

**FIȘA DE ÎNDEPLINIRE A STANDARDELOR POLITEHNICII BUCUREȘTI DE
PREZENTARE LA CONCURS
[ASISTENT PE PERIOADĂ NEDETERMINATĂ]**

Funcția didactică	Condiții	Îndeplinire condiții
Asistent / Cercetător științific	A. Doctor	Diploma Doctor, Nr. 186 din 10.06.2026 emisă de Universitatea Tehnică de Construcții București
	B. Minimum 3: (a) lucrări științifice în extenso publicate într-o revistă/volum de conferință, indexate într-o bază de date internațională [BDI] (pentru toate domeniile cu excepția celor din ramura de științe Arte)	45
	C. Atestarea studiilor (diploma + supliment diplomă) si a altor realizari profesionale	Diploma de Licență , în domeniul Ingineria Instalațiilor. Nr. 6968, din 26.09.2013, emisă de Universitatea Tehnică "Gheorghe Asachi" din Iași Diplomă de Studii Aprofundate / Masterat , Specializarea Ingineria Instalațiilor. Nr.128, din 27.04.2015, emisă de Universitatea Tehnică de Construcții București

Subsemnatul Dancă Paul Alexandru candidat la concursul pentru ocuparea postului de asistent universitar pe perioada nedeterminata, poziția 41, Departamentul de Hidraulică, Mașini Hidraulice și Ingineria Mediului, Facultatea de Energetică, din Domeniul de Studii Universitare Inginerie Energetică, declar pe propria răspundere, cunoscând prevederile art. 326 Cod Penal privind falsul în declarații, că sunt îndeplinite toate Standardele minimale prevăzute de Metodologia POLITEHNICA București pentru înscrierea la concurs, în momentul înscrierii la concurs și susțin veridicitatea informațiilor prezentate în dosar și în materialul de mai sus. Lucrările considerate a fi indexate WoS [ISI] sau în alte Baze de Date Internaționale [BDI] sunt vizibile în aceste baze, în dreptul numelui candidatului, la această dată.

Candidat,
Dancă Paul Alexandru.

Semnătura:

Data
04.06.2026

ÎN CONTINUARE: Lista lucrărilor / participărilor menționate la punctul B

1. Bode F., Joldos T., Sirbu G.M., Danca P., Nastase I., Coșoiu C., *Impact of realistic boundary conditions on CFD simulations: A case study of vehicle ventilation*, (2025) Building and Environment, 267, art. no. 112264, DOI: 10.1016/j.buildenv.2024.112264, IF 7.6;
2. Danca P., Bunea F., Lungulescu M., Enache A.A., Rădoi A.E, Nicula N., *Water Sterilization using Ultraviolet Light-Emitting Diodes*, (2024) EEA - Electrotehnica, Electronica, Automatica, 72 (1), pp. 23 - 29, DOI: 10.46904/eea.24.72.1.1108003;
3. Bode F.I., Joldos T.O., Sirbu G.M., Danca P., Cosoiu C., Nastase I., *Innovative High-Induction Air Diffuser for Enhanced Air Mixing in Vehicles and Personalized Ventilation Applications* (2024) Energies , 17 (12), art. no. 2930, DOI: 10.3390/en17122930, IF 3.2;
4. Danca P., Bunea B., Bode F., Nicolae S., *Evaluation of the flow induced by different shrouds geometries*, (2023), Journal of Science and Arts, Issue: 1, pages: 281-288, ISSN: 1844-9581, DOI:10.46939/J.Sci.Arts-23.1-c03, WOS:000967778700023, IF 0.3;
5. Nastase I., Danca P., Bode F., Croitoru C., Fechet L., Sandu M., Coșoiu C. I., *A regard on the thermal comfort theories from the standpoint of Electric Vehicle design — Review and perspectives*, (2022), Energy Reports, Volume 8, Pages 10501-10517, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2022.08.186>. - IF 4,937;
6. Dancă P., Coșoiu C.I., Nastase I., Bode F., Georgescu M.R., *Personalized Ventilation as a Possible Strategy for Reducing Airborne Infectious Disease Transmission on Commercial Aircraft*. (2022), Appl. Sci. 2022, 12, 2088. <https://doi.org/10.3390/app12042088>. - IF 2,838;
7. Bode F., Dogeanu A., Tăcutu L., Nastase I., Dancă P., Ene A., *Experimental study of an innovative perforated air diffuser at real scale conditions*, (2022), Energy Reports, Volume 8, Supplement 9, 2022, Pages 1479-1490, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2022.09.001>. - IF 4,937;
8. Dancă P., Jamin A., Nastase I., Janssens B., Bosschaerts W., Coșoiu C., *Experimental and numerical study of the flow dynamics and thermal behavior inside a car cabin: Innovative air diffusers and human body plumes interactions*, (2022), Energy Reports, Volume 8, Supplement 9, 2022, Pages 992-1002, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2022.07.133>. - IF 4,937;
9. Ion-Guță D.D., Ursu I., Toader A., Enciu D., Dancă P., Nastase I., Croitoru C.V., Bode F, Sandu M., *Advanced Thermal Manikin for Thermal Comfort Assessment in Vehicles and Buildings*. (2022), Appl. Sci. 2022, 12, 1826. <https://doi.org/10.3390/app12041826>. - IF 2,838;
10. Danca, P., Bode, F., Meslem, A., Sandu, M., Croitoru C., Nastase, I., Lungu, C., and Batali, L., *Experimental investigation of thermal vehicular environment during the summer season*. (2022), Science and Technology for the Built Environment, 2021: p. 1-14, doi.org/10.1080/23744731.2021.1911157. - IF 2,094;
11. Bode F., Nastase I., Danca P., *Reducing Indoor Air Pollution through Personalized Ventilation for Occupants in Office Environments and Confined Spaces*, (2024) E3S Web of Conferences, 514, art. no. 04004, DOI: 10.1051/e3sconf/202451404004;
12. Danca P.A., Simionescu S.-M., Cîrciumaru G., Nistoran D.-E.G., Chihaia R.A., Babutanu C., *Fish guidance system for a river water intake - Experimental and numerical study*, (2023) IOP Conference Series: Earth and Environmental Science, 1185 (1), art. no. 012018, DOI: 10.1088/1755-1315/1185/1/012018;
13. Fechet L., Bode F., Nastase I., Dancă P., Croitoru C., Sandu M., *Thermal Sensitivity Maps of the Human Body for Vehicle Personal Comfort System Design—Preliminary Results*, (2023)

- Environmental Science and Engineering, pp. 2413 - 2421, DOI: 10.1007/978-981-19-9822-5_260;
14. Danca P.A., Babutanu C., Bunea F., Dogeanu A., *A possibility of harnessing the heat discarded into the environment using thermoelectric generators*, (2023) IOP Conference Series: Earth and Environmental Science, 1234 (1), art. no. 012006, DOI: 10.1088/1755-1315/1234/1/012006;
 15. Georgescu M.-R., Cernei A., Nastase I., Danca P., Guta D., Ursu I., *Development and Use of a New Architecture of Thermal Manikin for Assessing Local Thermal Comfort* (2023) 2023 11th International Conference on ENERGY and ENVIRONMENT, CIEM 2023, DOI: 10.1109/CIEM58573.2023.10349780;
 16. Danca P., Bunea F., Babutanu C., Nedelcu A., Grecu I.S., *Experimental study of the flow induced by an axial hydrokinetic turbine*, (2023) IOP Conference Series: Earth and Environmental Science, 1136 (1), art. no. 012058, DOI: 10.1088/1755-1315/1136/1/012058
 17. Danca, P., Nastase, I. and Bode, F., *The influence of different air flows introduced on the thermal comfort of car passengers during the cooling period – Numerical Study*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012112, doi:10.1088/1755-1315/664/1/012112;
 18. Danca, P., Nastase, I., Croitoru, C., Bode, F. and Sandu, M., *Thermal comfort evaluation inside a car parked under sun and shadow using a thermal manikin*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012064, doi:10.1088/1755-1315/664/1/012064;
 19. Albaiyati, M.S.A., Danca, P. and Sandu, M., *Improving the efficiency of energy recovery from wastewater by using a double heat exchanger to protect the environment*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012063, doi:10.1088/1755-1315/664/1/012063;
 20. Nedelcu, A., Bunea, F., Danca, P., Chihaiia, R., Babutanu, C., Marin, D., and Ciocan, G. D., *Experimental research on a hydrokinetic turbine model*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012061, doi:10.1088/1755-1315/664/1/012061;
 21. Danca, P., Băbuțanu, C., Bunea, F. and Nedelcu, A., *Mixing Flow Characteristics in cylindrical tank*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012060, doi:10.1088/1755-1315/664/1/012060;
 22. Danca, P., Nastase, I., Bode, F., Croitoru C., Dogeanu, A., and Meslem, A. *Evaluation of the thermal comfort for its occupants inside a vehicle during summer*, Materials Science and Engineering 595 (2019) 012027 IOP Publishing doi:10.1088/1757-899X/595/1/012027;
 23. Danca, P., Bode, F., Nastase, I., Croitoru C. and Meslem, A. *Experimental and numerical study of the air distribution inside a car cabin*, Proceedings of the Proceedings of the EENVIRO 2018 Conference, E3S Web of Conferences 85, 02014 (2019), <https://doi.org/10.1051/e3sconf/20198502014>;
 24. Danca, P., Bode, F., Dogeanu, A., Croitoru C., Sandu, M., Meslem, A., and Nastase, I., *Experimental study of thermal comfort in a vehicle cabin during the summer season*, Proceedings of the 13th Clima2019 Conference, E3S Web of Conferences 111, 01048 (2019) DOI: <https://doi.org/10.1051/e3sconf/201911101048>;
 25. Danca, P., Bode, F., Nastase, I., and Meslem, A., *CFD simulation of a cabin thermal environment with and without human body – thermal comfort evaluation*, Advances in Heat and Transfer in Built Environment, Bucharest, E3S Web Conf., 32 (2018) 01022, pp 111-118, ISBN: 978-1-5108-5878-7, DOI: 10.1051/e3sconf/20183201018;
 26. Horobet, T., Danca, P., Nastase, I., and Bode, F., *Preliminary research on virtual thermal comfort of automobile occupants*, Advances in Heat and Transfer in Built Environment, Bucharest, E3S Web Conf., 32 (2018) 01022, pp136-140, ISBN: 978-1-5108-5878-7, DOI: 10.1051/e3sconf/20183201022;

27. Sandu, M., Bode, F., Danca, P., and Voicu, I., *Water flow structure optimization between the screenings and grit removals in a wastewater plant*, Proceedings of the 8th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, 2017, pp 101-104, ISBN:978-1-5386-3943-6, DOI: 10.1109/CIEM.2017.8720839, WOS:000427610300022;
28. Bode, F., Nastase, I., Danca, P., and Meslem, A., *The influence of the inlet angle of vehicle air diffuser on the thermal comfort of passengers*, Proceedings of the 8th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, 2017, pp 442-446, ISBN:978-1-5386-3943-6, DOI: 10.1109/CIEM.2017.8720839, WOS:000427610300094;
29. Danca, P., Bode, F., Nastase, I., and Meslem, A., *On the possibility of CFD modeling of the indoor environment in a vehicle*, Energy Procedia 112 (2017), pp 656-663, ISSN: 1876-6102, DOI: 10.1016/j.egypro.2017.03.1086, WOS:000404848300081;
30. Danca, P., Vartires, A., and Dogeanu, A., *An overview of current methods for thermal comfort assessment in vehicle cabin*, Energy Procedia 85 (2016), pp 162-169, ISSN: 1876-6102, DOI: 10.1016/j.egypro.2015.12.322, WOS:000377911100020;
31. Vartires, A., Dogeanu, A., and Danca, P., *The human thermal comfort evaluation inside the passenger compartment*, Proceedings of the 15th International Multidisciplinary Scientific Geoconference (SGEM), Bulgaria, 2015, pp 1113-1120, ISSN: 1314-2704, ISBN:978-619-7105-38-4, DOI:10.5593/SGEM2015/B41/S19, WOS:000371056000143;
32. Danca P.A., Cernei A., *A comparative study of classical and innovative lobbed air diffusers using temperature sensors for thermal environment/comfort in vehicle cabins*, E3S Web Conf. 608 02003 (2025), DOI: 10.1051/e3sconf/202560802003;
33. Cernei A., Lacassagne T., Fagniez T., Danca P.A., Georgescu M., Thevenet F., Verrielle M., Nastase I., *Exploring the impact of clothing insulation on thermal comfort evaluation using thermal manikins*, E3S Web Conf. 608 02005 (2025), DOI: 10.1051/e3sconf/202560802005;
34. Iakabos E. , Danca P.A., Chiriac F., Ilie A., Girip A. and Nichita M., *Enhancing the performance of a heating, ventilation, and air conditioning system using ice slurry*, E3S Web of Conferences 608, 01006 (2025), DOI: 10.1051/e3sconf/202560801006;
35. Georgescu M., Danca P.A., Cosoiu C., Bode F., Nastase I., *Seat-integrated Personalized Ventilation Diffuser for Improving Air Quality Aboard Commercial Aircraft*, E3S Web of Conferences 608, 01006 (2025), DOI: 10.1051/e3sconf/202560802006;
36. Joldos T. O., Danca P.A., Cernei A., *Comparative acoustic analysis of standard and innovative air diffusers with enhanced mixing capabilities*, E3S Web of Conferences 608, 01006 (2025), DOI: 10.1051/e3sconf/202560802002;
37. Danca P.A., Al Bayati A., Nastase I., Sandu M., Ivanov M., Terziev A., Mijorsk S., *Advanced solutions to improve heat recovery from wastewater in a double heat exchanger*, (2023) IOP Conference Series: Earth and Environmental Science, 1128 (1), art. no. 012008, DOI: 10.1088/1755-1315/1128/1/012008
38. Nedelcu A., Danca P.A., Babutanu C., Nicolaie S., Bunea F., *Energy Harvesting Using Thermoelectric Generators – Case Study*, (2023) International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 23 (4.1), pp. 59 - 65, DOI: 10.5593/sgem2023/4.1/s17.08;
39. Dancă P.A., Bunea F., Lungulescu M., Enache A.A., Rădoi A.-E., Nicula N., *Water Sterilization using Ultraviolet Light-Emitting Diodes*, (2024) EEA - Electrotehnica, Electronica, Automatica, 72 (1), pp. 23 - 29, DOI: 10.46904/eea.24.72.1.1108003;
40. Sandu, M., A. Albaiyati, I. Nastase, P. Danca, F. Bode, C. Croitoru, *Advanced solutions to improve*

heat recovery from wastewater in a double heat exchanger , Proceedings CLIMA2022 | 14th REHVA HVAC World Congress, 22-25 May 2022, Rotterdam, DOI: <https://doi.org/10.34641/mg.33>, ISBN: 978-94-6366-564-3;

41. Jamin, A., P. Danca, B. Janssens, F. Bode, I. Nastase, W. Bosschaerts, *Experimental and CFD comparison of driver's thermal plume with classical air diffusers*, Proceedings CLIMA2022 | 14th REHVA HVAC World Congress, 22-25 May 2022, Rotterdam, DOI: <https://doi.org/10.34641/mg.33>, ISBN: 978-94-6366-564-3;
42. Dan, M., Danca, P., Ursu, I., Nastase, I., *Advanced thermal manikin with neuro-fuzzy control*, Romanian Journal of Civil Engineering Volume 8 (2017), Nr. 4, ISSN 2068-3987, eISSN 2559-748;
43. Ouhimi, P., Lechartier, T., Danca, P., and Fabian, C, *Thermal comfort evaluation inside vehicles with classical indices - experimental approach*, Romanian Journal of Civil Engineering Volume 7 (2016), Nr. 2, ISSN 2068-3987, eISSN 2559-748;
44. Danca, P., Vartires, A., *Thermal comfort assessment using human subjects*, Proceedings of XXIII International Scientific-Technical Conference "trans & MOTAUTO '15", (2015) ISSN 1310-3946
45. Bode, F., Danca, P., Nastase, I., Meslem, A., Croitoru, C. and Dogeanu, A. - *Developing a realistic CFD model of the air distribution inside a vehicle cockpit*, Proceedings of Roomvent&Ventilation 2018: Excellent Indoor Climate and High Performing Ventilation, ISBN 978-952-5236-48-4,