

CURRICULUM VITAE

Anna Tampieri

ORCID: 0000-0003-3910-3157



Current position: ➤ **Director of Research** ISSMC-CNR, Institute of Science, Technology and Sustainability for Ceramic Materials (former ISTE-CNR)

Email: anna.tampieri@issmc.cnr.it;

H-index: 68 **n. citations: 17.994** (Google Scholar)

EDUCATION and TRAINING

20/02/1985 **Degree in Chemistry and T.F.** (110/110 cum laude) - University of Bologna, Italia
1986 **Fellowship** at Alfa Wasserman S.p.A., Bologna
1987 **Fellowship I.M.I.** at Dept. of Science Univ. Milan, and HNHR, San Francisco (USA)
1991 **NEDO Fellow** at Government Industrial Research Institute GIRIN, Nagoya, JAPAN,
1993 **Post Ph.D. Fellow** at National Institute for Inorganic Materials NIRIM, Tsukuba, JAPAN
1988-01 **Researcher** at ISTE-CNR
2001-Present **Director of Research** at ISTE-CNR

PROFESSIONAL APPOINTMENTS

2022-present **President and Scientific Expert** at EUREKA-Venture SpA
2021-2022 **Board Member** of the Scientific Committee of the National Health Cluster ALISEI
2020-2021 **President of ENEA-Tech**, Foundation, appointed by the Italian Ministry for the Economic Development
2016-2020 **Director of the Institute** of Science and Technology for Ceramic Materials (ISTEC – CNR)
2017-Present **Member** of the **Scientific Board of Aster**, *Rete Alta Tec. Emilia Romagna*
2015- 2023 **Expert Scientific Evaluator for ERC Starting Panel PE5** at European Commission
2015- 2016 **Expert Evaluator (GEV09) Quality of Research VQR 2011-2014**
2023-Present **Habilitation (ASN 03-B1) for Full Professor in Chemistry and Inorganic Systems**
2015-Present **President** of the **Scientific Advisory Board** of the start-up Green-Bone Ortho S.p.A;
2014-2015 **Member** of the **Commission of due diligence** for the evaluation of Veneto Nanotech
2012-2018 **President** of the **Commission CNCCS**, Pomezia Roma;
2011-2022 **Full Senior member** of Research Institute of Methodist Hospital, Houston TX, USA
2011-2013 **Member of the CNR Commission** for the evaluation of emerging “Spin off”
2020-present **Member** of the **Jury** for the Nicolò Copernico Prize in medical Sciences
2006-Present **Scientific Evaluator for EC funding schemes NMP ed Eurostar**;
1998-Present **Coordinator** of the “Bio-ceramics and hybrids in regenerative medicine” Research Group at ISSMC-CNR;
1998-2004 **President** of FIN-CERAMICA Faenza, start up born as ISTE-CNR spin-off;
1989-1998 **Coordinator** of the Research Line on “Superconductor Ceramics” at ISTE-CNR;

FUNDED PROJECTS

European-International Projects

- **Coordinator** of the EC project **SMILEY** “Smart Nano-structured Devices Hierarchically Assembled by Mineralization Processes” (7th F.P.) NMP-SL-2012-SMALL-6-310637 (2012-2015), Partners: 10, Total budget: 3.996.264 €. Budget CNR: 1.417.360 €.
- **Coordinator** of the EC project **OPHIS** “Composite Phenotypic triggers for bone and cartilage repair” (7th F.P.) NMP3-SL-2010-SMALL-3-246373 (2010-2013), Partners: 9, Total budget: 3.939.920 €. Budget ISTEC: 704.427 €.
- **Coordinator** of the Research Unit of the Methodist Hospital Research Institute, project **DARPA-USA** Defense Advanced Research Projects Agency, W911NF-11-1-0266 (2011-2013), Partners: 5, Total budget: 3.000.000 US\$.
- **Coordinator** of the EC project **TEMPLANT** “Production of new bio- ceramization processes applied to vegetable hierarchical structures” (6th F.P.) NMP4-CT-2006-033277 (2006-2011), Partners: 9, Total budget: 2.600.000 €. Budget CNR: 519.399 €.
- **Coordinator** of the EC project **AUTOBONE** “*Production Unit for the Decentralised Engineering of Autologous Cell-based Osteoinductive Bone Substitutes*” (6th F.P.) NMP3-CT2003-505711 (2003-2008), Total Budget: 4.818.442 €; Budget CNR: 698.819 €.
- **Coordinator** of the Bilateral project **Italy-Taiwan** (NYMU Programme) (2009-2010) International Collaboration Grant) between ISTEC and the National Yang-Ming University, Taiwan. Total budget: 100.000 US\$.
- **Coordinator** of the Bilateral project **Italy-Indonesia** (RUTI Programme) (2003-2005), TB: 100.000 US\$.
- **Coordinator** of the Bilateral project **Italy-Spain** (1998-2000), TB: 30.000 €.
- **WP Leader** of the EC project **SCREENED** “A multistage model of thyroid gland function for screening endocrine-disrupting chemicals in a biologically sex-specific manner” H2020-SC1-BHC-27-825745 (2019-2023), Partners: 9; Total Budget: 5.655.088 €. Budget CNR: 400.000 €.
- **WP Leader** of the EC project **CUPIDO** “Cardio Ultraefficient Nanoparticles for Inhalation of Drug Products” H2020-EU.2.1.2.720834 (2017-2021), Partners: 12; Total Budget: 6.094.784,00 €. Budget CNR: 1.800.000 €.
- **WP Leader** of the EC project **BIORIMA** “Biomaterial risk management”, H2020-GA-760928 (2017-2021), Partners: 41, Budget ISTEC: 200.000 €.
- **WP Leader** of the EC project **NanoReg** (GA310584) “A common European approach to the regulatory testing of manufactured nanomaterials” (2013-2017), Partners: 59, Total budget: 906.737 €. Budget CNR: 160.000 €.
- **WP Leader** of the EC project ERASMUS+ **BIOTECH-MA** “Teaching biotechnology for human health: from the bench to the market” (2015-2016), Partners: 7; Total budget: 297.000 €. Budget ISTEC: 25.000 €.
- **WP Leader** of the EC project ERASMUS+ **EUCERMAT** “European Ceramic Materials” (2015-2018), Partners: 6; Total budget: 360.000 €. Budget ISTEC: 35.000 €.
- **WP Leader** of the EC project **NORCEL** (funded by the Research Council of Norway) (2013-2018), Partners: 11, Total Budget 3.500.000 €, Budget ISTEC: 85.500 €.
- **WP Leader** of the EC ITN project **BIO-INSPIRE** “Bio Inspired Bone Regeneration” (7th F.P.) FP7-PEOPLE-2013-ITN (2013-2017), Partners: 9, Total budget: 3.824.007 €. Budget ISTEC: 510.000 €.

- **WP Leader** of the EC project **MAGISTER** “Magnetic scaffolds for in vivo tissue engineering” (7th F.P.) NMP3-LA-2008-214685 (2008-2012), Partners: 20; Total budget: 11. 863.407 €. Budget ISTEC: 685.000 €.

National Projects

- **Coordinator** of the project “**NIPROGEN** la natura ispira processi innovativi per lo sviluppo di impianti per la medicina rigenerativa ed elevato grado di vascolarizzazione e performance meccaniche” n. PG/2015/731448 (Por Fesr 2014-2020 della Regione Emilia Romagna) (2016-2018), Total Budget 999.767 €. Budget ISTEC: 320.000 €.
- **Coordinator** of the project “**PEEK** bone implants coated with biomimetic nanostructured hydroxyapatite for osteoporotic patients” (Fondazione del Monte di Bologna e Ravenna) (2015-2016), Budget ISTEC: 20.000 €.
- **Coordinator** of the project **FIRB** BIO-Protesi “Materiali innovativi per lo sviluppo di bioprotesi articolari” rif: RBIP068JL9 (2007-2010), Total budget: 1.908.571 €. Budget ISTEC: 967.356 €.
- **WP Leader** of the project **MEDFIL**: “Filtri multifunzionali con elevate capacità di scambio di calore ed umidità (HMEf) e per l’identificazione precoce di infezioni delle vie respiratorie” 632022 (POR FESR 2014-2020 della Regione Emilia Romagna) (2019-2021), CUP B54I19000030005, Total budget: 1.117.125 €, Budget ISTEC 402.500 €.
- **WP Leader** of the project **BIOBOS** “An in vitro and ex vivo model of biomimetic regenerative devices to treat bone metastases and soft tissue tumors”, GR-2016-02364704, Budget ISTEC: 90.000 €.
- **WP Leader** of the project **DINAMICA** “Sviluppo e validazione di biomateriali medicati nanostrutturati per il trattamento e la rigenerazione del tessuto Osseo metastatico” n. 632022 (POR FESR 2014-2020 della Regione Emilia Romagna) (2019-2021), Total Budget: 799.598,50 €. Budget ISTEC: 271.250 €.
- **WP Leader** of the project “**Mat2Rep** Biomateriali multifunzionali per l’autoriparazione di tessuti e organi” n. 626605 (POR FESR 2014-2020 della Regione Emilia Romagna) (2019-2021), Total Budget: 1.117.015,00 €, Budget ISTEC: 84.000 €.
- **WP Leader** of the project “**Nanocoatings**- Nuovi film antibatterici nanostrutturati per applicazioni in campo biomedicale” n. 725827 (2016-2018), Partners n° 6, Budget ISTEC: 160.000 €.
- **WP Leader** of the project “**Progetto Premiale – Medicina Personalizzata**” (2013-2016), Partners n° 20, budget CNR: 300.000 €.
- **WP Leader** of the project “**Flag Project - NanoMax**” (2013-2016), Partners n 10, Budget CNR: 300.000 €.
- **WP Leader** of the project “**Aging – INTERESSE-INVECCHIAMENTO**” (2012-2015), Partners n° 20, Total budget: 685.000 €. Budget ISTEC: 140.000 €.
- **WP Leader** of the project **FIRB** TissueNET “Rete nazionale di ricerca” rif: RBPR05RSM2 (2007-2010), Total budget: 3.500.000 €.
- **Coordinator** of the project **Galileo Program**, Italian-French University) G12-3 (2012-2013);
- **Coordinator** of the Operating unit ISTEC-CNR in the project **MSTA II** (1999-2001). (Total budget: 75.000 €);
- **Coordinator** of the Operating unit *ISTEC-CNR* in the project **MSTA I** (1990-1991). (Total budget: 35.000 €);
- **Task Leader** in the **PRIN** Project (prot. 2010L9SH3K). (Total budget: 1.100.834 €);
- **WP Leader** in the **Inter-Committee Strategic Project** (1993-1994). (Total budget: 24 Ml Lire);

Contracts with companies

- Research Contract ISTEC-Greenbone ortho s.r.l. CO-2015-03, Budget ISTEC: 190.000 €.
- Research Contract ISTEC-Curaden Healthcare CO-2015-08 ,Budget ISTEC: 32.000 €.
- Research Contract ISTEC-Curasept ADS s.r.l. (2010-2012), Budget ISTEC: 40.000 €.
- Research Contract ISTEC-Kalichem Italia s.r.l. CO-2015-06 ,Budget ISTEC: 12.000 €.
- Research Contract ISTEC-Intercos S.p.A. CO-2016-16, Budget ISTEC: 100.000 €.
- Research Contract ISTEC-Finceramica SpA (2011-2015), Budget ISTEC: 80.000 €.
- Research Contract ISTEC-Finceramica SpA: prot. 47 (2011), Budget ISTEC: 18.000 €.
- Research Contract ISTEC-Finceramica SpA: prot. 1135, 1535,1622 (2012) Budget ISTEC: 30.000 €.
- Research Contract ISTEC-Finceramica SpA CO-2014-03 ,Budget ISTEC: 58.300 €.

AWARDS

2021: **Speaker** of the edition of **TEDx** Ravenna, 6 June 2021;

2017: **Winner of the prize: “Best Italian Innovator woman”** given by the **National Association of Italian Inventors “ITWIIN”**, Torino, Nov. 2017.

2016: Selected among the 5 finalists of the contest: *Creatori di impresa*, prize – Unicredit Start Lab-*Gaetano Marzotto*, 1° Dicembre, Roma, Italia;

2016: **Selected among the 5 best innovators** at **“Italian Innovation Day”** per il 150° anniversario delle relazioni diplomatiche Italia-Giappone, Tokyo, Giappone 27 maggio 2016;

2016: **Selected among the 5 best innovators in Europe** per **TedxBinnenhof 2016 “Ideas from Europe”**, Den Haag, Olanda 31 marzo 2016;

2014: **Award by *Massachusetts Institute of Technology review*** come “Smart & Disruptive Project ITALIA 2014”, Bologna 11 maggio 2014;

2013: **Speker at the firsts** Edition of **TEDx** Bologna 12 luglio 2011;

2011: **Winner of “Innovation Special Price”** offerto da Svizzera Biotech – Salone Nazionale Innovazione Torino 18 novembre 2011;

2011: **First classified** a “Italian Start Cup Competition (promossa da CNR, Il Sole 24 Ore e Rete Ventures) per il progetto “Bone-Aid” Genova 4/10/2010;

2010: **Ad honorem Member** of the *Società Scientifica di Medicina e Scienze Naturali* dell’Università di Parma, 6 maggio 2010;

2009: **Award of *Time Magazine*** for the innovation “*From wood to bone*” come la 30° più importante invenzione dell’anno 2009.

2008: **Acknowledgement by Literature Awareness System** (UK) per “Design of graded biomimetic osteochondral composite scaffolds. Tampieri A. et al. 2008 *Biomaterials* 29 (26), 3539 most important paper of the year

2007: **Award by European Community “Gender Equality and Scientific Excellence”** for the Coordination of European Projects

2005: **Award by Marisa Bellisario**: concesso da Confindustria (17° Edizione) dedicato alla SANITA'. Motivazione del premio: "...per avere concretizzato fino al suo utilizzo in clinica di una ricerca innovativa come quella delle ricostruzioni craniche custom made in ceramico biomimetico e bioattivo", 10 giugno 2005;

MEMBERSHIP AND CHAIRS

2019-2022: **President of the** International Society of Ceramics in Medicine

2018-Presente: **Member of the Scientific Advisory Board** of the EC project BIORIMA.

12/02/2015: **Member of the Networking Cluster in Engineering & Upscaling** at the European Commission "DG Research and Innovation- Key Enabling Technologies"

2015: **Member of the "Falling Wall-Ideas for the future"**, Uni-Trento, 3 July 2015;

2015-Presente: **Chief of the Scientific Advisory Board** and **Inventor** of Green Bone Ortho S.r.l.

2014- 2018: **Member of the Networking Cluster Health and Biomaterials** at European Commission

2014-2015: **President of the Scientific Advisory Board** of the Consortium NAMABIO-EC

2013-2015: **President of the Scientific Advisory Board** of ITN- BIO-INSPIRE- EC

2015-Presente: **Member of the Editorial Board** of "Frontiers Bioengineering and Biotechnology" Journal;

2014-Presente: **Member of the Editorial Board** of: "Frontiers physiology and dentistry" Journal;

2012-Presente: **Member of the Editorial Board** of the "Bioinspired, Biometric and Nanobiomaterials" J.

2010-2011: **Member of the European Commission Group** for "Capacities in Nanoscience, Nanotechnology, Nanomaterials";

2005-2016 **Chief of the Scientific Advisory Board** di Fin-Ceramica S.p.A. leader in Customized cranial reconstructions" commercialized by INTEGRA USA;

ORGANIZATION OF SCHOOL AND CONFERENCE

- 2019: **Organizer and Chair** della 32° Edizione della Conferenza Internazionale dell'International Society of Ceramics in Medicine, Bioceramics32, Venezia Mestre, 20-23 Ottobre 2020 ([posticipato a 2022](#)).
- 2019: **Organizer and Chair** del **Simposio "Ceramics and glasses for healthcare" ECerS Conference 2019**, 16-20 June, Torino, Italy
- 3-6 Giugno 2013: **Organizer and Chair** del **Simposio "Smart Biomaterials for Regenerative Medicine"** nell'ambito della Conferenza Internazionale **World Biotechnology Conference**, Boston (USA).
- 8-11 Ottobre 2013: **Organizer and Chair** della **Conferenza Internazionale "Mime-Materials in Medicine"** 1° edizione, Faenza (Italia);
- 23-27 Giugno 2013: **Organizer and Chair** del **Simposio "Bioceramics and Health"** alla 13° edizione della Conferenza di "ECerS European Ceramic Society", Limoges (Francia);
- 13-18 giugno 2010: **Organizer and Chair** del **Simposio "Bioceramics"** Congresso CIMTEC 2010, 12th International Ceramics Congress, Montecatini (Italia);
- 10-13 Settembre 2009: **Organizer and Chair** del **Simposio "Biomedical Materials and organic bio-sensors in health and Diagnostics"** nella conferenza Internazionale "**EUROMAT**", Glasgow (UK);
- 2-5 Ottobre 2007: **Organizer and Chair** del **Simposio "Morphosynthetic Processes"** alla **11° CCT**, "Nanotechnology for functional Repair and Regenerative Medicine" Faenza (Italia);
- 10-15 settembre 2007: **Organizer and Chair** del **Simposio "Biomedical Materials: Tissue Engineering and drug delivery"** nella conferenza Internazionale "**EUROMAT**", Norimberga (Germania);
- 23-27 maggio 2006: **Organizer and Chair** del **Simposio "Compositi Bioibridi"** alla **10° CCT**, "Materials for Scaffolding of Biologically Engineered Systems", Faenza (Italia);

- 13-23 giugno 2005: **Organizer and Chair del Simposio** Compositi “New Biomimetic Materials” alla 9° edizione dell’ “European Ceramic Society Conference-**ECERS**”, Portoroz (Slovenia);
- 28 -10-2004: **Organizer and Chair del Simposio** “Compositi bioibridi” al **9° CCT** “Materials for tissue Engineering”, Faenza (Italy);
- 6-9 October 1998: **Chair del Simposio** “High critical current Superconductors” all’**8° SATT** “National Conference on HTc Superconductivity”, Ravenna (Italy);
- 1-14 luglio 1998: **Organizer and Chair della International Summer School-Advanced School Leonardo da Vinci** “Materiali superconduttori: avanzamenti della tecnologia e dell’applicazione”, Bologna (Italy);
- 2-6 ottobre 1995: **Organizer and Chair del Simposio** “Bulk HTc Superconductors” alla 4° edizione di “**ECERS** Fourth Euroceramics Symposium on HTc Superconductors”, Riccione (Italy).
- 9-13 Novembre 1992: **Organizer and Chair del CERMAT** Conference and Exhibition on New Ceramic Materials, Rimini, Italy.

INVITED LECTURES

Presentazione di n. 95 **Plenary, Keynote, Lectio Magistralis, Invited Lectures** at International Conferences

EDITORIAL ACTIVITY

2018: **Editor**: Core-Shell Nanostructures for Drug Delivery and Theranostics: Challenges, Strategies and Prospects for Novel Carrier Systems. M Focarete, A Tampieri (2018). Woodhead Publishing

2016-presente: **Editor** di *Bio-inspired Regenerative Medicine: Materials, Processes and Clinical Applications*. (Tampieri A e Sprio S), PAN Stanford Publishing, Singapore.

2016: **Editor** di *CERMODEL 2015 Modelling and simulation meet innovation in Ceramics Technology Cermodel 2015: Modelling and Simulation Meet Innovation in Ceramics Technology* (Tampieri A., D. Bigoni, P. Zannini), Volume 36, Issue 9 of Journal of the European Ceramic Society (2016);

2015-presente: **Co-Editor** of the international Journal “Frontiers Bioengineering and Biotechnology”;

2014-Presente: **Co-Editor** della rivista Internazionale: “Frontiers physiology and dentistry”;

2014: **Guest Editor** della rivista “Journal of Materials Science” per l’edizione speciale dedicata a “MiMe International Conference on Materials in Medicine” (Volume 25, issue 10);

2012-Presente: **Co-Editor** della rivista Internazionale Journal “Bioinspired, Biometric and Nanobiomaterial”;

2000: **Editor** *International Summer School Leonardo da Vinci Superconducting Materials: Advances in Technology and Applications* World Scientific publishing Singapore;

1999: **Editor** Proceedings of the 9th National Congress on High Temperature Superconductivity (SATT9) *International Journal of Modern Physics B* vol. 13 World Scientific publishing Singapore;

1996: **Editor** Proceedings del IV° European Ceramic Society Conference - Symposium on HTc Superconductors, Gruppo Editoriale Faenza Editrice vol.6, vol. 7.

TEACHING ACTIVITIES

2020: **Corso di specializzazione in Biotecnologie in chirurgia ortopedica** Università Cattolica del Sacro Cuore- Ospedale Gemelli, Roma

2019: **Master in Medicina Rigenerativa per apparato muscolo scheletrico** Humanitas University, Milano

2019: **Master di II livello: Emocomponenti e cellule per la medicina rigenerativa** Università del Piemonte Orientale, Novara

2017: **Master Business Med Tech Business Course**: Università della Svizzera Italiana, Lugano, Svizzera

2015: **Scuola di Specializzazione Ortopedia e Traumatologia** Università Politecnica delle Marche

2009: **Master post-laurea Tecniche di caratterizzazione dei geo-materiali per l'industria e per l'ambiente**
Dipartimento di Scienze della Terra- Università di Ferrara

2005: **Corso di specializzazione in Biomeccanica, Istituti Ortopedici Rizzoli, Bologna**

2003: **Corso di specializzazione in Biotecnologie in chirurgia ortopedica** Università Cattolica del Sacro Cuore- Ospedale Gemelli, Roma

2002: **Corso di specializzazione in Parodontologia** Scuola di Odontoiatria, Università di Ferrara

1998: **Corso di specializzazione in Chimica e Tecnologia dei materiali**, Chimica industriale, Univ. Bologna.

1998: **International Summer School - Advanced School Leonardo da Vinci** Bologna (Italy)

1997: **Corso di specializzazione in Chimica e tecnologia dei materiali**, Chimica Industriale Univ. di Bologna

1995: **Corso di formazione per Borsisti ENI**, Università di Milano

1990: **XV Corso su Materiali Ceramici Avanzati**, Mesagne, Otranto

SUPERVISOR OF MSC & PHD THESIS

1990-Presente: **n. 40 Post-docs**, **n.12 Ph.D. students**, **n.14 M.Sc. students**

Università di Bologna, Milano, Torino, Ferrara, Palermo, Roma, Pisa, Padova, Parma, Chieti, Trento (Italy);
Institut National Polytechnique de Toulouse, Université de Lyon (France), HMRI (Houston, USA), Columbia University NY, USA.

TECHNOLOGICAL TRANSFER

By way of example, the most important materials/devices I patented and developed ,today present on the market :

CustomBone®; SintLife; EngiPore®; MaioRegen®; RegenOss®; GreenBone ; Biosmalto® Biosmalto®Mousse

Patents WO2020030442 (A1): "System for chemical transformation of 3D state materials", 09/08/2018.

Livello di diffusione: EU, USA, India, Indonesia, Emirati Arabi Uniti.

Ceduto in licenza esclusiva e poi venduto all'azienda GreenBone ortho srl, Faenza nel 2019. Rif. CNR 10613: prot. 0054693 del 25/07/2019

- **WO2017021894 (A1)**: "Large 3D porous scaffolds made of active hydroxyapatite obtained by biomorphic transformation of natural structures and process for obtaining them", 06/08/2015, PCT/IB2016/054665.

Livello di diffusione: EU, USA, Russia, China, San Marino, Australia, Hong Kong, India, Canada, Japan, Korea, South Africa, Brazil, Mexico

Ceduto in licenza esclusiva e poi venduto all'azienda GreenBone ortho srl, Faenza nel 2018. Rif. CNR 10453: prot. 0005694 del 25/01/2018.

- **WO2018158684**: "Filter for the exchange of heat and moisture for application in the medical field and procedure for the production thereof", 27/02/2018

Livello di diffusione: EU, USA, Canada, China, Korea

- **WO2017153888**: “Physical solar filters consisting of substituted hydroxyapatite in an organic matrix”, 07/03/2016. Serial: PCT/IB2017/051290.
Livello di diffusione: EU, USA, Canada, China, Korea
- **WO2015193836 (A1)**: “Injectable apatitic cement ionically multi-substituted for regenerative vertebroplasty and kyphoplasty”. PCT/IB2015/054594.
Livello di diffusione: EU: Italy, France, UK; Germany, Spain, Switzerland, the Netherlands, Belgium
- **P201431091**: Procedimiento de obtencion de nanoparticulas de fosfato de calcio amorfo recubiertas de citrato. Registration date: 21/07/2014.
- Inventors: Josè Manuel Delgado-Lopez, Jaime Gomez-Morales, Raquel Fernandez Penas, Michele Iafisco, Anna Tampieri, Silvia Panseri
- **WO2012014172**: “Intrinsically Magnetic Hydroxyapatite”. PCT/IB2011/053362.
- Livello di diffusione: EU, USA, Canada, Brasile, Cina, Danimarca, Giappone, Corea, Messico, Sud Africa, Australia, Nuova Zelanda, Russia, Singapore.
- **WO2012063201**: “Implants for “load-bearing” bone substitutions having hierarchical organized architecture deriving from transformation of vegetal structures”. PCT/IB2011/054980.
Livello di diffusione: EU, USA, Russia, China, San Marino, Australia, Hong Kong, India, Canada
Ceduto in licenza esclusiva e poi venduto all’azienda GreenBone ortho srl, Faenza nel 2018. Rif. CNR 10074: prot. 0005694 del 25/01/2018.
- **WO2008146113**: “Process for coating a surface of a metal element to increase osteointegration thereof and prosthetic device including said element”. PCT/IB2008/001229.
Livello di diffusione: Italy
- **WO2007045953**: “A composite based on an apatite and a polysaccharide, method for its preparation and uses thereof”. PCT/IB2006/002843.
Livello di diffusione: Italy
- **WO2007045954**: “A plurisubstituted hydroxyapatite and the composite thereof with a natural and/or synthetic polymer, their preparation and uses thereof”. PCT/IB2006/002844.
Livello di diffusione: EU, USA, Japan, Canada, Brazil, Australia
Ceduto in licenza esclusiva e poi venduto all’azienda Finceramica SpA, Faenza nel 2015. Rif. CNR 1682: prot. 0065187 del 01/10/2015.
- **WO2007029276**: “Pin for anchorage of articular prosthesis, articular prosthesis comprising said pin, tibial component and articular prosthesis for the knee comprising said tibial component”. PCT/IT2006/000639.
Livello di diffusione: EU, USA, Australia, Canada, Cina, Japan
- **WO2006092718**: “Cartilaginous and osteochondral substitute comprising multilayer structure and use thereof”. PCT/IB2006/000452. **(Royalties a ISTECCNR)**
Livello di diffusione: EU, USA, Australia, Brasile, Canada, Cina, Danimarca, Giappone, Sud Africa.
- **WO2005082780**: “Biomimetic compounds containing hydroxyapatites substituted with magnesium and carbonate, and the processes used to obtain them”. PCT/EP2005/050815.
Livello di diffusione: EU, USA **Ceduto in licenza esclusiva a Finceramica SpA, Faenza nel 2010.**
- **EP1447104**: “Process to synthesize artificial bone tissue”. Inventors: Tampieri Anna, Celotti Giancarlo, Roveri Norberto, Landi Elena. Registration date: 18/08/2004
Designated States: EP1447104 (A1) EP1447104 (B1) ES2334503 (T3) DK1447104 (T3) AT444766 (T)
Patent granted in licence the 01/06/2010 to FINCERAMICA S.p.A. Faenza (Italy)
- Patent granted nr. IT1307292 (B1). Patent application for industrial invention, filing of the application n. ITRM990754: **“Dispositivo medico bio-attivo per la ricostruzione del tessuto osseo a base di idrossiapatite a porosità controllata”.**

Inventors: Martinetti Roberta, Ravaglioli Antonio, Nataloni Angelo, Zaghini Nicola, Belpassi Andrea, Tampieri Anna. Registration date: 13/06/2001

- Patent granted nr. IT1320938 (B1). Patent application for industrial invention, filing of the application n. ITBO20000038: **"Idrossiapatite a gradiente come materiale per le sostituzioni ossee"**.
Inventors: Celotti Giancarlo, De Santis Ernesto, Lorini Giovanni, Tampieri Anna.
Registration date: 31/07/2001
- Patent granted nr. IT1317939 (B1). Patent application for industrial invention, filing of the application n. ITRM20000603: **"Processo sol-gel di produzione di polveri di idrossiapatite"**.
Inventors: Bezzi Giovanni, Tampieri Anna, La Torretta Teresa M. Giovanna, Celotti Giancarlo.
Registration date: 17/05/2002
- Patent granted nr. IT1317940 (B1). Patent application for industrial invention, filing of the application n. ITRM20000604: **"Processo sol-gel di produzione di polveri di fosfato di calcio, in particolare di beta-tricalciofosfato e alfa-tricalciofosfato"**.
Inventors: Bezzi Giovanni, Tampieri Anna, La Torretta Teresa M. Giovanna, Celotti Giancarlo.
Registration date: 17/05/2002
- Patent application for industrial invention, filing of the application n. RM2014A000326: **"Cemento iniettabile apatitico ionicamente multi-sostituito per vertebroplastica rigenerativa"**.
Inventors: Sprio Simone, Tampieri Anna, Sandri Monica, Panseri Silvia, Logroscino Giandomenico
Registration date: 19/06/2014
- Patent application for industrial invention, nr. deposito MI2014A002207: **"Prodotti per la veicolazione di composti terapeutici/diagnostici al cuore"**.
Inventors: Daniele Catalucci, Michele Miragoli, Michele Iafisco, Anna Tampieri.
Registration date: 22/12/2014
- ITUA20161412 (A1): **"Composite material made of organic substrates and hydroxyapatite substituted with titanium and/or iron for use in dye sensitized solar cells"**
Inventors: Tampieri A, Sandri M, Sprio S, Sanson A.
Registration date: 07/03/2016. ITUA20161412 (A1) — 2017-09-07

Faenza, 01 /10/2025

Firma

