

# DAVIDE CADEMARTORI

I have recently completed my master's degree in Chemical and Process Engineering at the University of Genoa. I am organised, determined and reliable. I seek a position where I can enrich my knowledge and use my expertise to grow professionally.

## CURRENTLY

I am the recipient of the research scholarship: "**Preliminary investigations on perovskite electrodes as candidates for the development of the COELUS project**" issued by DICCA, University of Genoa. I have also applied for another research scholarship titled: "**Fabrication and electrochemical characterisation of solid oxide co-electrolysis cell components (SOECs)**", DICCA, University of Genoa.

## PERSONAL INTERESTS AND ACTIVITIES

- Fuel Cells and Electrolysers
- Renewable Energies
- Travelling and sharing ideas
- Social services for children assistance
- Tutoring and homework support
- Hiking and outdoor exploration
- Tennis and padel player

## LANGUAGE SKILLS

- Italian: Native
- English: B2-C1 level

## SOFTWARE SKILLS

- Office, Matlab: Intermediate
- SimaPro, AspenPlus, Fluent, Simulink, Codeblocks, ImageJ: Basic

## EXTRAS

- Full clean driving license
- Pizza Maker at Pizzeria-Ristorante "Dodo", Sestri Levante, Italy-2016

## REFERENCES

Thesis Supervisor: M. Paola Carpanese

[carpanese@unige.it](mailto:carpanese@unige.it)

"I authorize the treatment of personal data contained in this CV in conformity with EU 679-2016".

## EDUCATION

### Master's Degree in Chemical and Process Engineering Polytechnic School, University of Genoa (Italy)

September 2017-March 2020

Final grade: **110/110 CUM LAUDE**

**Focus on:** chemical plants, multiscale analysis and simulation of chemical processes, chemical reactors and applied kinetics, electrochemical materials and technologies, refinery and petrochemistry, industrial biotechnologies, ceramic materials, local transport phenomena.

**Thesis title:** "*Fabrication and electrochemical testing of button solid oxide cells*". Supervisors: Prof. Robert Steinberger-Wilckens, Prof. Maria Paola Carpanese, Dr. Ahmad El-Kharouf. Universities of Genoa and Birmingham.

### Bachelor's Degree in Chemical Engineering Polytechnic School, University of Genoa (Italy)

September 2014 – July 2017

Final grade: **110/110 CUM LAUDE**

**Focus on:** chemical processes and plants, thermodynamics, electrochemistry, fluid mechanic, corrosion and protection of materials, transport phenomena, materials science, general metallurgy.

**Thesis title:** "*Electrochemical and structural characterisation of a composite electrolyte based on doped ceria (GDC) and LSGM for fuel cells at intermediate temperatures*". Supervisors: Prof. Maria Paola Carpanese, Prof. Rodolfo Botter. University of Genoa.

### Classical High School Diploma Liceo Classico Federico Delpino, Chiavari (Italy)

September 2009 – June 2014

Final Grade: **100/100**

## ABROAD EXPERIENCES

### Erasmus+ for Traineeship: Centre for Hydrogen and Fuel Cell Research University of Birmingham (UK)

September 2019 - February 2020

Experimental activity on manufacturing and electrochemical analysis of reversible button solid oxide cells. Team and independent work.

## PUBLICATIONS IN SCIENTIFIC JOURNAL WITH IMPACT FACTOR

"**Infiltrated  $Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}$ -based electrodes as anodes in solid oxide electrolysis cells**". Submitted to Energies (MDPI). IF 2.707, 2020.  
X. M. d'Intignano, D. Cademartori, D. Clematis, S. Presto, M. Viviani, R. Botter, A. Barbucci, G. Cerisola, G. Caboche and M. P. Carpanese.

## ADDITIONAL INFORMATION

### Laboratory Experience

- Fabrication of button solid oxide cells via both the dry shaping process and the tape casting technique. Electrodes hand-made deposition.
- Powder thermal analysis by TGA and TDA techniques.
- Microstructural analysis of samples through SEM and EDXS.
- High temperature procedures for ceramic sintering processes.
- Solid oxide cells characterisation through impedance spectroscopy.

### Certificates and Scholarships

- First certificate in English, Cambridge Assessment English, 2018.
- Certificate of attendance to "GHG Junior Manager Course", 2019.
- Five scholarships from "Fondazione Arvedi Buschini", 2015-2019.