Curriculum Vitae

Dr. Lakhdar Aidaoui

Lecturer, MCA

PERSONAL INFORMATION:

First Name: Lakhdar الاسم: لخضر
Family Name: Aidaoui اللقب: عيداوي
Date and birthplace: 08-03-1977, Djelfa, Algeria
Nationality: Algerian
Familiar situation: Married
Professional Address: Department of Mechanical Engineering
University of Djelfa
B.P. 3117, Djelfa 17000, Algeria
Tel (Mobile): 00213 671904080
E-mail: l.aidaoui@univ-djelfa.dz, laidaoui@gmail.com

STUDIES AND DIPLOMAS:

07.2017: Habilitation degrees (HDR) in Mechanical Engineering, University of Sciences and Technology of Oran (USTO-MB), Algeria

06.2015: PhD in Mechanical Engineering, option: Environmental modelling and simulation, Mechanical Engineering Faculty, University of Sciences and Technology of Oran (USTO- MB), Algeria
In co-operation with: The Institute of Atmospheric Sciences and Climate (ISAC-CNR), Bologna, Italy

PhD Topic: Photochemical air pollution modelling in local and meso scales.

2005-2007: Magister in Energetic, option: MADEPODIM (MAster DEgree on Pollutant Dispersion Modelling) at the University of Sciences and Technology of Oran (USTO MB), Algeria
In co-operation with: AIAS Engineering Ltd, Thessaloniki (Greece).

Magister Topic: Mesoscale photochemical modelling in a medium sized city

1996-2001: Engineer diploma in mechanical engineering, option: energetic from the University of Sciences and Technology of Oran (USTO MB), Algeria

1996: Baccalaureate in nature and bio sciences (Algeria).

PROFESSIONAL EXPERIENCE:

Dec.2009-Present: University teacher and researcher, Department of Mechanical Engineering, University of Djelfa, Algeria

From 06.2017 to 06.2020: Deputy head of the mechanical engineering department, University of Djelfa, Algeria

DOMAIN OF RESEARCH INTERESTS:

My current research interest is focused on Computational Fluid Dynamic (CFD), Heat Transfer enhancement using complexes geometries, nanofluids and MHD. Environmental modelling, including: pollution dispersion, meteorology and air quality.

TEACHING INTERESTS:

Fluid mechanics - Computational fluid dynamics - Heat transfer - Numerical methods – Thermodynamics – Turbomachinery - Cryogenics

REFEREED JOURNAL PAPERS:

- **L. Aidaoui**, Y. Lasbet, F. Selimefendigil, (2020) Improvement of transfer phenomena rates in open chaotic flow of nanofluid under the effect of magnetic field: Application of a combined method. International Journal of Mechanical Sciences (Elsevier), vol. 179 105649.
- T.T. Naas, Y. Lasbet, **L. Aidaoui**, A.L. Boukhalkhal, K. Loubar, (2020) High performance in terms of thermal mixing of non-Newtonian fluids using open chaotic flow: Numerical investigations. Thermal Science and Engineering Progress (Elsevier), vol. 16 100454.
- M. Mouffok, **L. Aidaoui**, N. Zemmouri, (2019) Evaluation study of Eenergy performance and conformity to regulations for ordinary and HEP housings: Case study based on measurements at Djelfa City, Algeria. Instrumentation Mesure Metrologie, vol. 18 No. 2, pp. 171-180.
- M. Mouffok, N. Zemmouri, **L. Aidaoui**, Y. Lasbet, A. De Herde, (2017) Effects of building morphologies on CO2 air pollution. Case study: The vernacular urban fabric, city of Ghardaia (Algeria). Asian Journal of Civil Engineering, vol. 18, No 1, pp 1-19
- **L. Aidaoui**, Y. Lasbet and K. Loubar, (2016) Numerical analysis of the parameters governing 3D laminar mixed convection flow in a rectangular channel with imposed wall flux density. International Journal of Heat and Technology, vol. 34 No. 4, pp. 581-589
- Y. Lasbet, **L. Aidaoui** and K. Loubar, (2016) Effects of the geometry scale on the behaviour of the local physical process of the velocity field in the laminar flow. International Journal of Heat and Technology, vol. 34 No. 3, pp. 439-445
- **L. Aidaoui**, A. Maurizi, A. Azzi, (2015) Modelled NO2 tropospheric columns at different resolutions versus OMI satellite data. Air Qual Atmos and health (Springer), vol. 8, pp. 163-174
- **L. Aidaoui**, A.G. Triantafyllou, A. Azzi, S.K. Garas, V.N. Matthaios (2015) Elevated stacks' pollutants' dispersion and its contributions to photochemical smog formation in a heavily industrialized area. Air Qual Atmos and health (Springer), vol. 8, pp. 213-227
- V.N. Matthaios, A.G. Triantafyllou, **L. Aidaoui** (2014) Dispersion aspects of PM_{10} from point sources in a complex terrain area with a microscale and a mesoscale model during an episode case. Fresenius Environmental Bulletin, vol. 23, No. 12

CONFERENCE PROCEEDINGS:

- M. Mouffok, **L. Aidaoui**, N. Zemmouri, « Etude comparative de la consommation électrique des logements : cas des logements ordinaires et HPE de la ville de Djelfa » Vth International Conference on Energy, Materials, Applied Energetics and Pollution (ICEMAEP'19) October 22nd-24th, 2019, Constantine, Algeria.
- **L. Aidaoui**, Y. Lasbet, H. Bendaoud, et Z. Khinech, « laminar mixed convection flow control with rotating cylinders between two parallel planes », International Conference on Advanced Mechanics and Renewable Energies. ICAMRE2018, November 28 & 29, 2018, Boumerdes, Algeria
- V. Mattthaios, **L. Aidaoui**, A.G. Triantafyllou, «Modeling the dispersion of pollutants from point sources with a microscale and a mesoscale model during an episode case in a complex terrain area in Greece», 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, September 28 - October 1, 2013, Istanbul - Turkey
- **L. Aidaoui**, S. Zoras, A. Azzi, A. Merah, A.G. Triantafyllou, S. Papalexiou, V. Evagelopoulos, S. Garas & B. Douaiba. Photochemical air pollution simulations with the air pollution model over a medium sized city region. International Symposium "Environment and Transport in different contexts". 16-18, February 2009 Ghardaïa, Algeria.
- **L. Aidaoui**, S. Zoras, A. Azzi, A. Merah, S. Papalexiou, A. Ahmed Bensoltane. Numerical simulation of atmospheric chemistry and air pollution in a heavily industrial area. Colloque National sur la Chimie et l'Environnement CNCE'2008, Saida (Algeria) 26 et 27 Avril 2008.
- **L. Aidaoui**, S. Zoras, A. Azzi, S. Papalexiou, N. Akermi. Statistical evaluation of mesoscale photochemical pollution simulation results. Statistics and life sciences: perspectives and challenges. March 10-13 2008 Munich, Germany.

SKILLS:

- Operating Systems: Windows, Linux.
- Computer and Softwares:
  - ANSYS-CFX, Fluent and Workbench.
  - CDO (Climate Data Operators), NCL

LANGUAGES:

Arabic, English and French

STAYS ABROAD:

- 2013-2015, Institute of Atmospheric Sciences and Climate (ISAC-CNR), Group: Studies and modelling of dynamic and turbulent processes in the atmosphere, Bologna, Italy (18 months)
- 2006-2007, Laboratory of Atmospheric Pollution and Environmental Physics, Department of Environmental Engineering, Technological Education Institution (TEI) of Western Macedonia, Kozani, Greece (6 months)