

Curriculum Vitae

Personal information

First name / Surname **Giovanni, Mana**
Address Via Onorato Vigliani 26, 10135 Torino Italy (home)
INRIM – Strada delle cacce 91, 10135 Torino Italy (office)
Telephone +39 0113919 728 (office)
E-mail g.mana@inrim.it
Nationality Italian
Date of birth 1956-07-28
Gender male

Work experience

Date 2006 onwards
Position held **Adjunct professor** (teaching contract according Italian minister decree 242/98)
Main activities Classes on “observation and measurement methods: non-linear data analysis”
Name of employer University of Turin, Department of Physics “A Avogadro”

Date 2006 onwards
Position held **Director of research**
Main activities 2012 : international research project (INRIM, PTB, LNE, CNAM, OBSPARIS, NMIJ, IOM, BIPM)
“Realization of the awaited definition of the kilogram” funded by the European Commission (coordinator)
2011 : member of the Instrument Review committee of the Institut Laue-Langevin (ILL – France)
2010 onwards : member of the Committee of the European Metrology Research Programme
2008 : national research project (INRIM and Turin University) “atomic realization of the mass unit”
funded by the Compagnia di San Paolo (coordinator)
2007 – 2011 : international research project (INRIM, PTB, IRMM, Turin University, ILL, BIPM)
“Avogadro and molar Planck constants for the redefinition of the kilogram” funded by the European
Commission (coordinator)
2006 – 2010 : national research project (INRIM and Turin University) “atomic-scale displacement
metrology” funded by the Piedmont region (coordinator)
Name of employer Istituto Nazionale di Ricerca Metrologica (INRIM)

Date 2001 - 2005
Position held **Director of research**
Main activities 2005 : expert of the National Research Council (CNR) and member of the technical-support group of
the evaluation committee of the CNR department “Production Systems”
2004 – 2006 : coordinator of the IMGC and Turin University activities in the framework of the
International Avogadro Coordination
2004 onwards : Fellow of the Institute of Physics
2003 onwards : member of the Metrologia’s editorial board
2003 – 2005 : measurement of dynamical accelerations (leader)
2002 – 2005 : IMGC’s institute committee (member)
2001 : scientific committee of the II International Conference of the European Society of Precision
Engineering and Nanotechnology (chairman)
Name of employer CNR – Istituto di Metrologia “G Colonnetti” (IMGC)

Date	1982 - 2000
Position held	Scientist
Main activities	1998 – 2000 : national project (IMGC and Turin University) “scanning X-ray interferometry” funded by the physics committee of the Italian National Research Council (coordinator) 1997 – 1998 : international project (IMGC, Alenia Spazio, Politecnico di Torino, Matra-Marconi Space) “Active Pointing of Large Telescopes & Attitude Measurement Transfer System” funded by the European Space Agency (work-package responsible) 1995 – 2004 : IMGC Working group on the Avogadro constant – Comité Consultatif pour la Masse et les grandeurs apparentées of the Comité International des Poids et Mesures (member) 1991 – 1995 : international project (IMGC, PTB, NPL) “Combined Optical and X-ray Interferometry for high precision dimensional metrology” funded by the European Commission (work-package responsible) 1982 – 1990 : R&D in the framework of the IMGC’s research project “lattice spacing of silicon”
Name of employer	CNR – Istituto di Metrologia “G Colonnetti” (IMGC)
Date	1980 - 1982
Position held	Young scientist
Main activities	R&D on satellite attitude-control and data analysis (ESA missions POPSAT and HIPPARCOS)
Name of employer	EICAS Automazione, Torino
Type of business	R&D in automatic controls
Date	1975 - 1980
Occupation	electrical systems and equipments
Type of business	Individual business
Education	
Date	1987
Title of qualification awarded	PhD (metrology)
Organisation providing education	Politecnico di Torino
Date	1979
Title of qualification awarded	University degree (physics)
Organisation providing education	Università degli Studi di Torino
Date	1975
Title of qualification awarded	Certificate of electrical engineering (secondary school)
Organisation providing education	Istituto Tecnico Industriale “A Avogadro”, Torino
Competences	
Bibliometric indicators	I am a metrologist with both theoretical/mathematical and experimental/technological backgrounds. My main interest was the development of knowhow and measurement technologies to realize a kilogram definition based on the Planck constant by counting Si atoms. I have expertise in physics, mathematics, precision measurements, length metrology, measurement and control of atomic-scale displacements, dynamical theory of x-ray propagation in crystals, optical and x-ray interferometry and diffractometry, Fourier optics, automatic controls, data analysis, classical and Bayesian statistics, stochastic processes and spectral analysis, cryptanalysis (GF(2) algebra, Boolean satisfiability, and Hellman tradeoff), numerical computation and programming. I am author or co-author of about 90 papers in international refereed journals; my Hirsch index is 19; citations are about 1000 (about 500 excluding self-citations); co-authors are 90 from 40 institutions in 11 countries; funding institutions are 8. The data are from the Thomson Reuters ISI Web of Science.