

**Name:** GIULIANA  
**Surname:** BENEDETTO  
**Email:** g.benedetto@inrim.it  
**National insurance number:** BNDGLN49P41C860S  
**Gender:** Female  
**Date of birth:** 1949-09-01  
**Nazionalità:** ITALIAN  
**Document number:** AJ7743423  
**Passport number:**  
**Work address:**  
**Province:** TO  
**City:** TORINO  
**Address:** Strada delle Cacce  
**Number:** 91  
**CAP:** 10135  
**Telephone:** +390113919624  
**Fax:**

**Mobile:**  
**Organization type:** Istituto Nazionale di Ricerca Metrologica  
**Role:** Researcher

**Organization name:** (Istituto Nazionale di Ricerca Metrologica) I.N.Ri.M.  
**Education:** MS degree in Physics, Università di Torino, 1973

**Work experience in the last 5 years:** Since 1974 she is a research scientist at INRIM (formerly IEN) in the Acoustics Dept.

A present, she is a Senior researcher in the same dept.

**Technical, organizational and social skills:** Main research fields:

Applied acoustics 1990 –present. Physical acoustics, for the measurement of the speed of sound in gases and for primary acoustics thermometry.

1995 – 2005. She was in charge for the IEN research field "Tecniche di misura e applicazioni in acustica fisica"

She is a member of the Supervisor Board of the Ph.D. in Metrology at Politecnico di Torino.

She is responsible at INRIM of the project INFN-SAFE

**Loans managed for the last 5 years:** : Within the Acoustics Dept., she has managed the research funding assigned to IEN research field "Tecniche di misura e applicazioni in acustica fisica".

**Publications for the last 5 years, licences or other products of research:** 1. G.

Benedetto, R. M. Gavioso, R. Spagnolo, P. Marcarino, A. Merlone: Acoustic measurements of the thermodynamic temperature between the triple point of mercury and 380 K. Metrologia, Vol. 41, pp. 74-98, 2004.

2. G. Benedetto, R. M. Gavioso, P. A. Giuliano Albo, S. Lago, D. Madonna Ripa, R. Spagnolo: A microwave-ultrasonic cell for sound speed measurements in liquids. International Journal of Thermophysics, Vol. 26, no. 6, pp. 1651-1665, 2005.

3. G. Benedetto, R. M. Gavioso, P. A. Giuliano Albo, S. Lago, D. Madonna Ripa, R. Spagnolo: Speed of sound in pure water at temperatures between 274 and 394 K and pressures up to 90 MPa. International Journal of Thermophysics, Vol. 26, no. 6, pp. 1667-1680, 2005.

4. R.M. Gavioso, G. Benedetto, P.A. Giuliano Albo, A. Merlone, A. Balsamo, G.E. D'Errico, R. Spagnolo, Progress towards an acoustic measurement of the molar gas constant at INRIM

5. International Journal of Thermophysics, Vol. 28, no. 6, pp. 1775-1788, 2007.

6. R. M Gavioso, G. Benedetto, P. A. Giuliano Albo, Velocità del suono nei gas e metrologia

dei fluidi, Rivista Italiana di Acustica, Vol. 31, n. 3-4, pp. 7-16, 2007.

7. R. M. Gavioso, G. Benedetto, P. A. Giuliano Albo, A. Merlone, A. Balsamo, R. Spagnolo, Pro-Pro: progress and problems of the experiment for the acoustic determination of the Boltzmann constant at INRIM, Workshop on the acoustic determination of the Boltzmann constant and acoustic gas thermometry, Torino, September 2007; pubblicato on line su <http://forum.bipm.org>.

**Role in proposal:** Researcher