

CURRICULUM VITAE

Francesco Pompoli



Personal details

Name: FRANCESCO

Family name: POMPOLI

Place and date of birth: FERRARA, 25th MAY 1972

Nationality: ITALIAN

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Education

Advanced Degree in Mechanical Engineering

FACOLTÀ DI INGEGNERIA MECCANICA DI BOLOGNA (INDIRIZZO ENERGIA)

Marks : **100 / 100 cum laude** – Date : 15th July 1998

Thesis Project:

Acoustics –Airflow resistance of porous materials – Experimental thesis

TITLE : *Project and development of an apparatus fot the measurement of airflow
resistance according to UNI EN 29053 Standard*

PhD in Applied Physics

DIPARTIMENTO INGEGNERIA ENERGETICA, NUCLEARE E DEL CONTROLLO
AMBIENTALE (D.I.E.N.C.A.) DELL'UNIVERSITÀ DI BOLOGNA –

Date: 17th April 2002

Thesis Project:

Acoustics – Sound propagation in porous media – Experimental thesis

TITLE : *Mathematical models for the acoustical absorption of polyester fibre materials*

Research Activities:

From 2002 to 2010 he was Assistant Researcher in Applied Acoustics at Engineering Department, University of Ferrara. Member of the Italian Acoustics Association (AIA).

From 2010 he is Researcher at Mechlav, Laboratory of the Engineering Department, University of Ferrara, mainly involved in industrial collaborations with companies and technology transfer in the field of noise control of machinery, sound propagation in porous

materials, automotive applications of noise treatments, experimental and numerical techniques for acoustical applications.

Author of more than 130 papers published National and International Journals and Conference Proceedings, Bibliometric data (Scopus): H-index 9; total citations 322 (<https://www.scopus.com/authid/detail.uri?authorId=56631712000>).

Main researches in acoustics:

The propagation of sound in porous materials (experimental characterization of the acoustic and physical properties of poroelastic materials, numerical modeling of propagation of poroelastic materials and perforated systems, Improving the acoustic performance of the materials and developing innovative porous materials, FEM, BEM, SEA modeling of poroelastic materials and systems)

The noise of machines and mechanical systems such as engines, hydraulic pumps, appliances, burners, fans, boilers etc.

Non-stationary and acoustic (BEM) thermodynamic modeling of fluid dynamics systems for the simulation of the acoustic field produced by aerodynamic noise sources (boiler burners and centrifugal fans)

The sound transmission of sandwich panels

The simulation and testing of anechoic and reverberating laboratories

Numerical Geometric Optimization of Car Warners

Sound quality for automotive applications

Development and optimization of an electric vehicle acoustic warning device

Active noise control of booming phenomena in vehicles

Active noise control of vacuum pumps

Teaching Activities:

Academic Courses:

From 1999 to 2000 was Assistant Professor for the Academic Course of Applied Acoustics for Mechanical Engineering at the University of Modena.

From 2002 to 2006 was Assistant Professor for the Academic Course of Applied Acoustics for Mechanical Engineering at the University of Ferrara.

From 2015 to 2016 was Professor for the Academic Course of Applied Acoustics for Mechanical Engineering at the University of Ferrara.

From 2007 to 2019 was Professor for the Academic Course of Noise Control Techniques for Mechanical Engineering at the University of Ferrara.

From 2018 is Professor of the Academic Course of Passive/Active Noise & Vibration Control at MUNER (Motorvehicle University of Emilia-Romagna).

From 2019 is Professor of the Academic Course of Vehicle Vibroacoustic: Testing and Simulation at the University of Ferrara.

From 2019 is Professor of the Academic Course of Applied Physics at the University of Ferrara.

Other teaching activities:

From 1998-1999 is member of the teaching staff of the post-degree course for Acoustical Technicians of the School of Acoustics of the University of Ferrara.

Teacher in short courses for automotive and mechanical companies

Other activities

In 2004, with two colleagues, found the company *Materiacustica srl*, spinoff of the University of Ferrara.

From 2004 to 2010 was Vice President of the company.

From 2011 to 2017 was President of the company,

The company is involved in applied research activities and consulting in architectural, building, environmental acoustics, noise and vibration control, acoustical characterisation and modalisation of materials.