

CURRICULUM VITAE

Hai Trieu PHAN

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RESEARCH INTERESTS

Two-phase flow heat transfer, surface wettability, nanocoating techniques, nanofluids

Investigation of nanocoating for thermal application

My research efforts are directed primarily at the investigation of the fundamental effects of the surface wettability in two-phase heat transfer as: boiling and evaporation. The ultimate goal is to find new surfaces which have excellent thermal performance, then to explore their applications in heat transfer systems such as: microchannels, microchannels and heat pipe. The research programme is in collaboration with the LITEN Surface Coating Laboratory and sponsored by the Atomic Energy Commission (CEA-Grenoble).

EDUCATION

2007-2010: **PhD**, Grenoble Institute of Technology
Thesis title: “**Intensification of boiling heat transfer by micro- and nano-coatings of surface**”
2006-2007: **Master**, degree in Thermal and Energy Sciences, National Institute of Applied Science (INSA of Lyon)
2002-2007: **Engineer**, diploma in Thermal Science, National Institute of applied Science (INSA of Lyon)

HONORS AND AWARDS

September 2004: Eiffel Excellence Scholarship of the French ministry of foreign affairs
September 2003: Georges Besse scholarship for brilliant student in engineering
June 2002: Winner of the best student award on the entrance exam of the National University of Economics of Vietnam

PATENTS

1. Hai Trieu PHAN, Jérôme GAVILLET, Dispositif d'échange thermique a ébullition convective et confinée à efficacité améliorée, N° E.N.: 0956309 (2009).
2. Hai Trieu PHAN, Jérôme GAVILLET, Dispositif d'échange thermique à efficacité amélioré, N° E.N.: 0956308 (2009).
3. Hai Trieu PHAN, Jean-Antoine GRUSS, Olivier PONCELET, Procédé de réalisation d'un dépôt de nanoparticules à adhérence augmentée et dispositif pour la mise en œuvre d'un tel procédé, N° E.N.: 0950036 (2009).
4. Hai Trieu PHAN, Jérôme GAVILLET, Dispositif d'échange thermique à coefficient d'échange thermique augmenté et procédé de réalisation d'un tel dispositif, N° E.N.: 0953012 (2009).
5. Hai Trieu Phan, Jérôme GAVILLET, Stéphane COLASSON, Nadia CANEY, Philippe MARTY, Structure d'échange thermique et dispositif de refroidissement comportant une telle structure, N° E.N.: 0855336 (2008).

JOURNAL PAPERS

1. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, A model to predict the effect of contact angle on the bubble departure diameter during heterogeneous boiling, I. C. Heat and Mass Transfer, 12.2009 (submitted).
2. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, Surface coating by nanofluids: The effects on pool boiling heat transfer, J. Heat and Mass Transfer, 08.2009 (submitted).
3. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, Surface wettability controlled by nanocoating: The effects on pool boiling heat transfer and nucleation mechanism, I. J. Heat and Mass transfer 52 (2009) 5459–5471.
4. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, How does surface wettability influence nucleate boiling?, C. R. Mécanique 337 (2009) 251–259.
5. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, A new approach to understanding the effects of surface wettability on nucleate boiling, Mécanique & Industries 10, 223–230 (2009).

CONFERENCE PAPERS

1. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, Comment la mouillabilité influence-t-elle l'ébullition nucléée ?, 19^{ème} Congrès Français de Mécanique, 08.2009.
2. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, Influence of surface wettability on pool boiling heat transfer, Proceedings of the Seventh International ASME Conference on Nanochannels, Microchannels and Minichannels ICNMM09, 06.2009.
3. Hai Trieu PHAN, Nadia CANEY, Philippe MARTY, Stéphane COLASSON, Jérôme GAVILLET, Effets de la mouillabilité sur l'ébullition nucléée, Congrès de la Société Française de Thermique, 05.2009.

PERSONAL INFORMATION

- Enjoy Web design
Creation and management of several websites such as:
 - o Website of the Vietnamese student society in Grenoble (AEVG)
<http://aevg.fr>
 - o Website of the Vietnamese student society in Lyon (SVL)
<http://svlyon.fr>
 - o Website of the Vietnamese society in Sheffield (VIETSOC)
<http://vietsoc.union.shef.ac.uk>
- Enjoy public activities
 - o 2007-2008 : Vice president of AEVG
 - o 2007: Founder of the Vietnamese student society of INSA (AVI)
 - o 2005: Founder of VIETSOC
- Enjoy traveling
List of countries where I have travelled: France, United Kingdom, United State, Japan, Korea, Germany, Italy, Spain, Holland, Sweeden, Poland, Finland