

Euro pass Curriculum Vitae



Personal information

First name/ Surname **Emanuele Teodori**
Address 108, Via Salemi, 00133, Rome, Italy (permanent)
15, Avenida Duque d'avila 4°E Lisbon, Portugal
E-mail: e.teodori@dem.ist.utl.pt
Nationality Italian
Date of birth 01/11/1984
Gender Male

Desired employment / Occupational field

R&D in the field of applied thermodynamic for energy production

Education and training

Dates November 2012→Present
Title of qualification awarded **PhD, mechanical engineering**
Name and type of organization providing education and training Instituto Superior Técnico, IN+, Universidade Técnica de Lisboa, Lisbon, Portugal
Key topics Realization of a sustainable two-phase cooling system for electronic components.
Study of the pool boiling phenomena in the context of energy applications.
Realization and optimization of micro heaters and RTD in collaboration with INESC.

Major publications

**“Empirical and modelling based correlations for pool boiling over micro-structured surfaces”
(Manuscript submitted at International Journal of Interfacial Phenomena), May 2014
E.Teodori, A.S. Moita, A.L.N Moreira.**

**“Characterization of pool boiling mechanisms over micro-patterned surfaces using PIV”
(International Journal of Heat and Mass Transfer Volume 66, November 2013, Pages 261-270
E.Teodori, A.S. Moita, A.L.N Moreira.**

**“Enhancement of pool boiling heat transfer by surface micro- structuring”
Journal of Physics: Conference Series 395 (2012) DOI:10.1088/1472-6569/395/1/012175
A.S. Moita, E.Teodori, A.L.N Moreira**

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| Papers in international conferences | <p>“Study of the combined effect of liquid properties and surface micro patterning on pool boiling heat transfer” 15th International Heat Transfer Conference IHTC-15, Kyoto, Japan, 10-15 August 2014, E.Teodori,A.S.Moita,A.L.N.Moreira(oral presentation)</p> <p>“Empirical Correlations between Bubble Dynamics and Heat Transfer Coefficient for Pool Boiling over Micro Textured Surfaces” 17th International Symposium on applications of laser techniques to fluid mechanics Lisbon, Portugal 2014, E.Teodori,A.S.Moita,A.L.N.Moreira(oral presentation)</p> <p>“Pool Boiling Heat transfer over Micro-Treated Surfaces: a Mechanistic Approach” 5th international conference on Heat Transfer and Fluid Flow in Micro Scale. HTFFM-V, Marseille, France, 22-25 April 2014.Teodori E., Moita AS, Moreira A.L.N, (oral presentation)</p> <p>“Evaluation of pool boiling heat transfer over micro-structured surfaces by combining high-speed visualization and PIV measurement” 10th international symposium on particle image velocimetry- PIV 13. Delft, The Netherlands, July 2-4 2013. Teodori E., Moita AS, Moreira A.L.N</p> <p>“Pool boiling heat transfer over micro-patterned surfaces: experiments and theory”, 8th World Conf. Exp Heat Transf., Fluid Mech. and Thermodynamics, ExHFT-8, Lisbon, Portugal, 2013. Teodori E., Moita AS, Moreira ALN, (oral presentation)</p> <p>“Pool boiling over enhanced surfaces over a wide range of wettability conditions”, 8th World Conf. Exp Heat Transf., Fluid Mech. and Thermodynamics, ExHFT-8, Lisbon, Portugal, 2013. I.Malavasi,E.Teodori,M.Marengo,A.S.Moita, A.L.N. Moreira</p> |
| Other production | Participation and oral presentation in two national conferences “ Encontro Annual do Laboratorio Associado LARSyS”, “15 anos do IN+, IN+15” and “E3 forum”, Pavilhao do conhecimento, Lisbon, PT |
| External activities | <p>Co-Supervisor of two master thesis:</p> <p>“Development and control of a condensation system using Peltier Cells” (Discussed 15/05/2014,Student: Antonio Maciel, final note 17/20)</p> <p>“CFD simulation of a two-phase cooling system for electronic components” (Student: Caterina Laurencia, thesis not completed yet)</p> <p>Courses:</p> <p>“Computational Fluid Dynamics”- 16/20</p> <p>“Micro and Nano Technologies”- 18/20</p> |
| Dates | 18/08/14 - 18/09/14 |
| Title of qualification awarded | Summer Internship |
| Name and type of organisation providing education and training | Jilin University, department of Bionic Engineering, Renmin Street 5988, Changchun, China |
| Key topics | Fabrication of Super Hydrophobic Surfaces for experiments in Pool Boiling conditions |
| Dates | 13/08/13 - 30/08/13 |
| Title of qualification awarded | Invited student |
| Name and type of organisation providing education and training | Nanjing University of Aeronauts and Astronauts and Jilin University |
| Key topics | Participation to “The 4th International Conference of Bionic Engineering (ICBE 2013)” Nanjing, China Stage at “Jilin university” department of Bionic Engineering , Renmin Street 5988, Changchun, China |
| Dates | May 2011 - October 2012 |
| Title of qualification awarded | Research grant (project PTDC/EME-MFE/109933/2009 SURWET-COOLS) |
| Name and type of organisation providing education and training | Instituto Superior Técnico,IN+,Universidade Técnica de Lisboa,Lisboa,Lisbon,Portugal |
| Key topics | Study of the effect of the surface topography in the context of the pool boiling process, for cooling applications such as cooling of micro-electronic components. Project, design and realization of a first working prototype. |

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| Papers in international conferences | <p>“Enhancement of pool boiling heat transfer by surface micro structuring” 6th European Thermal Science Conference, Eurotherm 2012 Poitiers-Futuroscope, France, E.Teodori,A.S.Moita,A.L.N.Moreira (oral presentation)</p> <p>“Pool boiling mechanisms over micro-textured surfaces” 16th International Symposium on applications of laser techniques to fluid mechanics Lisbon,Portugal, E.Teodori,A.S.Moita,A.L.N.Moreira (oral presentation)</p> <p>“Influence of surface topography and wettability in the boiling mechanisms” 24th Annual Conference on Liquid Atomization and Spray Systems, Estoril,Portugal A.S.Moita, E.Teodori, A.L.N.Moreira (oral presentation)</p> |
| Other production | Participation and oral presentation in three national conferences and forums: “E3 Forum”, “MIT Portugal energy night 2012”, MEFTE 2012 “ IV National Conference in fluid mechanic, thermodynamic and energies” |
| Date | April 2012 - July 2012 |
| Title of qualification awarded | Pos-graduação em energias solares (Post Graduate course in Solar Energies) |
| Key topics | Post-graduate course in solar energies applications and energy production systems |
| Name and type of organisation providing education and training | SGS academy |
| Level in national classification | 16/20 (best note of the course) |
| Dates | May 2012 - June 2012 |
| Title of qualification awarded | Participation in Beta-Start program for Start-up acceleration |
| Key topics | Winner of the process of national patent for the project “Boil2Cool (New cooling solution for electronic components)”Oral presentation of the project in order to obtain external funds |
| Dates | February 2009 - July 2011 |
| Title of qualification awarded | Master’s degree in Energy and Nuclear Engineering |
| Thesis title | “ <i>Study of pool boiling mechanisms in the context of cooling applications</i> ” |
| Key topics | Experimental fluid mechanics and heat transfer |
| Name and type of organisation providing education and training | Università di Roma Tor Vergata,Rome, Italy Instituto Superior Técnico,Universidade Técnica de Lisboa,Lisbon,Portugal |
| Level in national classification | 110 cum laude/110 (Maximum grade with honours) |
| Work experience | |
| Dates | August 2013 - present |
| Occupation or position held | Vice President Engineering department at Aries elettromagnetismo e spazio.srls |
| Type of business or sector | Thermal management of electronic devices for telecommunication and similar applications |
| Dates | November 2012 – January 2013 |
| Occupation or position held | Freelancer in collaboration with Eng. Alessio Alleva and Eng. Vincenzo Alleva (Via Pupinia 31, Rome, Italy) |
| Type of business or sector | Telecommunication: project and simulation (MatLab,HFSS) of high frequency spatial combiner |
| Dates | 17/09/12 - 23/09/12 |
| Occupation or position held | Internship in Sinergieae (Rua Francisco Sá CarneiroLT F13, Mem Martins,Lisbon,Portugal) |
| Type of business or sector | Renewable energy system: Installation of two Micro PV energy production system. |
| Dates | 2005 – 2007 |

