

H. NAJI'S BIOGRAPHY AND SUCCINCT CV

NAJI HASSANE, Full professor of Fluid Mechanics and Thermal Engineering

Univ. Artois, Univ. Lille, IMT Lille-Douai, Junia, ULR 4515 - LGCgE, Laboratoire de Génie Civil et géo-Environnement, Technoparc Futura, F-62400 Béthune, France.

Born in Casablanca on Oct. 20, 1957; Nationality: French

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H. Naji is a full Professor of Mechanical Engineering at Artois University (France). He received his undergraduate and graduate education in the Mechanical Engineering Department of Lille University (France). Following research engineer and Assistant Professor positions at Rouen University & INSA, Rouen, France, he joined Polytech'lille School Mechanical Engineering-Lille University as an Associate Professor until 2010, and then moved to the Artois University. Professor Naji holds a Ph.D. in Physical Sciences from the University of Lille (France) and an M.Sc. in Thermal-Fluid Sciences from the National Polytechnic Institute of Lorraine (INPL), Nancy, France. Hassan Naji's research is in the areas of Fluid Mechanics and Turbulence, Thermal-Fluid Sciences and Engineering, Advanced Heat Transfer, and Numerical Methods for Multi-Scale Simulations (mesoscopic and macroscopic approaches).

H. Naji is a fellow or member of various professional institutes and societies (e.g. the American Society of Thermal and Fluids Engineers (**ASTFE**), the French Association of Mechanics, the Thermal French Society) and is regularly invited as keynote speaker at local and international conferences. In terms of research, he is the author of several referred articles (>80) and lectures (>250) in international journals and conferences. Also, he is a referee for many scientific journals as *Int. Journal of Thermal Sciences*, *Int. Journal of Heat & Mass Transfer*, *Computers and Mathematics with Applications*, *Computers & Fluids*, *Heat and Mass Transfer*, *Physica A*, *Engineering Computations*, *Mathematical Problems in Engineering* (Associate Editor), *Journal Energy Science and Technology* (Editorial Board member), etc.

MAIN IDENTIFIERS

- Web of Science Researcher ID/AAC-5799-2020
- <https://orcid.org/0000-0002-5994-7958>
- Scopus Author ID: 6602675400

WEB PAGES

- https://scholar.google.com/citations?hl=en&user=RTzEIC4AAAAAJ&view_op=list_works
- https://scholar.google.com/citations?hl=en&user=RTzEIC4AAAAAJ&view_op=list_works&sortby=pubdate
- <https://www.scopus.com/>
- https://www.researchgate.net/profile/Hassane_Naji/publications

SELECTED PUBLICATIONS

1. R. Mabrouk, **H. Naji**, H. Dhahri, S. Hammouda, Z. Yousfi
"Numerical investigation of porosity effect on a PCM's thermal performance in a porous rectangular channel via thermal lattice Boltzmann method", **Int. Commun. Heat Mass Transf.** (IF = 3.971; Ed. Elsevier; Q1), Vol. 119 104992, 2020; <https://doi.org/10.1016/j.icheatmasstransfer.2020.104992>
2. R. Mabrouk, H. Dhahri, **H. Naji**, S. Hammouda, Z. Yousfi
"Lattice Boltzmann simulation of forced convection melting of a composite phase change material with heat dissipation through an open-ended channel", **Int. J. Heat Mass Transf.** (IF = 4.947; Ed. Elsevier; Q1), Vol. 153, pp. 119606, 2020; <https://doi.org/10.1016/j.ijheatmasstransfer.2020.119606>
3. R. Mabrouk, **H. Naji**, H. Dhahri, Z. Yousfi
"Insight into Foam Pore Effect on Phase Change Process in a Plane Channel under Forced Convection Using the Thermal Lattice Boltzmann Method", **Energies** (IF = 2.702; Ed. MDPI; Q1), Vol. 13, No. 15, pp. 3979, 2020; <https://doi.org/10.3390/en13153979>

4. L. Qabbal, Z. Younsi, **H. Naji**
 “Indoor air quality investigation in a ventilated demonstrator building via a smart sensor”, *Int. J. Vent.* (IF= 0.929; Ed. Taylor & Francis; Q2), 2020; <https://doi.org/10.1080/14733315.2020.1786974>
5. M. Nial, L. Loukarfi, and **H. Naji**
 “Aerodynamic control of a diffusion flame to optimize materials’ transition in a rotary cement kiln”, *Mech. Ind.* (IF= 0.874; Ed. EDP Sciences; Q3), Vol. 21, pp. 414, 2020. <https://doi.org/10.1051/meca/2020043>
6. Z. Younsi, **H. Naji**
 “Numerical assessment of brick walls’ use incorporating a PCM towards thermal performance in buildings during a passive cooling strategy”, *Therm. Sci.* (IF = 1.541, Ed. Vinča Institute of Nuclear Sciences, Belgrade; Q3), Vol. 24, No. 3, pp. 1909-1922, 2020; <https://doi.org/10.2298/TSCI180302207Y>
7. Z. Younsi, **H. Naji**
 “Numerical simulation and thermal performance of hybrid brick walls embedding a Phase Change Material for passive building applications”, *J. Therm. Anal. Calorim.* (IF = 2.731; Ed. Springer; Q2), Vol. 140, pp. 965-978, 2020; <https://doi.org/10.1007/s10973-019-08950-x>
8. Z. Younsi, L. Koufi, **H. Naji**
 “Numerical study of the effects of ventilated cavities outlet location on thermal comfort and air quality”, *Int. J. Numer. Heat Fluid Flow* (IF = 2.87; Ed. Emerald Publishing; Q1), Vol. 29, No.11, pp. 4462-4483, 2019; <https://doi.org/10.1108/HFF-09-2018-0518>
9. A. Yehya, **H. Naji**, L. Zalewski
 “Experimental and numerical characterization of an impure phase change material using a thermal lattice Boltzmann method”, *Appl. Therm. Eng.* (IF = 4.725; Ed. Elsevier; Q1), Vol. 154, pp. 738-750, 2019; <https://doi.org/10.1016/j.applthermaleng.2019.03.026>
10. A. Yahiaoui, M. Djeddar, **H. Naji**
 “Simulating of heat transfer enhancement via a water-based nanofluid in enclosures with curved side walls”, *Int. Commun. Heat Mass Transf.* (IF = 4.224; Ed. Elsevier; Q1), Vol. 100, pp. 118-132, 2019; <https://doi.org/10.1016/j.icheatmasstransfer.2018.12.003>
11. A. Yahiaoui, M. Djeddar, **H. Naji**
 “Numerical computation of natural convection inside a curved-shape nanofluid-filled enclosure with non-uniform heating of the bottom wall”, *Int. J. Modern Physics C* (IF= 1.100; Ed. World Scientific; Q3); Vol. 30, No. 1 (1950006), 2019; <https://doi.org/10.1142/S0129183119500062>
12. Z. Younsi, **H. Naji**
 “A numerical investigation of melting phase change process via the enthalpy porosity approach: Application to hydrated salts”, *Int. Commun. Heat Mass Transf.* (IF= 4.224; Ed. Elsevier; Q1), Vol. 86, pp. 12-24; 2017; <https://doi.org/10.1016/j.icheatmasstransfer.2017.05.012>
13. M. Lachheb, Z. Younsi, **H. Naji**, M. Karkri, S. Ben Nasrallah
 “Thermal behavior of a hybrid PCM/plaster: A numerical and experimental investigation”, *Appl. Therm. Eng.* (IF= 4.725; Ed. Elsevier; Q1), Vol. 111, pp. 49-59, 2017; <https://doi.org/10.1016/j.applthermaleng.2016.09.083>
14. Z. Younsi, **H. Naji**, M. Lachheb
 “Numerical investigation of transient thermal behavior of a wall incorporating a phase change material via a hybrid scheme”, *Int. Commun. Heat Mass Transf.* (IF = 4.224; Ed. Elsevier; Q1), Vol. 78, pp. 200-206, 2016; <https://doi.org/10.1016/j.icheatmasstransfer.2016.09.007>
15. A. Yehya, **H. Naji**, M. C. Sukop
 “Simulating flows in multi-layered and spatially-variable permeability media via a new Gray Lattice Boltzmann model”, *Comput Geotech* (IF = 3.818; Ed. Elsevier; Q1), Vol. 70, pp. 150-158, 2015; <https://doi.org/10.1016/j.compgeo.2015.07.017>

EDUCATION (degrees awarded)

- *Habilitation à diriger les recherches* (HDR) in Physical Sciences, January 1998, University of Lille, France (Degree required for Professor position).
- *Physical Doctor* (PhD) in Fluid Mechanics, 1984, University of Lille, France.
- *Master of Science* in Thermal-Fluid Sciences (M.Sc.), 1981, National Polytechnic Institute of Lorraine (INPL), Nancy, France.
- *BS in Mechanics Sciences*, June 1980, University of Lille.

ACADEMIC APPOINTMENTS & OTHER RELATED EXPERIENCE

December 2010 - Present	Professor (tenured), Artois University, France
1989-2010	Associate Professor (tenured), Polytech'lille School Mechanical Engineering-Lille 1 University, France.
1988-1989	Guest researcher at Reacting Gas Dynamics Laboratory (Prof. A. F. Ghoniem), Massachusetts Institute of Technology, Cambridge, MA 02139, USA (Grant of NATO).
1986-1988	Assistant Professor, Rouen University & INSA, Rouen, France.
1985-1986	Research Engineer at CORIA (complex Aerothermochemistry Interprofessional Research) UMR 6614/CNRS/University & INSA of Rouen.
1984-1985	Researcher Apprentice, Office National des Etudes et Recherches Aérospatiales (ONERA)-Institut de Mécanique des Fluides de Lille (IMFL), France.

RESEARCH INTEREST

- Computational Thermal-Fluid Science, Advanced Heat Transfer and Fluid Mechanics, Numerical Modeling and Computer-based Simulation, Finite volume (FV) and lattice Boltzmann (LB) simulation Methods.

TEACHING INTEREST

- Level: Undergraduate, Masters and Engineering Schools; Fluid mechanics and turbulence, Thermal-Fluid Sciences and Engineering, Advanced Heat Transfer; Numerical Methods for Multi-scale Simulations (mesoscopic and macroscopic approaches), Applied Thermodynamics for Engineering.

SCIENTIFIC AND PROFESSIONAL SOCIETIES

- Member (*membership number: 10044*) of the American Society of Thermal and Fluids Engineers (ASTFE), <https://www.astfe.org/>;
- Member of the French Association of Mechanical (AFM).
- Member of the French Society of Thermal Science (SFT).

EDITORIAL BOARD MEMBER OF JOURNALS & MEMBER OF TECHNICAL PROGRAM COMMITTEES

- Lead Guest Editor of **Mathematical Problems in Engineering**;
- **Journal of Petroleum Engineering**; **Journal Energy Science and Technology**;
- **Applied Sciences** (<http://www.mdpi.com/journal/applsci>);
- **Mathematical Problems in Engineering**, (<http://www.hindawi.com/journals/mpe/editors/>);
- Member of the Technical program committee for **HEFAT2014** (10th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics), July 2014, Orlando, Florida, USA;
- Member of the Technical Program Committee for **HEFAT2016** (12th International Conference, 11-13 July 2016, Costa del Sol, Malaga, Spain. <https://edas.info/web/hefat2016/>).

JOURNALS' EXPERTISE (Reviewer's activity)

- *Computers and Mathematics with Applications* (Ed. Elsevier); • *Computers and Fluids* (Ed. Elsevier); • *Int. Journal of Thermal Sciences* (Ed. Elsevier) (Ed. Elsevier); • *Int. Journal of Heat & Mass Transfer* (Ed. Elsevier); • *Int. Communications of Heat and Mass transfer* (Ed. Elsevier); • *Applied Thermal Engineering* (Ed. Elsevier); • *International Journal of Thermal Sciences* (Ed. Elsevier); • *International Journal of Computational Fluid Dynamics* (Ed. Taylor & Francis); • *International Journal for Numerical Methods in Fluids* (Ed. Wiley); • *Int. Journal of Computational Methods*, • *International journal of Modern Physics C* (Ed. World Scientific) • *Heat and Mass transfer* (Ed. Springer); • *Engineering Computations* (Ed. Emerald Gr. Publishing); • *Heat Transfer Research* (Ed. Ed. Begellhouse), etc.