



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Antonella Priarone**
Telephone(s) +39 010 3532870 (GE) / +39 019 21945274 (SV)
Fax(es) +39 010 311870
E-mail a.priarone@unige.it
Nationality Italian
Date of birth 04.06.1977

Work experience

Dates	From 01.07.2010
Occupation or position held	Researcher-Assistant Professor of Technical Physics (SSD IND-IND/10) – permanent position (ING-IND/10)
Name and address of employer	University of Genoa, DIME
Main activities and responsibilities	Research activity: Ground coupled heat pumps, energy in buildings, two-phase pressure drop and boiling heat transfer; Teaching activity: 2010/2011: Fisica Tecnica (Management Engineering) (6 CFU) 2011/12, 2013/14, 2014/15: Heat Transfer (Environmental & Energy Engineering) (6 CFU) ASN for Assistant Professor (II fascia - SC 09/C2), valid until December 22, 2020
Mother tongue(s)	Italian
Other language(s)	French (excellent); English (good)
Dates	01.12.2008-10.11.2009
Occupation or position held	Post PhD Position
Name and address of employer	University of Bologna, DIENCA
Main activities and responsibilities	Thermal response tests of geothermal heat exchangers with numerical evaluation and efficiency optimization
Dates	01.04.2007-31.07.2008
Occupation or position held	Post PhD Position
Name and address of employer	University of Genoa, DIME
Main activities and responsibilities	Heat transfer and two phase flow of dielectric fluids in minichannels and narrow spaces
Dates	01.03.2005-28.02.2007
Occupation or position held	Post PhD Position
Name and address of employer	University of Genoa, DIME
Main activities and responsibilities	Boiling of dielectric fluids in minichannels

Education and training

Dates	January 2002 - December 2004
Title of qualification awarded	Degree of Doctor of Philosophy in Mechanical Engineering, Applied Physics curriculum PhD Thesis: "Caratteristiche dello scambio termico di fluidi dielettrici nella ebollizione stagnante e convettiva in canali di piccole dimensioni"; supervisor Prof. G. Guglielmini - University of Genoa
Dates	September 1996 - November 2001
Title of qualification awarded	Degree in Mechanical Engineering (five year curriculum), 110/110 summa cum laude Thesis: "Effetto dell'orientazione superficiale sullo scambio termico nell'ebollizione nucleata di fluidi dielettrici"; supervisor Prof. G. Guglielmini - University of Genoa

Publications

- A. Priarone, "Effect of surface orientation on nucleate boiling and critical heat flux of dielectric fluids", *International Journal of Thermal Sciences* 44, 822-831 (2005).
- G. Guglielmini, M. Misale, A. Priarone, "Combined orientation and confinement effects on saturated pool boiling of dielectric liquid", *Proc. of 13th International Heat Transfer Conference*, Paper BOI-31, IHTC13.p.28.310 (Sydney, NSW, Australia, 13-18 August 2006), 1-12.
- M. Fossa, D. Dalla Pietà, A. Priarone, "Measurement of flow parameters in solid-liquid slugging fluidised beds", *Flow Measurement and Instrumentation* 18, 12-17 (2007).
- G. Guglielmini, A. Priarone, C. Schenone, "An experimental investigation of two-phase pressure drop in small diameter horizontal channels", *Proc. of 11th International Conference on Multiphase Flows* (Palermo, 7-10 Settembre 2008), 381-390.
- M. Misale, G. Guglielmini, A. Priarone, "HFE-7100 pool boiling heat transfer and critical heat flux in inclined narrow spaces", *International Journal of Refrigeration* 32, 235-245 (2009).
- E. Zanchini, S. Lazzari, A. Priarone, "Effects of flow direction and thermal short-circuiting on the performance of coaxial ground heat exchangers", *Proc. of International Conference on Renewable Energies and Power Quality (ICREPQ'09)*, (Valencia, Spain, 15-17 April 2009).
- G. Guglielmini, M. Misale, A. Priarone, "Experiments on HFE-7100 pool boiling at atmospheric pressure in horizontal narrow spaces", *Proceedings of ECI International Conference on Boiling Heat Transfer*, Florianópolis-SC-Brazil, 3-7 May 2009.
- E. Zanchini, S. Lazzari, A. Priarone, "Finite element simulation of coaxial borehole heat exchangers", *Proc. of SET2009 - 8th Int. Conf. on Sustainable Energy Technologies*, Aachen, Germany, 31st August - 3rd September 2009.
- A. Priarone, S. Lazzari, E. Zanchini, "Numerical evaluation of long-term performance of borehole heat exchanger fields", *European Comsol Conference 2009*, Milan, Italy, 14-16 October 2009.
- E. Zanchini, S. Lazzari, A. Priarone, "Improving the thermal performance of coaxial borehole heat exchangers", *Energy* 35, 657-666 (2010).
- E. Zanchini, S. Lazzari, A. Priarone, "Effects of flow direction and thermal short-circuiting on the performance of small coaxial ground heat exchangers", *Renewable Energy* 35, 1255-1265 (2010).
- S. Lazzari, A. Priarone, E. Zanchini, "Long-term performance of borehole heat exchanger fields with negligible groundwater movement", *Energy* 35, 4966-4974 (2010).
- S. Lazzari, A. Priarone, E. Zanchini, "Long-Term Performance of Borehole Heat Exchanger Fields with Groundwater Movement", *European Comsol Conference 2010*, Paris, France, 17-19 November 2010.
- M. Misale, G. Guglielmini, A. Priarone, "Nucleate boiling and critical heat flux of HFE-7100 in horizontal narrow spaces", *Experimental Thermal and Fluid Science*, Special Issue: Boiling Conference 2009 35, 772-779 (2011).

A. Priarone, S. Lazzari, "Comparison of 2D conduction models for vertical ground coupled heat exchangers", European Comsol Conference 2011, Stuttgart, Germany, 26-28 October 2011.

S. Lazzari, A. Priarone, E. Zanchini, "Validation of a simplified model to determine the long term performance of borehole heat exchanger fields with groundwater advection", European Comsol Conference 2011, Stuttgart, Germany, 26-28 October 2011.

E. Zanchini, S. Lazzari, A. Priarone, "Long-term performance of large borehole heat exchanger fields with unbalanced seasonal loads and groundwater flow, Energy 38, 66-77 (2012).

M. Fossa, D. Rolando, A. Priarone, J. Vaccaro, "Numerical evaluation of the ground response to a Thermal Response Test experiment", European Geothermal Congress 2013, Pisa, 3-7 June 2013.

S. Lazzari, E. Zanchini, A. Priarone, "Loss of performance of double U-tube borehole heat exchangers due to thermal short-circuiting, Third Int. Conference on Computational Methods for Thermal Problems, THERMACOMP2014, Lake Bled, Slovenia, 2-4 June, 2014.

A. Priarone, S. Lazzari, "Short-term behavior and steady-state value of BHE thermal resistance", European Comsol Conference 2014, Cambridge, UK, September 17 - 19, 2014.