

Curriculum Vitae

Dr. Ioannis K. Nikolos

Assistant Professor

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STUDIES

July 1991 – Sep. 1996

Ph.D. Degree, Department of Mechanical Engineering, National Technical University of Athens (NTUA), Greece, Fluids Section, Lab. of Thermal Turbomachines.

Subject: “*Contribution to the calculation of secondary flows inside compressors and modeling of the tip clearance effects*” (in Greek).

Sep. 1985 – Oct. 1990

Mechanical Engineering Diploma, NTUA.

PROFESSIONAL EXPERIENCE

Jan. 16th, 2003 – today

Technical Univ. of Crete
Dept. of Production Engineering and Management
Subject: “Thermal and Hydrodynamic Engines”

Oct. 98 – Jan. 15th, 2003

Technical Univ. of Crete,
- Dept. of Production Engineering and Management,
- Dept. of General Science.
Adjunct Lecturer

1999 – Jan. 15th, 2003

Technical Univ. of Crete,
Dept. of Production Engineering and Management,
Intelligent Systems and Robotics Laboratory.
Research Associate

Sep. 24th, 2001 – Feb. 15th, 2002

Feb. 25th, 2002 – June 28th, 2002

Sep. 24th, 2002 – Feb. 14th, 2003

Technical Educational Institute of Crete,
Adjunct Lecturer

Sep. 28th, 1998 – July 5th, 1999

Nov. 1st, 1999 – July 5th, 2000

Okt. 2nd, 2000 – July 5th, 2001

Technical Educational Institute of Athens,
Adjunct Lecturer.

Mar. 2000 – Feb. 2001

National Technical University of Athens (NTUA), Dept. of Mechanical Eng., Lab. of Thermal Turbomachines,
Research Associate.

July 1998 – Nov. 1998

National Technical University of Athens (NTUA)
Project Manager

Nov. 25th, 1996 – May 25th 1998

Military Service

Jan. 15th, 1991 – July 31st 1996

National Technical University of Athens (NTUA), Dept. of Mechanical Eng., Lab. of Thermal Turbomachines,
Research Assistant.

ADMINISTRATIVE POSITIONS

Sep. 4th, 2009 - Aug. 2010

Sep 8th, 2010 - Aug. 2011

Aug. 24th, 2005 – Aug. 2006

Associate member of the University Senate (Technical University of Crete).

Member of the University Senate (Technical University of Crete).

<i>Sep. 23rd, 2008 – today</i>	Coordinator of the student's internships project, Department of Production Engineering and Management, TUC.
<i>Sep. 23rd, 2005 – today</i>	Member of the University Library Committee (Technical University of Crete).
<i>Okt. 2004 – Sep. 2007</i>	Member of the Department's Undergraduate Studies Committee (Department of Production Engineering and Management - Technical University of Crete).

MEMBER OF PROFESSIONAL SOCIETIES

Senior Member of A.I.A.A. (American Institute of Aeronautics and Astronautics).
 Member of A.S.M.E. (American Society of Mechanical Engineers).
 Member of I.E.E.E. (Institute of Electrical and Electronics Engineers).
 Member of I.E.E.E., Computational Intelligence Society.
 Member of I.E.E.E., Systems, Man, and Cybernetics Society.
 Member of the Technical Chamber of Greece (T.E.E.).
 Member of the Greek Professional Mechanical and Electrical Engineers Society.

RESEARCH PROJECTS

Scientific Coordinator

1. «Provision of research and education work in the subject of three-dimensional constructions modeling - Phase 1». Funded by SOFiSTiK Hellas S.A. Duration: 1/10/10 to 31/12/10. Scientific Coordinator.
2. "TUNFEC - Structural and aerodynamic design of TUNels under Fire Emergency Conditions", Eurostars Project No E15292. Subcontract of ELXIS Engineering Consultants S.A. Scientific Coordinator.
3. "Consulting provision in subjects related with Computational Fluid Dynamics", Funded by EADS 3 Sigma S.A. Duration: 16/02/10 to 16/06/10. Scientific Coordinator.
4. «Software development for the constructions modeling in three dimentions, utilizing the geometric libraries of Open Cascade - Phase IV», Funded by SOFiSTiK Hellas S.A. Duration: 1/07/09 to 31/12/09. Scientific Coordinator.
5. «Software development for the constructions modeling in three dimentions, utilizing the geometric libraries of Open Cascade - Phase III», Funded by SOFiSTiK Hellas S.A.. Duration: 1/04/09 to 30/06/09. Scientific Coordinator.
6. «Software development for the constructions modeling in three dimentions, utilizing the geometric libraries of Open Cascade - Phase II», Funded by SOFiSTiK Hellas S.A. Duration: 1/09/08 to 31/12/08. Scientific Coordinator.
7. «Software development for the constructions modeling in three dimentions, utilizing the geometric libraries of Open Cascade», Funded by SOFiSTiK Hellas S.A. Duration: 1/06/08 to 31/08/08. Scientific Coordinator.
8. «3-dimensional modeling and analysis of Tunnels». Within the framework of «International Cooperation in Industrial Research, and Development Actions in Pre-competitive Stage - 2005», Funded by GSRT and SOFiSTiK Hellas S.A. Duration: 25/07/06 to 30/04/08. Scientific Coordinator.
9. «Design and aerodynamic evaluation of an S-Duct intake for Perseas UAV, using computational tools», 2005, Funded by EADS-3SIGMA S.A. Scientific Coordinator.
10. «Aerodynamic evaluation of the existing S-Duct intake of the IRIS-JET UAV and design of a new one using computational tools», 2005, Funded by EADS-3SIGMA S.A., Scientific Coordinator.
11. «Design, Development and Construction of a Prototype Unmanned Surface Vessel». Within the framework of the PEPER-Crete Project, funded by GSRT. Scientific Associate Coordinator.
12. «Optimal design of products and manufacturing processes, with focusing on the parametric formation of complicated geometry bladings», PYTHAGORAS II project, Greek Ministry of Education, 1/1/2005 to 31/12/2007. Scientific Coordinator.
13. «Automatic parametric design of small turbomachinery parts, using modern numerical methods», 2004, Funded by the Technical University of Crete. Scientific Coordinator.
14. «UNISTEP», 2004, «Software and digital library for furniture synthesis». Scientific Coordinator of a research group.

Research Assistant/ Research Associate (Selection)

1. "Tip Clearance Effects in Axial Flow Compressors" BRITE/EURAM AERO-0021-C, Lab. of Thermal Turbomachines, NTUA, Research Assistant.
2. "Advanced Civil Core Compressor Aerodynamics" IMT AER2-CT92-0039, Lab. of Thermal Turbomachines, NTUA, Research Assistant.
3. "Small Turbomachinery Research", GIRD-CT2000-00151, Lab. of Thermal Turbomachines, NTUA, Research Associate.
4. "Robust integration methodologies of a fleet of commercially available autonomous robots", PENED 99, Greek General Secretariat for Research and Technology (GSRT) , Intelligent Systems and Robotics Laboratory, Technical University of Crete. Research Associate.
5. "Development of a jet engine for the propulsion of UAVs", 00 EPER 167, Greek General Secretariat of Research and Technology, Intelligent Systems and Robotics Laboratory, Technical University of Crete. Research Associate.
6. "Development of a vertical take off and landing Unmanned Aerial Vehicle", 00 EPER 169, Greek General Secretariat of Research and Technology, Intelligent Systems and Robotics Laboratory, Technical University of Crete. Research Associate.

BOOKS

1. L. Klianis, I.K. Nikolos, I. Sideris, "Internal Combustion Engines, Volume I", Eugenides Foundation, Publ., 2002 (in Greek), ISBN 960-337-046-0.
2. L. Klianis, I.K. Nikolos, I. Sideris, "Internal Combustion Engines, Volume II", Eugenides Foundation, Publ., 2003 (in Greek), ISBN 960-337-047-9.

SCIENTIFIC PUBLICATIONS

A. Refereed Serial Transaction / Journal papers /

1. A.I. Delis, I.K. Nikolos, M. Kazolea, "Performance and comparison of cell-centered and node-centered unstructured finite volume discretizations for shallow water free surface flows", *Archives of Computational Methods in Engineering* (accepted).
2. M.P. Papadopoulou, I.K. Nikolos, G.P. Karatzas, «Computational Benefits using Artificial Intelligent Methodologies for the Solution of an Environmental Design Problem - Saltwater Intrusion», *Water Science and Technology* (on line).
3. I.C. Trichakis, I.K. Nikolos, G.P. Karatzas, «Artificial Neural Networks (ANNs) Based Modeling for Karstic Groundwater Level Simulation», *Water Resources Management*. (On-line, DOI: 10.1007/s11269-010-9629-6)
4. I. K. Nikolos, A. I. Delis, "An unstructured node-centered finite volume scheme for shallow water flows with wet/dry fronts over complex topography", *Computer Methods in Applied Mechanics and Engineering*, 198, pp. 3723-3750, 2009.
5. I.K. Nikolos, M.P. Papadopoulou, G.P. Karatzas, "Artificial Neural Network and Differential Evolution Methodologies used in Single- and Multi-objective Formulations for the Solution of Subsurface Water Management Problems", *International Journal of Advanced Intelligence Paradigms*, Vol. 2, No. 4, pp. 365-377, 2010.
6. I. Trichakis, I.K. Nikolos, G.P. Karatzas, "Optimal selection of Artificial Neural Network parameters for the prediction of a karstic aquifer's response", *Hydrological Processes*, 23, pp. 2956–2969, 2009.
7. G. Koini, S. Sarakinos, I. K. Nikolos, "A Software Tool for Parametric Design of Turbomachinery Blades", *Advances in Engineering Software*, 40 (2009) pp. 41-51.
8. E. I. Amoiralis and I.K. Nikolos, «Freeform Deformation versus B-Spline Representation in Inverse Airfoil Design», *ASME Journal of Computing & Information Science in Engineering*, Vol. 8, Issue 2, June 2008.
9. I. K. Nikolos, M. Stergiadi, M. P. Papadopoulou, G. P. Karatzas, «Artificial Neural Networks an Alternative Approach to Groundwater Numerical Modeling and Environmental Design», *Hydrological Processes*, 22, pp. 3337-3348, 2008.
10. I. M. Valakos, M. S. Ntipteni, I. K. Nikolos, «Structural Optimization of a Centrifugal Impeller Using Differential Evolution in CATIA™ Environment», *Operational Research an International Journal*, vol. 7, No. 2 (2007).
11. S. Karterakis, G. P. Karatzas, I. K. Nikolos and M. P. Papadopoulou, «Application of Linear Programming and Differential Evolutionary Optimization Methodologies for the Solution of Coastal Subsurface Water Management Problems Subject to Environmental Criteria», *Journal of Hydrology*, Volume 342, Issues 3-4, pp. 270-282, Sept. 2007.
12. S. S. Sarakinos, I. M. Valakos, I. K. Nikolos, «A Software Tool for Generic Parameterized Aircraft Design», *Advances in Engineering Software*, Vol. 38, No. 1, pp. 39-49 (2007).
13. A. Brintaki, I. K. Nikolos, «Coordinated UAV Path Planning Using Differential Evolution», *Operations Research an International Journal*, Vol. 5, Issue 3, 2005. ISSN 1109-2858.
14. I. K. Nikolos, L. Doitsidis, V. N. Christopoulos, N. Tsourveloudis, «Roll Control of Unmanned Aerial Vehicles using Fuzzy Logic», *WSEAS Transactions on Systems*, Issue 4, Volume 2, pp. 1039-1047, Oct. 2003.
15. I. K. Nikolos, K. P. Valavanis, N. C. Tsourveloudis, A. N. Kostaras, «Evolutionary Algorithm Based Off-line / On-line Path Planner for UAV Navigation», *IEEE Transactions on Systems, Man and Cybernetics-Part B*, Vol. 33, No.6, pp. 898-912, Dec. 2003.
16. I. K. Nikolos, N. Tsourveloudis, K. P. Valavanis, «Evolutionary Algorithm Based Off-Line Path Planner for UAV Navigation», *Automatika*, 42 (2001) 3-4, pp. 143-150.
17. N. Tsourveloudis, K. P. Valavanis, R. Kolluru, and I. K. Nikolos, «Position and Suction Control of a Reconfigurable Robotic Gripper», *Machine Intelligence and Robotic Control*, vol. 1, No 2, pp. 53-62, 1999.

B. Book chapters

1. G.P. Karatzas, V. Alexopoulou, I.K. Nikolos, «Groundwater management, combining simulation and optimization methodologies», *HYDROGAEA*, Honorary Volume dedicated to Prof. Christos Tzimopoulos, Aristoteleion University of Thessaloniki, pp. 157-167, 2009.
2. I. K. Nikolos, N. Tsourveloudis, «Path Planning for Cooperating Unmanned Vehicles over 3-D Terrain», in Filipe, J., Andrade-Cetto, J., Ferrier, J.-L. (Eds.), *Informatics in Control Automation and Robotics – Selected papers from the International Conference on Informatics in Control Automation and Robotics 2007*, Lecture Notes in Electrical Engineering, 24, pp. 153- 168, Springer, 2009, ISBN: 978-3-540-85639-9, e-ISBN: 978-3-540-85640-5.
3. I. K. Nikolos, N. Tsourveloudis, K. Valavanis, «Chapter 10: Evolutionary Algorithm based path planning for multiple UAV cooperation», in Valavanis Kimon (Ed.), *Advances in Unmanned Aerial Vehicles, State of the Art and the Road to Autonomy*, (Series: Intelligent Systems, Control and Automation: Science and Engineering, Vol. 33), pp. 309 – 340, Springer publications, 2007, ISBN: 978-1-4020-6113-4.
4. I. K. Nikolos, E. S. Zografos, A. N. Brintaki, «UAV Path Planning Using Evolutionary Algorithms», in Chahl, J.S., Jain, L.C., Mizutani, A., Sato-Ilic, M. (Eds.), *Innovations in Intelligent Machines - 1*, (Series: Studies in Computational Intelligence – SCI, vol. 70), pp. 77-111, Springer publications, 2007, ISBN: 978-3-540-72695-1.

C. Refereed Conference papers (full paper review)

1. I.C. Trichakis, I.K. Nikolos, G.P. Karatzas, "On the Use of Random-Walk Based Training Algorithms for Neural Networks Applied in Environmental Engineering", XVIII International Conference on Water Resources, CMWR 2010, Barcelona, 21-24 June, 2010.
2. A.I. Delis, I.K. Nikolos, M. Kazolea, "Comparison of Cell-Centered and Node-Centered Formulations of a High-Resolution Well-Balanced Finite Volume Scheme: Application to Shallow Water Flows", XVIII International Conference on Water Resources, CMWR 2010, Barcelona, 21-24 June, 2010.
3. M.P. Papadopoulou, I.K. Nikolos, G.P. Karatzas, "Optimal Geographical Well Positioning in Agricultural Polluted Areas", XVIII International Conference on Water Resources, CMWR 2010, Barcelona, 21-24 June, 2010.
4. A. Brintaki, S. Lai-Yuen, I.K. Nikolos, "A Kinematics and Evolutionary Approach for Modeling Molecular Conformations", in A. Johnson and J. Miller, (eds.), Proceedings of the 2010 Industrial Engineering Research Conference, IIE Annual Conference and Expo 2010, Cancun, Mexico, June 5 – 9, 2010.
5. I.C. Trichakis, G.P. Karatzas, I.K. Nikolos, "Quantification of artificial neural network uncertainty with bootstrap percentile intervals for the prediction of a karstic aquifer's response", in Proceedings of the 6th International Symposium on Environmental Hydraulics, ISEH2010, 23-25 June, 2010, Athens, Greece (Christodoulou & Stamou (eds.), Environmental Hydraulics, 2010 Taylor & Francis Group, London, ISBN 978-0-415-58475-3).
6. A.I. Delis, I.K. Nikolos, "A well-balanced node-centered finite volume scheme for shallow water flows with wetting and drying", International Conference of Numerical Analysis and Applied Mathematics 2009 (ICNAAM 2009), Rethymnon, Greece, 18-22 Sep. 2009, American Institute of Physics, Conference Proceedings, pp. 1425-1428, ISBN: 978-0-7354-0709.
7. M. Papadopoulou, I.K. Nikolos, G.P. Karatzas, "Soft-computing methodologies for the solution of contamination problems", The First International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering, Madeira, Portugal, Sep. 2009.
8. I. Trihakis, I.K. Nikolos, G.P. Karatzas, "Predicting the change in hydraulic head of a karstic aquifer using Neural Networks", The First International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering, Madeira, Portugal, Sep. 2009.
9. A.N. Brintaki, S.K. Lai-Yuen, I.K. Nikolos, "A kinematics-based Differential Evolution method for molecular conformational search", Proceedings of the IEE 2009 Industrial Engineering Research Conference, Miami, 2009.
10. M.P. Papadopoulou, I.K. Nikolos, G.P. Karatzas, G. Kyritsakas, «Artificial Intelligence Methodologies used for the Solutions of Environmental Water Resources Management Problems», 2nd International Conference on Water Economics, Statistics, and Finance, International Water Association, Alexandroupolis, Thrace-Greece, 3-5 July, 2009.
11. I.C. Trichakis, I.K. Nikolos, G.P. Karatzas, «Simulation of a Karstic Groundwater System using Artificial Neural Networks (ANNs). The example of Edwards aquifer», European Water Resources Association 7th International Conference: Water Resources Conservation and Risk Reduction Under Climatic Instability, Limassol, Cyprus, 25-27 June, 2009.
12. I.K. Nikolos, M. Stergiadi, M.P. Papadopoulou, G.P. Karatzas, «Groundwater Numerical Modeling and Environmental Design Using Artificial Neural Networks and Differential Evolution», In I. Lovrek, R.J. Howlett, and L.C. Jain (Eds.): *Knowledge-Based Intelligent Information and Engineering Systems (KES 2008)*, Part II, LNAI 5178, pp. 34–41, 2008, Springer-Verlag, ISBN 978-3-540-85564-4.
13. P. Spanoudakis, N. Tsourveloudis, I.K. Nikolos, «Optimal Selection of Tools for Rough Machining of Sculptured Surfaces», Proceedings of International Multi Conference of Engineers and Computer Scientists – IMECS 2008, (The 2008 IAENG International Conference on Industrial Engineering), Hong Kong, 19-21 March 2008, (ISBN: 978-988-98671-8-8).
14. I. K. Nikolos, and N. Tsourveloudis, «Evolutionary Path Planning for Unmanned Aerial Vehicles Cooperation», *Proceedings of the International Conference on Informatics in Control, Automation & Robotics*, Angers, France, May 09-12, 2007 (*ICINCO07*).
15. E. I. Amoiralis, and I. K. Nikolos, «Freeform Deformation vs. B-Spline Representation in Inverse Airfoil Design», *Proceedings of the 8th Biennial Conference on Engineering Systems Design and Analysis*, ASME-ESDA06, Torino, Italy, July 4-7, 2006, paper ESDA2006-95557.
16. S. Karterakis, G. P. Karatzas, I. K. Nikolos and M. P. Papadopoulou, «Groundwater Management in Coastal Regions Using Linear Programming and Genetic Algorithms», XVI International Conference in Computational Methods in Water Resources (CMWRXVI), Copenhagen, Denmark, June 19-22, 2006.
17. S. S. Sarakinos, E. Amoiralis, and I. K. Nikolos, «Exploring FreeForm Deformation Capabilities in Aerodynamic Shape Parameterization», *CD Proceedings of the IEEE-EUROCON 2005*, Belgrade, November 22 – 24, 2005, pp. 535-538 (IEEE Catalog no.: 05EX1255C, ISBN: 1-4244-0050-3).
18. G. N. Koini, S. S. Sarakinos, and I. K. Nikolos, «Parametric Design for Turbomachinery Blades», *CD Proceedings of the IEEE-EUROCON 2005*, Belgrade, November 22 – 24, 2005, pp. 539-542 (IEEE Catalog no.: 05EX1255C, ISBN: 1-4244-0050-3).
19. I. K. Nikolos, A. Brintaki, «Coordinated UAV Path Planning Using Differential Evolution», *Proceedings of the 13th Mediterranean Conference on Control and Automation, IEEE*, Cyprus, June 2005.
20. V. N. Christopoulos, I. K. Nikolos, «Multi-Objective Optimization Using Evolutionary Algorithms in Engineering Design: Part I, Methodology Presentation and Benchmark Testing», *Proceedings of the 7th National Congress on Mechanics*, pp. 351-356, June 24-26, 2004, Chania, Greece.
21. V. N. Christopoulos, I. K. Nikolos, «Multi-Objective Optimization Using Evolutionary Algorithms in Engineering Design: Part II, Airfoil Design Optimization», *Proceedings of the 7th National Congress on Mechanics*, pp. 345-350, June 24-26, 2004, Chania, Greece.
22. S. Sarakinos, E. Amoiralis, I. Valakos, I. K. Nikolos, «Generic Parameterized Aircraft Surface Generation for Design Optimization», *Proceedings of the 7th National Congress on Mechanics*, pp. 357-362, June 24-26, 2004, Chania, Greece.
23. E. S. Zografos, I. K. Nikolos, «Design Optimization of Aerodynamic Shapes Using Differential Evolution», *Proceedings of*

- the 7th National Congress on Mechanics*, pp. 339-344, June 24-26, 2004, Chania, Greece.
24. I. K. Nikolos, «Inverse Design of Aerodynamic Shapes using Differential Evolution coupled with Artificial Neural Network», *Proceedings of the ERCOFTAC Conference in Design Optimization: Methods and Applications*, Athens, Mar. 31- Apr. 2, 2004 ([Invited lecture](#)).
 25. I. K. Nikolos, L. Doitsidis, V. N. Christopoulos, N. Tsoouveloudis, «Roll Control of Unmanned Aerial Vehicles using Fuzzy Logic», *Proceedings of the 4th WSEAS International Conference on Fuzzy Sets and Fuzzy Systems*, Athens, Greece, May 29-31, 2003.
 26. G. Kolomvos, A. Mygdalas, I. K. Nikolos, «An Evolutionary Approach to a Time Table Problem», *International Conference on Computational Management Science*, Chania, Greece, May 27-30, 2003.
 27. A. N. Kostaras, I. K. Nikolos, N. C. Tsoouveloudis, K. P. Valavanis, «Evolutionary Algorithm Based On-line Path Planner for UAV Navigation», *Proceedings of the 10th Mediterranean Conference on Control and Automation*, MED 2002 IEEE, Portugal, July 9-12, 2002.
 28. I. K. Nikolos, N. Tsoouveloudis, K. P. Valavanis, «Evolutionary Algorithm Based 3-D Path Planner for UAV Navigation», *Proceedings of the 9th Mediterranean Conference on Control and Automation*, IEEE, Dubrovnik, Croatia, June, 27-29, 2001.
 29. I. K. Nikolos, D. I. Douvikas, K. D. Papailiou, «Modelling of the Tip Clearance Losses in Axial Flow Machines», 1996, ASME paper 96-GT-72.
 30. I. K. Nikolos, D. I. Douvikas, K. D. Papailiou, «The Prediction of the Tip Clearance Vortex Circulation and its Induced Flow Field in Axial Flow Machines», 1996, ASME paper 96-GT-73.
 31. I. K. Nikolos, D. I. Douvikas, K. D. Papailiou, «Prediction of Losses Due to the Tip Clearance Presence in Axial Flow Machines», 1995, *AGARD Conference Proceedings 571*.
 32. I. K. Nikolos, D. I. Douvikas, K. D. Papailiou, «Theoretical Modelling of Relative Wall Motion Effects in Tip Leakage Flow», 1995, ASME paper 95-GT-88.
 33. I. K. Nikolos, D. I. Douvikas, K. D. Papailiou, «A Method for the Calculation of the Tip Clearance Flow Effects in Axial Flow Compressors. Part I: Description of Basic Models», 1993, ASME paper 93-GT-150.
 34. I. K. Nikolos, D. I. Douvikas, K. D. Papailiou, «A Method for the Calculation of the Tip Clearance Flow Effects in Axial Flow Compressors. Part II: Calculation Procedure», 1993, ASME paper 93-GT-151.

D. Refereed Conference papers (extended abstract review)

1. A. Brintaki, S. Lai-Yuen, I.K. Nikolos, "A Kinematics Based Heuristic Approach to Minimize Molecular Conformational Search", *International CAD Conference*, Dubai, United Arab Emirates, June, 21-25, 2010.
2. A. N. Brintaki, I. K. Nikolos, S. K. Lai-Yuen, "A Biological Differential Evolution Approach for Molecular Design", *CAD '09*, *International CAD Conference and Exhibition*, June 8-12, 2009, Reno, Nevada.
3. S. S. Sarakinos, I. K. Nikolos, T. Pappou, «A Software Tool for 3D Geometric Modeling of Tunnels», *CD-ROM Proceedings of the ECCOMAS Thematic Conference on Computational Methods in Tunnelling (EURO:TUN 2007)*, August 27-29, 2007, Vienna, Austria, Eds.: J. Eberhardsteiner, G. Beer, Ch. Hellmich, H.A. Mang, G. Meschke, W. Schubert, Publisher: Vienna University of Technology, Austria, ISBN: 978-3-9501554-7-1.
4. I. M. Valakos, M. S. Ntipteni, I. K. Nikolos, «Structural Optimization of a Centrifugal Impeller Using Differential Evolution», *SEECCM06*, *Proceedings of the First South-East European Conference on Computational Mechanics*, Kragujevac, Serbia, 28-30 June 2006, pp. 545-551.
5. E. I. Amoralis, I. K. Nikolos, «Daedalus – A Software Package for the Design and Analysis of Airfoils», *SEECCM06*, *Proceedings of the First South-East European Conference on Computational Mechanics*, Kragujevac, Serbia, 28-30 June 2006, pp. 471-478.
6. M. S. Ntipteni, I. M. Valakos, I. K. Nikolos, «An Asynchronous Parallel Differential Evolution Algorithm», *ERCOFTAC 2006 Conference on Design Optimization: Methods & Applications*, Gran Canaria, Canary Islands, Spain, April 5-7, 2006.
7. I. K. Nikolos, A. N. Brintaki, E. S. Zografos, «Coordinated UAV Path Planning Using an ANN Assisted Differential Evolution Algorithm», *CD Proceedings of the EUROGEN 2005 Conference (Sixth Conference on Evolutionary and Deterministic Methods for Design, Optimization and Control with Applications to Industrial and Societal Problems)*, Munich, Sep. 12-14, 2005 (ISBN: 3-00-017534-2).
8. I. K. Nikolos, V. Christopoulos, «Enhanced Evolutionary Algorithm Convergence Using Partially Evaluated Population in Single and Multiple-Deme Implementations», *Proceedings of the EUROGEN 2003 Conference*, Barcelona, Sep. 15-17, 2003.
9. A. N. Kostaras, I. K. Nikolos, K. P. Valavanis, «Evolutionary Algorithm Based 3-D On-line Path Planner for UAV Navigation in an Unknown Environment», *Proceedings of the EUROGEN 2001 Conference*, Athens, Sep.19-21, 2001.

E. Workshops

1. A. Delis, M. Kazolea, N.A. Kampanis, I.K. Nikolos, "Finite Volume Simulations for the Generation and Propagation of Waves", *FORTH-IACM*, 30 March, 2009.
2. V. Gekas, K. Ahladianakis, I. K. Nikolos, «Development of an Experimental Apparatus for Oscillating-Flow Pressure-Drop Measurements Through a Stirling Engine Regenerator», *The Improving Human Potential Programme*, Research results at Plataforma Solar de Almeria, EDITORIAL CIEMAT, Madrid, p.p. 115 – 121, 2004.
3. I. K. Nikolos, K. P. Valavanis, N. C. Tsoouveloudis, A. N. Kostaras, V. Christopoulos, «Evolutionary Algorithm Based Off-line / On-line Path Planner for UAV Navigation», *11th Mediterranean Conference on Control & Automation, Workshop on UAVs*, IEEE, Rhodes, Greece, 2003.

The work of Dr. I.K. Nikolos has attracted more than 180 citations.