

DIMITRIOS TZEMPELIKOS

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PhD MECHANICAL ENGINEER

EDUCATION

University of Patras, Patras, Greece, 2015

Doctor of Philosophy (PhD) in Mechanical Engineering

National Technical University of Athens, Athens, Greece, 2008

Master of Business Administration (MBA) in Engineering Management

National Technical University of Athens, Athens, Greece, 2006

Master of Science (MSc) in Applied Mechanics

National Technical University of Athens, Athens, Greece, 2005

Master of Science (MSc) in Computational Mechanics

University of Patras, Patras, Greece, 2002

Diploma in Mechanical Engineering

PROFESSIONAL EXPERIENCE

- From 1/2016 – today, Head of the Department for Waste Management and Recycling, Municipality of Egaleo
- From 2/2002 – today, Member of Civil Protection, Municipality of Egaleo
- From 9/2012 – today, Senior Project Engineer, Development Association of West Athens
- From 2/2002 – 12/2015, Senior Mechanical Engineer, Electromechanical Department, Municipality of Egaleo

JOURNALS

1. **Tzempelikos, D.A.**, Vouros, A.P., Bardakas, A. V., Filios, A.E. & Margaritis, D.P., «Experimental study on convective drying of quince slices and evaluation of thin-layer drying models», *Engineering in Agriculture, Environment and Food*, Vol. 8, pp. 169-177, 2015.
2. **Tzempelikos, D.A.**, Mitrakos, D., Vouros, A.P., Bardakas, A. V., Filios, A.E. & Margaritis, D.P., «Numerical modelling of heat and mass transfer during convective drying of cylindrical quince slices», *Journal of Food Engineering*, Vol. 156, pp. 10-21, 2015.
3. A.V. Bardakas, Vasilis K. Chasiotis, **D.A. Tzempelikos** and A.E. Filios, «Design and implementation of a three axis digitally controlled traverse system for flow surveys in a drying chamber», *International Journal of Engineering & Technology*, Vol. 3, pp. 350-356, 2014.
4. **D.A. Tzempelikos**, A.P. Vouros, A.V. Bardakas, A.E. Filios and D.P. Margaritis, «Case studies on the effect of the air drying conditions on the convective drying of quinces», *Case Studies in Thermal Engineering*, Vol. 3, pp. 79-85, 2014.
5. **D.A. Tzempelikos**, A.P. Vouros, A.V. Bardakas, A.E. Filios and D.P. Margaritis, «Design, construction and evaluation of a new laboratory convective dryer using CFD», *International Journal of Mechanics*, Issue 4, Vol. 7, pp. 425-434, 2013.
6. **D.A. Tzempelikos**, A.P. Vouros, A.V. Bardakas, A. E. Filios and D.P. Margaritis, «Analysis of air velocity distribution in a laboratory batch-type tray air dryer by computational fluid dynamics», *International Journal of Mathematics and Computers in Simulation*, Issue 5, Vol. 6, pp. 413-421, 2012.
7. W. C. Maskell, J. A. Page, **D. A. Tzempelikos**, «Measurement of oxygen concentrations at ppm levels using solid-state sensors», *Sensors and their Applications XII*, Institute of Physics Publishing, Bristol, UK, pp. 539-543, 2003.

INTERNATIONAL CONFERENCES

1. **D. A. Tzempelikos**, D. Mitrakos, A. P. Vouros, A.V. Bardakas, A. E. Filios and D. P. Margaritis, «Modelling and simulation of heat and mass transfer during convective drying of cylindrical quince slices», eRA-9, Piraeus, 22 - 24 September 2014.
2. **D. A. Tzempelikos**, A.V. Bardakas, V. K. Chasiotis, A. E. Filios and D. P. Margaritis, «On the development of a laboratory scale convective dryer», eRA-9, Piraeus, 22 - 24 September 2014.

3. **D. A. Tzempelikos**, A.V. Bardakas, A. P. Vouros, A. E. Filios, and D. P. Margaritis, «Thin-layer drying models critical evaluation based on laboratory scale convective dryer experiments», 6th International “From Scientific Computing to Computational Engineering” (IC-SCCE), Athens, 9 - 12 July 2014.
4. **D. A. Tzempelikos**, A.V. Bardakas, A. P. Vouros, D. G. Tsepeneas, A. E. Filios and D. P. Margaritis, «An experimental study on convective drying of quince», EENVIRO, Bucharest, Romania, 19 - 20 September 2013.
5. **D. A. Tzempelikos**, A. V. Bardakas, A. P. Vouros, D. G. Tsepeneas, D. A. Christoloukas, A. E. Filios and D. P. Margaritis, «Design, construction and performance evaluation of a new laboratory convective dryer», 5th International Conference on Experiments / Process / System Modelling / Simulation and Optimization (IC-EpsMsO), Athens, 3 - 6 July 2013.
6. **D. A. Tzempelikos**, A. P. Vouros, A. V. Bardakas, A. E. Filios and D. P. Margaritis, «Airflow patterns in a Laboratory Batch-Type, Tray Air Dryer», 5th International “From Scientific Computing to Computational Engineering” (IC-SCCE), Athens, 4 - 7 July 2012.
7. E. I. Xanthopoulos, **D. A. Tzempelikos**, A. E. Filios and D. P. Margaritis, «"Use of Virtual Instrumentation and Computational Fluid Dynamics in an undergraduate research project», 7th GRACM International Congress on Computational Mechanics, Athens, 30 June - 2 July 2011.
8. A.G. Ghiaus, A.E. Filios, D.P. Margaritis, **D.A. Tzempelikos**, «Industrial drying of wooden pallets-CFD analysis of air flow», 17th International Drying Symposium, Magdeburg-Germany, 3 - 6 October 2010.
9. **D. A. Tzempelikos**, A.E.Filios and D.P. Margaritis, «Air flow characteristics in an industrial wood pallet drying kiln», 3rd International Conference on Experiments / Process / System Modelling / Simulation and Optimization (IC-EpsMsO), Athens, 8 - 11 July 2009.

CORE COMPETENCIES

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| ▪ Mechanical Engineering | ▪ Engineering Management | ▪ Ansys, Fluent, Gambit |
| ▪ Thermal Engineering | ▪ Electromechanical Applications | ▪ Matlab – Simulink |
| ▪ Thermal Analysis and Design | ▪ Business Administration | ▪ Labview |
| ▪ Heat & Mass Transfer | ▪ Computational Mechanics | ▪ Fortran, C / C++ |
| ▪ Computational Fluid Dynamics | ▪ Detail-Orientated | ▪ AutoCAD, SolidWorks |
| ▪ Numerical Modeling & Simulation | ▪ Analytical Skills | ▪ ACE ERP eCM |
| ▪ Product Development Support | ▪ Data Analysis & Reporting | ▪ Microsoft Project (Proficiency) |
| ▪ Engineering Technical Support | ▪ Experimental Design | ▪ Microsoft Office (Proficiency) |
| | ▪ Innovative Thinker | ▪ Greek (Native Language), English (Fluent) |

ADDITIONAL INFORMATION

- **Teacher**, Machine Elements, CAD – CAM – CAE and Computational Methods in Mechanical Engineering, Technological Educational Institute of Athens and Technological Educational Institute of Chalkis, 2000–2013
- **Chartered Engineer**
- Member of TCE (Technical Chamber of Greece)
- Former member of ASME and ASHRAE