

PERSONAL INFORMATION

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 - o <https://www.docenti.unina.it/vincenza.faraco>
 - o <https://www.edenshift.com>
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- **Work Address:**
University of Naples Federico II
Department of Chemical Sciences
Via Cintia, 4, 80126 Napoli, Italy

CURRENT JOB POSITION

Professor of Fermentation Chemistry and Biotechnology

03/06/2014 – Current

University of Naples Federico II – Department of Chemical Sciences – Naples, Italy

PROFESSIONAL SUMMARY

Scientist, university professor, and business consultant with over 20 years of experience in **industrial biotechnology** and **sustainability**, specializing in:

- **Development of innovative biocatalytic systems** for the sustainable production of biofuels, bioplastics, biocosmetics, and fine chemicals with diverse applications, offering eco-friendly alternatives to traditional industrial processes.
- **Securing significant European Commission funding**, coordinating industrial research projects with a combined budget exceeding €20 million.
- Promoting impactful innovation in bioeconomy through **research-industry connections and international partnerships**.
- Mentoring early-career researchers, and fostering knowledge exchange across **India, Brazil, the USA, and Europe**.

Recognized among the **top 2% of scientists worldwide** in 2019 and 2020, I have a proven track record of **groundbreaking achievements**, including over **100 high-impact publications** in bioeconomy and enzymatic research. My contributions span the early development of cellulolytic enzymes to optimizing esterases for advanced industrial applications, showcasing my **versatility and innovation across diverse biotechnological fields**.

As the founder of **CIAK SI SCIENZA** -now **EDEN SHIFT**- I have led projects integrating **sustainability into industrial processes** and fostering **societal impact** through education, consultancy, and outreach. My initiatives within EDEN SHIFT include:

- Designing and delivering **training programs** for ecological transition and sustainability reporting managers.
- Supporting companies in obtaining **European Commission funding**.

I am dedicated to **international collaboration** and have worked in multidisciplinary environments across academia, industry, and government. My experiences as a **visiting researcher** in institutions such as **Imperial College London, the Hebrew University of Jerusalem, Kyoto University, the Federal University of Paraná (Brazil), and the Council of Scientific and Industrial Research (India)** have enriched my ability to integrate diverse scientific perspectives and apply them to practical challenges.

My career reflects a **growing focus on entrepreneurship**, inspired by a desire to apply scientific knowledge to address real-world challenges. This evolving entrepreneurial approach has enabled me to:

- Contribute to the identification and implementation of **green innovations** that protect human and environmental health.
- Foster **networks** of international experts and industries to support sustainable transitions.
- Offer consultancy services to companies seeking to enhance competitiveness through **sustainability and circular economy practices**.

Committed to advancing sustainability and fostering innovation, I aim to further strengthen the **global bioeconomy** by connecting research excellence with practical applications, empowering industries to achieve **sustainable growth**.

WORK EXPERIENCE

Training Manager

07/01/2025 – Current

CIAK SI SCIENZA APS -now EDEN SHIFT- Italy

Main activities and responsibilities:

- Designed and organized the online professional course "**Sustainability Reporting and ESG Management**".
- Managed the setup of the web page of the course.
- Conducted communication activities to promote the courses.
- Supervised student assistance throughout the program.

[Details](#)

Business or sector: Professional, scientific, training and technical activities

Visiting Researcher

16/10/2024 – 14/11/2024

Imperial College London – Department of Chemical Engineering, Faculty of Engineering, UK

Main activities:

- Collaboration with Professor Jason Hallett on research related to development of optimized biocatalysts to efficiently process lignocellulosic materials pretreated with ionic liquids.
- Participation in scientific meetings and discussions.
- Exploration of new potential applications for advanced biotechnological solutions in green chemistry.

Business or sector: scientific, and technical activities

Coordinator of Department of Bioeconomy and Circular Economy

19/03/2024 – Current

CETRI-TIRES – Rome, Italy

Main activities and responsibilities:

- Intensify dialogue with institutional organizations to boost the advancement of **bioeconomy** and **circular economy**.
- Enhance cooperation with private companies in the fields of **circular transition** and **bioeconomy**, aligning with the priorities of the **European Green Deal**.

- Strengthen access to **European Commission funds** for initiatives in the **bioeconomy** and **circular economy** sectors.
- Promote knowledge dissemination to foster **fair, inclusive, ethical, and sustainable development**.

[More details](#)

Business or sector: Professional, scientific, and technical activities

Coordinator of Task Force in Circular Economy

02/01/2023 – Current

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Coordinated the **Federico II University Task Force in Circular Economy**, a multidisciplinary team of experts working to:
 1. Intensify **research, development, and training activities**.
 2. Enhance access to **European Union funds**.
 3. Foster **technology transfer** and strengthen collaboration with private companies in the fields of **circular transition** and **bioeconomy**, aligned with the priorities of the **European Green Deal**.

[Task Force Website](#) [Additional Information](#)

Business or sector: Professional, scientific, training and technical activities

Training Manager

01/01/2022 – Current

CIAK SI SCIENZA APS -now EDEN SHIFT- Naples, Italy

Main activities and responsibilities:

- Designed and organized the online professional course "**Ecological Transition Manager**".
- Created course programs and selected and coordinated teachers.
- Managed the setup of the online platform for course delivery.
- Conducted communication activities to promote the courses.
- Supervised student assistance throughout the program.

[Details](#)

Business or sector: educational and technical training activities.

University Lecturer

01/11/2019 – Current

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Lecturer of **Chemistry of Fermentation** for the bachelor's degree Course in **Industrial Chemistry**.
- Conducted **48 hours** of teaching annually.

[Professor profile](#)

Business or sector: training and education.

Coordinator of the Network of Industries and Experts in “(Eco)sustainability and Circular (Bio)Economy” - ECIRCULAR

31/10/2019 – Current

UNIVERSITY OF NAPLES "FEDERICO II" – Research Center Laboratory of Urban and Regional Planning "**Raffaele d'Ambrosio**" (L.U.P.T.) Via Toledo, 402, 80134, Naples, Italy

Main activities and responsibilities:

- Coordinated the **ECIRCULAR Network** of industries and experts in **(Eco)sustainability and Circular (Bio)Economy**.
- Promoted the application of **eco-sustainable technologies** and the advancement of the **circular economy** for territorial development.
- Managed a network currently including **150 experts** and approximately **50 private companies**, cooperatives, and trade associations, with continuous expansion.

[Website](#)

Business or sector: Professional, scientific, and technical activities

Founder and President

14/02/2019 – Current

CIAK SI SCIENZA APS -now **EDEN SHIFT**- Naples, Italy

Main activities and responsibilities:

- Founded and managed the not-for-profit organization **CIAK SI SCIENZA APS**-now **EDEN SHIFT**.
- Organized and managed **consultancy services** for professionals and industries to enhance business competitiveness through **eco-sustainability** and the **circular economy**.
- Designed and organized **training courses** for individuals and corporate groups, both face-to-face and online, to specialize in skills required for ecological and circular transition and sustainability.
- Conducted dissemination and communication activities for companies, emphasizing their contributions to ecological transition, especially in the **bioeconomy** and **circular economy** sectors. Activities included:
 - Website design and development.
 - Social media management.
 - Preparation of communication materials.
 - Organization of events.
- Provided **scientific and environmental information** through the online newspaper **CIAK SCIENZA** and social media platforms.

[Website](#)
[English Version](#)
[New website](#)

Business or sector: educational and technical training activities.

University Lecturer

01/11/2014 – Current

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Lecturer of **Biotechnology of Fermentation** for the Bachelor Degree Course in **Biomolecular and Industrial Biotechnology**.
- Conducted **48 hours** of teaching annually.

[Professor profile](#)

Business or sector: training and education.

University Professor

03/06/2014 – Current

UNIVERSITY OF NAPLES "FEDERICO II" – Department of Chemical Sciences
Complesso Monte Sant'Angelo, Via Cintia 4, 80126, Naples, Italy

Role: Associate Professor of **Fermentation Chemistry and Biotechnology**.

Details:

Professor of Fermentation Chemistry and Biotechnology pursuant to **art. 1, paragraph 9, of Law n. 230-2005** and ss.mm.ii., as winner of specific high-qualification research programs identified by the **Minister of Education, University, and Research** decree of July 1, 2011 (Annex 2), in implementation of **art. 29, paragraph 7, Law n. 240 of December 30, 2010**.

Main activities and responsibilities:

- Teaching in bachelor's degree courses.
- Leading research groups in Fermentation Chemistry and Biotechnology.
- Managing collaborations with national and international organizations and industries.

[Professor profile](#)

Business or sector: education, scientific research, and training.

Visiting Researcher

09/02/2024 – 03/03/2024

University Federal of Paraná – Curitiba, Brazil

Main activities:

- Collaboration with Professor Carlos Ricardo Soccol on Circular BioEconomy: optimal systems for biomasses and wastes upgrading.
- Participation in scientific meetings and discussions.
- Exploration of new collaborative projects for advancing biotechnological solutions in green chemistry.

Business or sector: scientific, training, and technical activities

Audit Supervisor

31/01/2023 – 30/03/2023

European Commission – Brussels, Belgium

Role: External expert and auditor for the evaluation of a technical report for a project funded under the **European Union's Horizon 2020 research and innovation programme**.

Main activities and responsibilities:

- Reviewed the technical periodic report of the project.
- Prepared individual assessment reports, including comments and recommendations.
- Participated in meetings with project partners and European Commission officers to provide feedback and share recommendations.

- Compiled a consolidated assessment report, integrating feedback from the European Commission.
- Audited project progress, evaluating the achievement of objectives, implementation of activities, and compliance with the Grant Agreement.

Business or sector: public administration, research funding, and evaluation.

Training Manager

01/02/2021 – 31/12/2022

CIAK SI SCIENZA APS – now EDEN SHIFT- Naples, Italy

Main activities and responsibilities:

- Created and organized the professional online course “**Environmental Expert of Services Companies**” in collaboration with the **Network of Private Companies and Experts in (Eco)sustainability and Circular (Bio)Economy (ECIRCULAR)** of the **University of Naples Federico II** (center L.U.P.T. "Raffaele D'Ambrosio").
- Designed course programs and selected and coordinated teachers.
- Managed the setup of the online platform for course delivery.
- Conducted communication activities to promote the courses.
- Supervised student assistance throughout the program.

Business or sector: educational and technical training activities.

Training Manager

01/04/2020 – 31/12/2022

CIAK SI SCIENZA APS – now EDEN SHIFT- Naples, Italy

Main activities and responsibilities:

- Created and organized the professional online course “**Environmental Expert for Sustainable Tourism and Hotel Facilities**” in collaboration with the **Network of Private Companies and Experts in (Eco)sustainability and Circular (Bio)Economy (ECIRCULAR)** of the **University of Naples Federico II** (center L.U.P.T. "Raffaele D'Ambrosio").
- Designed course programs and selected and coordinated teachers.
- Managed the setup of the online platform for course delivery.
- Conducted communication activities to promote the courses.
- Supervised student assistance throughout the program.

Business or sector: educational and technical training activities.

Auditor

20/09/2022 – 24/11/2022

European Commission – Brussels, Belgium

Role: External expert and member of the panel of reviewers for the evaluation of **Innovation Action project proposals** submitted for funding under the **European Commission Circular Bio-based Europe Joint Undertaking (CBE JU)**.

Main activities and responsibilities:

- Reviewed project proposals submitted for funding under the Bio-Based Industries Joint Undertaking (BBI).
- Prepared individual assessment reports, including comments and recommendations for all submitted proposals.
- Participated in meetings with other panel members and European Commission officers to discuss feedback and finalize consolidated assessment reports.
- Evaluated project proposals based on their scientific and technical merits and alignment with funding criteria.

Business or sector: public administration, research funding, and evaluation.

Visiting Researcher

15/01/2021 – 13/06/2021

The Lanzarote University School of Tourism (EUTL) – Lanzarote, Spain

Main activities and responsibilities:

- Collaborated with Professor Rita Rosa Carballo Fuentes on the sustainability of tourist destinations, with reference to the activities of CIAK SI SCIENZA.
- Delivered seminars and participated in scientific conferences and meetings.
- Conducted evaluations of sustainability practices in various contexts.

Business or sector: Professional, scientific, and technical activities

Auditor

23/09/2020 – 23/11/2020

European Commission – Brussels, Belgium

Role: External expert and member of the panel of reviewers for the evaluation of **Flagship project proposals** submitted for funding under the **European Commission Bio-Based Industries Joint Undertaking (BBI)**.

Main activities and responsibilities:

- Reviewed project proposals submitted for funding under the Bio-Based Industries Joint Undertaking (BBI).
- Prepared individual assessment reports, including comments and recommendations for all submitted proposals.
- Participated in meetings with other panel members and European Commission officers to discuss feedback and finalize consolidated assessment reports.
- Evaluated project proposals based on their scientific and technical merits and alignment with funding criteria.

Business or sector: public administration, research funding, and evaluation.

University Lecturer

01/11/2015 – 31/10/2019

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Delivered lectures in **Environmental Biotechnology** and **Sustainable Production of Biochemicals** for the master's degree Course in **Molecular and Industrial Biotechnology**.
 - Conducted **40 hours** of teaching annually.
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Principal investigator

01/09/2016 – 31/08/2019

University of Naples "Federico II" – Department of Chemical Sciences – Naples, Italy

Role: Principal investigator for the research project **BIOrescue**:

"Enhanced bioconversion of agricultural residues through cascading use", funded by the European Commission under **H2020 Bio-Based Industries (BBI) programme**.

Main activities and responsibilities:

- Led the research activities for the project.
- Coordinated research activities aimed at developing innovative biorefinery concepts for converting agricultural residues, particularly spent mushroom substrate, into high-value bio-based products.
- Collaborated with international partners to implement project tasks and disseminate results.
- Managed the allocated budget of €270,945 for the University of Naples "Federico II".

Project details:

- **Title:** Enhanced bioconversion of agricultural residues through cascading use – BIOrescue
- **Grant Agreement Number:** 720708
- **Funding Programme:** Horizon 2020 / BBI-JU

- **Type of Action:** BBI-RIA (Research and Innovation Action)
- **Total Project Budget:** €3,767,587
- **EU Contribution:** €2,635,144
- **Funding awarded to Faraco's research unity:** € 270,945.

Business or sector: Industrial research and development.

Project Manager

02/01/2018 – 28/02/2019

APRE – Agency for the Promotion of European Research – Rome, Italy

Role: Scientific coordinator of the **BIOVOICES** project:

"Mobilization of a plurality of voices and mutual learning to accelerate the Bio-based sector," funded by the European Commission under the **H2020 Bio-Based Industries (BBI)** programme (Grant No. 774331).

Main activities and responsibilities:

- Coordinated scientific activities for the BIOVOICES project, aiming to foster stakeholder engagement and mutual learning in the bio-based sector.
- Oversaw project planning, implementation, and dissemination in alignment with H2020 BBI programme goals.
- Collaborated with international stakeholders to accelerate bioeconomy adoption through knowledge exchange and capacity building.

Business or sector: Research coordination and policy support.

Auditor

23/09/2018 – 23/11/2018

European Commission – Brussels, Belgium

Role: External expert and member of the panel of reviewers for the evaluation of **Flagship project proposals** submitted for funding under the **European Commission Bio-Based Industries Joint Undertaking (BBI)**.

Main activities and responsibilities:

- Reviewed project proposals submitted for funding under the Bio-Based Industries Joint Undertaking (BBI).
- Prepared individual assessment reports with comments and recommendations for all submitted proposals.
- Participated in meetings with other panel members and European Commission officers to discuss feedback and finalize consolidated assessment reports.

- Evaluated project proposals based on their scientific and technical merits and alignment with funding criteria.

Business or sector: public administration, research funding, and evaluation.

Project Coordinator

30/11/2013 – 01/12/2017

University of Naples "Federico II" – Naples, Italy

Role: Securing funding for, and coordinating the large collaborative SME-targeted project

OPTIBIOCAT:

"Optimized esterase biocatalysts for cost-effective industrial production" (Grant No. 613868), funded by European Commission **under Seventh Framework Programme (FP7) - Knowledge-Based Bio-Economy (KBBE) programme.**

Project details:

- **Title:** Optimized esterase biocatalysts for cost-effective industrial production – OPTIBIOCAT
- **Grant Agreement Number:** 613868
- **Funding Programme:** FP7
- **Type of Action:** Knowledge-Based Bio-Economy (KBBE)
- **Total budget:** €9,109,854.78
- **EU funding:** €6,851,846

Main activities and responsibilities:

- Coordinated a multidisciplinary partnership involving over 100 professionals from 18 partners across eight European countries (Sweden, Germany, Netherlands, Finland, Portugal, Italy, Greece, and France), including:
 - o 5 universities
 - o 2 research institutions
 - o 9 small and medium-sized enterprises (SMEs)
 - o 2 large companies
- Managed key collaborations with partners such as:
 - o University of Naples "Federico II," KORRES S.A. Natural Products, Luleå Tekniska Universitet, Westfälische Wilhelms-Universität Münster, Supren GmbH, Taros Chemicals GmbH & Co KG, Institut National de la Recherche Agronomique, Koninklijke Nederlandse Akademie van Wetenschappen, Tekniska Högskola AB, Nzytech LDA, ServiceXS BV, Dyadic Nederland BV, DuPont, Clea Technologies BV, Helsingin Yliopisto, Proteonic BV, Biocom, and GIBV.
- Planned, managed, and monitored all project activities to ensure successful execution.
- Supervised the preparation of periodic reports by coordinating international teams and liaising with European Commission officers.
- Organized meetings, workshops, and events to ensure project progress, collaboration, and dissemination of results.

Business or sector: Industrial research and development.

Auditor

23/09/2017 – 23/11/2017

European Commission – Brussels, Belgium

Role: External expert and member of the panel of reviewers for the evaluation of **Flagship project proposals** submitted for funding under the **European Commission Bio-Based Industries Joint Undertaking (BBI)**.

Main activities and responsibilities:

- Reviewed project proposals submitted for funding under the Bio-Based Industries Joint Undertaking (BBI).
- Prepared individual assessment reports, including comments and recommendations for all submitted proposals.
- Participated in meetings with other panel members and European Commission officers to discuss feedback and finalize consolidated assessment reports.
- Evaluated project proposals based on their scientific and technical merits and alignment with funding criteria.

Business or sector: public administration, research funding, and evaluation.

Principal investigator

01/06/2012 – 30/09/2017

UNIVERSITY OF NAPLES "FEDERICO II" – Department of Chemical Sciences – Naples, Italy

Role: Principal investigator for the European Commission-funded research project **LIFE11 ENV/IT/275 "ECOREMED"**:
"Implementation of eco-compatible protocols for agricultural soil remediation in Litorale Domizio-Agro Aversano NIPS."

Main activities and responsibilities:

- Conducted research on sustainable soil remediation techniques.
- Developed and implemented eco-compatible protocols for agricultural soil recovery.
- Collaborated with multidisciplinary teams to address environmental challenges in the Litorale Domizio-Agro Aversano area.

Project details:

- **Title:** "Implementation of eco-compatible protocols for agricultural soil remediation in Litorale Domizio-Agro Aversano NIPS." – ECOREMED
- **Grant Agreement Number:** LIFE11 ENV/IT/000275
- **Funding Programme:** LIFE Programme

- **Type of Action:** Environment and Resource Efficiency
- **Funding awarded to Faraco's Research unity:** € 253,550.

Business or sector: Industrial research and development.

Project coordinator

30/03/2013 – 31/07/2017

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Role: Securing funding for, and coordinating the **Industrial Research and Training Project (Public-Private Laboratory) BioPoliS:**

"Development of green technologies for the production of biochemicals for the synthesis and industrial application of polymeric materials starting from agricultural biomasses obtained from sustainable cultivation systems in the Campania Region" (PON03PE_00107_1).

Project details:

- **Title:** Development of green technologies for the production of biochemicals for the synthesis and industrial application of polymeric materials starting from agricultural biomasses obtained from sustainable cultivation systems in the Campania Region– BioPoliS
- **Grant Agreement Number:** PON03PE_00107_1
- **Funding Programme:** National Operational Programme R&C 2007–2013 (D.D. Prot. n. 713/Ric. of 29/10/2010).
- **Total budget:** €11,461,011.74
- **Funding:** €9,027,789.00

Main activities and responsibilities:

- Coordinated a partnership involving more than 200 people from seven private industries:
 - **ARCA 2010 Società Cooperativa Scarl, BST SPA, Biochemtex SpA (Mossi & Ghisolfi), Consorzio Sanniotex, Novamont SpA, SAPA SRL, and Socratis Scarl.**
- Collaborated with three public organizations:
 - **University of Naples "Federico II"** (six departments).
 - **National Research Council (CNR)** (seven institutes from four departments).
 - **University of Campania "Luigi Vanvitelli".**
- Planned, managed, and monitored project activities.
- Supervised the preparation of periodic reports, coordinating diverse groups and interacting with ministry officers.
- Organized meetings and events to ensure project progress and dissemination.

Business or sector: Industrial research, development, and training

Training Manager

30/05/2016 – 11/05/2017

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Created, planned, coordinated, and organized the **training course: "Expert in the Management of Biorefineries: Setup of Sustainable Cultivation Systems, Bioconversion of Biomasses into Biochemicals, Their Polymerization and Subsequent Transformation of Polymers into Materials for Industry"** (1200 hours).
- The course was carried out within the **BioPoliS PON03PE_00107_1** industrial research and training project.

Course structure:

- **Module A (600 hours):** Classroom training covering 20 submodules, including:
 - o Agronomic aspects related to biomass production and valorization.
 - o Biomass treatment processes.
 - o Fermentation and product separation processes.
 - o Chemical synthesis processes.
 - o Formulation and transformation of plastic materials.
- **Module B (480 hours):** Application work experience supporting personnel engaged in industrial research and experimental development.
- **Module C (120 hours):** Training on programming, strategic management, evaluation, and operational organization of industrial research projects, focusing on:
 - o Corporate finance and project accounting.
 - o National and EU frameworks for research projects.
 - o Project management techniques, including technical, organizational, managerial, and relational skills.
 - o Intellectual property, including copyright, trademarks, and patents, as well as the economic value of patents.

Objectives:

- Provided participants with an integrated technical and scientific foundation suitable for the biorefinery sector.
- Combined theoretical knowledge with practical application, ensuring a comprehensive training process.

Business or sector: educational and technical training activities.

Auditor

01/03/2017 – 30/03/2017

European Commission – Brussels, Belgium

Role: External expert and member of the panel of auditors for the evaluation of a technical report under the **European Commission Bio-Based Industries Joint Undertaking (BBI)**.

Main activities and responsibilities:

- Reviewed the technical periodic report of a project funded under the Bio-Based Industries Joint Undertaking (BBI).
- Prepared an individual assessment report, including comments and recommendations.
- Participated in meetings with project partners and European Commission officers to discuss feedback and provide recommendations.
- Compiled a consolidated assessment report incorporating input from the European Commission.
- Audited project progress regarding achievement of objectives, activity implementation, and compliance with the Grant Agreement.

Business or sector: public administration, research funding, and evaluation.

Project coordinator

30/07/2012 – 29/07/2016

UNIVERSITY OF NAPLES "FEDERICO II" – Department of Chemical Sciences – Naples, Italy

Role: Securing funding for, and coordinating the research project **BIOASSORT**:

“Improvement of technologies and tools, e.g. biosystems and biocatalysts, for waste conversion to develop an assortment of high added value eco-friendly and cost-effective bio-products”, funded by the European Commission FP7 (Marie Curie Actions People International dimension).

Main activities and responsibilities:

- Managed the research project.
- Coordinated mobility and research activities involving over 50 researchers from international institutions, including:
 - **University of Jaén (Spain)**
 - **National Renewable Energy Center (Spain)**
 - **École Polytechnique Fédérale de Lausanne (Switzerland)**
 - **Council of Scientific and Industrial Research, Trivandrum (India)**
 - **Federal University of Paraná (Brazil)**
 - **Center of Biotechnology, Tecnológico de Monterrey (Mexico)**
 - **Universidad de La Frontera (Chile)**
 - **Michigan State University (USA)**
- Planned, managed, and monitored project activities.
- Supervised the preparation of periodic reports by coordinating diverse international groups and interacting with European Commission officers.
- Organized meetings and events to ensure project progress and dissemination.

Project details:

- **Title:** Improvement of technologies and tools, e.g. biosystems and biocatalysts, for waste conversion to develop an assortment of high added value eco-friendly and cost-effective bio-products - BIOASSORT
- **Grant Agreement Number:** 318931

- **Funding Programme:** European Commission FP7, Marie Curie Actions People International dimension.
- **Total budget:** €296,100.00
- **Funding:** €247,590.00

Business or sector: research and development

Lecturer

01/11/2014 – 31/10/2015

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Delivered lectures in **Environmental Biotechnology** for the Master's Degree Course in **Molecular and Industrial Biotechnology**.
- Conducted **40 hours** of teaching.

Business or sector: training and education.

Project Manager

October 2011 – March 2015

UNIVERSITY OF NAPLES FEDERICO II – Naples, Italy

Role: Project Manager for the Industrial Research and Training Project **ENERBIOCHEM**: “Integrated agro-industrial supply chains with high energy efficiency for the development of processes of eco-compatible production of energy and bio-chemicals from renewable sources and for the enhancement of the territory” (PON01_01966).

Main activities and responsibilities:

- Managed the research and training project **for the UNIVERSITY OF NAPLES FEDERICO II involving 7 departments**.
- Coordinated the implementation of **Objective OR3**: "Definition of high energy efficiency processes for the transformation of ligno-cellulosic biomass for industrial purposes, including the valorisation of waste."
- Supervised the planning and execution of Industrial Research and Experimental Development (R&D) activities.
- Oversaw the preparation of periodic reports by coordinating multiple teams and ensuring compliance with funding requirements.
- Interacted with stakeholders, including industrial partners and academic institutions, to align project objectives with industry needs.

Project details:

- **Title:** Integrated agro-industrial supply chains with high energy efficiency for the development of processes of eco-compatible production of energy and bio-chemicals from renewable sources and for the enhancement of the territory – ENERBIOCHEM.
- **Grant Agreement Number:** PON01_01966.
- **Funding Program:** National Operational Program Research and Competitiveness 2007–2013
- **Funding awarded to Faraco's Research unity:** €868,082.

Business or sector: Industrial research, development, and training

Lecturer

01/11/2010 – 31/10/2014

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Delivered lectures in **Environmental Biotechnology** for the Master's Degree Course in **Molecular and Industrial Biotechnology**.
- Conducted **32 hours** of teaching annually.

Business or sector: training and education.

University Researcher

27/12/2004 – 12/06/2014

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Role: Researcher in **Fermentation Chemistry and Biotechnology**.

Main activities and responsibilities:

- Taught courses at bachelor's and master's degree levels.
- Led a research group focused on fermentation chemistry and biotechnology.
- Managed collaborations with national and international organizations and industries.

Business or sector: education, scientific research, and training.

Corporate Training Manager

14/12/2013 – 20/12/2013

Federal University of Paraná – Brazil

Main activities and responsibilities:

- Delivered training courses for students and researchers of the **Bioprocess Engineering and Biotechnology Graduation Program (PPGEBB)**.
- Conducted a **20-hour course** on “**Procedures for improvement of enzymes for lignocellulose conversion.**”

Business or sector: training and education.

Lecturer

01/11/2012 – 31/10/2013

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Delivered lectures in **Biotechnology of Fermentation** for the Bachelor Degree Course in **Biomolecular and Industrial Biotechnology**.
- Conducted **48 hours** of teaching.

Business or sector: training and education.

Corporate Training Manager

01/10/2013 – 20/10/2013

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Organized and taught the training course "**Second generation biofuels and biorefineries**" at the Department of Chemical Sciences, in collaboration with **Binod Parameswaran** and **Rajeev Kumar Sukumaran** from the Biotechnology Division of the **National Institute for Interdisciplinary Science and Technology (CSIR)**.
- Delivered **11 lessons (22 hours)** under the European Commission FP7-funded research project **BIOASSORT (318931)**: "Improvement of technologies and tools, e.g. biosystems and biocatalysts, for waste conversion to develop an assortment of high added value eco-friendly and cost-effective bio-products."
- Created the course program in collaboration with CSIR.
- Coordinated other teachers and taught a portion of the course.

Business or sector: training and education.

Corporate Training Manager

05/10/2010 – 08/10/2010

Federal University of Paraná – Brazil

Main activities and responsibilities:

- Delivered training courses for students and researchers of the **Bioprocess Engineering and Biotechnology Graduation Program (PPGEBB)**.
- Conducted a 20-hour course on “**Enzymes for lignocellulose conversion.**”

Business or sector: training and education.

Corporate Training Manager

16/08/2009 – 20/08/2009

Federal University of Paraná – Brazil

Main activities and responsibilities:

- Delivered training courses for students and researchers of the **Bioprocess Engineering and Biotechnology Graduation Program (PPGEBB)**.
- Conducted a 15-hour course on “**The second generation biorefineries: components, processes, and perspectives.**”

Business or sector: training and education.

Corporate Training Manager

04/06/2009 – 11/07/2009

Hebrew University of Jerusalem – Rehovot, Israel

Main activities and responsibilities:

- Conducted training activities at the Department of Microbiology and Plant Pathology, Robert H. Smith Faculty of Agriculture, Food and the Environment.
- Delivered a 40-hour training program on “**Microorganisms and bioprocesses for lignocellulose conversion**”.

Business or sector: training and education.

Visiting Researcher

04/06/2009 – 11/07/2009

Hebrew University of Jerusalem – Rehovot, Israel

Main activities:

- Research on microorganisms and bioprocesses for lignocellulose conversion.
- Optimization of transformation system for *Pleurotus ostreatus*.
- Seminars and meetings.

Business or sector: scientific, and technical activities

Lecturer

01/11/2005 – 31/10/2006

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Delivered lectures in **Fermentation Chemistry and Biotechnology** for the Master's Degree Course in **Drug Biotechnology**.
- Conducted 32 hours of teaching.

Business or sector: training and education.

Lecturer

01/11/2005 – 31/10/2006

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Delivered lectures in the **Laboratory of Fermentation Biotechnology** for the master's degree Course in **Molecular and Industrial Biotechnology**.

Business or sector: training and education.

Lecturer

01/11/2005 – 31/10/2006

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main activities and responsibilities:

- Delivered lectures in **Laboratory II of Fermentation Biotechnology** for the Master's Degree Course in **Molecular and Industrial Biotechnology**.

Business or sector: training and education.

Visiting Researcher

14/04/2005 – 03/05/2005

Public University of Navarra – Pamplona, Spain

Main activities and responsibilities:

- Conducted research at the Department of Agricultural Production.
- Analyzed the multigene family of laccases produced by the fungus *Pleurotus ostreatus*.

- Performed 'selection of a BAC (bacterial artificial chromosome) genome library of *Pleurotus ostreatus*'.

Business or sector: scientific, and technical activities

Professional Consultancy Contracts

06/2004 – 10/2004

UNIVERSITY OF NAPLES "FEDERICO II" – Complesso Monte S. Angelo, Via Cintia, Napoli, Italy

Main activities and responsibilities:

- Conducted research activities in collaboration with the Department of Organic Chemistry and Biochemistry.
- Focused on scientific research in biochemistry and molecular biology.

Business or sector: scientific, and technical activities.

Scholarship Holder

02/2003 – 2004

UNIVERSITY OF NAPLES "FEDERICO II" – Department of Organic Chemistry and Biochemistry, Napoli, Italy

Main activities and responsibilities:

- Conducted experimental research on the recombinant expression of fungal laccases.
- Carried out research activities under a departmental grant.

Business or sector: scientific, and technical activities.

Visiting Researcher

17/09/2001 – 27/10/2001

Kyoto University – Kyoto, Japan

Main activities:

- Development of a transformation system for the *Pleurotus ostreatus* mushroom.
- Seminars to describe the ongoing research at University of Naples.
- Meetings on future projects.

Business or sector: scientific, and technical activities

PhD Student in Biochemistry and Molecular Biology

10/1998 – 10/2002

UNIVERSITY OF NAPLES "FEDERICO II" – Department of Organic Chemistry and Biochemistry, Napoli, Italy

Main activities and responsibilities:

- Conducted research supported by a PhD scholarship.
- Analyzed the transcriptional induction of laccase gene expression in *Pleurotus ostreatus*.
- Investigated the transcriptional factors involved in gene regulation.

Business or sector: scientific, and technical activities.

EDUCATION AND TRAINING

05/10/2023 – 12/12/2023

Executive Training Course on Sustainability Reporting

TÜV – Milan, Italy

31/03/2017

National Qualification as full Professor

Field: Chemistry and Pharmaceutical, Toxicological, and Nutraceutical-Food Technologies

Details: Pursuant to Law no. 95 of 2016

2015

Training Course: "The Horizon 2020 Programme: How to Structure Your Proposal"

Institution: APRE – Agency for the Promotion of European Research

Field: Europlanning

10/1998 – 10/2002

PhD in Biological Chemistry and Molecular Biology

Thesis: "Transcriptional regulation process of phenoloxidase gene expression: analysis of the response to metals".

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main subjects:

- Biochemistry
 - Molecular Biology
-

01/1998 – 09/1998

Internal Graduate

Laboratory of Prof. G. Sannia, Department of Organic and Biological Chemistry

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Main subjects:

- Biochemistry
 - Molecular Biology
-

1999

Qualification to Practice as a Chemist

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

18/12/1997

Degree in Chemistry (Biological Chemistry Specialization)

UNIVERSITY OF NAPLES "FEDERICO II" – Naples, Italy

Grade: 110/110 cum laude

Thesis: "Isolation, characterization and determination of the structure of the gene of a phenol oxidase from *Pleurotus ostreatus*"

Main subjects:

- Chemistry
- Biochemistry
- Molecular Biology

NETWORKS AND MEMBERSHIPS

- **Contact Person** for CIAK SI SCIENZA APS (now EDEN SHIFT), within the **Bio-based Industries Public Private Partnership Platform**
 - **Duration:** 10/2024 – current
 - **Website:** [Bio-based Industries Consortium](#)
- **Coordinator** of the **Task Force on Bioeconomy and Circular Economy** University of Naples Federico II
 - **Duration:** 02/01/2023 – Current
 - **Focus:** Development of strategic initiatives and collaboration between industry and research to advance bioeconomy and biocircular innovations.
- **Member** of the Working Group "Wastes" of **RUS (Rete Università per lo Sviluppo Sostenibile/Network of Universities for Sustainable Development)**
 - **Duration:** 01/01/2020 – 31/12/2022
- **Coordinator** of the **Ecircular Network**
 - **Duration:** 31/10/2019 – Current
 - **Focus:** A network of Italian companies promoting circular economy and sustainable bio-based solutions.
- **Titular Member** of the ChemRAWN (*CHEMical Research Applied to World Needs*) Committee of IUPAC (*International Union of Pure and Applied Chemistry*)
 - **Duration:** 01/01/2016 – 31/12/2019
 - **Website:** [ChemRAWN Committee](#)
- **Contact Person** for the Department of Chemical Sciences, University Federico II, within the **Bio-based Industries Public Private Partnership Platform**
 - **Duration:** 06/07/2013 – 31/12/2021
 - **Website:** [Bio-based Industries Consortium](#)
- **Member of the Coordination Committee** of Federico II for the **National Green Chemistry Technology Cluster SPRING**
 - **Duration:** 26/01/2015 – Current
 - **Website:** [SPRING Cluster](#)
- **National Representative** of the ChemRAWN (*CHEMical Research Applied to World Needs*) Committee of IUPAC (*International Union of Pure and Applied Chemistry*)
 - **Duration:** 01/01/2012 – 31/12/2013
 - **Website:** [ChemRAWN Committee](#)
- **Associate Member** of the ChemRAWN (*CHEMical Research Applied to World Needs*) Committee of IUPAC (*International Union of Pure and Applied Chemistry*)
 - **Website:** [ChemRAWN Committee](#)

CONFERENCES AND SEMINARS

GreenMatch: The Perfect Match Between Innovation and Circular and Sustainable Development of Companies and Regions

- **Date:** 16/11/2023
- **Location:** Naples, Italy
- **Role:** Organizer and Chair
- **Description:** Creation, organization, and chairing of the first GreenMatch workshop aimed at:
 - o Promoting industrial symbiosis and circular economy practices.
 - o Networking innovators, institutions, and businesses for sustainable solutions.
 - o Disseminating updates on EU circular economy regulations and financing opportunities.
 - o Raising institutional awareness for action on the climate emergency.

PITCH PERFECT and Boost the European Bioeconomy 2023

- **Date:** 23/09/2023
- **Location:** Brussels, Belgium
- **Role:** Speaker
- **Presentation:** "Task Force in Circular Bioeconomy: Optimal Systems for Biomass and Waste Upgrading"
- **Details:** Organized by six major bioeconomy platforms (Pilots4U, Tech4Biowaste, BioeconomyVentures, Smartbox, Waste2Func, Bio Base Connect) with funding from the Horizon 2020 programme.

Re-think Circular Economy Forum

- **Date:** 30/06/2022
- **Location:** Naples, Italy
- **Role:** Participant
- **Details:** [Description to be added as necessary.]

PITCH PERFECT and Boost the European Bioeconomy 2021

- **Date:** 28/09/2021
 - **Location:** Brussels, Belgium
 - **Role:** Speaker
 - **Presentation:** "Improved Biocatalysts for Waste Conversion and Bioproduct/Biopolymer Production"
 - **Details:** Organized by bioeconomy platforms under Horizon 2020.
-

Roundtable: "What European Perspective for a Circular Economy of Plastics and Composites?"

- **Date:** 22/09/2021
 - **Location:** Milan, Italy
 - **Role:** Moderator
-

Roundtable: "End of Waste of Plastic Materials"

- **Date:** 07/11/2019
 - **Location:** Rimini, Italy
 - **Role:** Moderator
-

4-CIAB: 4th Iberoamerican Congress on Biorefineries

- **Date:** 24/10/2018 – 26/10/2018
 - **Location:** Jaen, Spain
 - **Role:** Member of the International Scientific Committee
-

Ecomondo: International Trade Fair of Material and Energy Recovery and Sustainable Development (2017)

- **Date:** 07/11/2017 – 10/11/2017
 - **Location:** Rimini, Italy
 - **Role:** Speaker and Organizer
 - **Presentation:** "Mining Enzymes for Green Products"
 - **Details:** Organized and moderated the third workshop of Optibiocat and its final conference.
-

XXI IUPAC Chemrawn Conference: Solid Urban Waste Management

- **Date:** 06/04/2016 – 08/04/2016
 - **Location:** Rome, Italy
 - **Role:** Vice-Chair
-

Advanced Training Course: Emerging Biotechnologies for Waste Management and Biorefinery Development

- **Date:** 04/04/2016 – 05/04/2016
 - **Location:** Naples, Italy
 - **Role:** Organizer and Chair
-

Renewable Resources and Biorefineries (RRB) Series

- **2015 (RRB-11):** Speaker ("*Statistical Analysis of Arundo Donax Saccharification by Pleurotus Ostreatus Cellulase and Xylanase*") in Ghent, Belgium.
 - **2014 (RRB-10):** Speaker ("*New Biocatalysts for Arundo Donax Conversion*") in Valladolid, Spain.
 - **2013 (RRB-9):** Speaker ("*Development of New Biocatalysts Based on Cellulases and Hemicellulases*") in Antwerp, Belgium.
 - **2012 (RRB-8):** Speaker ("*High-Added Value Products from Agro-Industrial Wastes*") in Toulouse, France.
-

International Conference on Industrial Biotechnology (ICIB2012)

- **Date:** 21/11/2012 – 23/11/2012
 - **Location:** Patiala, India
 - **Role:** Speaker
 - **Presentation:** "*Rational and Random Mutagenesis of a Family GH51 α -L-Arabinofuranosidase for Food and Beverage Industries*"
-

4th International Congress on Bioprocesses in Food Industries

- **Date:** 05/10/2010 – 08/10/2010
 - **Location:** Curitiba, Brazil
 - **Role:** Plenary Speaker and Member of Scientific Committee
 - **Presentation:** "*Enzymes for Food and Beverage Industries: Challenges and Perspectives*"
-

4th International Bioenergy Congress

- **Date:** 18/08/2009 – 21/08/2009
 - **Location:** Curitiba, Brazil
 - **Role:** Plenary Speaker
 - **Presentation:** "*Biorefinery and Green Chemistry to Biofuel Production*"
-

WRITING BOOK CHAPTERS AND EDITORIAL WORK

1. **Faraco, V., Giardina, P., Palmieri, G., and Sannia, G.** (2002). *Metal-activated laccase promoters*. In: L. Viikari and R. Lantto (Eds.), *Biotechnology in the Pulp and Paper Industry*, Volume 21 in the Series "Progress in Biotechnology", Elsevier, pp. 105–111. ISBN: 0-444-51078-8.
2. **Soccol, C.R., Faraco, V., Karp, S., Vandenberghe, L.P.S., Soccol, V.T., Woiciechowski, A., and Pandey, A.** (2011). *Lignocellulosic bioethanol: Current status and future perspectives*. In: A. Pandey, C. Larroche, S.C. Ricke, C.G. Dussap, and E. Gnansounou

- (Eds.), *Biofuels—Alternative Feedstocks and Conversion Processes*, Academic Press, Elsevier Inc., San Diego, USA, Chapter 5, pp. 101–122.
3. **Editor of the Special Issue** “Genes Coding Industrially Relevant Enzymes in Fungi: Isolation and Protein Engineering of Laccases” for the international journal *Current Genomics*, Volume 12, Number 2, April 2011.
 4. **Amore, A., and Faraco, V.*** (2013). *Chemico-physical factors affecting food and beverage processing fermentations*. In: C.R. Soccol, A. Pandey, and C. Larroche (Eds.), *Engineering Aspects of Fermentation Processes in the Food Industry*, Taylor & Francis: Contemporary Food Engineering Series, Chapter 3, pp. 47–73.
 5. **Editor of the Book** *Lignocellulose Conversion: Enzymatic and Microbial Tools for Bioethanol Production*. Springer, 2013.
-

MAIN COLLABORATIONS

- **Jason Hallett (Imperial College London, UK)**
 - **Topic:** development of optimized enzymes for hydrolysis of cellulose pulp from ionic liquid pretreatment of lignocellulosic wastes
- **Y. Honda (Kyoto University, Japan) and Y. Hadar (The Hebrew University of Jerusalem, Israel)**
 - **Topic:** Genetic transformation of fungi
 - **Outcome:** 2 publications with Y. Honda and 1 with Y. Hadar
- **L. Ramírez (UPNA, Pamplona, Spain)**
 - **Topic:** Analysis of fungal genomes for the presence of laccase gene families
 - **Outcome:** 1 publication
- **B. Henrissat (CNRS, UMR6098, Aix-Marseille Université, Marseille, France)**
 - **Topic:** Identification of novel genes encoding carbohydrate-active enzymes (CAZymes)
 - **Outcome:** 2 publications
- **V. Florence (CNRS, UMR7257, Aix-Marseille Université, Marseille, France)**
 - **Topic:** Modeling of three-dimensional structures of CAZymes
 - **Outcome:** 2 publications
- **Collaborations within the BIOASSORT Project (Grant No. 318931)**
 - **Partners:** 7 international partners, including B. Venkatesh (Michigan State University, USA), C. Ricardo Soccol (Universidade Federal Do Paraná, Curitiba, Brazil), P. Binod and A. Pandey (CSIR Trivandrum, India), and Eulogio Castro (University of Jaén, Spain)
 - **Topic:** Biotechnological processes for waste valorization
 - **Outcome:** 12 publications
- **Collaborations within the OPTIBIOCAT Project (Grant No. 613868)**
 - **Partners:** 15 European public and private partners, including P. Christakopoulos (Luleå Tekniska Universitet, Luleå, Sweden) and R. De Vries (Westerdijk Fungal Biodiversity Institute, Utrecht, Netherlands)
 - **Topic:** Biocatalysts and bioconversions for antioxidant production for the cosmetic industry
 - **Outcome:** 2 publications
- **Collaborations within the BioPoliS Project (Grant No. PON03PE_00107_1/1)**
 - **Partners:** 10 Italian public and private partners
 - **Topic:** Biocatalysts and bioconversions for bioplastic production
 - **Outcome:** 8 publications

- **Collaborations within the ENERBIOCHEM Project (Grant No. PON01_01966)**
 - **Partners:** 10 Italian public and private partners
 - **Topic:** Biocatalysts and bioconversions for bioethanol production
 - **Outcome:** 17 publications

MENTORING AND SUPERVISION

- **2012 – 2024:** Supervised 11 graduates who were awarded research fellowships in research projects managed by V. Faraco at the Department of Chemical Sciences (DSC), University of Naples Federico II (UNINA).
- **2012 – 2024:** Supervised 5 postdoctoral researchers who were awarded research grants in research projects managed by V. Faraco at DSC (UNINA).
- **2006 – 2024:** Supervised 8 PhD students at DSC (UNINA) and 1 PhD student at Universidade Federal do Paraná, Brazil.
- **2006 – 2024:** Supervised 12 Master's students in Industrial Biotechnology, 3 Master's students in Chemical Sciences, and 1 Bachelor's student in Industrial Biotechnology at UNINA.
- **2012 – 2016:** Supervised 13 foreign PhD students and 4 foreign PhD researchers within the framework of the EU-funded project BIOASSORT (Grant No. 318931).

SCIENTIFIC PUBLICATIONS IN INTERNATIONAL JOURNALS WITH IMPACT FACTOR

Vincenza Faraco (ORCID ID: 0000-0002-3014-8415) is the author of **100 indexed SCOPUS or ISI scientific articles** published in international peer-reviewed journals, cited by **4,261 documents** for a total of **5,255 citations**.

H-index: 40.

Articles in which she appears both as a corresponding author and the last author (creator and supervisor of the research): 49/100

Articles in which she appears as a corresponding author: 8

Total of corresponding author articles: 57/100

1. P. Giardina, G. Palmieri, A. Scaloni, B. Fontanella, V. Faraco, G. Cennamo and G. Sannia. **Protein and gene structure of a blue laccase from *Pleurotus ostreatus***. *Biochem. J.* (1999) 341, 655-663. IF 5.06. DOI: [10.1042/bj3410655](https://doi.org/10.1042/bj3410655)
2. Palmieri G., Cennamo G., Faraco V., Amoresano A., Sannia G. and Giardina P. **Atypical laccase isoenzymes from copper supplemented *Pleurotus ostreatus* cultures**. *Enzyme Microbial Technology*. (2003) 33, 220-230. IF 2.287. DOI: [10.1016/S0141-0229\(03\)00117-0](https://doi.org/10.1016/S0141-0229(03)00117-0)
3. Faraco V., Giardina P., and Sannia G. **Metal responsive elements in *Pleurotus ostreatus* laccase gene promoters**. *Microbiology*. (2003) 149, 2155-2162. IF 2.957. DOI: [10.1099/mic.0.26360-0](https://doi.org/10.1099/mic.0.26360-0)
4. Faraco V., Palmieri G., Festa G., Monti M., Sannia G. and Giardina P. **A new subfamily of fungal subtilase: Structural and functional analysis of a *Pleurotus ostreatus* member**. *Microbiology*. (2005) 151, 457-466. IF 2.957. DOI: [10.1099/mic.0.27441-0](https://doi.org/10.1099/mic.0.27441-0)
5. V. Faraco, A. Piscitelli, G. Sannia and P. Giardina. **Identification of a new member of the dye-decolorizing peroxidase family from *Pleurotus ostreatus***. *World Journal of*

- Microbiology and Biotechnology*. (2007) 23, 889-893. IF 1.214. DOI: [10.1007/s11274-006-9303-5](https://doi.org/10.1007/s11274-006-9303-5)
6. Giardina P., Autore F., Faraco V., Festa G., Palmieri G., Piscitelli A., Sannia G. **Structural characterization of heterodimeric laccases from *Pleurotus ostreatus***. *Applied Microbiology and Biotechnology*. (2007) 75, 1293-1300. IF 3.583. DOI: [10.1007/s00253-007-0954-4](https://doi.org/10.1007/s00253-007-0954-4)
 7. Faraco V.*, Ercole C., Festa G., Giardina P., Piscitelli A., and Sannia G. **Heterologous expression of heterodimeric laccases from *Pleurotus ostreatus* in *Kluyveromyces lactis***. *Applied Microbiology and Biotechnology*. (2008) 77, 1329-1335. IF 3.583. DOI: [10.1007/s00253-007-1265-5](https://doi.org/10.1007/s00253-007-1265-5)
 8. Faraco V.*, Pezzella C., Miele A., Giardina P., Sannia G. **Bio-remediation of colored industrial wastewaters by the white-rot fungi *Phanerochaete chrysosporium* and *Pleurotus ostreatus* and their enzymes**. *Biodegradation*. (2009) 20, 209-220. IF 2.012. DOI: [10.1007/s10532-008-9214-2](https://doi.org/10.1007/s10532-008-9214-2)
 9. Faraco V.*, Pezzella C., Giardina P., Piscitelli A., Vanhulle S., Sannia G. **Decolourization of textile dyes by the white-rot fungi *Phanerochaete chrysosporium* and *Pleurotus ostreatus***. *Journal of Chemical Technology and Biotechnology*. (2009) 84, 414-419. IF 1.818. DOI: [10.1002/jctb.2055](https://doi.org/10.1002/jctb.2055)
 10. Pezzella C., Autore F., Giardina P., Piscitelli A., Sannia G., Faraco V.* **The *Pleurotus ostreatus* laccase multi-gene family: Isolation and heterologous expression of new family members**. *Current Genetics*. (2009) 55, 45-57. IF 2.035. DOI: [10.1007/s00294-008-0221-y](https://doi.org/10.1007/s00294-008-0221-y)
 11. Autore F., Del Vecchio C., Fraternali F., Giardina P., Sannia G., Faraco V.* **Molecular determinants of peculiar properties of a *Pleurotus ostreatus* laccase: Analysis by site-directed mutagenesis**. *Enzyme and Microbial Technology*. (2009) 45, 507-513. IF 2.287. DOI: [10.1016/j.enzmictec.2009.08.004](https://doi.org/10.1016/j.enzmictec.2009.08.004)
 12. Miele A., Faraco V., Piscitelli A., Del Vecchio C., Giardina P., and Sannia G. **Selection of 'better performing' laccases through directed evolution**. *FEBS Journal*. (2009) 276, 377-378. IF 3.129. DOI: [10.1111/j.1742-4658.2009.07119.x](https://doi.org/10.1111/j.1742-4658.2009.07119.x)
 13. Miele A., Giardina P., Sannia G., Faraco V.* **Random mutants of a *Pleurotus ostreatus* laccase as new biocatalysts for industrial effluents bioremediation**. *Journal of Applied Microbiology*. (2010) 108, 998-1006. IF 2.365. DOI: [10.1111/j.1365-2672.2009.04505.x](https://doi.org/10.1111/j.1365-2672.2009.04505.x)
 14. Giardina P., Faraco V., Pezzella C., Piscitelli A., Vanhulle S., Sannia G. **Laccase: A never-ending story**. *Cellular and Molecular Life Sciences*. (2010) 67, 369-385. IF 7.047. DOI: [10.1007/s00018-009-0169-1](https://doi.org/10.1007/s00018-009-0169-1)
 15. Miele A., Giardina P., Notomista E., Piscitelli A., Sannia G., Faraco V.* **A semi-rational approach to engineering laccase enzymes**. *Molecular Biotechnology*. (2010) 46, 149-156. IF 2.091. DOI: [10.1007/s12033-010-9289-y](https://doi.org/10.1007/s12033-010-9289-y)
 16. Piscitelli A., Pezzella C., Giardina P., Faraco V., G. Sannia. **Heterologous laccase production and its role in industrial applications**. *Bioengineered Bugs*. (2010) 1, 252-262. IF 0.06. DOI: [10.4161/bbug.1.4.11438](https://doi.org/10.4161/bbug.1.4.11438)
 17. Faraco V.* and Y. Hadar. **The Potential of Lignocellulosic Ethanol Production in the Mediterranean Basin**. *Renewable and Sustainable Energy Reviews*. (2011), 15, 252-266. IF 4.567. DOI: [10.1016/j.rser.2010.09.050](https://doi.org/10.1016/j.rser.2010.09.050).
 18. Iandolo D., Piscitelli A., Sannia G. and Faraco V.* **Enzyme production by solid substrate fermentation of *Pleurotus ostreatus* and *Trametes versicolor* on tomato pomace**. *Applied Biochemistry and Biotechnology*. (2011) 163(1):40-51. DOI: [10.1007/s12010-010-9014-0](https://doi.org/10.1007/s12010-010-9014-0)
 19. Piscitelli A., Giardina P., Lettera V., Pezzella C., Sannia G. and Faraco V.* **Induction and Transcriptional Regulation of Laccases in Fungi**. *Current Genomics*. (2011) 12, 104-112. IF 1.879. DOI: [10.2174/138920211795564331](https://doi.org/10.2174/138920211795564331)

20. Iandolo D., Amore A., Birolo L., Leo G., Olivieri G., and Faraco V.* **Fungal solid state fermentation on agro-industrial wastes for acid wastewater decolourization in a continuous flow packed-bed bioreactor.** *Bioresource Technology*. (2011) 102, 7603-7607. IF 4.365. DOI: [10.1016/j.biortech.2011.05.029](https://doi.org/10.1016/j.biortech.2011.05.029)
21. Piscitelli A., Del Vecchio C., Faraco V., Giardina P., Macellaro G., Miele A., Pezzella C., Sannia G. **Fungal laccases: Versatile tools for lignocellulose transformation.** *C.R. Biologies*. (2011) 334(11):789-94. DOI: [10.1016/j.crv.2011.06.007](https://doi.org/10.1016/j.crv.2011.06.007)
22. Faraco V.* **Genes coding industrially relevant enzymes in fungi: Isolation and protein engineering of laccases.** *Current Genomics*. (2011) 12(2):71. DOI: [10.2174/138920211795564395](https://doi.org/10.2174/138920211795564395)
23. Amore A., Amoresano A., Birolo L., Henrissat B., Leo G., Palmese A., Faraco V.* **A family GH51 alfa-L-arabinofuranosidase from *Pleurotus ostreatus*: Identification, recombinant expression and characterization.** *Applied Microbiology and Biotechnology*. (2012) 94(4):995-1006. DOI: [10.1007/s00253-011-3678-4](https://doi.org/10.1007/s00253-011-3678-4). IF 3.583.
24. Karp S.G., Faraco V., Amore A., Birolo L., Giangrande C., Soccol V.T., Pandey A., Soccol C.R. **Characterization of laccase isoforms produced by *Pleurotus ostreatus* in solid state fermentation of sugarcane bagasse.** *Bioresource Technology*. (2012) 114:735-9. IF 4.365. DOI: [10.1016/j.biortech.2012.03.058](https://doi.org/10.1016/j.biortech.2012.03.058)
25. Castanera R., Pérez G., Omarini A., Alfaro M., Pisabarro A., Faraco V., Amore A., Ramírez L. **Transcriptional and enzymatic profiling of *Pleurotus ostreatus* laccase genes in submerged- and solid-state fermentation cultures.** *Applied and Environmental Microbiology*. (2012) 78(11):4037-45. IF 3.778. DOI: [10.1128/AEM.07880-11](https://doi.org/10.1128/AEM.07880-11)
26. Amore A. and Faraco V.* **Potential of fungi as category I Consolidated BioProcessing organisms for cellulosic ethanol production.** *Renewable & Sustainable Energy Reviews*. (2012) 16:3286–3301. IF 4.567. DOI: [10.1016/j.rser.2012.02.050](https://doi.org/10.1016/j.rser.2012.02.050)
27. Piscitelli A., Amore A., and Faraco V.* **Last advances in synthesis of added value compounds and material by laccase-mediated biocatalysis.** *Current Organic Chemistry*. (2012) Vol. 16 Issue Number: 21, 508-2524. IF 2.537. DOI: [10.2174/138527212804004571](https://doi.org/10.2174/138527212804004571)
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*corresponding author

LANGUAGES

Mother tongue
ITALIAN

Other languages

ENGLISH

UNDERSTANDING		SPEAKING		WRITTEN PRODUCTION
Listening	Reading	Interaction	Oral production	
C2	C1	C2	C2	C1

Levels: A1/2 Basic level - B1/2 Intermediate level - C1/2 Advanced level
Common European Framework of Reference for Languages

DIGITAL SKILLS

- **Social Media:** Content creation in **Moodle** and **WordPress**
- **Microsoft Office package:** Microsoft **Word**, **Excel**, **PowerPoint**, **Access**
- **Video Conferencing:** Advanced use of **Zoom**, **Teams**, **Skype**, **Webex**
- **Content Editing Tools:** Proficient in **Canva** and **Adobe Premiere Pro**
- **Google Suite:** Proficient in **Gmail**, **Google Drive**, **Google Slides**, **Google Docs**, **Google Sheets**, **Google Forms**
- **Photo/Video Editing**

PROFESSIONAL-TECHNICAL SKILLS

- **Excellent ability to use specific equipment** for research in the field of **biological chemistry** and **molecular biology**, with a particular focus on:
 - o Recombinant expression and characterization of proteins and enzymes.
 - o Guided evolution and site-directed mutagenesis of enzymes.

Main outlines of research:

1. Development of **fermentation/bioconversion processes** and **bio-systems/biocatalysts** based on microorganisms and their enzymes (both native and genetically engineered) for the detoxification of industrial and agro-food wastes.
2. Development and characterization of **fermentation/bioconversion processes** and **bio-systems/biocatalysts** based on microorganisms and their enzymes (both native and genetically engineered) for the conversion of biomass and lignocellulosic waste, producing **fine chemicals**, **biofuels**, and **bioplastics**.
3. Isolation and characterization of new microorganisms and enzymes for the conversion of biomass and lignocellulosic wastes for the production of **fine chemicals**, **biofuels**, and **bioplastics**.
4. **Heterologous recombinant expression** of native and mutant enzymes.
5. Development and characterization of **fermentation/bioconversion processes** and **bio-systems/biocatalysts** for the production of new compounds through **metagenomics**.

6. Elucidation of **structure-function relationships** of enzymes via **rational mutagenesis**.
 7. Development and characterization of new **biocatalysts** through **metagenomics**, **rational mutagenesis**, and **guided evolution**.
-

COMMUNICATION SKILLS

- **Common European Framework of Reference for Languages**
 - Excellent communication and interpersonal skills with team members, external institutions, and public and private organizations.
 - Ability to manage group work and interpret work situations while addressing individual needs.
 - Willingness to listen and engage in constructive confrontation.
-

ORGANISATIONAL AND MANAGEMENT SKILLS

- Excellent organizational, coordination, and management skills concerning team members, external institutional bodies, and public and private organizations.
 - Strong problem-solving abilities, planning and organizational skills for working time and methods.
 - Excellent predisposition to pursue and achieve established objectives.
-

PROVEN ABILITY TO SECURE RESEARCH FUNDING

BIORESCUE (720708)

- **Program:** Horizon 2020 / BBI-JU
 - **Role:** Project Manager
 - **Total Budget:** €3,767,587.00 | EU Contribution: €2,635,145.00
 - **Funding awarded to Faraco's Research unity:** €270,945.
 - **Duration:** 01/09/2016 – 31/08/2019
-

OPTIBIOCAT (613868)

- **Program:** FP7
 - **Role:** Project Manager
 - **Total Budget:** €9,109,854.78 | Funding: €6,851,846.00
 - **Duration:** 30/11/2013 – 01/12/2017
-

ECOREMED (LIFE11 ENV/IT/275)

- **Program:** LIFE+
- **Role:** Principal Investigator

- **Funding awarded to Faraco's Research unity:** € 253,550.
 - **Project Description:** Implementation of eco-compatible protocols for agricultural soil remediation in the Litorale Domizio-Agro Aversano area.
 - **Duration:** 01/06/2012 – 30/09/2017
-

BIOPoliS (PON03PE_00107_1)

- **Program:** National Operational Program Research and Competitiveness
 - **Role:** Course Creator and Coordinator
 - **Total Budget:** €11,461,011.74 | **Funding:** €9,027,789.00
 - **Duration:** 30/05/2016 – 11/05/2017
-

BIOASSORT (318931)

- **Program:** FP7 (Marie Curie Actions People International Dimension)
 - **Role:** Project Manager
 - **Total Budget:** €296,100.00 | **Funding:** €247,590.00
 - **Duration:** 30/07/2012 – 29/07/2016
-

ENERBIOCHEM (PON01_01966)

- **Program:** National Operational Program Research and Competitiveness 2007–2013
 - **Role:** Project Referent for "Federico II" and OR3 Coordinator
 - **Funding awarded to Faraco's Research unity:** €868,082.
 - **Duration:** October 2011 – March 2015
-

HONOURS AND AWARDS

June 2022

Sustainability Award 22 – Austrian Government

Awarded in the context of the "**Communication and Decision-Making**" action for the **Federico II course in 'Sustainability and Climate Change'**, as part of the **Aurora Project** (Aurora UNINA - University of Naples Federico II).

Co-awarded with colleagues **Dario Minervini** (Department of Social Sciences) and **Laura Lieto** (Department of Architecture).

October 2021

Included in the **list of the world's best researchers (2%) for 2020**, reported in **Plos Biology** based on Scopus parameters.

[Source](#)

October 2020

Included in the **list of the world's top researchers (2%) for 2019**, reported in **Plos Biology** based on Scopus parameters.

[Source](#)

21/07/2017

Winner of the "**One-time**" **incentive for research activities**, ranked **first in Chemistry** among **UNINA** researchers for the 2011-2013 period, pursuant to **Law n. 240 of December 30, 2010**.

I authorise the processing of my personal data in accordance with the General Data Protection Regulation (EU) 2016/679 (GDPR) and applicable national laws.