

CURRICULUM VITAE

FORMATO EUROPEO/EUROPEAN FORMAT

PERSONAL INFORMATION

Name, Surname	Marco Andrea Marangoni
Address	Dipartimento di Fisica – Politecnico di Milano and Istituto di Fotonica e Nanotecnologie (IFN) del Consiglio Nazionale delle Ricerche (CNR) Via Gaetano Previati 1/C 23900 – Lecco (ITALY)
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E-mail	marco.marangoni@polimi.it
Nationality	Italian
Place and Date of birth	Bollate (MI), 11/01/1970

WORK EXPERIENCE

Dates (from – to)	2015-Present Head of the Lecco Division of the Photonics and Nanotechnology Institute (IFN) of the National Research Council (CNR)
	2011 – Present Associate Professor in Physics Department of Physics - Politecnico di Milano Head of the research group on Comb-Assisted Molecular spectroscopy
	2001 – 2010 Staff Researcher Department of Physics - Politecnico di Milano
	1999 – 2001 Post-Doctoral Fellow Department of Physics - Politecnico di Milano
Name and address of employer	Dipartimento di Fisica – Politecnico di Milano Via Gaetano Previati 1/C 23900 Lecco (ITALY)
Type of business or sector	Academic and scientific sector
Occupation or position held	Associate Professor in Physics
Main activities and responsibilities	Teaching activity Supervision of Bachelor/Master and PhD students Management of research programs Management of the Lecco Division of the Istituto di Fotonica e Nanotecnologie (IFN) del CNR (National Research Council) Management of 2 laboratories in the field of Precision Molecular Spectroscopy and Trace Gas Sensing Co-founder of a start-up company: Lithium Lasers

EDUCATION AND TRAINING

Dates (from – to)	February 1999 Ph D in Electronic and Communication Engineering Thesis: “Optical waveguides in lithium niobate for second harmonic generation: modelling, characterization and nonlinear measurements”. Advisor: Prof. Gianpiero Banfi
	April 1995 Master degree in Electronic Engineering, grade 100/100 <i>cum laude</i> at Politecnico di Milano. Thesis: “Theoretical and experimental study of the Cerenkov and guided second harmonic in lithium niobate waveguides”. Advisor: Prof. Vera Russo

RESEARCH ACTIVITIES

Research sectors

High-precision molecular spectroscopy

Highly accurate spectroscopic investigation of molecular gas samples, in the near- and mid-infrared, through the use of optical frequency combs in combination with semiconductor and quantum-cascade lasers

Trace gas detection

Development of cavity-enhanced comb-assisted spectrometers for trace gas detection, investigation of weakly absorbing species, ultra-precise determination of line-centre frequencies in sub-Doppler regime

Optical frequency combs synthesizers

Synthesis of optical frequency combs with wide tunability in the mid-infrared spectral region through difference frequency generation and optical parametric oscillation

Coherent Raman microscopy

Development of novel fiber-format systems for Coherent Raman microscopy in a variety of regimes: Coherent-Antistokes Raman Scattering, Stimulated Raman Scattering, Raman-Induced Kerr Effect

Recent Scientific Activities

2018
Winner of the Switch2Product competition for Startup companies, by Politecnico di Milano and Deloitte

2018-2019
Unit coordinator of the project “Development of two new sensors for industry”
Cooperative project with KAUST

2017-2019
Unit coordinator of the project “EMpowerment del PAzienTe In cAsa (EMPATIA)”
Project from Regione Lombardia and FondazioneCariplo

2016-2018
Unit coordinator of the project “Future Home for Future Communities (FHFC)”
Project from Accordo quadro Regione Lombardia – CNR

2016-2018
Unit coordinator of the project “Frequency-comb-calibrated cavity-Enhanced Absorption Spectroscopy at high Temperatures for combustion-relevant gases (FEAST)”
Cooperative project with KAUST

2013-2015

Coordinator of the project "Surface-enhanced Coherent Antistokes Raman Scattering for label-free ultra-sensitive detection"

Regional project from Fondazione Cariplo

2016

Director of the 2016 Winter School on Optical Frequency Combs organized by the International Centre for Theoretical Physics (ICTP) in Trieste (February 15th-26th)

2015-17

Member of the Optical Metrology Subcommittee for Conference on Lasers and Electro-Optics (Cleo)

2014-18

Member of the Solid-State-Laser Subcommittee for the Europhoton Conference.

2017

External Member in the Committee for assigning the PhD title in Physics to Maria Carmela Cardilli, Angelo Sampaolo, Annalisa Volpe dell'Università degli Studi di Bari (Italy)

2015

External Member in the Committee for assigning the PhD title in Physics to Johannes Burkart at the Université de Grenoble (France)

2014

External Member in the Committee for assigning the PhD title in Physics to Lucile Rutkowski at Université Claude Bernard Lyon (France)

Books and Articles

Author and co-author of 98 publications on international journals cited in ISI- Web of Knowledge

Author and co-author of 10 book chapters

Author and co-author of 105 accepted contributions to international conferences

Invitation to 6 oral presentations at international conferences

Co-author of 2 international patents

Co-author of 1 Italian patent

ADDITIONAL INFORMATION

H-index = 30 (Google Scholar)

Total number of citations = 3380 (Google Scholar, March 6th, 2019)

Habilitation as Full Professor from 12/04/2017 to 12/04/2023 in the topic 02/B1 – Experimental Physics of Matter

2000 - Present: Professor of Experimental Physics A+B at Politecnico di Milano

2010 – Present: Professor of Micro and Nanooptics at Politecnico di Milano

1997 – 2008: Teaching assistant of Laser Applications, Optical Technologies, General Physics II

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PERSONALI, INFORMATIVA E
CONSENSO**

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(*barrare la casella*)

Si, acconsento