



Europass Curriculum Vitae

Personal information

First name(s) / Surname **Kyros Yakinthos**

Address Laboratory of Fluid Mechanics & Turbomachinery, Dept. of Mechanical Engineering, School of Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece

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Nationality Greek

Date of birth 16.10.1967

Gender Male

Work experience

Dates 2014- onwards

Occupation or position held Associate professor

Main activities and responsibilities Teaching / research (Advanced topics on Fluid Mechanics, Aerodynamics, CFD, Aeronautics)

Name and address of employer Laboratory of Fluid Mechanics & Turbomachinery, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

Dates From 1st of September- onwards

Occupation or position held Laboratory of Fluid Mechanics & Turbomachinery, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

Main activities and responsibilities Director of the Laboratory of Fluid Mechanics & Turbomachinery

Name and address of employer Laboratory of Fluid Mechanics & Turbomachinery, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

Dates 2007- 2014

Occupation or position held Assistant professor

Main activities and responsibilities Teaching / research (Advanced topics on Fluid Mechanics, Aerodynamics, CFD, Aeronautics)

Name and address of employer Laboratory of Fluid Mechanics & Turbomachinery, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

Type of business or sector Academia

Dates 2007- 2009

Occupation or position held Member of the board of directors

Main activities and responsibilities Administration – technological subjects

Name and address of employer "Metallurgical Industrial Research & Technology Development Center S.A.", Volos, Greece

Type of business or sector Public sector company

Dates 2007- 2009

Occupation or position held Alternate member of the board of directors

Main activities and responsibilities Administration – technology and innovation subjects

Name and address of employer "Alexander Zone of Innovation S.A." Thessaloniki, Greece

Type of business or sector Public sector company

Dates	2007- 2009
Occupation or position held	Consultant
Main activities and responsibilities	Technology and innovation subjects
Name and address of employer	General Secretariat of Research and Technology, Greece
Type of business or sector	Public sector service
Dates	2003- 2007
Occupation or position held	Lecturer
Main activities and responsibilities	Teaching / research (Advanced topics on Fluid Mechanics, Aerodynamics, CFD, Aeronautics)
Name and address of employer	Laboratory of Fluid Mechanics & Turbomachinery, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece
Type of business or sector	Academia
Dates	1999- 2003
Occupation or position held	Post doctoral researcher
Main activities and responsibilities	Senior researcher, participation in Research & Development projects
Name and address of employer	Laboratory of Fluid Mechanics & Turbomachinery, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece
Type of business or sector	Academia
Dates	1999- 2003
Occupation or position held	Visiting professor
Main activities and responsibilities	Teaching (Fluid Mechanics, Computer programming)
Name and address of employer	Dept. of Mechanical Engineering, University of Western Macedonia, Greece
Type of business or sector	Academia

Education and training

Dates	1992-1997
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	Thesis Title: "Development of a numerical method for modeling incompressible and compressible flows"
Name and type of organisation providing education and training	Dept. of Mechanical Engineering, Aristotle University of Thessaloniki, Greece
Dates	1985 - 1990
Title of qualification awarded	Diploma in Mechanical Engineering
Principal subjects/occupational skills covered	Mechanical Engineering, direction of expertise: Energy sector – Fluid Mechanics
Name and type of organisation providing education and training	Dept. of Mechanical Engineering, Aristotle University of Thessaloniki, Greece
Dates	1989 - 1990
Title of qualification awarded	Diploma Thesis (ERASMUS): "Tip Vortex Cavitation"
Principal subjects/occupational skills covered	Section Energetique
Name and type of organisation providing education and training	ENSTA – Paris, France

Personal skills and competences

Mother tongue

Other language(s)

Self-assessment

European level (*)

English

French

Greek

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C2	Proficient user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

- Team work: I have worked in research teams focused on research and innovation through research and development projects
- Intercultural skills: I lived in France during my first 8 years

Organisational skills and competences

- I have organized the CFD group in the Laboratory of Fluid Mechanics and Turbomachinery of the Dept. of Mechanical Engineering / Aristotle University of Thessaloniki
- I have organized the High Performance Computing (computations on a parallel computing environment) group in the Laboratory of Fluid Mechanics and Turbomachinery of the Dept. of Mechanical Engineering / Aristotle University of Thessaloniki
- I organized the 7th Panhellenic Conference on Fluid Mechanics with invited speakers well-known professors from abroad
- Collaboration with the following companies and institutes
 MTU Aero Engines GmbH, D, for the design of intercooled recuperated aero engines
 PROMES-CNRS, F, for heat transfer experimental measurements on porous media
 Fraunhofer Project Center for Coatings in Manufacturing, Centre for Research and Technology Hellas (CERTH), Themi, Greece, for the development of CFD models on dust gun technologies
 Laboratory for Machine Tools and Production Engineering of RWTH Aachen University, D, for the development of CFD models for the lubrication on cutting technologies
- Invited reviewer in many International Scientific Journals in the field of Fluid Mechanics, Computational Fluid Dynamics and Heat Transfer such as:
Int. J. of Heat & Fluid Flow
Applied Thermal Engineering
Int. J. of Heat and Mass Transfer
J. of Mech, Eng. Science, IMechE proc., part C
J. of Automobile Eng., IMechE proc., part D
J. of Aerospace Eng., IMechE proc., part G
J. of Sports Eng. and Tech., IMechE proc., part P
Int. J. Sustainable Energy
Eng. App. of Computational Fluid Mechanics
J. of Taiwan Inst. of Chem. Eng.
ASME conferences
EUROTURBO conferences
Progress in Computational Fluid Dynamics
J. of Aerospace Engineering
J. of Aerospace Science and Technology

Technical skills and competences

- Design of wind tunnels for thermofluids experiments
- Design of computer clusters for massive parallel computations
- Design and manufacturing of UAVs

Computer skills and competences

- FORTRAN programming language
- UNIX and OS X operating systems
- MPI interface for parallel computing
- ANSYS CFX, FLUENT, NUMECA - FINE

Annexes

- ANNEX A: List of publications
 ANNEX B: List of research and technology projects I participated

ANNEX A
List of publications

International Scientific Journals

1. Goulas, A., Kyriakides, N., Yakinthos, K., *Modelling of Transition. Experimental and Numerical Studies*. ERCOFTAC Bulletin, March 1995, pp.13-16
2. Palikaras, A., Yakinthos, K., Goulas, A., *Transition on a flat plate with a semi-circular leading edge under uniform and positive shear freestream flow*. Int. J. Heat & Fluid Flow, Vol. 23, 2002, pp.455-470
3. Palikaras, A., Yakinthos, K., Goulas, A. *The effect of negative shear on the transitional separated flow around a semi-circular leading edge*. Int. J. Heat & Fluid Flow, Vol. 24, 2003, pp.421-430
4. Goulas, A., Katheder, K., Palikaras, A., Yakinthos, K. *Flow measurements and investigations in a staggered tube matrix of a heat-exchanger*. International Journal of Heat & Technology, Vol. 21, N.2, 2003, pp. 55-63
5. Tsinoglou D., Koltsakis G., Missirlis D., Yakinthos K. *Modelling of flow distribution during catalytic converter light-off*. Int. J. Vehicle Design, Vol. 34, N.3, 2004, pp. 231-259
6. Tsinoglou D., Koltsakis G., Missirlis D., Yakinthos K. *Transient modeling of flow distribution in automotive catalytic converter*. Applied Math. Modelling, Vol.28, No.9, 2004, pp. 775-79
7. D. Missirlis, K. Yakinthos, A. Palikaras, K. Katheder, A. Goulas *Experimental and numerical investigation of the flow field through a heat exchanger for aero-engine applications*. Int. J. Heat Fluid Flow, Vol. 26, N.3, 2005, pp. 440-458
8. D. Missirlis, K. Yakinthos, P. Storm, A. Goulas *Modeling pressure drop of inclined flow through a heat exchanger for aero-engine applications*. Int. J. Heat Fluid Flow, Vol. 28, N.3, 2007, pp.512-515
9. K. Yakinthos, D. Missirlis, A. Palikaras, P. Storm, B. Simon, A. Goulas *Optimization of the installation of recuperative heat exchangers in the exhaust nozzle of an aero engine*. Applied Mathematical Modeling, Vol.31, N.11, 2007, pp.2524-2541
10. Z. Vlahostergios, K. Yakinthos, A. Goulas *Experience gained using second moment closure modeling for transitional flows due to boundary layer separation*, Flow Turbulence & Combustion, Vol. 79, N.4, 2007, pp. 361-387
11. K. Yakinthos, Z. Vlahostergios, A. Goulas *Modeling the flow in a 90° rectangular duct using one Reynolds-stress and two eddy-viscosity models*. Int. J. Heat & Fluid Flow, Vol. 29, N.1, 2008, pp. 35-47
12. C. Albanakis, K. Yakinthos, K. Kritikos, D. Missirlis, A. Goulas, P. Storm. *The effect of heat transfer on the pressure drop through a heat exchanger for aero engine applications*, *Applied Thermal Engineering*, 29, 2009, pp.634-644
13. C. Albanakis, D. Missirlis, N. Michailidis, K. Yakinthos, A. Goulas, H. Omar, D. Tsipas, B. Granier *Experimental analysis of the pressure drop and heat transfer through metal foams used as volumetric receivers under concentrated solar radiation* *Experimental Thermal and Fluid Science*, 2009, 33, pp.246-252
14. Z. Vlahostergios, K. Yakinthos, A. Goulas *Separation-induced boundary layer transition: modeling with a non-linear eddy-viscosity model coupled with the laminar kinetic energy equation* Int. J. Heat Fluid Flow, 2009, 30 (4), pp. 617-636
15. Vlahostergios, K. Yakinthos, A. Goulas *Efforts to model boundary layer separation induced transition using a non-linear eddy-viscosity model and a Reynolds stress model*. ERCOFTAC Bulletin 80, Sept. 2009, pp. 29-34
16. G. Martinopoulos, D. Missirlis, G. Tsilingiridis, K. Yakinthos, N. Kyriakis, *CFD modeling of a polymer solar collector*, *Renewable Energy*, 2010, 35 (7), pp. 1499-1508
17. D. Missirlis, S. Donnerhack, O. Seite, C. Albanakis, A. Sideridis, K. Yakinthos, A. Goulas, *Numerical development of a heat transfer and pressure drop porosity model for a heat exchanger for aero engine applications*, *Applied Thermal Engineering*, 2010, 30 (11-12), pp. 1341-1350
18. J. Aidarinis, D. Missirlis, K. Yakinthos, A. Goulas, *CFD Modelling and LDA Measurements for the Air-Flow in an Aero Engine Front Bearing Chamber*. GTP-10-1267, *Journal of Engineering for Gas Turbines and Power*. 2011, 133(8), 082504
19. Marilena Kyriakou, Dimitrios Missirlis, Kyros Yakinthos, *Numerical modeling of the vortex breakdown phenomenon on a delta wing with trailing-edge jet-flap*, Int. J. Heat Fluid Flow, 2010, 31 (6), pp. 1087-1095
20. A. Sideridis, K. Yakinthos, A. Goulas, *Turbulent kinetic energy balance measurements in the wake of a low-pressure turbine blade*, Int. J. Heat Fluid Flow, 2011, 32 (1), pp. 212-225
21. D. Missirlis, M. Flouros, K. Yakinthos, *Heat transfer and flow field investigation of a heat exchanger for aero engine applications*, Int. J. of Heat and Technology, 2011, 29 (2), pp. 57-64
22. K. Yakinthos, D. Missirlis, A. Sideridis, Z. Vlahostergios, O. Seite, A. Goulas, *Modelling the operation of a system of recuperative heat exchangers for an aero engine with the combined use of a porosity model and a thermo mechanical model*, *Eng. Applications of Computational Fluid Mechanics*, 2012, 6(4), pp. 608-621
23. Z. Vlahostergios, A. Sideridis, K. Yakinthos, A. Goulas, *Performance assessment of a non-linear eddy-viscosity turbulence model applied to the anisotropic wake-flow of a low-pressure turbine blade*, Int. J. of Heat & Fluid Flow, 2012, vol. 38, pp. 24-29
24. Bouzakis, K.-D., Klocke, F., Tsouknidas, A., Kombogiannis, S., Missirlis, D., Vlahostergios, Z., Sideridis, A., Yakinthos, K., Tzevelekis, A., Stabliev, G., Bolz, S. *Development of a ball valve with PVD-coated metal-to-metal sealing mechanism*, *Journal of the Balkan Tribological Association*, Volume 18, Issue 3, 2012, Pages 390-404
25. Z. Vlahostergios, D. Missirlis, K. Yakinthos, A. Goulas, *Computational modeling of vortex breakdown control on a delta wing*, Int. J. of Heat & Fluid flow, 2013, vol. 39, pp. 64-77
26. K. Yakinthos, *Application of non-linear eddy-viscosity model involving A_2 stress-invariant transport equation to transitional flows*, *Engin. Applications of Computational Fluid Mechanics*, 2013, vol.7/3, pp. 393-405
27. D. Missirlis, G.Martinopoulos, G. Tsilingiridis, K. Yakinthos, N. Kyriakis *Investigation of the heat transfer behaviour of a polymer solar collector for different manifold configurations*, *Renewable Energy*, 2014, vol. 68, pp. 715-723
28. Z. Vlahostergios, D. Missirlis, M. Flouros, C. Albanakis, K. Yakinthos, *Effect of turbulence intensity on the pressure drop and heat transfer in a staggered tube bundle heat exchanger*, *Experimental Thermal and Fluid Sciences*, 2015, vol.60, pp. 75-82

29. P. Panagiotou, P. Kaparos, K. Yakinthos, *Winglet Design and Optimization for a MALE UAV using CFD*, Aerospace Science and Technology, 39 (2014), pp.190-205
30. M. Flouros, G. Iatrou, K. Yakinthos, F. Cottier, M. Hirschmann, *Two-phase Flow Heat Transfer and Pressure Drop in Horizontal Scavenge Pipes in an Aero-Engine*, J. Eng. Gas Turbine and Power, 2015, vol.137
31. A. Goulas, S. Donnerhack, M. Flouros, D. Missirlis, Z. Vlahostergios, K. Yakinthos, *Thermodynamics Cycle Analysis, Pressure Losses and Heat Transfer Assessment of a Recuperative System Aero Engine*, J. Eng. Gas Turbine and Power, 2015, vol.137
32. Z. Vlahostergios, K. Yakinthos, *Modelling the Flow in a Transonic Diffuser with one Reynolds-stress and Two Eddy-Viscosity Models*, Flow, Turbulence and Combustion, 2015, vol. 94 (3)
33. P. Panagiotou, A. Sideridis, K. Yakinthos, A. Goulas, *Turbulence kinetic energy balance in the wake of a sharp-edged highly swept delta wing Flow*, Turbulence and Combustion, Volume 95, Issue 1, 10 July 2015
34. Flouros, M., Karanachos, A., Yakinthos, K., Salpingidou, C., Cottier, F. *Two-Phase Flow Pressure Drop in Corrugated Tubes Used in an Aero-engine Oil System*, J. Eng. Gas Turbines and Power, v. 138, Issue 6, 1 June 2016
35. Panagiotou, P., Kaparos, P., Salpingidou, C., Yakinthos, K., *Aerodynamic design of a MALE UAV*, Aerospace Science and Technology., 50, (2016)

International and Greek National Conferences

1. Yakinthos, K. and Goulas, A. *The Prediction of Flow on a Flat Plate with a Cylindrical Leading Edge*. A Collection of Technical Papers, 6th Symposium on Computational Fluid Mechanics, Lake Tahoe, Nevada, vol. III, 1995.
2. Yakinthos, K., Tamamidis, P. and Goulas, A. *Calculation of Steady Incompressible Flows Using High-Resolution Monotonic Schemes*. A Collection of Technical Papers, 6th Symposium on Computational Fluid Mechanics, Lake Tahoe, Nevada, vol. III, 1995
3. Yakinthos, K., Ballas, M., Tamamidis, P. and Goulas, A. *Numerical Simulation of Three-Dimensional Complex Flows using a Pressure-Based Non-staggered Grid-Method*. Computations of Three-Dimensional Complex Flows, vol 53, Lausanne, Suisse, 1995.
4. Papadopoulos, J., Yakinthos, K. and Goulas, A. *The Prediction of Transonic Separated Flow Using the k-εModel*. Proc. of 2nd International Conference on Pumps and Fans, Chinghua University, University of Petroleum, Beijing, 1995
5. CAO, S-L, Goulas, A., Yakinthos, K., WU, Y-L, Tsukamoto, H. and Deliporandis, G. *Numerical Simulation of Three-Dimensional Flow in a Centrifugal Pump Impeller*. Proc. Of 3rd International Conference on Pumps and Fans, Chinghua University, University of Petroleum, Beijing, 1998
6. Yakinthos, K. and Goulas, A., *The Prediction of Flow on a Flat Plate with a Circular Leading Edge Under Zero and Non-Zero Pressure Gradient*. I.Mech.E. 3rd European conference on Turbomachinery: Fluid Dynamics and Thermodynamics, vol. 1, pp. 135-146, 1999.
7. Stapountzis, H., Yakinthos, K., Goulas, A., Kallergis, S. and Kambanis, V. *Cylinder-Wake Airfoil Interaction for Application to a Downwind Hawt*, European Wind Energy Conference, Nice 1999
8. Stapountzis, H., Yakinthos, K., Goulas, A., Efstathiou, T, Iordanoglou, A., *Heat and momentum transfer during the interaction of 2 parallel jets* 2nd Panhellenic Conference of Chemical Engineering, Volos, 1999
9. Stapountzis, H., Yakinthos, K., Goulas, A., Haralambous, G., *Blade wind-turbine wake interaction*, 6th Panhellenic Conference of Solar Energy Institute, Volos, 1999
10. Stapountzis, H., Yakinthos, K., Tsiapas, D., Goulas, A., Valougeorgis, D., Gikas, A., *Optimization of transport phenomena during the impingement of jets on straight and curved surfaces*, 6th Panhellenic Conference of Solar Energy Institute, Volos, 1999
11. Z. Vlahostergios, A. Sotiropoulos, K. Yakinthos, A. Goulas *Experience in Parallelizing a CFD solver for execution in a parallel environment*. 10th Panhellenic Congress in Informatics, 2005.
12. Seume J., Herbst F., Missirlis D., Yakinthos K. and Goulas A. *Numerical Modelling of the unsteady interaction between probe and flow in axial turbomachinery* The XVIII Symposium on Measuring Techniques in Turbomachinery, AUTH, Thessaloniki, 2006.
13. C. Albanakis, K. Kritikos, D. Missirlis, K. Yakinthos, A. Goulas, *Investigation of alterative installations for exhaust-gas cooling in aero engines* 5th Panhellenic Conference on Fluid Mechanics, FLOW 2006, Patras, 2006
14. Z. Vlahostergios, K. Yakinthos, A. Goulas, *Modeling the flow development in a 90 deg. duct with the adoption of sophisticated turbulence models* 5th Panhellenic Conference on Fluid Mechanics, FLOW 2006, Patras, 2006
15. Yakinthos K., Missirlis D., Palikaras A. and Goulas A. *Heat exchanger for aero engine applications* IMECE-2006, Proceedings of IMECE-2006, ASME International Mechanical Engineering Congress & Exposition, 2006, Chicago USA
16. F. Klocke, C. Gorgels, E. Bouzakis, D. Misirlis, K. Yakinthos *Experimental investigation and computational fluid dynamics modelling of micro blasting of coated cutting tools*. IC MEN International Conference 2008
17. C. Albanakis, K. Yakinthos, D. Missirlis, A. Goulas *Effect of the inlet turbulence intensity in the pressure drop through heat exchangers*, 6th Panhellenic Conference on Fluid Mechanics, FLOW 2008, Kozani, 2008s.
18. Z. Vlahostergios, K. Yakinthos, A. Goulas *Modeling Boundary Layer Separation-Induced Transition using a non-Linear Eddy-Viscosity Model Combined with the Laminar Kinetic Energy* European Turbomachinery Conference, March 2009, Graz
19. Kyros Yakinthos, Stefan Donnerhack, Dimitrios Missirlis, Olivier Seite, Paul Storm, *Derivation of an anisotropic model for the pressure loss through a heat exchanger for aero engine applications*, Proceedings of ASME Turbo Expo 2009: Power for Land, Sea and Air, GT2009, June 8-12, 2009, Orlando, Florida, USA
20. C. Albanakis, D. Missirlis, P. Storm, K. Yakinthos, A. Goulas, *Experimental investigation of the effect of heat transfer on pressure drop for a heat exchanger for aero engine applications*, ExHFT-7: 7th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics, 28 June – 03 July 2009, Krakow, Poland
21. Marilena Kyriakou, Dimitrios Missirlis, Kyros Yakinthos, *Numerical modeling of the vortex breakdown phenomenon on a delta wing with trailing edge jet control*, Conference on Modelling Fluid Flow (CMFF'09): The 14th International Conference on Fluid Flow Technologies, Budapest, Hungary, September 9-12, 2009
22. D. Missirlis, O. Seite, S. Donnerhack, K. Yakinthos, *Heat and Fluid Flow investigations on a heat exchanger for aero engine applications*, ISABE 2009: 19th ISABE Conference, September 7-11, 2009 Montreal, Canada

23. J. Aidarinis, D. Missirlis, K. Yakinthos, A. Goulas, *CFD modeling and LDA measurements in an aero engine front bearing chamber*, Proc. ASME Turbo Expo 2010: Power for Land, Sea and Air, GT2010, 2010, UK
24. D. Missirlis, K. Yakinthos, O. Seite, A. Goulas, *Modeling an installation of recuperative heat exchangers for an aero engine*, Proc. ASME Turbo Expo 2010: Power for Land, Sea and Air, GT2010, 2010, UK
25. K. Yakinthos, D. Missirlis, O. Seite, Z. Vlahostergios, A. Goulas, *Modeling the operation of a heat exchanger for aero engine applications for real engine operating conditions*, ETMM 8, Marseilles, 2010, FR
26. Sideridis, K. Yakinthos, A. Goulas, *Turbulence measurements in the wake of a low-pressure turbine blade*, ETMM 8, Marseilles, 2010, FR
27. D. Missirlis, K. Yakinthos, M. Flouros, Z. Vlahostergios, A. Goulas, *Flow field and heat transfer investigations in the exhaust nozzle of a recuperative aero engine*, 5 Int. Conf. "The future of Gas Turbine Technology", 2010, Brussels
28. Zinon Vlahostergios and Kyros Yakinthos, *Modeling separation – induced transition using a non – linear three equation turbulence model and a Reynolds stress turbulence model*, GT2010-23331, Proc. ASME Turbo Expo 2010: Power for Land, Sea and Air, GT2010, UK
29. E. Bouzakis, D. Missirlis, K. Yakinthos, *Experimental investigation and numerical modeling using CFD of a dust-gun manufacturing process*, FLOW 2010, 7^o Panhellenic Conference on Fluid Mechanics, Thessaloniki, 2010
30. G. Martinopoulos, D. Missirlis, K. Yakinthos, G. Tsiligirdis, K. Kyriakis, *Numerical modeling of a solar collector*, FLOW 2010, 7^o Panhellenic Conference on Fluid Mechanics, Thessaloniki, 2010
31. D. Missirlis, K. Yakinthos, M. Flouros, A. Sideridis, A. Goulas, *Investigation of the flow field in the core of a heat exchanger for aero engines*, FLOW 2010, 7^o Panhellenic Conference on Fluid Mechanics, Thessaloniki, 2010
32. Z. Vlahostergios, D. Missirlis, O. Regies, K. Yakinthos, A. Goulas, *Nuerical modeling of the vortex-breakdown phenomenon on delta wings*, FLOW 2010, 7^o Panhellenic Conference on Fluid Mechanics, Thessaloniki, 2010
33. Vlahostergios, Z., Missirlis, D., Yakinthos, K. *Application of turbulence modeling on delta wing vortex-breakdown control*, 3rd GACM Colloquium on Computational Mechanics, 21-23 Sept. 2009, Hannover, Germany
34. D. Missirlis, K. Yakinthos, A. Goulas, Z. Vlahostergios, S. Donnerhack, O. Seite, M. Flouros, *Hot Nozzle Optimization and Heat Exchanger Loss Modelling*, European Workshop on New Aero Engine Concepts, Munich, 30 June-1 July 2010
35. Z. Vlahostergios, A. Sideridis, K. Yakinthos, A. Goulas *URANS Modeling of the Wake-Flow produced by a low pressure turbine blade to be presented on the 9th International ERCOFTAC Symposium on Engineering Turbulence Modeling and Measurements (ETMM9)*, Thessaloniki, June 2012
36. M. Flouros, G. Iatrou, K. Yakinthos, F. Cottier, M. Hirschmann, *Two-phase flow heat transfer and pressure drop in horizontal scavenge pipes in an aero engine*, Proceedings of ASME Turbo Expo 2014: Power for Land, Sea and Air
37. A. Goulas, S. Donnerhack, M. Flouros, D. Missirlis, Z. Vlahostergios, K. Yakinthos, *Thermodynamics cycle analysis, pressure loss and heat transfer assessment of a recuperative system for aero engines*, Proceedings of ASME Turbo Expo 2014: Power for Land, Sea and Air
38. P. Panagiotou, N. Pitzatzis, G. Savaidis, K. Yakinthos, *Fluid Structure Interaction computations on a MALE UAV*, 35th Int. Symp. On Mechanics and Materials, Jun. 2014, Greece
39. N. Pitzatzis, G. Savaidis, P. Panagiotou, K. Yakinthos, *Design and FE Calculations of a Lightweight Civil Unmanned Air Vehicle*, 58th Ilmenau Scientific Colloquium, TUL, Sept. 2014
40. A. Amanatiadis, E. G. Karakasis, L. Bampis, T. Giitsidis, P. Panagiotou, G. Sirakoulis, A. Gasteratos, P. Tsalides, A. Goulas, and K. Yakinthos, *The HCUAV project: Electronics and software development for medium altitude remote sensing*, IEEE SSRR2014 Conf, Japan, 2014
41. Yakinthos, K., Missirlis, D., Vlahostergios, Z., Flouros, M., Donnerhack, S. *Best strategies for the development of a holistic porosity model of a heat exchanger for aero engine applications*, Proceedings of ASME Turbo Expo 2015

ANNEX B
List of research and technology projects

Participation as coordinator

HCUAV - Hellenic Civil Unmanned Air Vehicle, (Greek General Secretariat of Research and Technology). Project co-funded by three Hellenic private companies and the National Strategic Growth Framework

Participation as scientific responsible

Investigation of transitional flow on turbine blades (Greek General Secretariat of Research and Technology)

LEMCOTEC – Low Emission Core Technologies for aero engines (from Sept of 2014) -FP7, IP Project 2011 - 2014, Rolls-Royce D, coordinator

ULTIMATE - Ultra Low Emission Technology Innovations for Mid-century Aircraft Turbine Engines, HORIZON2020 Project, Chalmers Un. coordinator

Participation as a senior researcher and senior engineer

1. **End Wall Boundary Layers in Multistage Axial Compressors**. (VW – D)
2. **Transition in Turbomachinery Flows** (BRITE-EURAM, 1990-1995, EU, Rolls-Royce plc., SNECMA among other partners).
3. **Investigation of the Aerodynamics and Cooling of Advanced Turbine Components** (BRITE-EURAM, 1992-1996, EU, MTU, SNECMA, Rolls-Royce plc among other partners).
4. **Investigation and optimization of the flow characteristics in high pressure water vanes** (1991-1994, Greek Ministry of Education – General Secretariat of Research and Technology – APCO Valves)
5. **Transition in turbomachines** (Greek General Secretariat of Research and Technology 1995-1998).
6. **Lubrication and seals technology** (BRITE-EURAM project 1995-1997, EU, SNECMA, Rolls-Royce plc, MTU among other partners).
7. **ERCOFTAC Thematic Network in Transition** 1998-2000.
8. **Cylinder Wake-Airfoil Interaction for Application to a Downwind Hawt**, JOULE, 1998-2001.
9. **AEROHEX - Advanced Exhaust Gas Recuperator Technology for Aero-Engine Applications** (FP5, GROWTH 1999-2004, MTU Aeroengines GmbH coordinator).
10. **GEOCOOL – Geothermal Heat Pump for coastal areas** (GROWTH 2000-2003).
11. **Optimization of the ATHENS 2004 Olympic torch operation**
12. **NEWAC – New Aero Engine Core Concepts** (FP6, IP Project, 2006-2009, MTU Aeroengines GmbH coordinator).
13. **Further investigation of the recuperation technology in aero engines** (Greek General Secretariat of Research and Technology – MTU Aeroengines GmbH)