



## Alessandro Sorce

Fixed-term assistant professor

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### *Education and training*

2013

#### **PhD degree European label Turbomachinery Engineering**

Monitoring and Diagnosis of Energy Systems

Università degli Studi di Genova - Genova - IT

2009

#### **Professional practice examination for industrial engineer**

Università degli Studi di Genova - Genova - IT

2009

#### **Masters degree in Mechanical Engineering**

Recuperator experimental investigation and anodic circuit design of SOFC

Hybrid Systems emulator - 110/110 cum laude

Università degli Studi di Genova - Genova - IT

2006

#### **Bachelors degree in Mechanical Engineering**

Technical potential of combined heat and power generation in Sicilian industrial sector - 110/110 cum laude

Università degli Studi di Palermo - Palermo - IT

### *Academic experience*

2016 - ONGOING

#### **Assistant Professor**

Università degli Studi di Genova - Genova - IT

2013 - 2016

#### **Applied researcher**

Università degli Studi di Genova - Genova - IT

Support to the Tirreno Power diagnostic room. Develop and test of Long Term Monitoring algorithms and performance calculations. Assessment and comparison over time of combined cycle power plant basing on Ansaldo and General Electric Gas turbine frames. Develop of solutions aiming to the Technical focus on particular events or feasibility studies (fast start-up operations flexibility and production cost reduction)

## ***Work experience***

2010 - 2011

### **Working student**

Siemens - Power Diagnostic Centre - Muelheim an der Ruhr - DE

Support to the remote diagnostic of Gas Turbine based power plants.  
Performance calculation. Development of numerical models and long term monitoring rules

## ***Language skills***

### **English**

Independent

## ***Teaching activity***

A.A 2018/19

SISTEMI ENERGETICI (cod: 60221) INGEGNERIA

SYSTEM MANAGEMENT FOR ENERGY AND ENVIRONMENT (cod: 94667)

INGEGNERIA

## ***Research interests***

He graduated in 2013 as PhD at the “Science and Technology for Engineering” school of the University of Genoa carrying out his research in the field of “Energy Systems Diagnostics”, taking care also of data validation process. From February 2010 to December 2012, he collaborated to the GENIUS European project developing the monitoring & diagnostic code for SOFC systems, validated on-line. From September 2010 to July 2011, he was at the Power Diagnostic Centre of Siemens at Muelheim an der Ruhr (Germany), inside the Operation Support group, focusing on the remote long term monitoring of Gas Turbine and Combined Cycle and on the development and optimization of the diagnostic process. From February 2013 to December 2014 he is collaborating at Tirreno Power, an Italian electricity producer, to develop and enhance the monitoring of Combined Cycle Power Plants based on different GT frames. At present, he collaborates with recognised energy companies in the Italian and International market, on the topic of expert monitoring systems and process flexibility.

## ***Grants***

2017 - ONGOING

### **Pump Heat - Performance Untapped Modulation for Power and Heat via Energy Accumulation**

European Community

Participant

<http://www.tpg.unige.it/TPG/projects/#toggle-id-3>

2010 - 2012

**Genius - GEneric diagNosis InstrUment for SOFC Systems**

European Community

Participant

<http://www.tpg.unige.it/TPG/projects/#toggle-id-26>