

Francesco Lonis

06/11/1992

Italy

Education

PhD Industrial Engineering, 2020 (2016)-(02/2020)

University of Cagliari, Italy

Project: Design, modelling, evaluation and comparison of energy systems for the production and use of renewable methanol using recycled CO₂

- Modelling and analysis of energy storage systems to produce liquid fuels and other chemicals, such as methanol and dimethyl ether, using hydrogen from renewable energy sources and recycled carbon dioxide. Mass, heat, and energy balances were carried out to evaluate the performance of the systems via the software Aspen Plus and Matlab.

Awards:

- Full PhD scholarship POR-FSE 2014-2020 European Commission

Professional Mechanical Engineer Qualification (P.Eng.), 12/2016

University of Cagliari, Italy

M.Sc. Mechanical Engineering, 2016, GPA 29.0/30.0, 110/110 e Lode (2014)-(2016)

University of Cagliari, Italy

- Energy systems, renewable energy technologies, fluid machinery, dynamic and control of energy systems, modelling and simulation of energy systems, combustion and heat transfer, design and management of industrial assets, mechanical behaviour of materials, FEM

Awards:

- Among the 12 best graduates of the University - A.Y. 2015/2016.
- Best graduate master's degree Mechanical Engineering - A.Y. 2015/2016

B.Sc. Mechanical Engineering, 2014, GPA 28.0/30.0, 110/110 e Lode (2011)-(2014)

University of Cagliari, Italy

- Energy systems, fluid machinery; thermo and fluid dynamic, technical drawing, 3D drawing and modelling (SolidWorks), project and design of mechanical components, mechanical plants, mathematics, physics, chemistry, statistics

Experience

Visiting Scholar within PhD Programme (01/2018)-(09/2018)

Heriot-Watt University, Edinburgh, Scotland UK

Projects: 1) Simulation of jet fuel production from CO₂ via Aspen HYSYS. 2) CFD and experimental study of a heat transfer process between hot water and liquid nitrogen (COMSOL Multiphysics, Autodesk Inventor, AutoCAD)

Heriot-Watt University is a renowned international university, with students and people from all over the world. Staying in such an international and diverse environment widened my horizons and improved my communication, cooperation and team working skills.

Awards:

- 6-month scholarship Erasmus+ Traineeship Placedoc European Commission

Tasks: river clean-ups, path maintenance, invasive species removal, log jams removal

Heriot-Watt University Chaplaincy, Edinburgh, Scotland UK

Volunteer, 05/2018

Tasks: collecting kitchenware and tableware from student halls and kitchens within the HWU Campus

CUS Cagliari Canoa, Cagliari, Italy

Canoe Sprint (ICF) Basic Level Instructor, 12/2012-12/2017

Tasks: teaching to kids and adults how to practise kayaking. In addition, competitive canoe sprint had been practised for 13 years. Teamwork, leadership, and other interpersonal skills had been developed.

Hobbies and passions

I love practising sports, such as canoe sprint, running, and weightlift. I also love reading books and travelling to open my mind and widen my horizons. Hiking and spending time in nature, as well as visiting new places and cities, are my main passions. I am naturally inquisitive, and I like meeting new people and making new friends.

Autorizzo il trattamento dei miei dati personali ai sensi del d. lgs. 196/2003 "Codice in materia di protezione dei dati personali"