

Chemical Engineer & Scientist specialized in Chemistry, Minerals, Advanced Materials, Energy, Nanotechnologies  
MBA-like Training in Management, Economics & Innovation

## Work Experience

EPFL - Physics Dept. & Ligentec SA

Lausanne, Switzerland

Staff Scientist & Sr. Process Engineer

Apr 2023 - Jan 2025

Advanced Materials & Chips - Process R&D - Coordinating process team affairs

TU Delft - Chemical Eng. Dept.

The Netherlands

Postdoc Scientist, Optoelectronic Materials Division

Oct 2019 - Nov 2022

Leading a multi-partner 1 MEur R&D project sponsored by industry leaders  
Chemistry and physics of advanced materials. Supervised 7 researchers.

Italian Institute of Technology

Genoa, Italy

Research Fellow, NanoChemistry Group

May 2014 - July 2019

Leading R&D projects on the chemistry and physics of advanced materials

Lawrence Berkeley National Lab

United States of America

Visiting Scientist, Molecular Foundry

Jun 2018 - Sep 2018

Center of Excellence in Microelectronics  
Optoelectronics and Processes

Lisbon, Portugal

Research Fellow

Nov 2011 - Aug 2013

## Initial Training

Imperial College London

United Kingdom

Master thesis, Electrochemical Engineering

Feb 2010 - Sep 2010

Institute of Chemical and Bio Tech.

Lisbon, Portugal

Jr. Research Fellow, Heterogeneous Systems

Jan 2009 - Dec 2009

Nova University of Lisbon

Lisbon, Portugal

Student Project, Photo-Chemistry Group

Feb 2008 - Jun 2008

## Recent Extra-Curricular Activities

- Board Member and Treasurer of EPFL's Intermediate Body Association
- Organizer at Science Festival Pint of Science in Lausanne (2024)
- Member of EPFL's Business Consulting Society (2023)
- Reviewer for Scientific Journals (ACS & RSC)

## Professional References

Dr. Liberato Manna

Italian Institute of Technology

Head of the Nanochemistry Dpt.

email: liberato.manna@iit.it

- PhD Advisor

Prof. Arjan Houtepen

TU Delft, Full Professor

NCFun Group Leader

email: a.j.houtepen@tudelft.nl

- Postdoc Supervisor

## Education

MAS Management, Tech & Economics

2026

ETH Zurich, Switzerland

Strategy, Finance, Leadership etc.

PhD Chemistry & Materials Science

2018

IIT & University of Genoa, Italy

Advisor: Prof. Dr. Liberato Manna

Topic: Colloidal Nanocrystals

MEng Chemical Engineering

2011

NOVA Uni. of Lisbon, Portugal

Final year at Imperial College London

Grade A (top 10%, ECTS scale)

Baccalauréat Général

2005

French Lyceums of Warsaw and Lisbon

Science Branch

## Certifications

Intellectual Property: Patents

2025

European Patent Office

Business Concepts for Entrepreneurs

2024

Innosuisse, Switzerland

Agile Project Management

2024

QRP International, Switzerland

Management Essentials

2023

CEGOS, Switzerland

Micro & Nano Fabrication

2023

EPFL @ edX

Quantum Optics

2020

Online Series by Prof. A. Aspect, Nobel 2022

Nano Science and Technologies

2016

Electronics Track, Grenoble France

Photo-Chemistry

2016

University of Bologna, Italy

## Languages

French, English, Portuguese

Italian & Spanish

## Selected Publications

InP Colloidal Quantum Dots for Visible and Infrared Photonics

70

Nature Materials, 2023

Ligand Exchange for Stable Nanocrystals

234

ACS Energy Letters, 2019

Resurfacing Halide Perovskite Nanocrystals

186

Science, 2019

The role of Acid Base Equilibria in the Size, Shape and Phase Control of Cesium Lead Bromide Nanocrystals, ACS Nano 2018

511