

### PROF. MASSIMO GARAI - SHORT C.V.

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#### General data

Place and date of birth: Bologna (IT), 16 January 1959. Gender: male. Nationality: Italian. Prof. Massimo Garai, DIN - Università di Bologna, Viale Risorgimento 2, 40136 Bologna, Italy E-mail: <a href="massimo.garai@unibo.it">massimo.garai@unibo.it</a>, Web: <a href="massimo.garai@unibo.it">https://www.unibo.it/sitoweb/massimo.garai/</a>

## **Education**

Laurea degree in Physics cum laude (honors) in 1983 at University of Bologna. "Dottore di Ricerca in Fisica Tecnica" (Ph.D. in Technical Physics) in 1991 at University of Bologna. Native language: Italian. Foreign languages: English and French.

# **Position at University**

Full Professor, affiliated with the Department of Industrial Engineering (DIN) of the University of Bologna. Courses: "Applied Acoustics and Lighting" and "Environmental Technical Physics". Supervisor of more than 100 M.A. and Ph.D. students. Professor of "Acoustics" for the degree in Physics and Advanced Technologies of the University of Siena (2021-2022 and 2022-2023). Vice Dean of his Department (DIENCA) for the term 2009-2011. Vice Dean and Responsible of Operating Unit of the Inter-departmental Center for Industrial Research "Buildings and Constructions" of the University of Bologna for the term 2010-2015.

### Position in standardization bodies

President of the "Acoustics and Vibrations" committee of UNI (Italian Standardisation Organisation) and convenor of the working groups "Noise screens" and "Determination of uncertainty in acoustics".

Convenor of CEN/TC 256/SC 1/WG 40 "Noise barriers for rail infrastructure".

Convenor of CEN/TC 226/WG 6 "Road traffic noise reducing devices".

Member of ISO/TC 43/SC 1/WG 33, ISO/TC 43/SC 2/WG 35, ISO/TC 43/SC 2/WG 36.

#### **Affiliations**

Member of the Board of the Italian Association of Technical Physics (FTI) for the term 2014-2019. Full member, past-treasurer and member of the board of AIA (Italian Acoustics Association), full member of EAA (European Acoustics Association), INCE-USA (Institute of Noise Control Engineering of the USA), AES (Audio Engineering Society) and ASA (Acoustical Society of America).

## Scientific work

**Author** of about 340 papers and 4 books. Scientific interests: outdoor sound propagation, acoustic barriers, environmental impact assessment, building acoustics, room acoustics, industrial noise control, digital signal processing, properties of materials and metamaterials, sustainability, energy in buildings.

Reviewer for Applied Acoustics, J. of Sound and Vibration, J. of the Acoustical Society of America, Noise Control Engineering J., Acta Acustica united with Acustica, J. of Building Engineering, J. of Environmental Management, Science of the Total Environment, Building and Environment, J. of Pollution Effects and Control, J. Cleaner Production, Building Acoustics, J. Applied Physics, Int. J. Modern Physics B. Member of the Editorial board of Rivista Italiana di Acustica. Associate Editor of Open Journal of Acoustics, The Open Transportation Journal and Applied Sciences. One of the most cited authors of Applied Acoustics for the years 2002-2005. "Outstanding Reviewer" for the journal Applied Acoustics for the years 2013, 2015, 2018. "Outstanding Reviewer" for the journal Energy and Buildings for the year 2018. Session chair and invited speaker in many national and international congresses. Best Paper Award at the International Congresses ISTD 2009, ISTD 2011, IBPC 2015. Awarded by UNI with the Paolo Scolari Prize 2022. General chairman of the International Symposium on Temporal Design ISTD 8 (2017). Keynote lecturer at Inter-Noise 2024.

## Recent competitive projects

Scientific responsible of the competitive projects: PRIN2022 (2023-2025) on a new meta-window (budget 295  $k \in$ ), INVOLUCRO (High-performance building envelope) (2017-2019, budget 1.400  $k \in$ ), PRIN2017 (2019-2022) on materials and metamaterials (budget 870  $k \in$ ), INAIL-BRIC ID27 (2017-2019, budget 250  $k \in$ ). WP leader in the European projects: QUIESST (2009-2012, budget 1.950  $k \in$ ), SOPRANOISE (2019-2021, budget 400  $k \in$ ), LIFE SILENT (2023-2028, budget 2.650  $k \in$ ).

# **Professional work**

Since 1990, consultant in acoustics for national road and railway authorities, strategic projects, airports, industrial plants, and buildings. Certified as "competent technician in acoustics" according to Italian law 447/95 (ENTECA n. 5711) and certified at level 3 (maximum) by CICPND for acoustics.