

## PERSONAL INFORMATION

Pier Paolo Pompa

## WORK EXPERIENCE

- 2018 - present **Contract Professor**  
University of Genova, Dep.t of Biotechnologies  
Undergraduate and postgraduate teaching  
Business or sector **Education**
- 2013 - present **Senior Researcher, tenured**  
Istituto Italiano di Tecnologia; Via Morego 30, 16163 Genova  
Leading a research group (Nanobiointeractions&Nanodiagnostics), in the areas of nanomaterials (mostly but not exclusively metal nanoparticles) used as precision sensors and as catalysts  
Business or sector **Research & Development**
- 2013 - present **Co-founder and Partner of HiQ-Nano**  
HiQ-Nano, via Barsanti, Arnesano (LE)  
Green production of high-quality nanoparticles, reference nanomaterials, and POC diagnostics  
Business or sector **Research & Development / Application Development / Manufacturing**
- 2011 - 2014 **Senior Scientist and Center Director**  
Center for Bio-Molecular Nanotechnology (CBN-IIT), Lecce, Italy.  
Management of the IIT Center in Lecce, and leadership of a group researching in the areas of biointeractions, nanodiagnostics and environmental health  
Business or sector **Research & Development**
- 2009-2011 **Team Leader and Coordinator of the Environment, Health&Safety (EHS) Platform**  
Center for Bio-Molecular Nanotechnology (CBN-IIT), Lecce, Italy.  
Leading a group on nanotoxicology and nanodiagnostics  
Business or sector **Research & Development**
- 2006-2008 **Staff Scientist**  
Coordinator - Research Platform "Advanced characterization tools and imaging"  
Use of metallic nanoparticles for imaging applications, and development of new characterization methods.  
Business or sector **Research & Development**
- 1-12/04 **Junior researcher**  
National Nanotechnology Laboratory (NNL) (Lecce, Italy)  
Research projects in the area of characterization and biomedical applications of metallic nanoparticles  
Business or sector **Research & Development**

## EDUCATION AND TRAINING

- 2005 **PhD in Nanoscience**  
Institute of Advanced Interdisciplinary Studies), University of Salento  
"Characterization of inorganic nanomaterials, optoelectronic properties of nanometals"
- 2000 **Laurea in Physics**  
University of Salento, Dept. of Physics, Lecce

## WORK ACTIVITIES

- Awards** All related to Tech Transfer activities: QST Qatar; Marzotto Prize Finalist; J-Cube; Wylab (2019); CosmoPharma Award; InnovAging Award (2018); Start Cup Liguria - First prize (2016)
- Editorial activity** 2019-: Associate Editor - Frontiers in Bioengineering and Biotechnology - Nanobiotechnology  
2018-: Editorial Board Member - Biosensors; 2014-present: Editorial Board Member - Nanobiomedicine Journal. 2021-22: Special Issue "Role of Electrochemical Biosensors within Sustainable Food Chains and Food Safety" guest-edited in *Biosensors* 2021: Special Issue "Where nano meets bio: advances toward understanding the bionano interface" guest-edited in *Frontiers in Bioengineering and Biotechnology*.
- Grants** **1)** "Development of a point-of-care diagnostic platform for the on-site detection of bacterial contaminations" (2022) (sponsored by IREN; PPP's budget 70 k€). **2)** "Nano and Key enabling technologies: smart innovations and health and safety in the workplace (NanoKey Advanced)" (2021-2022) (sponsored by INAIL; PPP's budget 170 k€). **3)** "Development of a point-of-care colorimetric test for non-invasive detection of salivary glucose (II)" (2020-2021) (sponsored by AI-CUBE; PPP's budget 50 k€). **4)** "Development of a point-of-care method for the on-site detection of Legionella contaminations" (2020) (sponsored by A2A; PPP's budget 30 k€). **5)** "Development of a point-of-care colorimetric test for non-invasive detection of salivary glucose" (2020) (sponsored by AI-CUBE; PPP's budget 25 k€). **6)** "Advanced nanozymes for antioxidant therapy" (2020-2021) (sponsored by European Space Agency (ESA); PPP's budget ca. 40 k€). **7)** "Development of a point-of-care method and device for the on-site detection of bacterial contaminations" (2019) (sponsored by ACDA; PPP's budget 25 k€). **8)** "Marcatori biologici e funzionali per la biomedicina astronautica di precisione (MARS-

PRE)" (2019-2021) (sponsored by the Italian Space Agency Project; PPP's budget ca. 40 k€).

- Patents**
1. M. Moglianetti, F. Gatto, and P.P. Pompa "Composizione di rivestimento antimicrobica e antivirale (Antimicrobial and antiviral coating composition)" Patent Application 102021000027776 (2021).
  2. M. Moglianetti, D. Pedone, and P.P. Pompa "Metodo anticontraffazione e kit per l'attuazione di tale metodo" Patent Application 102020000015460 (2020).
  3. P.P. Pompa and P. Donati "Procedimento e kit per rilevare un analita in un campione" Patent Application 102020000007162 (2020).
  4. M. Moglianetti, V. Mastronardi, and P.P. Pompa "Process for the production of ultra-small Pt nanocrystals with high percentage of {111} surface domains" Patent Appl. 102019000020697 (2019).
  5. M. Moglianetti, D. Pedone, and P.P. Pompa "Procedimento per la sintesi di nanoparticelle mesoporose di platino in ambiente acquoso" Patent 102019000005964 (2019).
  6. P. Donati and P.P. Pompa "Procedimento Colorimetrico per la Determinazione del Mercurio Organico" Patent 102018000008034 (2018).
  7. G. Tatulli, P. Valentini, and P.P. Pompa "Kit e procedimento per la rivelazione colorimetrica di un acido nucleico bersaglio in un campione" Patent 102018000005685 (2018).
  8. D. Pedone, M. Moglianetti, and P.P. Pompa "Procedimento per determinare la capacità antiossidante di un campione biologico e relativo kit" Patent 102018000003475 (2018).
  9. R. Marotta, T. Catelani, M. Moglianetti, E. De Luca, and P.P. Pompa "Method for imaging a biological sample and corresponding probe" Patent 1020170000087291 (2017).
  10. L. Bertolacci and P.P. Pompa "Metodo per la rivelazione della presenza di mercurio in acqua e kit per la realizzazione del metodo" PCT/IB2018/053380 (Patent 1020170000052359, 2017).
  11. M. Moglianetti and P.P. Pompa "Procedimento per determinare la capacità antiossidante di un campione biologico e relativo kit" Patent 1020170000030715 (2017).

## ADDITIONAL INFORMATION

8 Number of peer-reviewed papers: 181 (Scopus). Total number of citations: 7630 (Scopus)  
H index: 40 (Scopus)

### Recent, relevant publications

1. S. Franco-Ulloa, ... P.P. Pompa\*, M. Cascella\*, and M. De Vivo\* "Dispersion state phase diagram of citrate-coated metallic nanoparticles in saline solutions" *Nat Commun* 11, 5422 (2020).
2. G. Tatulli and P.P. Pompa "An amplification-free colorimetric test for sensitive DNA detection based on the capturing of gold nanoparticle clusters" *Nanoscale* 12, 15604 (2020).
3. D. Pedone... P.P. Pompa "Platinum nanozyme-enabled colorimetric determination of total antioxidant level in saliva" *Anal Chem* 92, 8660-4 (2020).
4. P. Donati, ... P.P. Pompa "Nanocatalyst/nanoplasmon-enabled detection of organic mercury: a one-minute visual test" *Angewandte Chemie* 58, 10285-9 (2019).
5. A. Turco... P.P. Pompa "Sputtering-enabled intracellular X-ray photoelectron spectroscopy (SEI-XPS): a versatile method to analyze the biological fate of metal nanoparticles" *ACS Nano* 12, 7731-40 (2018).
6. P. Valentini, A. Galimberti, V. Mezzasalma, F. De Mattia, M. Casiraghi, M. Labra, and P.P. Pompa "DNA barcoding meets nanotechnology: development of a smart universal tool for food authentication" *Angewandte Chemie* 129, 8206-10 (2017).

### Personal data

I hereby authorize the use of my personal data in accordance to the GDPR 679/16 - "European regulation on the protection of personal data".

Date...1/2./2022