics and Biocomposites, 21-26 January 2018, Daytona Beach, USA (CO-ORGANIZER)
- "TISSUE REGENERATION: ADVANCED CERAMICS AND COMPOSITES" (TRACE), October 19-20 2017, Aula Convegna NH Collection Genova Marina Molo, Italy (Member of Scientific Committee)
- Baltic Conference Series 2017, 8th-11th October 2017, Stockholm-Sweden (Member of Scientific Committee)
- International Seminar on Biomaterials and Regenerative Medicine (BioReMed 2017) 5th-8th October 2017, Timisoara, Romania. (Member of Scientific Committee)
- 3rd Int'l Conference on Biomaterials and Applications (ICBA 2017) 20-22 July 2017, Guilin, China. (Member of Scientific Committee)
- 41st International Conference and Expo on Advanced Ceramics and Composites (ICACC 2017) SYMPOSIUM 5: Next Generation Bioceramics and Biocomposites 22nd-27th January 2017, Daytona Beach, United States Of America. (Co-Organizer)
- #UNESCO4SCIENCE-Notte Europea dei Ricercatori 2016 30th September 2016, Great Hall-Engineering Department, University of RomaTre, Rome, Italy. in collaboration with Comitato Giovani Lazio della CNI per l'Unesco (Co-Organizer)
- World Water Day: Acqua, sostenibilità e partecipazione 22 March 2016, in collaboration with Comitato Giovani Lazio della CNI per l'Unesco and Consorzio Tiberina, Niccolò Cusano University, Italy (CO-ORGANIZER)
- 1 National Assembly of Youth Committees for UNESCO 15-16 January 2016, Rome, Italy (Senato and Niccolò Cusano University) (CO-ORGANIZER)
- 4 International Conference on Biomedical Engineering and Biotechnology, Shanghai, China, 2015 (Member of Technical Program Committee)
- 3 International Conference on Biomedical Engineering and Biotechnology, 2014, Wuhan, China (Member of Technical Program Committee)

- 2 International Conference on Biomedical Engineering and Biotechnology, 2013, Wuhan, China (Member of Technical Program Committee)

"Mechanoresponsive and thermoresponsive materials: exploring new applications in mechanical engineering", hold by Dr. Filippo Cellini, Advanced Science Research Center of the City University of New York (CUNY)

12th January 2018, University of Rome "Niccolò Cusano", Italy

"High value bio-based compounds for food packaging applications"

Dr. Marina Ramos, University of Alicante, Department of Analytical Chemistry, Nutrition and Food Science, Group Nanomaterials and Polymer Analysis

29th November 2017, Aula IV, University of Rome "Niccolò Cusano", Rome, Italy

"Polymer composites with metal nanoparticles for organic optoelectronics" hold by

Dr. Jiri Pflieger, Macromolecular Chemistry Institute (Ústav makromolekulární chemie AV ČR, v. v. i.) Praha- Česká Republika

22nd September 2016, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

Lectures in the context of Erasmus+ programme from Adana University

"Analytical solution for shallow-water wave equations", hold by Dr. Baran Aydin, Adana Science and Technology University, Department of Civil Engineering

"Evaluation of unbound granular pavement layers with non-destructive test methods", hold by Dr. Volkan Emre Uz, Adana Science and Technology University, Department of Civil Engineering

20th June 2016, Classroom IV, University of Rome "Niccolò Cusano", Rome, Italy

"EDILIZIA LOW COST/LOW TECH: Una progettazione modulare e tecnologicamente semplice"
Lectures in the context of Erasmus+ programme from University of Osijek

"Pratiche urbane e processi di autoconstruzione", hold by Prof. Antonella Valitutti, Università degli Studi di Roma "Niccolò Cusano", Dipartimento di Ingegneria

"Traditional rural low-tech architecture of the Croatian part of Middle Europe", hold by Prof. Sanja Lončar-Vickovič, University of Osijek, Department of Architecture and Urban Planning

Sistemi modulari di assemblaggio a secco: il pannello home done, hold by Dott.ssa Sara Scagliotti, Sapienza - Università di Roma

01st June 2016, Classroom IV, University of Rome "Niccolò Cusano", Rome, Italy

"UNESCO Let's Jazz"

30th April 2016, International Jazz Day, in collaboration with Comitato Giovani Lazio della CNI per l'Unesco, Faramusic and I-jazz, Sala Consiliare del Comune di Rieti e Auditorium Vallone, Rieti, Italy.

World Water Day: Acqua, sostenibilità e partecipazione

22th March 2016, in collaboration with Comitato Giovani Lazio della CNI per l'Unesco and Consorzio Tiberina, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

COMSOL Multiphysics Workshop

09th March 2016, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

"1st National Assembly of Youth Committees for UNESCO"

15th-16th January 2016, Rome, Italy (15th January, at Senato, Rome-Italy; 16th January at University of Rome "Niccolò Cusano", Rome-Italy)

"6th International Seminar on Biomaterials & Regenerative Medicine" (BIOREMEDI 2015)

17th-20th September 2015, Oradea, Romania.

"Some Stem Cells Studies in Orthopedics, Neurology and Cardiology by Synchrotron Radiation"

hold by Prof. Franco Rustichelli, Polytechnical University of Marche, Ancona, Italy

26th September 2015, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

"Composite materials for electronic applications" hold by

Dr. Francesco Piana, Macromolecular Chemistry Institute (Ústav makromolekulární chemie AV ČR, v. v. i.) Praha- Česká Republika

09th July 2015, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

"New Trends in Biomaterials Research and Characterization: The potential of BIOCERAMICS"
hold by Prof. Iulian Antoniac, University Politehnica of Bucharest, Romania
21st May 2015, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

"Functional ceramic materials for biomedical, biotechnological and environmental applications"
hold by Dr. Laura Treccani, University of Bremen-Germany
14th April 2015, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

Conference Attendance

July 2019

XV Convegno Nazionale AIMAT/XII Convegno Nazionale sulla Scienza e Tecnologia dei Materiali INSTM
21-24 July 2019, Hotel Continental Terme, Ischia Porto (Na)-Italy.

June 2019

Congresso Nazionale Biomateriali 2019 (SIB 2019), 5-7 June 2019, Centro Residenziale e Studi della Scuola Nazionale dell'Amministrazione, Caserta, Italy.

Workshop-"Innovative approaches for label-free manipulation and monitoring of biological cells and tissues", 23 May 2019, Università di Roma "Tor Vergata".

May 2019

6th Convegno Nazionale del Forum On Regenerative Methods 2019
9-10 May 2019, 'Aula Pocchiarri'-Istituto Superiore di Sanità, Rome, Italy.

April 2019

Eurofillers Polymerblends 2019, 23th-26th April 2019, University of Palermo, Palermo, Italy.

May 2018

5th Convegno Nazionale del Forum On Regenerative Methods 2018
10-11 May 2018, 'Aula Pocchiarri'-Istituto Superiore di Sanità, Rome, Italy.

October 2017

International Conference TISSUE REGENERATION: ADVANCED CERAMICS AND COMPOSITES (TRACE)
19th -20th October 2017, Palazzo della Meridiana-Genova, Italy.

International Seminar on Biomaterials and Regenerative Medicine - BIOREMEDI 2017 - Today's research for tomorrow medicine
05th -07th October 2017, Victor Babeş University for Medicine and Pharmacy Timișoara, Timișoara-România.

July 2017

XI Convegno Nazionale sulla Scienza e Tecnologia dei Materiali INSTM
12th-15th July 2017, Hotel Continental Terme, Ischia Porto (Na)-Italy.

XIV Convegno Nazionale AIMAT 2017
12th-15th July 2017, Hotel Continental Terme, Ischia Porto (Na)-Italy.

May 2017

4° Convegno Nazionale del Forum On Regenerative Methods: Tecnologie innovative nelle metodiche di rigenerazione tissutale (FORM 2017)
11th-12th May 2017, Istituto Superiore di Sanità (ISS), Rome, Italy.

March 2017

STAMPA 3D IN MEDICINA: REGOLE, TUTELE, MERCATO E FORMAZIONE
31st March 2017, OPIFICIO GOLINELLI, Bologna

January 2017

"2nd National Assembly of Youth Committees for UNESCO"

14th-15th January 2017, Naples, Italy

November 2016

3rd International CBRNe Workshop

25th November 2016, Villa Mondragone-Rome, Italy

"Il Microbiota. L'Organo sconosciuto"

12th November 2016, University of Rome "Niccolò Cusano", Rome-Italy.

International Conference on Sustainable Bioplastics: "Bioplastics: A Genuine Alternative"

10th-11th November 2016, Alicante, Spain.

3rd Workshop on sustainable mobility

7th November 2016, University of Rome "Niccolò Cusano", Rome-Italy.

September 2016

#UNESCO4SCIENCE-Notte Europea dei Ricercatori 2016

30th September 2016, Great Hall-Engineering Department, University of RomaTre, Rome, Italy.

16^o Italian Energy Summit

26th-27th September 2016, Sole24Ore, Milan, Italy.

IX ECNP International Conference on Nanostructured Polymers and Nanocomposites (ECNP 2016)

18th-21st September 2016, Roma Eventi-Fontana di Trevi, Rome, Italy.

European Research Council (ERC) Giornata Nazionale di Lancio dei Bandi 2017 in Horizon 2020

14th September 2016, Aula Pocchiari, Istituto Superiore di Sanità, Rome, Italy.

Terza Giornata sul Grafene e Ossido di Grafene -Graphene Polymer Composite

9th September 2016, Salerno-Italy

July 2016

Congresso AIMAT 2016

13th-15th July 2016, Hotel Continental, Ischia Porto (Na), Italy

Congresso SIB 2016

13th-15th July 2016, Hotel Continental, Ischia Porto (Na), Italy

June 2016

V Convegno GNB (Gruppo Nazionale Bioingegneria)

20th-22nd June 2016, Facoltà di Ingegneria, Università degli Studi di Napoli "Federico II", Naples-Italy.

April 2016

II Convegno Nazionale: Nanotecnologie e nanomateriali nel settore alimentare e loro valutazione di sicurezza

29th April 2016, Aula Pocchiari, Istituto Superiore di Sanità (ISS), Rome-Italy.

PROGETTO RInnovaReNano: Sviluppo Responsabile dei Nanomateriali ed opportunità per il sistema industriale regionale

18th April 2016, Aula Pocchiari, Istituto Superiore di Sanità (ISS), Rome-Italy.

Le Prospettive Professionali dell'Ingegnere Biomedico

18th April 2016, Sala del Chiostro Università La Sapienza di Roma, Rome-Italy

3° Convegno Nazionale del Forum On Regenerative Methods (FORM) 2016
Metodiche rigenerative: Applicazioni innovative in odontostomatologia e ortopedia
7th-8th April 2016, Aula Pocchiarri, Istituto Superiore di Sanità (ISS), Rome-Italy.

EMN MEETING ON BIOMATERIALS 2016 (INVITED)
4th-7th April 2016, *Holiday Inn Resort Phuket, PHUKET, THAILAND*

March 2016

COMSOL Multiphysics Workshop
09th March 2016, Great Hall, University of Rome "Niccolò Cusano", Rome, Italy

January 2016

"1st National Assembly of Youth Committees for UNESCO"
15th-16th January 2016, Rome, Italy (15th January at Senato, Rome-Italy; 16th January at University of Rome "Niccolò Cusano", Rome-Italy)

November 2015

1st International Congress Advances in the Packaging Industry-Product and Process (API)
19th -20th November 2015, Castel dell'Ovo, Naples, Italy.

2nd International CBRNe Workshop "IW CBRNe 2015"
20th November 2014, University of Rome "Tor Vergata", Rome, Italy.

2nd Workshop on the State-of-the-art and future trends for a sustainable development of road vehicles
16th November 2015, Great Hall-University of Rome "Niccolò Cusano", Rome, Italy.

October 2015

Congress: "Il cantiere dell'energia dai rifiuti: tecnologie ed esperienze"
29th October 2015, Great Hall-University of Rome "Niccolò Cusano", Rome, Italy.

INBB (Istituto Nazionale Biostrutture e Biosistemi Consorzio Interuniversitario) Congress: Ricerche Bio-Mediche di Frontiera
22nd-23rd October 2015, Aula Marconi, CNR Piazzale Aldo Moro, Rome, Italy.

2nd Bilateral Italian/Indian workshop "Nanoscale Excitations in Emergent Materials" (NEEM)
12th -14th October 2015, Aula Marconi, CNR Piazzale Aldo Moro, Rome, Italy.

Panel Discussion: "Il problem solving nella gestione del k mammario "innovazione tecnologica e biotecnologie nello screening del k mammario: potenzialità e limiti"
2nd October 2015, Great Hall-University of Rome "Niccolò Cusano", Rome, Italy.

September 2015

Nanoscience & Nanotechnology 2015 (NN15)
28th September- 2nd October 2015, INFN-Laboratori Nazionali di Frascati, Rome-Italy.

ICNAAM 2015, Second Minisymposium on Mathematics in Engineering and Technology,
23rd-29th September 2015, Rodos Palace Hotel, Rhodes, Greece.

"6th International Seminar on Biomaterials & Regenerative Medicine" (BIOREMED 2015)
(INVITED)
17th-20th September 2015, Oradea, Romania.

August 2015

5th Molecular Materials Meeting @ Singapore 2015 (INVITED)
3rd-5th August 2015, Resorts World™ Sentosa Convention Center, Singapore

July 2015

"X Convegno Nazionale sulla Scienza e Tecnologia dei Materiali INSTM"
28th June-1st July 2015, Favignana (TP), Italy.

June 2015

VI WORKSHOP NAZIONALE AICING, Molecules and Materials: Chemistry for Engineering
22nd-23rd June 2015, Chioistro di San Pietro in Vincoli, University of Rome "Sapienza", Rome-Italy.

IDBN Italian Digital Biomanufacturing Network - Foundation Conference
19th June 2015, Aula Magna del Centro di Ricerca Codivilla-Putti, Istituto Ortopedico Rizzoli (IOR), Bologna-Italy.

“L'alimentazione nella pratica sportiva per il benessere psico-fisico dell'atleta e per il miglioramento delle performance”

06th June 2015, Aula Magna, University of Rome "Niccolò Cusano", Rome-Italy.

March 2015

2° Convegno Nazionale del Forum On Regenerative Methods (FORM) 2015
Le metodiche rigenerative nel Servizio Sanitario Nazionale (SSN): applicazioni attualmente utilizzate-
19th-20th March 2015, Aula Pocchiari, Istituto Superiore di Sanità (ISS), Rome-Italy.

January 2015

Industrial Workshop- Applicazioni Industriali di Nanomateriali: Prospettive & Criticità (INVITED)
27th January 2015, University of Rome "Tor Vergata", Aula Seminari "Galileo", Rome, Italy.

November 2014

Workshop on Sustainable Mobility - WSM2014
17th November 2014, University of Rome "Niccolò Cusano", Rome, Italy.

1st International CBRNe Workshop “IW CBRNe 2014” - Strategies and Solutions to Face Ongoing Global CBRNe Threats.

21st November 2014, University of Rome "Tor Vergata", Rome, Italy.

September 2014

ICNAAM 2014, First Minisymposium on Mathematics in Engineering and Technology,
22nd-28th September 2014, Rodos Palace Hotel, Rhodes, Greece.

XII Convegno Nazionale AIMAT 2014
21st-24th September 2014, Officine Cantelmo, Lecce, Italy.

February 2014

Nuove metodologie e applicazioni dell'antropologia e genetica forensi
14th February 2014, Aula Magna “Pietro Gismondi”, Macroarea di Scienze Matematiche Fisiche e Naturali, University of Rome "Tor Vergata", Rome-Italy.

December 2013

VIII Convegno di Dermatologia Militare
3rd December 2013, Palazzo Salviati, Centro Alti Studi per la Difesa (CASD), Rome-Italy.

November 2013

1° Convegno Nazionale del Forum On Regenerative Methods (FORM) 2013
Le metodiche rigenerative nel SSN: una speranza per il futuro
28th-29th November 2013, Aula Pocchiari, Istituto Superiore di Sanità (ISS), Rome-Italy.

September 2013

9th Edition Nanoforum
Micro, Nano & Advanced technologies: where research meets business
18th-20th September 2013, Faculty of Engineering, University of Rome “La Sapienza”, Rome-Italy

June-July 2013

IX Convegno Nazionale sulla Scienza e Tecnologia dei Materiali INSTM
30th June-3rd July 2013, Bari, Italy.

December 2012

Convegno di studi: DNA e il Processo Penale: la scienza in ausilio della conoscenza
Associazione Culturale Osservatorio Penale
14th December 2012, Residenza Farnese, Rome-Italy.

November 2012

97° Congresso Nazionale Società Italiana di Ortopedia e Traumatologia (SIOT) 2012
Lesioni capsulo-legamentose acute, le protesi dolorose
10th-14th November 2012, *Marriott Park Hotel*, Rome-Italy.

September 2012

8th Edition Nanoforum

Micro, Nano & Advanced technologies: where research meets business

24th-26th September 2012, Faculty of Engineering, University of Rome "La Sapienza", Rome-Italy

11th Congress AIMAT (Associazione Italiana Ingegneria dei Materiali) 2012

16th-19th September 2012, Hotel Summit, Gaeta (LT)-Italy

June 2012

3rd Congress GNB (National Bioengineering Group) 2012

26th-29th June 2012, University of Rome "Roma Tre", Faculty of Letters and Philosophy

SNETP Open Day: "Research and Development for a Sustainable Nuclear Energy in Europe: Status and Perspectives"

19th June 2012, ENEA Headquarters, Rome-Italy

May 2012

YOUNG INTERNATIONAL FORUM

8th-11th May 2012, "La Pelanda" Testaccio-Rome, Italy

April 2012

International Workshop on innovative nuclear reactors cooled by heavy liquid metals: status and perspectives

17th-20th April 2012, University of Pisa-Faculty of Engineering, Pisa-Italy

December 2011

Third International Conference: Regenerative Surgery

14th-16th December 2011, *Eurostars Roma Aeterna Hotel*, Rome-Italy

October 2011

96th Congresso Nazionale della Società Italiana di Ortopedia e Traumatologia (SIOT 2011)

Materiali e Rivestimenti in Ortopedia/Biotecnologie applicate alla Traumatologia

1st-5th October 2011, *Pala Congressi*, Rimini-Italy.

September 2011

7th Edition Nanoforum

Micro & Nanotechnologies: where research meets business

13th-15th September 2011, Faculty of Engineering, University of Rome "La Sapienza", Rome-Italy

24th European Conference on Biomaterials (ESB)

4th-8th September 2011, *Convention Centre Dublin (CCD)*, Dublin-Ireland

July 2011

National Congress on Corrosion and Protection-IX Edition

6th-8th July 2011, Monte Porzio Catone (RM)-Italy

May 2011

13th Annual Seminar & Meeting, Ceramics, cells and tissues, International Congress on Bioceramics, Surface-reactive biomaterials as scaffolds and coatings: interactions with cells and tissues

17th-20th May 2011, Faenza (RA)-Italy

May 2010

BIOMATERIALI PER LA MEDICINA DEL BENESSERE: Farmaci, termalismo, protesi tradizionali, ingegneria tissutale e genetica: ruolo della nanotecnologia

6° PROGETTO GIACOBBE JACOB PROJECT (6th edition)

28th May 2010, Exposanità Exhibition area – Bologna

March 2010

III Forum Nazionale Giovani Ricercatori di Scienza e Tecnologia dei Materiali

22nd-24th March 2010, Centro civico di arte e cultura Altinate San Gaetano, Padua-Italy

November-December 2009

SAMIC 2009: From molecules to nanosystems: syntheses and methodologies in inorganic chemistry, chemistry and materials for energy and health

30th November-3rd December 2009, Bressanone/Brixen (BZ)-Italy.

October 2009

4th International Conference on surfaces, coatings and nanostructured materials (NanoSmat 2009)

19th-22nd October 2009, Rome-Italy

June 2009

11th International Conference and Exhibition of the European Ceramic Society (ECERS) 2009

21st-25th June 2009, Cracow, Poland

May 2009

12th Annual Seminar & Meeting, Ceramics, cells and tissues, International Congress on Bioceramics, Surface-reactive biomaterials as scaffolds and coatings: interactions with cells and tissues

19th-22nd May 2009, Faenza (RA)-Italy

September 2008

Congresso 2008 della Società Italiana Biomateriali

17th -19th September 2008, Follonica-Italy

June-July 2008

2nd International congress on ceramics

29th June- 4th July 2008, Verona-Italy

May-June 2008

8th World Biomaterials Congress

28th May-01st June 2008, Amsterdam-Poland

October 2007

11th Ceramics, cells and tissues, International Congress on Bioceramics

2nd-5th October 2007, Faenza (RA)-Italy

Projects

2018-2019

“Innovative composites based implants for CRANIoplasty applications: from the processing of tomographic images to the realization of the prototype through Additive Manufacturing (CRANIMA)”, funded by Lazio Region under the **Key Enabling Technologies (KETs) Programme**, role: **Principal Investigator**.

The goal of this study is to formulate, produce and characterize innovative implants for application in the cranioplasty by additive manufacturing, to be integrated with a 3D printed sensor to monitorate the post-surgery inflammation.

2018-now

"Brain Revealed: Innovative Technologies in Neurosurgery Study (BRAINIT)" (Project Number: 2018-1-RO01-KA203-049317), funded by European Committee under the **Call Erasmus+ Strategic Partnerships**. Partners: Lucian Blaga University of Sibiu, University of Rome "Niccolò Cusano", Universidad de Las Palmas de Gran Canaria, Sibiu County Emergency Clinical Hospital, website: <http://grants.ulbsibiu.ro/brainit/>. role: **Principal Investigator for UNICUSANO**.

The activity is focused on the formulation, synthesis and characterisation of innovative materials for the 3D printing of skull and brain.

• 2018-now *"Biotecnologie enzimatiche innovative per processi di chiarifica sostenibili nel settore birrario (bioEnBi)"*, funded by Lazio Region under the **POR-FESR 2014-2020 PROGETTI DI GRUPPI DI RICERCA**. Partners: Università degli Studi della Tuscia University of Rome "Niccolò Cusano". role: **Principal Investigator for UNICUSANO**.

The activity is focused on the formulation, preparation and characterisation of ecosustainable systems for enzymatic immobilization.

• 2018-now

"Development of encapsulation systems for the formulation of functional food", funded by University of Rome Unicusano under the **Progetti di Ateneo Programme**, role: **Principal Investigator**.

The activity is focused on the development of encapsulation systems, based on natural and synthetic biopolymers and composites to encapsulate and stabilize specific microorganisms, in order to promote the production of postbiotics.

• 2018-now *"Innovative tools for conservation and monitoring of artworks in concrete by exploiting electrochemical paper-based sensors, functionalised nanomaterials, and modelling (INNOCONCRETE)"*, funded by Ministero degli Esteri (MAE) under the **Grande Rilevanza Italia-Svezia Programme**, role: **Participant**.

The activity is focused on the development and testing of innovative and long-lasting solutions for the conservation of artworks in concrete, exploiting new (nano)materials and innovative techniques to monitor and characterize the ageing processes, associated to experimental and multiscale modelling approaches.

• 2018-now

"Developing a nano particles for controlling oxygen release inside tissues" (Project number: 16051), funded by Lazio Region under the **Torno Subito 2018** Call, Research Fellowship: Mostafa Awaid, PhD.

Partners: Engineering Department of University of Rome Niccolò Cusano (Prof. Ilaria Cacciotti)/LAMP Biomaterials lab Northeastern University (Prof. Sidi Bencherif)

The activity deals with the production and characterisation of innovative nanoparticles, using different techniques.

• 2018

"New encapsulation strategies for the protection of active principles extracted from aloe vera agro wastes", funded by Universidad de Alicante under the **GRANTS FOR PREDOCTORAL RESEARCH STAYS OUT OF THE VALENCIAN REGION - BEFPI 2018** Call, PhD Studente: SOLABERRIETA IGNACIO, NANOBIOPOL – Research group on Polymers and Nanomaterial Analysis, Department of Analytical Chemistry, Nutrition and Food Sciences, Faculty of Science, University of Alicante, HOST INSTITUTION: Università Niccolò Cusano of Rome, RESPONSIBLE RESEARCHER: Prof. Cacciotti Ilaria, PERIOD: 17/09/18 – 16/12/18

The activity is focused on the production and characterisation of natural biopolymeric fibers by electrospinning, to encapsulate and stabilize agro waste extracts.

• 2017-now

"Biomaterials and advanced physical techniques for regenerative cardiology and neurology (BIONECA)", funded by European Committee under the **COST Actions Programme**, role: **Participant**.

The main aim of BIONECA project is to establish the platform for coordinated interaction among top-level scientists of the following scientific disciplines: regenerative cardiology, regenerative neurology, stem cell biology, physics, chemistry, material science, material engineering, rapid prototyping, computational modelling and advanced imaging technologies.

• 2016-now

LIFE15 ENV/IT/000417-“A new environment-friendly manufacturing approach for marine antifouling coating (LIFE PAINT-IT)”, funded by European Committee under the **LIFE+ 2015 Programm**, role: **Senior Technical Manager**.

The aim of this study is to formulate and produce ecosustainable antifouling coatings as alternatives to the commonly used ones, based on the addition of biocides.

2016-2019

“SCIADRO-Sciame di Droni”, funded by Toscana Region under the **Toscana FAR-PAS Programme**, role: **Participant**.

The goal of this study is to develop miniaturized sensors for the detection of heavy metals and salmonella, to be mounted on drones.

2013-2018

“Development of the use of recycled and non-petrochemical derived materials for industrial applications in the fire sector”, funded by BRIDGESTONE Technical Center **Scientific and Technological Project**, role: **Participant**.

2013-2015

“Magnetic nanoparticle filled conductive polymer composites for emi reduction”, funded by Lombardia Region under the **CARIPL0 2012 Programme**, role: **Participant**.

• 2013-2014 “Technical and scientific state of the art about the preparation of thermostable, biodegradable and compostable resins”, funded by Comital **Industrial Research Project**, role: **Participant**.

2011-2012

”Bioresorbable nanospheres and microspheres loaded with human neurons as dopamine release systems: development of a potential innovative therapy for the Parkinson disease treatment”, funded by L'ORÉAL under the **L'ORÉAL-UNESCO Italy for Women and Science 2011-IX Edition” Competition**, role: **Principal Investigator**.

This project was focused on the application of **alginate encapsulation** technology as promising biotechnological tool for the **differentiation of the embryonic cancer stem Ntera2 cells into dopamine-producing cells**.

2007-2009

“Study of the alignment and segregation phenomena induced in hybrid polymeric matrices and in electrospun polymeric blends”, funded by **INSTM** under the **PRISMA Programme**, role: **Participant**.

2006-2009

“Design and manufacture of organic, inorganic and hybrid nanostructured scaffolds as substrates for the differentiation of stem cells in regenerative medicine”, funded by MIUR under the **PRIN 2006 Programme**, role: **Participant**.

Collaborations

- Institute of Biochemistry and Clinical Biochemistry, Università Cattolica del Sacro Cuore
- Departments of Chemical Science and Technology, Physics, Biomedicine & Prevention, Industrial Engineering, Enterprise Engineering, University of Rome "Tor Vergata", Rome-Italy
- Department of Materials Science and Chemical Engineering, LINCE Lab, Politecnico di Torino, Torino-Italy
- Department of Chemistry, University of Rome "Sapienza", Rome-Italy.
- DiSTeMeV and Solid State Chemistry Laboratory, University of Verona, Verona-Italy
- Department of Chemical Science, University of Catania, Catania-Italy
- Centro Sviluppo Materiali S.p.a., Rome-Italy
- Enea, Centro Ricerche Brasimone, Bologna-Italy
- Mechanical and Industrial Engineering Department, University of Rome 'Roma Tre', Rome-Italy
- Department of Public Health and Cell Biology, University of Rome 'Tor Vergata', Rome-Italy
- Department of Technology and Health, Istituto Superiore di Sanità, Rome-Italy
- Ceramic Physics Laboratory & Research Institute for Nanoscience, RIN, Kyoto Institute of Technology, Kyoto-Japan
- Materials Science and Technology Center, UdR INSTM, NIPLAB, University of Perugia, Terni-Italy
- Department of Experimental Medicine and Biochemical Science, Section of Biochemistry and

Molecular Biology, Perugia-Italy

- Department of Mechanical Engineering and Department of Biology, University of Padova, Padova-Italy
- Istituto di Struttura della Materia, Consiglio Nazionale delle Ricerche, Rome-Italy
- Parco Torricelli delle Arti e delle Scienze, Faenza (RA)-Italy
- Department of Materials and Environmental Engineering, University of Modena-Reggio Emilia, Italy
- Centre for Material and Fibre Innovation, Deakin University, Geelong, Victoria-Australia
- Advanced Ceramics Group, Faculty of Production Engineering, University of Bremen, Germany
- Institute of Macromolecular Chemistry, Prague, Česká republika
- CREA-FRU, Rome-Italy
- Department of Mechanical and Aerospace Engineering, Tandon School of Engineering, New York University (NYU)