

Attachment 'C'

University Academic Curriculum Vitae

- Personal information** Name: CARLO CALIGIURI
Place and date of birth: COSENZA, 28/05/1991
Nationality: ITALIAN
Address: VIA DEL TEMBIEN 18, COSENZA (CS)
Current Address: VIA CESARE BATTISTI 27, BOLZANO (BZ)
Telephone numbers:
• Mobile: +393482641917
E-Mail: carlo.caligiuri@natec.unibz.it
- Education since leaving school**
- 2009 - 2012, Bachelor's Degree in Mechanical Engineering (Università della Calabria)
 - 2012 - 2015, Master's Degree in Energy Engineering (Università della Calabria)
- Post-graduate courses**
- Expert's Degree in Numerical Simulation in Engineering with ANSYS (Fluid Mechanics Majoring), Technical University of Madrid, 2016
- Present appointment**
- PhD candidate in Sustainable Energy and Technology (Free University of Bolzano), XXXI Cycle
 - Main research focus: alternative fuels in internal combustion engines, experimental measurements in combustion, exhaust gas after treatment systems
- Professional experience** Chronological list of all previous employments (each with job title, starting and finishing dates, level, employer, responsibilities)

From / to	Job title	Institution Name	Academic level	Responsibilities
01/2015 - 05/2015	Short research training	Von Karman Institute for Fluid Dynamics	Master Thesis	Experimental investigations, building of an optical set-up for Laser Induced Fluorescence applications
08/2015 - 11/2015	Internship	CNH Industrial	Post-Graduate	Support in Technical Customer Management division

Research and scholarships

- Currently: three years PhD scholarship at the Free University of Bolzano
- 04/2014 – 09/2014: Erasmus student scholarship for an exchange semester at the Leibniz University of Hanover
- 01/2015 – 05/2015: Erasmus traineeship scholarship for research activities in the framework of my Master Thesis work at the Von Karman Institute for Fluid Dynamics

Experience in academic teaching

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Other academic responsibilities

- Co-supervision of a Master Thesis: "Experimental characterization of a diesel-engine micro-cogeneration system fed with biofuel blends"
- Participation in a commissioned research work in collaboration with Roechling Automotive Italia S.r.l. on the study of the SCR's effectiveness with regards to the new EURO VII regulations for diesel engine passenger vehicles.

Publications

- Conference papers:

Renzi, M., Caligiuri, C., Rossi, M., *Micro-gas turbine feed with natural gas and synthesis gas: Variation of the turbomachines' operative conditions with and without steam injection*, Proceedings of the ASME Turbo Expo Volume 8, 2017 ASME Turbo Expo 2017: Turbomachinery Technical Conference and Exposition, GT 2017, 10.1115/GT2017-63801

Caligiuri, C., Renzi, M., *Combustion modelling of a dual fuel diesel-producer gas compression ignition engine*, Energy Procedia, Volume 142, 2017, Pages 1395-1400, 9th International Conference on Applied Energy, ICAE 2017, 10.1016/j.egypro.2017.12.525

Caligiuri, C., Antolini, D., Patuzzi, F., Renzi, M., Baratieri, M., *Modelling of a small scale energy conversion system based on an open top gasifier coupled with a dual fuel diesel engine*, European Biomass Conference and Exhibition Proceedings Volume 2017, Issue 25th EUBCE, June 2017, Pages 788-793

- Journal articles in refereed academic journals:

Vakalis, S., Caligiuri, C., Moustakas, K., Malamis, D., Renzi, M., Baratieri, M., *Modeling the emissions of a dual fuel engine coupled with a biomass gasifier—supplementing the Wiebe function*, Environmental Science and Pollution Research, Pages 1-8, 2018 10.1007/s11356-018-1647-5

Further data

- Poster presentations in international conferences:

Caligiuri C., Renzi M., Baratieri M., *Development of a 0D Thermodynamics Combustion Simulation Tool for a Dual Fuel Diesel – Producer Gas Engine*, European Combustion Meeting 2017, Dubrovnik

Caligiuri, C., Antolini, D., Patuzzi, F., Renzi, M., Baratieri, M., *Modelling of a small scale energy conversion system based on an open top gasifier coupled with a dual fuel diesel engine*, European Biomass Conference and Exhibition 2017, Stockholm

D. Antolini, S. S. Ail, C. Caligiuri, F. Patuzzi, M. Renzi, M. Baratieri, *Load modulation capability of an open top gasifier by varying the second stage air flow rate (Best Student Poster Award)*, 7th International conference on Engineering for Waste and Biomass Valorization 2018, Prague

- Oral presentations in international conferences:

C. Caligiuri, D. Antolini, F. Patuzzi, M. Renzi, M. Baratieri, *Experimental investigation on an open top downdraft gasifier coupled with a dual fuel compression ignition engine micro-cogeneration system*, 7th International conference on Engineering for Waste and Biomass Valorization 2018, Prague

C. Caligiuri, M. Bietresato, M. Renzi, *The effect of using diesel-biodiesel-bioethanol blends on the fuel feed pump of a small-scale internal combustion engine*, ICAE 2018, Hong Kong

Statement of interest

Thermal engineering challenges have always been one of my main scientific interest. I am interested into this position because of the possibility of implementing numerical models and fulfilling experimental validation of relevant issues such as the thermal management of batteries. I think that my experience in physical modeling and experimental testing could positively meet position requests.

Language competence

English – C1 (CAE, see attachment)
German – A1 (see attachment)

Driving license

B

Date

05/09/2018

Signature

