CURRICULUM VITAE

PERSONAL DATA:

NAME: VASSILIOS FRAGOS
POSITION: PROFESSOR, HEAD OF THE LABORATORY OF AGRICULTURAL ENGINEERING., SCHOOL OF AGRICULTURE, ARISTOTLE UNIVERSITY OF THESSALONIKI.
ADDRESS: University Campus, Aristotle University of Thessaloniki , (AUTh), Faculty of Agriculture, Forestry and Natural Environment, SCHOOL OF AGRICULTURE, Department of Hydraulics, Soil Science and Agricultural Engineering, 54124, Thessaloniki, Greece.
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WORK EXPERIENCE

In June 2010, I was elected Lecturer in the Faculty of Agriculture, Forestry and Natural Environment, School of Agriculture, AUTh, with the scientific subject "Agricultural Engineering - Pumps ".
In April 2015, I was elected Assistant Professor in the Faculty of Agriculture, Forestry and Natural Environment, School of Agriculture, AUTh, with the scientific subject "Agricultural Engineering - Pumps ".
In June 2020, I was elected Associate Professor in the Faculty of Agriculture, Forestry and Natural Environment, School of Agriculture, AUTh, with the scientific subject "Agricultural Engineering - Pumps ".
In Oktober 2024, I was elected Professor in the Faculty of Agriculture, Forestry and Natural Environment, School of Agriculture, AUTh, with the scientific subject "Agricultural Engineering - Pumps ".

RESEARCH AREA

Computational fluid mechanics, Finite elements, Super Computing, Simulation of laminar and turbulent air flows in wind tunnel, Wind tunnel modeling, Thermodynamics, Pump systems, Pump cavitation, Air pumps, Internal and external environment of agricultural structures, . Precision Agriculture, Automation Control and Signal Analysis and Decision Support Systems (DSS).

TEACHING ACTIVITY

Since 2004, I teach the following courses in the Faculty of Agriculture, AUTh.

Undergraduate Courses: Meteorology – Climatology, Statistics, Principles of Fluid Mechanics, Mechanical Harvesting of Farm Crops, Electric Motors and Pumps, Farm Mechanization, Farm Machinery Management, Farm Power and Machinery, Greenhouses, Biosystem engineering, Mathematics.
Postgraduate Courses: Environment-Setting- Control of livestock buildings and greenhouses, Controlled Environment Systems, Advanced Farm Power and Machinery,Research Methodology in Agricultural Engineering, Big Data processing - Internet of Things (IoT), Biosystems.Modelling and Simulation.

RECENT PUBLICATIONS IN PEER REVIEWED JOURNALS

Karnoutsos, P., Katsantonis, D., Gkotzamani, A., Koukounaras, A., Kotsopoulos, T., Pantazi, X. E., & Fragos, V. P., 2025, ¨Plant-Driven Precision Irrigation in Aeroponics: Real-Time Turgor Sensing for Sustainable Lettuce Cultivation¨, Agriculture, 15(18), 1-31.

Lampridi, M., Kateris, D., Myresiotis, C., Berruto, R., Fragos, V., Kotsopoulos, T., Bochtis, D., 2024, "Leveraging Digital Technologies for Carbon Footprint Tracking in Perennial Cultivations: A Case Study of Walnut Orchard Establishment in Central Greece", Agronomy, 14(10), 2241.

Karagiovanidis, M., X-E Pantaci, Papamichail D, Fragos, V.P., 2023, ¨Early Detection of Cavitation in Centrifugal Pumps using Low-Cost Vibration and Sound Sensors¨, Agricultuure, Volume 13, Issue 8, 1544.

Laskos, V. N., Kotsopoulos, T., Karpouzos, D., & Fragos, V. P. (2023). Numerical Investigation of the Three-Dimensional Flow around a Surface-Mounted Rib and the Onset of Unsteadiness. Mathematics, 11(12), 2601.

Partheniotis, G., Kalamaras, S. D., Martzopoulou, A. G., Firfiris, V. K., Fragos, V. P. (2022). Turbulence Models Studying the Airflow around a Greenhouse Based in a Wind Tunnel and Under Different Conditions. AgriEngineering, 4(1), 216-230.

Firfiris, V. K., Kalamaras, S. D., Martzopoulou, A. G., Fragos, V. P., Kotsopoulos, T. A. (2022). Improvement of the Performance of an Earth to Air Heat Exchanger for Greenhouse Cooling by the Incorporation of Water Finned Tubes—A Theoretical Approach. AgriEngineering, 4(1), 190-206.

Kalamaras, S. D., Vitoulis, G., Christou, M. L., Sfetsas, T., Tziakas, S., Fragos, V., Samaras P., Kotsopoulos, T. A., 2021, "The Effect of Ammonia Toxicity on Methane Production of a Full-Scale Biogas Plant—An Estimation Method. Energies" 14(16), pp 1-13.

Fragos V.P., ''Effect of roof type and distance on external conditions between two successive agricultural structures mounded on the wind tunnel - A numerical study", 2020, World Journal of Modelling and Simulation, 16(3), pp 216-228.

Firfiris V.K., Fragos V.P., Kotsopoulos T.A., Nikita-Martzopoulou Ch., 2020, "Energy and environmental analysis of an innovative greenhouse structure towards frost prevention and heating needs conservationt", Sustainable Energy Technologies and Assessments, 40, pp 1-17.

Martzopoulou A., Vafiadis D., Fragos V., 2020, "Energy Gain in Passive Solar Greenhouses Due to CO2 Enrichment", Energies, pp 1-16.

Paapagrigoriou G., Denizopoulou A.., Karagiovanidis M., Koukounaras A., Andreopoulou Z, Fragos V., 2020, "Low-cost arduino-based measuring system for indoor environmental parameters of Agricultural buildings in greece", Journal of Environmental Protection and Ecology, vol 21, No 1, pp 250-257.