






PERSONAL INFORMATION

Michael Vlachogiannis



 IOU 2, LARISSA, 41334, GREECE
 (+30) 2410 591 342  (+30) 6948 529 333
 vlachogiannis.michael@gmail.com
 <https://www.teilar.gr/person.php?pid=149>
 Sex MALE | Date of birth 19/02/1974 | Nationality GREEK

WORK EXPERIENCE

A. Private Sector - Industry

October 2014 - Present Mechanical Engineer (Freelancer)

Hydroclave Hellas S.A., www.hydroclave.gr

Medical Waste Treatment and Sterilization, Larissa's Industrial Area, 41500, Larissa

- Manager of thirty-two (32) employees (2 Engineers, 5 vocational certificated employees, 3 Accountants, 1 Information Technology, 10 professional Drivers, 11 Labourers).
- Responsible for the Logistics. Eleven (11) trucks of various size collecting Medical Waste from more than two hundred (200) hospital units throughout Greece.
- Responsible for the Mechanical Equipment. *Selected Accomplishments: 40% reduction of the consumption of Natural Gas through the improvement of the operation of a Steam Boiler (800kW) in series with a Steam Generator (2000kW). 70% reduction of the water consumption through the design of a new cooling system.*
- Responsible for the Personnel Recruitment and Vocational Training.
- The Annual Budget of the Company varies between 3 to 4 million Euros.

October 2015 - Present Mechanical Engineer - Inspector

TERRA S.A. (Condellis Paul Group of Companies), www.terra.com.gr

Inspector of Field Crop & Orchard Sprayers (Qualified by the Ministry of Agriculture)

- Technical check of sprayers according to EN 13790 (part 1 &2), EN ISO 16122
- Calibration of plant protection product application equipment, ways to improve application quality

June 2009 – September 2013 Mechanical Engineer – Safety Officer (Freelancer)

Coca – Cola S.A. (Volos), MAKRO Cash & Carry S.A., Intersport S.A., MEDISPES S.A.

- Supporting the development of OHS policies and programs
- Advising and instructing on various safety-related topics (noise levels, use of machinery etc.)
- Conducting risk assessment and enforcing preventative measurements

October 2005 – September 2008 Mechanical Engineer Manager

TEMKA S.A.

Steel Structure Manufacturing

- Programming of Machines (Messer, Ficep, Kaltenbach, Vernet, e.t.c.), Responsible for the Assembly and Welding Dept., Director of Maintenance
- Selected Projects: CERN - Lifting Beam, SIDMA- Steel Plant, Main Field Mine Belt Conveyor =1800 Modification, Manufacturing of Drive Heads and Return Stations of Belt conveyors, Wet Flue Gas Desulphurization of Megalopolis PPC - SES Unit III
- Selected Accomplishments: Increasing the oxyfuel cutting speed (25%), Welding of 230mm plate (supports for the Hydroelectric Power Plant H.E.P. ILARION)
- Manager of eighty (80) Personnel, including Mechanical and Electrical Engineers, Industry CAD/CAM Designers, Vocational Certificated Employees (Welders, etc.)
- The averaged annually, budget of the projects (SANDVIK, SUZLON, FAM, BUCK) was 35 million Euros.

January 2001 – December 2002 **Post-doctoral Associate**
Department of Chemical Engineering, University of Illinois at Urbana-Champaign, www.uiuc.edu .
 «Experimental Studies on the Physics and Technology of Polymer Drag-Reduction », Defence Advanced Research Projects Agency, Microsystems Technology Office, ***Friction Drag Technologies DARPA Order No. K042/05/24***, Issued by DARPA/CMO under Contract MDA972-01-C-0029, (3/19/2001 to 12/18/2003)

B. Public Sector: Academia (Administration, Teaching & Research)

January 2007 - present **Professor of Fluid Mechanics and Turbomachinery**
Department of Mechanical Engineering, University of Applied Sciences of Thessaly (TEI of Thessaly), Larissa (www.teilar.gr/index_en.php).
 (Associate Professor from 2007 to 2012 and Full Professor from 2012 to Present)
 Teaching Fluid Mechanics, Turbomachinery, Thermal Process Equipment, Safety at Work

June 2013 – Sept. 2015 **Vice Rector of Research and Development**
University of Applied Sciences of Thessaly (TEI of Thessaly), Larissa (www.teilar.gr/index_en.php).

- Chairman of the Research Committee of TEI of Thessaly (15 members)
- Responsible for twenty (20) employees (Accountants, Secretariats, Computer Scientists, etc.)
- The Budget of the Research Committee of TEI of Thessaly: (1) 3.6 Million Euros for 2014 (2) 4.2 Million Euros for 2015
- Responsible for the preparation and implementation of the budget.
- Prepare and implement the strategy for the University Research Activities
- Prepare the Annual Activity Report and send it to the Ministry of Education

Sept. 2010 – Sept. 2013 **Chairman of the Department of Mechanical Engineering**
Department of Mechanical Engineering, University of Applied Sciences of Thessaly (TEI of Thessaly), Larissa (<http://www.mech.teilar.gr>).

- Responsible for one thousand (1000) students, seventeen (17) Faculty, ten (10) Staff.
- Organising the new Syllabus of the Department of Mechanical Engineering by introducing (for first time) 3D Engineering Drawing and Numerical Courses.

October 2014 – Sept. 2016 **Better Training for Safer Food (BTSF), Tutor**
 Organized by **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH**

- Use of plant protection product application equipment (e.g. sprayers, including hand-held equipment) and its maintenance, required technical checks of sprayers, ways to improve spray quality.
- Consideration of available and new standards for machinery inspection;
- Preparing plant protection product application equipment for work, including calibration, and operation with minimum risks;
- Technical check of sprayers, calibration of plant protection product application equipment, ways to improve application quality (sprayers; sowing of treated seeds, etc);

June 2015 – September 2015 **Director of Lifelong training program on Advanced Renewable Energy Sources & Pollution Abatement Technologies (PEGA)**
Ministry of Education Research and Religious Affairs (www.minedu.gov.gr, <http://pega.teilar.gr>).

- Director, responsible for eighty (80) MSc Students, financial management.
- Teaching “Energy Consumption for Industrial Applications”
- Responsible for the preparation and implementation of the Programme.

January 2012 – April 2016 **Director of training program on Energy Building Inspectors**

Department of Mechanical Engineering, University of Applied Sciences of Thessaly (TEI of Thessaly), Larissa (www.teilar.gr/index_en.php).

- Organizing and Running a 190 hours (120 hrs Theoretical, 70 hrs Practice) Training Program for Energy Building Inspectors approved by the Ministry of Energy (www.ypeka.gr). Organizing energy inspections at public and private buildings as Practical Exercises
- Teaching: Thermodynamics and Heat Transfer

November 2013 – October 2015 ERASMUS Office, TEI of THESSALY, Coordinator

University of Applied Sciences of Thessaly (TEI of Thessaly), Larissa (www.teilar.gr/index_en.php).

- Organizing the Erasmus Office, Recruiting personnel.
- Increase of the Incoming Students (30%). Apply for the Erasmus+ special needs support grant for disabled students

Public Sector: Training

EDUCATION & TRAINING

10/1996 – 01/2001 PhD - Thesis Title: “Experimental Investigation of the film flow along a flat and a corrugated wall”

University of Thessaly, School of Engineering, Dept. of Mechanical Engineering, Volos, Greece
With Honor

10/1991 – 07/1996 Bachelor of Science (Diploma) in Mechanical Engineering

University of Thessaly, School of Engineering, Dept. of Mechanical Engineering, Volos, Greece

- Thesis Title: “Experimental Study of Laser Welds”
- Overall GPA 8.77/10 (1st)

PERSONAL SKILLS

Mother tongue(s) Greek

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C2
First Certificate in English (FCE), University of Cambridge, B2					

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills ▪ Strong communication skills gained through my experience as a Professor-Tutor and through the positions I held as a Mechanical Engineer.

Organisational / managerial skills ▪ Strong managerial skills gained from my aforementioned professional experience.

Job-related skills Member of the Council of TEI of Thessaly (Elected Position, 1st).

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient	Independent	Independent	Independent	Proficient

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Replace with name of ICT-certificates

- Excellent command of Microsoft Office suite (word processor, spread sheet, presentation software)
- Good command of several commercial software (COREL, PHOTOSHOP) related to Digital Image Processing, gained from my PhD.
- Excellent command of MATLAB (CFD Simulation, Image Processing, Calculus), Fortran, Unix Systems, AutoCad
- Good knowledge of blockchain technology and its applications.
- Bitcoin/Cryptocurrency Mining. Self-investment and creation of a mobile mining farm that is easy to deploy anywhere in the world. The mining farm is consisted of twenty GPUs (12 AMD, 8 NVIDIA)

Other skills Playing & Coaching University Basketball Team

Driving licence B

ADDITIONAL INFORMATION

Publications
h-index 12, 640 citations

1. M. Vlachogiannis, A.D. Zervaki & G. N. Haidemenopoulos, 1998 A Macro – and Micro – Structural Study of Laser Welds in D36 Ship Steel, *Tech. Chron. Sci. J. TGG*, V, No 1-2.
2. M. Vlachogiannis, V. Bontozoglou, Ch. Georgalas & G. Litinas 1999 Desalination by mechanical compression of humid air. *Desalination*, 122, 35-42. (19)
3. M. Vlachogiannis & V. Bontozoglou 2001 Observations of solitary wave dynamics of film flows. *J. Fluid Mech.*, 435, 215. (76)
4. M. Vlachogiannis & V. Bontozoglou 2002 Experiments on laminar film flow along a corrugated wall. *J. Fluid Mech.*, 457, 133-156. (102)
5. N. Malamataris, M. Vlachogiannis & V. Bontozoglou 2002 Solitary waves on inclined films: Flow structure and binary interactions. *Phys. Fluids*, 14, 1082-1094. (96)
6. M. Vlachogiannis, M.W. Liberatore, A.J. McHugh & T.J. Hanratty 2003 Effectiveness of a Drag Reducing Polymer: Relation to Molecular Weight Distribution and Structuring. *Phys Fluids*, 15 (12), 3786-3794. (31)
7. M. Vlachogiannis & T.J. Hanratty 2004 Influence of wavy structured surfaces and polymer aggregation on drag reduction. *Exps. Fluids*, 36 (5), 685 – 700 (38)
8. S. Baik, M. Vlachogiannis and T.J. Hanratty 2005 Use of particle image velocimetry to study heterogeneous drag reduction *Exps. Fluids*, 39 (4): 637-650 (9)
9. K. Argyriadi, M. Vlachogiannis and V. Bontozoglou 2006 Experimental study of inclined film flow along periodic corrugations: The effect of wall steepness. *Phys. Fluids*, 18 (1), 1082-1094. (68)
10. Tzotzi C., Bontozoglou V., Andritsos N. and Vlachogiannis M Effect of Fluid Properties on Flow Patterns in Two-Phase Gas–Liquid Flow in Horizontal and Downward Pipes, *Industrial and Engineering Chemistry Research*, vol. 50, no. 2, 645-655, 2011. (13)
11. M. Vlachogiannis, A. Samandas, V. Leontidis, and V. Bontozoglou 2010 Effect of channel width on the primary instability of inclined film flow, *Phys. Fluids* 22, 012106 (2010); doi:10.1063/1.3294884 (22)
12. V. Leontidis, J. Vatteville, M. Vlachogiannis, N. Andritsos and V. Bontozoglou 2010 Nominally two-dimensional waves in inclined film flow in channels of finite width, *Phys. Fluids* 22, 012106 (2010); doi:10.1063/1.3294884 (14)
13. Georgantaki, J. Vatteville, M. Vlachogiannis and V. Bontozoglou 2011 Measurements of liquid film flow as a function of fluid properties and channel width: Evidence for surface-tension-induced long-range transverse coherence, *Phys. Rev. E- Statistical, Nonlinear, and Soft Matter Physics*, vol. 84, no. 2, 2011. (16)
14. Georgantaki, M. Vlachogiannis and V. Bontozoglou, The effect of soluble surfactants on liquid film flow, *Journal of Physics: Conference Series*, vol. 395, no. 1, 2012.
15. Z. Cao, M. Vlachogiannis and V. Bontozoglou, Experimental evidence for a short-wave global mode in film flow along periodic corrugations, *Journal of Fluid Mechanics*, vol. 718, 304-320, 2013. (10)

Projects

More than 20 scientific projects related to Mechanical Engineering Science (total Budget: >1.500.000 Euro).

Selected Projects:

- Life+, EcoPest, Coordinator: Benaki Phytopathological Institute
Sustainable Use of Pesticides in a vulnerable ecosystem: Application of innovative agricultural technologies for minimization of contaminants from agriculture Spray drift control nozzles, Development of Prototype System for the control of spraying machinery
- People, Marie Curie: Initial Training Networks
«Multi-scale complex fluid flows and interfacial phenomena - 'MULTIFLOW'»,

Conferences

Participation in Conferences as a Speaker

- N. Malamataris, M. Vlachogiannis & V. Bontozoglou Computer aided analysis of the nonlinear evolution of inclined film flows. Annual AIChE meeting, Los Angeles, Nov. 2000.
- M. Vlachogiannis & V. Bontozoglou, Experiments on solitary wave dynamics of film flows. EFMC2000 (organized by EuroMech), Eindhoven, Nov. 19-23 2000.
- M. Vlachogiannis & V. Bontozoglou, Experiments on laminar film flow along a corrugated wall. EFMC2000 (organized by EuroMech), Eindhoven, 19-23 Nov. 2000.
- N. Malamataris, M. Vlachogiannis & V. Bontozoglou Solitary wave dynamics of Newtonian film flows: simulations and experiments 3rd Intl. Meeting of the Hellenic Society of Rheology, Patras, 10-14 June 2001.
- M. Vlachogiannis & V. Bontozoglou, Experiments on laminar film flow along a corrugated wall. 5th World Conference On Experimental Heat Transfer, Fluid Mechanics and Thermodynamics, Thessaloniki, 24-28 Sept. 2001
- N. Malamataris, M. Vlachogiannis & V. Bontozoglou, Computer simulation of the nonlinear evolution of inclined film flows. 6th Natl. Congress on Mechanics (organized by HSTAM), Thessaloniki, 19-21 July 2001.
- M. Vlachogiannis & T.J. Hanratty, Heterogeneous Drag-Reduction Studies, Friction Drag PI meeting DARPA, Washington, Nov. 2001
- N. Malamataris, M. Vlachogiannis, K. Serifi & V. Bontozoglou, Computer simulation of waves on inclined films: flow structure and binary interactions. Annual Meeting of INTAS project, Krashnodar, Russia, 12-18 August 2002.
- M. Vlachogiannis & T.J. Hanratty, The Influence of Drag-Reducing Polymers on Turbulent Flows over a Structured Wavy Surface. Annual AIChE meeting, Indianapolis, Nov. 2002.
- N. Malamataris, M. Vlachogiannis & V. Bontozoglou, Solitary waves on inclined films: Flow structure and binary interactions. Annual AIChE meeting, Indianapolis, Nov. 2002.
- N. Malamataris, K. Serifi, . Vlachogiannis & V. Bontozoglou, Waves on inclined films: Induced flow field and effect on transport phenomena. COST F2, 2nd workshop, Aachen, 7-9 November 2002.
- M. Vlachogiannis, M.W. Liberatore, A.J. McHugh & T.J. Hanratty 2003 Relation of the Degradation of the Effectiveness of a Drag Reducing Polymer (HPAM) on Molecular Weight Distribution. EFMC2003 (organized by EuroMech), Toulouse, 24-28 Aug. 2003.
- M. Vlachogiannis, K. Argyriadi, V. Bontozoglou Solitary Waves on Liquid Film Flowing Along a Periodic Wall, XXI Int. Congress of Theoretical and Applied Mechanics Warsaw, Poland, August 15-21, 2004
- M. Vlachogiannis and T. Tsirikoglou Experiments on spray nozzles using the fluorescence imaging method. 2nd International Conference on Experiments/Process/System Modelling/Simulation & Optimization, 2nd IC-EpsMsO, Athens, 4-7 July, 2007
- V. Leontidis, M. Vlachogiannis & V. Bontozoglou, «The Onset Of Three dimensionality in Inclined Film Flows», EFMC7 (organized by EuroMech), Manchester, September 14 - 18, 2008.
- V. Leontidis, M. Vlachogiannis, N. Andritsos & V. Bontozoglou, «Three dimensional effects in inclined film flows». 7th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics EXHFT-7, 28 June – 03 July 2009, Krakow, Poland
- Ch. Tzotzi, M. Vlachogiannis and N. Andritsos, « Effect of fluid properties and pipe inclination on flow pattern in two-phase gas-liquid flow». 7th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics EXHFT-7, 28 June – 03 July 2009, Krakow, Poland
- . Georgantaki, M. Vlachogiannis, J. Vatteville , V. Leontidis, N. Andritsos and V. Bontozoglou The effect of channel width and Kapitza number on the primary instability and the wave characteristics of inclined film flow, 8th Euromech Fluid Mechanics Conference, 13-16 μ 2010,
- Georgantaki, M. Vlachogiannis, J. Vatteville, and V. Bontozoglou, The effects of Kapitza number and channel width on liquid film flow, International Conference on Multiscale Complex Fluid Flows and Interfacial Phenomena - Multiflow 2010, 8-11 μ 2010
- Z. Cao, M. Vlachogiannis and V. Bontozoglou, 2010 Experimental study of instabilities of film flow over corrugated wall, Multiflow Summer School, El Escorial
- Z. Cao, M. Vlachogiannis and V. Bontozoglou, 2010 Observation of instabilities and bifurcations of film flow along corrugated walls, Intl. Conference on Multi-scale Fluid Flows and Interfacial Phenomena, Brussels
- Z. Cao, M. Vlachogiannis, V. Bontozoglou and A. Oron, 2011 Experimental and theoretical evidence for a new instability in film flow along periodic corrugations, Conference on Bifurcation and Instabilities in Fluid Dynamics, Barcelona
- J. Vatteville, A. Georgantaki, M. Vlachogiannis, V. Bontozoglou , The role of the transverse dimension in the instabilities and transitions of inclined film flow, GAMM 2011, Gratz, Austria, 18-21 April 2011
- Georgantaki, M. Vlachogiannis and V. Bontozoglou, The effect of surfactants on liquid film flow, EPFDC 2012, Imperial College, 10-12 July, London
- Georgantaki, M. Vlachogiannis and V. Bontozoglou, The effect of soluble active agents on film flow, Summer school on Wave Patterns and Interactions in Advection-Dominated Flows, Marie Curie Initial Training Network, 16-20 July, Volos
- Georgantaki, M. Vlachogiannis and V. Bontozoglou, The effect of soluble surfactants on liquid film flow, Eurotherm 2012 6th European Thermal Sciences Conference, 4-7 September, France.
- Z. Cao, M. Vlachogiannis and V. Bontozoglou, 2012 Experimental study of inclined film flow along periodic corrugations, Multiflow Summer School, Volos
- Z. Cao, M. Vlachogiannis and V. Bontozoglou, 2012 Experimental study of film flow over corrugations, European Postgraduate Fluid Dynamics Conference, London
- Z. Cao, M. Vlachogiannis and V. Bontozoglou, 2012 Experimental evidence for a new instability mode in inclined film flow along periodic corrugations. European Thermal Sciences Conference, Futuroscope.

- Honours and awards**
- 1996 National Scholarship Foundation of Greece, Best Undergraduate ranking: Overall GPA: 8.77/10 (1st)
 - 1998 National Scholarship Foundation of Greece, 1997-2000, full PhD funding, Panhellenic Examination in 4 courses. Overall GPA: 15.27/20 (1st)
 - 2003 Honoured as "Distinguished New Scientist" from the Greek Department of Defence (7/3/2003)
 - 2004 National Scholarship Foundation of Greece, Post-Doctoral Scholarship

Memberships Technical Chamber of Greece, ASME, AIChE.

Certifications EN ISO Standards for Sterilization Monitoring with emphasis in packaging, monitoring, validation of operating cycle
by Brian Kirk, 3M, Athens, Greece 26/09/2017

References

References are available on request