

Curriculum Vitae

PERSONAL INFORMATION

Family name, First name **Pezzella, Cinzia**
Date of birth 14th July, 1981
Nationality Italian
Status Married, two children
e-mail cpezzella@unina.it;
cinziapezzella@personalepec.unina.it
Skype account pezzellac
ORCID orcid.org/0000-0001-5694-472X



CURRENT POSITION

Jun 2019 to present **Fixed Time Researcher Type B**
03/D1, **SSD CHIM/11** Chemical and fermentation technology
Department of Agricultural Sciences, Federico II University, Portici, Italy

Nov 2011 to present **Co-founder and Scientific Officer**
Biopox srl, Naples (www.biopox.com)
Main role: scientific coordination of R&D activities

EDUCATION

4th Apr 2018 **National Academic Qualification as Associate Professor (Italian ASN)**
03/D1, **SSD CHIM/11** Chemical and fermentation technology (from 04/04/2018 to 04/04/2027)

9th Jan 2009 **PhD in Biotechnological Sciences** (Industrial Biotechnology field)
Department of Chemical Sciences, Federico II University, Naples, Italy
Thesis: "Development of oxidative bio-systems for the treatment of industrial coloured wastewaters"
Supervisor: Prof. Giovanni Sannia

17th Dec 2009 **Master Degree in Molecular and Industrial Biotechnology** (Grade 110/100 cum laude)
Department of Chemical Sciences, Federico II University, Naples, Italy
Thesis: Heterologous expression of new laccases from *Pleurotus ostreatus*"
Supervisor: Prof. Giovanni Sannia

- 14th Dec 2004 **Master Degree in Industrial Biotechnology** (Grade 110/100 cum laude)
 Department of Chemical Sciences, Federico II University, Naples, Italy
 Thesis: “The secretion of psychrophilic α -amylase in Gram-negative bacteria: molecular evidence of new secretion systems”
 Supervisor: Prof. Maria Luisa Tutino
- July, 1999 **Italian High School Certificate** (Grade 100/100)
 Liceo Scientifico Statale “Carlo Miranda”, Frattamaggiore (NA)

FELLOWSHIPS

- Oct 2018 to Apr 2019 **Post-Doc Research Fellow**
 Department of Chemical Sciences, Federico II University, Naples, Italy
 Recipient of grants from the project “Evaluation of production of full-length TATk28-CDKL5_1 using pP79 in *Pseudoalteromonas haloplanktis* TAC125” funded by Amicus Therapeutics Inc.
- Jul 2018 to Aug 2018 **Post-Doc Research Fellow**
 Department of Chemical Sciences, Federico II University, Naples, Italy
 Recipient of grants from the project “Sugar BEEt biorefinery for the inTEgrated prODuction of biofUel and polyesTers – BEETOUT”, funded by CARIPO.
 Field of research: “Validazione dei risultati ottenuti nel progetto BEETOUT e verifica del loro impatto sociale, economico ed ambientale”
- Dec 2017 to May 2018 **Post-Doc Research Fellow**
 Department of Chemical Sciences, Federico II University, Naples, Italy
 Recipient of grants from the project “Studio di metodi di funzionalizzazione di polimeri e biopolimeri”
- Dec 2016 to Nov 2017 **Post-Doc Research Fellow**
 Department of Chemical Sciences, Federico II University, Naples, Italy
 Recipient of grants from the project “Sugar BEEt biorefinery for the inTEgrated prODuction of biofUel and polyesTers – BEETOUT”, funded by CARIPO
 Scientific manager for UNINA partner of WP2 activities “Engineering of *E. coli* strains for PHAs production starting from crude glycerol as by-product of fatty acid transesterification into biodiesel”
- Jun 2014 to Nov 2016 **Post-Doc Research Fellow**
 Department of Chemical Sciences, Federico II University, Naples, Italy
 Recipient of grants from the European project “Optimized oxidoreductases for medium and large scale industrial biotransformations, INDOX” (KBBE-2013-7 613549).
- Apr 2013-Mar 2014 **Post-Doc Research Fellow**
 Department of Chemical Sciences, Federico II University, Naples, Italy
 Recipient of grants from “CREME” Reti di eccellenza tra Università- Centri di ricerca- Imprese, POR Campania FSE 2007/2013, asse IV e asse V

Mar-Sept 2012	Post-Doc Research Fellow Department of Chemical Sciences, Federico II University, Naples, Italy Recipient of grants from ENERBIOCHEM PON01_01966 (2011-2014) “Filiera agro-industriali integrate ad elevata efficienza energetica per la messa a punto di processi di Produzione Eco-compatibili di Energia e Bio-chemicals da fonte rinnovabile e per la valorizzazione del Territorio” Resp. Prof. Vincenza Faraco
Nov 2010-Apr 2011	Post-Doc Research Fellow Department of Chemical Sciences, Federico II University, Naples, Italy Recipient of grants from ITALY-TURKEY Joint Project “Development of characterization of new biocatalysts by rational and random mutagenesis of laccases from different sources”. Resp. Prof. Giovanni Sanna
Mar 2009- Oct 2010	Post-Doc Research Fellow Department of Chemical Sciences, Federico II University, Naples, Italy Recipient of grants from Progetto PRIN 2007 “Structure-activity relationships of oxidative enzymes for biotransformations”. Resp. Prof. Giovanni Sanna
Jan-May 2008	Visiting Researcher Laboratoire de Bioinorganique Structurale dell'Università Aix III- Marseille (France) Supervisor: Prof. Thierry Tron
Jan-Sept 2005	Scholarship Department of Chemical Sciences, Federico II University, Naples, Italy Field of research “Investigation of protein secretion systems in psychrophilic bacteria”

TEACHING ACTIVITIES

From A.Y. 2019/20 to present	Professor of “Principi di chimica delle fermentazioni e bioprocessi innovativi” (6 CFU) for the master in “Biotecnologie Agro-ambientali e alimentari” (LM7), Federico II University Professor of “Polyester based bioplastics” (6 CFU) for the master in “Biotecnologie Molecolari e Industriali (LM-8), English curriculum “Biotechnology for Renewable Resources (BiRRe)”, Federico II University
Jan 2017 to present	Lecturer for the II Level Master BIOECONOMY IN THE CIRCULAR ECONOMY - BIOCIRCE Federico II University, Naples Cycle of lessons on “Microbial cell factories for biopolymer synthesis: case studies and laboratory demonstration”
Jun 2017 to present	Lecturer for the PhD School in Biotechnology Federico II University, Naples Cycle of lessons on “Microbial cell factories in industrial biotechnology”

Jul-Oct 2013	<p>Lecturer in “Protein Engineering</p> <p>CNR, Istituto di Biochimica delle Proteine, Napoli, Italy Progetto di Formazione “Sicurezza Chimico- Tossicologica dell’Ambiente” (BIODEFENSOR) “Prodotti innovativi per il monitoraggio e la decontaminazione e detossificazione di agenti nervini ed esplosivi nell’ambiente e/o per la gestione delle emergenze”</p>
Nov 2013-May 2014	<p>Lecturer in “Biochemistry of Fermentation Processes”</p> <p>CNR, Istituto di Chimica Biomolecolare Progetto di Formazione “PON01_02740_Sfruttamento integrato di biomasse algali in filiera di qualità (SIBAFEQ)</p>
Jan-Jun 2009	<p>Lecturer on Contract for the course in “Microbial Biotechnologies”</p> <p>Faculty of Biotechnological Sciences, Federico II University, Naples</p>

OTHER INSTITUTIONAL ACTIVITIES

Supervisor of PhD students

- Co-tutor for the thesis “Microbial Polyhydroxyalkanoates: Converting Renewable Resources into Bioplastics”, PhD student Iolanda Corrado- 33° cycle, Biotechnology, Federico II
- Co-supervising for the thesis “Biorefinery for Biomaterials: new tools for Polyhydroxyalkanoates (PHAs) recombinant production”, PhD student Marco Vastano- 30° cycle, Biotechnology, Federico II
- Co-supervising for the thesis “Wild-Type and mutated laccases for a green industry”, PhD student Valerio Guido Giacobelli- 29° cycle, Biotechnology, Federico II

Supervisor of Master and Degree thesis

Since 2009, for more than 15 students for the Master Degree in Industrial Biotechnology, Chemistry and Biology

Scientific Reviewer

International Scientific Journals: Enzyme and Microbial Technology (Elsevier), Bioresources (Elsevier), Applied and Environmental Microbiology (ASM), International Journal of Biological Macromolecules (Elsevier)

Guest Editor

Special Issue "Biopolymers and Bioplastics" for the section “Polymer Applications” in *Polymers* (ISSN 2073-4360), April 2021

Project Evaluator

National Science Centre (Narodowe Centrum Nauki), Polonia, from March 2015 to present

Member of the Evaluation Committee

PhD Dissertation of Claudia Marcela Rivera Hoyos, from the Science Department of Universidad Javeriana (Bogotá, Colombia); PhD in Biological Sciences, July 2016

Member of the Committee "Saperi minimi" for the major in "Agro-environmental and food Biotechnology", Federico II University

Organisation of scientific meetings

Member of the organizing committee of several internal meetings carried out in Italy in the frame of the European Projects she has been involved in.

PROJECT INVOLVEMENT

- Head of the PHA Research Unit of the University of Napoli Federico II, progetto PRIN "CARDoon valorisation by InteGrAted biorefiNery-CARDIGAN", for the activities aimed at the production of microbial biopolymer through valorization of cardoon roots (**Sept 2019 to present**).
- Head of the Research Unit of BIOPOX, EU funded project "in-built Triggered Enzymes to Recycle Multi-layers: an INnovation for USes in plastic-packaging- TERMINUS" - H2020-NMBP-ST-IND-2018 (**Jan 2019 to present**)
- Head of the Research Unit of BIOPOX, EU funded project WASTE2FUEL - Sustainable production of next generation biofuels from waste streams, W2F, 654623" financed by Horizon 2020 programme for the activities "Enzymatic pre-treatment of lignocellulosic biomasses for the production of biofuels through fermentative processes" (**2016-2019**)
- Head of the PHA Research Unit of the University of Napoli Federico II, project BEETOUT "Sugar beet biorefinery for the integrated production of biofuel and polyesters" financed by Fondazione CARIPO for Work Package 2 activities, "Engineering of *E.coli* strains for PHAs production starting from crude glycerol as by-product of fatty acid transesterification into biodiesel" (**2016-2018**)
- Member of UNINA Research Unit, European Union funded INDOX project: "OPTIMIZED OXIDOREDUCTASES FOR MEDIUM AND LARGE SCALE INDUSTRIAL BIOTRANSFORMATIONS" (INDOX, 613549) in the frame of the seventh framework programme of the EU. (**2013-2016**)
- Member of UNINA Research Unit, MIUR funded project PRIN 2009 "Catalytic mechanism and structural determinants of enzymatic properties of oxidases, peroxidases and oxigenases usable in biotechnological processes and in bio-recovery" (**2009-2012**)
- Member of UNINA Research Unit, project financed by Compagnia San Paolo (BIOFORM) "Sviluppo di sistemi per il trattamento di reflui industriali mediante l'utilizzo di microrganismi batterici e fungini". (**2008-2010**)
- Member of UNINA Research Unit, MIUR financed project PRIN 2007 "Structure-activity relationships of oxidative enzymes for biotransformations" (**2007-2010**)
- Member of UNINA Research Unit, European Union funded integrated-project IP-SME "SOPHIED" "SUSTAINABLE BIOPROCESSES FOR THE EUROPEAN COLOUR INDUSTRIES" (NMP2-CT-2004-505899) in the frame of the sixth framework programme of the EU. (**2006-2009**)

- Member of UNINA Research Unit, European Union funded STREP project STREP: “DISCOVERING QUORUM SENSING IN INDUSTRIALLY USEFUL FUNGI, A NOVEL APPROACH AT MOLECULAR LEVEL FOR SCALING-UP IN WHITE BIOTECH” (QUORUM, 032811) in the frame of the sixth framework programme of the EU. (2008-2011)

RESEARCH TOPICS

- Development of Integrated biorefineries for the valorization of agro-industrial wastes
- Designing of microbial cell-factories for the conversion of waste materials into biobased products
- Recombinant and native production of microbial Polyhydroxyalkanoates (PHA) biopolymers
- Enzymatic methods for biopolymer functionalization
- Designing of *ad-hoc* enzymatic bio-systems for applications in the field of the industrial biotechnology.
- Protein engineering for designing of enzymatic improved variants
- Development of enzymatic and fungal oxidative bio-systems for bioremediation and new green biosynthetic routes

SCIENTIFIC COLLABORATIONS

- Dr. Mario Malinconico and Dr. Barbara Immirzi, Dr. Gabriella Santagata, Institute for Polymers, Composites and Biomaterials (IPCB-CNR), Naples, Italy. *Topic: biopolymer characterization and exploitation*
- Prof. Georg Guebitz, University of Natural Resources and Life Sciences, Vienna, Austria. *Topic: biopolymer functionalization*
- Dr. Vincent Verney, Institut de Chimie de Clermont-Ferrand. *Topic: enzyme stabilization in Natural Deep Eutectic Solvents*
- Prof. Martino Di Serio and Prof. Rosa Turco, Chemical Science Department, Federico II University. *Topic: synthesis and application of new plasticizers to polyhydroxyalkanoates*
- Prof. Concetta Valeria Lucia Giosafatto, Chemical Science Department, Federico II University. *Topic: functionalization of hydrocolloidal materials with plant derived extracts for active packaging*
- Prof. Danilo Porro, Prof. Paola Branduardi, Department of Biotechnology and Bioscience, Bicocca University, Milan, Italy. *Topic: microbial production of polyesters*
- Prof. Antonio Marzocchella, Department of Chemical Engineering, Materials and Industrial Production at University of Naples Federico II; Italy. *Topic: microbial fermentation and enzyme immobilization*
- Prof. Riccardo Basosi and Prof. Rebecca Pogni, Department of Biotechnology, Chemistry and Pharmacy, University of Siena, Italy. *Topic: spectroscopic characterization of oxidative enzymes*
- Dr. Dietmar Schlosser, Helmholtz Centre for Environmental Research - UFZ, Department of Environmental Microbiology, Leipzig, Germany. *Topic: marine fungi for bioremediation*
- Dr. Eric Record, INRA, UMR 1163 Biotechnologie des Champignons Filamenteux, Polytech Marseille, Marseille, France. *Topic: laccase production in filamentous fungi*

- Dr. Thierry Tron, Aix Marseille Université, Centrale Marseille, CNRS iSm2, Marseille, France. *Topic: laccase production in recombinant yeasts.*
- Dr. Victor Guallar, Joint BSC-CRG-IRB Research Program in Computational Biology, Supercomputing Center, Barcelona, Spain; and ICREA, Barcelona, Spain. *Topic: laccase computational modelling*
- Dr. Mehmet Sener, Setas Technology Center, Tekirdag, Turkey. *Topic: industrial exploitation of laccase synthesized dyes*

PUBLICATIONS

H-Index: 19; Total Citations: 2083 (SCOPUS, November 2021)

H-Index: 22; Total Citations: 2928 (GOOGLE SCHOLAR, November 2021)

- 1) "A biorefinery approach for the conversion of *Cynara cardunculus* biomass to active films" (Mirpoor SF, Varriale S, Porta R, Naviglio D, Spennato M, Gardossi L, Giosafatto CVL, Pezzella C) (2022) *Food Hydrocolloids*, 122, Article number 107099; DOI 10.1016/j.foodhyd.2021.107099
- 2) "The power of two: An artificial microbial consortium for the conversion of inulin into Polyhydroxyalkanoates" (Corrado I, Petrillo C, Isticato R, Casillo A, Corsaro MM, Sannia G, Pezzella C) (2021) *International Journal of Biological Macromolecules*, 189, 494 – 502; doi10.1016/j.ijbiomac.2021.08.123.
- 3) "Optimization of Inulin Hydrolysis by *Penicillium lanosocoeruleum* Inulinases and Efficient Conversion Into Polyhydroxyalkanoates" (Corrado I, Cascelli N, Ntasi G, Birolo L, Sannia G, Pezzella C*) (2021) *Front Bioeng Biotechnol.*, 9, 108; doi10.3389/fbioe.2021.616908
- 4) "In vivo and Post-synthesis Strategies to Enhance the Properties of PHB-Based Materials: A Review" (Turco R, Santagata G, Corrado I, Pezzella C*, Di Serio M.) (2021) *Front Bioeng Biotechnol.*, 8:619266. doi: 10.3389/fbioe.2020.619266.
- 5) "Old Enzymes at the Forefront of Lignocellulosic Waste Valorization" (Giacobbe S, Pezzella C, Sannia G, Piscitelli A) (2021) In: Schlosser D. (eds) *Laccases in Bioremediation and Waste Valorisation. Microbiology Monographs*, vol 33. Springer, Cham. https://doi.org/10.1007/978-3-030-47906-0_3
- 6) "Turning Wastes into Resources: Exploiting Microbial Potential for the Conversion of Food Wastes into Polyhydroxyalkanoates" Corrado I, Vastano M, Cascelli N, Sannia G, Pezzella C* (2021) In: *Bio-valorization of Waste-Print* ISBN: 978-981-15-9695-7. Springer, <https://doi.org/10.1007/978-981-15-9696-4>
- 7) "Design and characterization of poly (3- hydroxybutyrate-co-hydroxyhexanoate) nanoparticles and their grafting in whey protein-based nanocomposites". (Corrado, I., Abdalrazeq, M., Pezzella, C.*, Di Girolamo, R., Porta, R., Sannia, G., Giosafatto, C.V.L.) (2021) *Food Hydrocolloid.*, 110, 106167.
- 8) "Beyond natural laccases: extension of their potential applications by protein engineering" (Stanzione I, Pezzella C, Giardina P, Sannia G, Piscitelli A) (2019) *Applied Microbiology and Biotechnology* Volume 104, Issue 3, 1 February 2020, Pages 915-924
- 9) "Green synthesis of conductive polyaniline by *Trametes versicolor* laccase using a DNA template" (Giacobbe S, Pezzella C, Della Ventura B, Giacobelli VG, Rossi M, Fontanarosa C, Amoresano A, Sannia G, Velotta R, Piscitelli A) (2019) *Engineering in Life Sciences* 19(9), 631-642
- 10) "Conversion of no/low value waste frying oils into biodiesel and polyhydroxyalkanoates" (Vastano M, Corrado I, Sannia G, Solaiman DKY, Pezzella C.) (2019) *Scientific Reports* 9(1):13751
- 11) "Butanol production from laccase-pretreated brewer's spent grain" (Giacobbe S, Piscitelli A, Raganati F, Lettera V, Sannia G, Marzocchella A, Pezzella C.) (2019); *Biotechnology for Biofuels*;

- 12) "Laccase pretreatment for agrofood wastes valorization" (Giacobbe S, Pezzella C, Lettera V, Sannia G, Piscitelli A) (2018) *Bioresource Technology* 265, pp. 59-65
- 13) "Laccase-based synthesis of SIC-RED: A new dyeing product for protein gel staining" (Giacobelli VG, Pezzella C, Sannia G, Olivieri G, Fontanarosa C, Amoresano A, Piscitelli A) (2018); *Biocatalysis and Agricultural Biotechnology* 15, pp. 270-276
- 14) "Enzymatic production of clickable and PEGylated recombinant polyhydroxyalkanoates" (Vastano M, Pellis A, Immirzi B, Dal Poggetto G, Malinconico M, Sannia G, Guebitz G, Pezzella C) *Green Chemistry*, (2017), 19(22) 5494-5504; DOI: 10.1039/C7GC01872J.
- 15) "New lipases by mining of *Pleurotus ostreatus* genome", (Piscitelli,A., Tarallo V., Guarino L., Sannia G., Birolo L., Pezzella C.) (2017), *PLoS ONE* 12 (9), art.no. e0185377
- 16) "A step forward in laccase exploitation: Recombinant production and evaluation of techno-economic feasibility of the process" (Pezzella C., Giacobelli V.G., Lettera V., Olivieri G., Cicatiello P., Sannia G., Piscitelli A) (2017), *Journal of Biotechnology*, DOI: 10.1016/j.jbiotec.2017.07.022
- 17) "Oxidoreductases on their way to industrial biotransformations" (Martínez AT, Ruiz-Dueñas FJ, Camarero S, Serrano A, Linde D, Lund H, Vind J, Tovborg M, Herold-Majumdar OM, Hofrichter M, Liers C, Ullrich R, Scheibner K, Sannia G, Piscitelli A, Pezzella C, Sener ME, Kılıç S, van Berkel WJH, Guallar V, Lucas MF, Zuhse R, Ludwig R, Hollmann F, Fernández-Fueyo E, Record E, Faulds CB, Tortajada M, Winckelmann I, Rasmussen JA, Gelo-Pujic M, Gutiérrez A, Del Río JC, Rencoret J, Alcalde M.) (2017) *Biotechnology Advances* Jun 15. pii: S0734-9750(17)30062-9. doi: 10.1016/j.biotechadv.2017.06.003.
- 18) "Applications of Functional Amyloids from Fungi: Surface Modification by Class I Hydrophobins" (Piscitelli A, Cicatiello P, Gravagnuolo AM, Sorrentino I, Pezzella C, Giardina P) (2017) *Biomolecules*. Jun 26;7(3). pii: E45. doi: 10.3390/biom7030045.
- 19) "Exploitation of *Trametes versicolor* for bioremediation of endocrine disrupting chemicals in bioreactors" (Pezzella, C., Macellaro, G., Sannia, G., Raganati, F., Olivieri, G., Marzocchella, A., Schlosser, D., Piscitelli, A.) (2017) *PLoS ONE*, 12 (6), art. no. e0178758.
- 20) "Repurposing designed mutants: a valuable strategy for computer-aided laccase engineering the case of POXA1b" (Giacobelli, VG; Monza, E; Lucas, MF; Pezzella, C; Piscitelli, A; Guallar, V; Sannia, G) (2017) *CATALYSIS SCIENCE & TECHNOLOGY* Vol 7, 2, 515-523
- 21) "Production of bioplastic from waste oils by recombinant *Escherichia coli*: a Pit-Stop in Waste Frying Oil to Bio-Diesel conversion race" (Pezzella C., Vastano M, Casillo A, Corsaro MM, Sannia G) (2016) *Environmental Engineering and Management Journal*, 15 (9), 2003-2010.
- 22) "Green routes towards industrial textile dyeing: a laccase based approach" (Pezzella C., Giacobbe S., Giacobelli V.G., Guarino L., Kylic S., Sener M., Sannia G and Piscitelli) (2016) *J Mol Cat B Enz*, 134, pp. 274-279.
- 23) "Efficient immobilization of a fungal laccase and its exploitation in fruit juice clarification" (Lettera V., Pezzella C., Cicatiello P., Piscitelli A., Giacobelli V.G., Galano E., Amoresano A., Sannia G.) *Food Chem.* 2016 196:1272-1278.
- 24) "Production of medium-chain-length polyhydroxyalkanoates from waste oils by recombinant *Escherichia coli*" (Vastano M, Casillo A, Corsaro MM, Sannia G, and Pezzella C.) *Eng in Life Sci*, 2015, 15, 700–709.
- 25) "How to enjoy laccases" (Pezzella C., Guarino L., and Piscitelli A.) *Cell. Mol. Life Sci.* 2015 72:923-40
- 26) "Immobilization of a *Pleurotus ostreatus* laccase mixture on perlite and its application to dye decolourisation" (Pezzella C., Russo M.E., Marzocchella A., Salatino P., Sannia G.) *Biomed Res Int*.

2014, 2014:308613. DOI: 10.1155/2014/308613.

- 27) "Fungal laccase degradation of endocrine disrupting compounds" (Macellaro G., Pezzella C., Cicatiello P., Sannia G., and Piscitelli A.) *Biomed Res. Int.* (2014) DOI 10.1155/2014/614038
- 28) "Effective mutations in a high redox potential laccase from *Pleurotus ostreatus*" (Macellaro G., Baratto M.C., Piscitelli A., Pezzella C., Fabrizi de Biani F., Palmese A., Piumi F., Record E., Basosi R., and Sannia G.) *Appl Microbiol Biotechnol* 2014 98:4949-4961.
- 29) "Fungal Laccases: Structure, Function and Application" (Piscitelli A., Pezzella C., Lettera V., Giardina P., Faraco V., and Sannia G.) in *Fungal Enzymes: Progress and Prospects* pp: 113-151 (Eds Maria de Lourdes T. M. Polizeli and Mahendra Rai) 2013 CRC Press ISBN 978-1-4665-9454-8
- 30) "Transcriptional analysis of *Pleurotus ostreatus* laccase genes" (Pezzella C., Lettera V., Piscitelli A., Giardina P., and Sannia G.), *Appl. Microbiol. Biotech.* 2013, 97:705-717
- 31) "Regulated Recombinant Protein Production in the Antarctic Bacterium *Pseudoalteromonas haloplanktis* TAC125" (Rippa V., Papa R., Giuliani M., Pezzella C., Parrilli E., Tutino M.L., Marino G., Duilio A.) *Methods Mol Biol.* 2012, 824, 203-18
- 32) "A Novel Strategy for the Construction of Genomic Mutants of the Antarctic Bacterium *Pseudoalteromonas haloplanktis* TAC125" (Giuliani M., Parrilli E., Pezzella C., Rippa V., Duilio A., Marino G., Tutino M.L.) *Methods Mol Biol.* 2012, 824, 219-33
- 33) "Classical breeding in *Pleurotus ostreatus*: a natural approach for laccase production improvement" (Del Vecchio C., Lettera V., Pezzella C., Piscitelli A., Leo G., Birolo L., and Sannia G.) *Biocatal Biotransformation* 2012, 30: 78-85
- 34) "Fungal laccases: versatile tools for lignocellulose transformation" (Piscitelli A., Del Vecchio C., Faraco V., Giardina P., Macellaro G., Pezzella C., and Sannia G.), *Comptes Rendus Biologies*, 2011, 334:789-794
- 35) "Induction and Transcriptional Regulation of Laccases in Fungi" (Piscitelli A., Giardina P., Lettera V., Pezzella C., Sannia G., and Faraco V.), *Current Genomics*, 2011, 12:104-112
- 36) "The *Pleurotus* genome: an inventory of laccase-type genes" (Piscitelli A., Pezzella C., Lettera V., Giardina P., Faraco V., and Sannia G.) *Proceedings of Oxidative Enzymes as Sustainable Industrial Biocatalysts*, Santiago de Compostela- Spain (September 2010), Ed, G, Feijoo and M, T, Moreira, ISBN-13:978-84-614-2824-3, pp, 22-27
- 37) "Identification of a new member of *Pleurotus ostreatus* laccase family from mature fruiting body," (Lettera V., Piscitelli A., Leo G., Birolo L., Pezzella C., and Sannia G.) *Fungal Biology* 2010, 114:724-730
- 38) "Heterologous laccase production and its role in industrial applications," (Piscitelli A., Pezzella C., Giardina P., Faraco V., and Sannia G.) *Bioengineered Bugs* 2010, 1:252-262
- 39) "PssA is required for alpha-amylase secretion in Antarctic *Pseudoalteromonas haloplanktis*" (Parrilli E., Giuliani M., Pezzella C., Danchin A., Marino G., Tutino M.L.) *Microbiology* 2010 156, 211-219
- 40) "Laccases: a never-ending story" (Giardina P., Faraco V., Pezzella C., Piscitelli A., Vanhulle S., and Sannia G.) *Cell. Mol. Life Sci.* 2010, 67:369-385
- 41) "Possibilities and limitations of the investigation of colored samples in the luminescent bacteria test" (Jäger I., Hafner C., Hercher C., Sannia G., Pezzella C., Mois E., Cludts M., Junghanns C., Schlosser D., Prunty C., Jarosz-Wilkolazka A., Olszewska A., Yesiladali K., Enaud E., Vanhulle S.) *Melliand English* 10/2008; E119-122
- 42) "The *Pleurotus ostreatus* laccase multi-gene family: isolation and heterologous expression of new family members" (Pezzella C., Autore F., Giardina P., Piscitelli A., Sannia G., and Faraco V.) *Current Genetics* 2009, 55:45-57

- 43) "Bio-remediation of coloured industrial wastewaters by the white-rot fungi *Phanerochaete chrysosporium* and *Pleurotus ostreatus* and their enzymes" (Faraco V., Pezzella C., Miele A., Giardina P., and Sannia G.) *Biodegradation* 2009 20, 209–220
- 44) Decolourization of textile dyes by the white-rot fungi *Phanerochaete chrysosporium* and *Pleurotus ostreatus*" (Faraco V., Pezzella C., Giardina P., Piscitelli A., Vanhulle S., and Sannia G.) *Journal of Chemical Technology & Biotechnology* 2008, 84:414-419
- 45) "Decolourisation and detoxification of textile effluents by fungal biosorption" (Prigione V., Tigini V., Pezzella C., Anastasi A., Sannia G., and Varese G.C.) *Water Res* 2008 42(12): 2911-20
- 46) "Evidence for a radical mechanism in biocatalytic degradation of synthetic dyes by fungal laccases mediated by violuric acid" (Pogni R., Brogioni B., Baratto M.C., Sinicropi A., Giardina P., Pezzella C., Sannia G., Basosi R.) *Biocatal and Biotransf* 2007 25, 269-275

COMMUNICATIONS

Dr. Pezzella is author/co-author of numerous communications at Italian and Foreign meetings These are the ones she presented as speaker:

- 1) Laccase pretreatment for agrofood wastes valorisation (Pezzella C., Giacobbe S., Lettera V., Piscitelli A., Sannia G.) XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale, Milano, 4-6 settembre 2018- Best poster Award
- 2) Sustainable production and enzymatic functionalization of microbial Polyhydroxyalkanoates (Corrado I., Vastano M., Pellis A., Immirzi B., Dal Poggetto G., Guebitz G., Malinconico M., Sannia G., Pezzella C.) XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale, Milano, 4-6 settembre 2018
- 3) Recombinant production and derivatization of amorphous mcl- Polyhydroxyalkanoates: innovative enzymatic approach for polymer bio-functionalization (Vastano M., Pellis A., Immirzi B., Dal Poggetto G., Malinconico M., Guebitz G.M., Sannia G., Pezzella C.) DESIGNER BIOLOGY FROM PROTEINS AND CELLS TO SCAFFOLDS & MATERIALS Vienna, Austria 7-9 giugno 2017
- 4) BIOPOX srl: soluzioni biotech per l'industria (Pezzella C., Lettera V., Morra S., Piscitelli A., and Sannia G.) Bio-UNIVERSE: UNlone uniVERsità-impreSE, Napoli-30 Gennaio, 2015
- 5) Effective mutations in a high-redox potential laccase from *Pleurotus ostreatus* (Pezzella C., Piscitelli A., Macellaro G., Giacobelli V.G., Cicatiello P., Sannia G.) *OxiZymes* 2014 Vienna, 1-4 Luglio 2014
- 6) New systems for polyhydroxyalkanoates production from related carbon sources: valorization of waste materials (Vastano M., Casillo A., Corsaro M.M., Sannia G., and Pezzella C.) 8th International Conference on Polymer and Fiber Biotechnology; Braga, Portogallo, 25-27 maggio 2014
- 7) High redox- potential oxidative enzymes for industrial applications (Pezzella C., Piscitelli A., Macellaro G., Giacobelli V.G., Cicatiello P., Sannia G.) 8th International Conference on Polymer and Fiber Biotechnology; Portogallo, 25-27 maggio 2014
- 8) Laccases as industrial biocatalysts: two case studies (Pezzella C., Lettera V., Piscitelli A., Cicatiello P., Giacobelli V. G., Morra S. and Sannia G.) IFIB, Napoli 22-23 Ottobre 2013
- 9) Bioremediation of colored industrial wastewaters by the white rot fungi *Phanerochaete chrysosporium* and *Pleurotus ostreatus* and their enzymes (Pezzella C., Faraco V., Miele A., Giardina P., and Sannia G.) 4th Bioremediation Conference. Chania, Creta 3-6 Settembre 2008
- 10) Bio-remediation strategies for the treatment of industrial colored wastewaters (Pezzella C., Del Vecchio C., Faraco V., Miele A., Giardina P. and Sannia G.) X National Biotechnology Congress. Perugia, Italia 17-19 Settembre 2008,
- 11) The white rot fungi PO322 and PC374 and their enzymes for the bioremediation of industrial colored wastewaters (Pezzella C., Del Vecchio C., Faraco V., Giardina P., Miele A., Piscitelli A., and Sannia

G.) Last Annual Meeting SOPHIED (Novel Sustainable Bioprocesses for European Colour Industries), Malaga Spagna, 20-30 maggio 2008

- 12) La secrezione dell'alfa-amilasi psicrofila in *Pseudoalteromonas haloplanctis* TAC125: evidenze molecolari di un nuovo sistema di secrezione proteic" (Pezzella C., Parrilli E., Tutino M.L.) Cortona Procarioti, 31 marzo-1 aprile 2005

DISSEMINATION ACTIVITIES

XXIX Futuro Remoto; Un viaggio tra scienza e fantascienza, una festa di Arte Scienza Tecnologia." Napoli 15-19 Ottobre 2015. "Dagli olii esausti alle bioplastiche: non esiste scarto senza valore" (Pezzella C., Vastano M., Sannia G.).

"XXX Futuro Remoto-Una festa di scienza, tecnologia, arte e cultura" Napoli 7-10 Ottobre, 2016. "Basta un poco di zucchero...e la barbabietola si trasforma in biodiesel e bioplastica" (Pezzella C., Vastano M., Sannia G., Martani F., Branduardi P., Porro D.)

"Circolare...dai rifiuti alle bioplastiche, il semaforo è verde" (Corrado I, Cascelli N, Cozzolino D, Sannia G, **Pezzella C.**) Futuro Remoto 2019 - Essere 4.0" promossa dalla Città della Scienza, Napoli 21-24 Novembre 2019.

CAREER BREAKS

22 nd Jul-23 rd Dec 2011	maternity leave
13 th Feb-14 th Jul 2015	maternity leave

Napoli, 3rd November, 2021

Signature
Cinzia Pezzella