BRIEF CURRICULUM VITAE

NAME	**Polycarpos K. Papadopoulos**
TITLE	Lecturer of the Department of Engineering Sciences of the School of Engineering of the University of Patras
PROFESSIONAL ADDRESS	Division of Applied Mathematics & Mechanics Department of Engineering Sciences School of Engineering University of Patras GR 265 04 Patras Greece Tel. : +30 2610 997 564 +30 2610 997 710 Fax : +30 2610 996 845 e–mail : p.papadopoulos@des.upatras.gr web page : www.cfdmf.des.upatras.gr

BIOGRAPHICAL INFORMATION

EDUCATION

1. Diploma in Mechanical Engineering (2000), Department of Mechanical Engineering and Aeronautics, School of Engineering, University of Patras.
2. Doctorate Diploma (Ph.D. Thesis), Dissertation: "Investigation of internal, incompressible, laminar hydrodynamic and thermal flow using the improved CVP method and the SIMPLE method" (2004), Department of Engineering Sciences, School of Engineering, University of Patras.

EMPLOYMENT

2001 – 2008	Mechanical Engineer (Self-employed)
2008 – present	Lecturer of the Department of Engineering Sciences, School of Engineering, University of Patras.

TEACHING & RESEARCH

TEACHING ACTIVITIES

1. *Mathematics I* to the Department of Mechanical Engineering and Aeronautics of the University of Patras, (Fall Semester, 2007-08 – present).
2. *Mathematics II* to the Department of Mechanical Engineering and Aeronautics of the University of Patras, (Spring Semester, 2007-08 – present).
3. *Mathematics I* to the Department of Mechanical Engineering and Aeronautics of the University of Patras, (Fall Semester, 2007-08).
4. *Programming and Computer Applications* (Laboratory) to the Department of Civil Engineering (Fall Semester, 2009-10 – 2012-13).
5. *Computational Methods for PDEs* to the Department of Mechanical Engineering and Aeronautics of the University of Patras, (Fall Semester, 2012-13).

RESEARCH AREAS

1. Computational Fluid Dynamics,
2. Numerical Heat Transfer,
3. Magnetohydrodynamics,
4. Biomechanics,
5. Numerical Methods,
6. Electromagnetism

RECENT PUBLICATIONS IN INTERNATIONAL SCIENTIFIC JOURNALS

1. Papadopoulos, P.K., 2013, "An implicit potential method for incompressible flows", International Journal for Numerical Methods in Engineering, vol. 94(7), pp.672-686. Link

2. Papadopoulos, P.K., Vafeas, P. & Hatzikonstantinou, P.M., 2012, "Ferrofluid pipe flow under the influence of the magnetic field of a cylindrical coil", Physics of Fluids, vol. 24, no. 122002, pp. 1-13. Link

3. Papadopoulos, P.K., 2011, "An auxiliary potential velocity method for incompressible viscous flow", Computers and Fluids, vol. 51, no. 1, pp. 60-67. Link

4. Vafeas, P. , Papadopoulos, P.K. & Lesselier, D., 2012, "Electromagnetic low-frequency dipolar excitation of two metal spheres in a conductive medium", Journal of Applied Mathematics, vol. 2012, Article number628261. Link

5. Vafeas, P., Papadopoulos, P.K. & Hatzikonstantinou, P.M., 2011, "On the perturbation of the three–dimensional Stokes flow of micropolar fluids by a constant uniform magnetic field in a circular cylinder", Mathematical Problems in Engineering, vol. 2011, pp. 1-41. Link

SELECTED RESEARCH ARTICLES PRESENTED IN INTERNATIONAL CONFERENCES

1. Georgiou, M., Papadopoulos, P.K & Hatzikonstantinou, P.M., 2012, " Comparison of the Continuity Vorticity Pressure, Auxiliary Potential and Implicit Potential Methodologies for Incompressible Flow in Straight Ducts", in proceedings of the 8th International Conference on Engineering Computational Technology, Civil-Comp Press Proceedings, paper 118, Dubrovnik, Croatia. Link

2. Vafeas, P., Papadopoulos, P.K. & Hatzikonstantinou, P.M., 2008, "Micropolar flow under the effect of a magnetic dipole", in proceedings of the 6th International Conference on Computational Methods in Sciences and Engineering, American Institute of Physics Conference Proceedings, vol. 1148, pp. 566-570, Crete, Greece. Link

3. Papadopoulos, P.K., Vafeas, P. & Hatzikonstantinou, P.M., 2008, "Numerical study of a new model for the magnetohydrodynamic flow of micropolar magnetic fluids in straight square ducts", in proceedings of the 6th International Conference on Engineering Computational Technology, Civil-Comp Press Proceedings, paper 96, pp. 1-19, Athens, Greece. Link

RESEARCH PROJECTS

1. Scientific researcher in “K. Karatheodoris 2009” program of the Research Committee of the University of Patras (Duration: 2010 – 2013, Program code: C.922, in collaboration with Dr P. Vafeas, Prof P. M. Hatzikonstantinou and Ph.D. Candidate P. Bakalis).

REFEREE IN INTERNATIONAL SCIENTIFIC JOURNALS

1. Applied Mathematical Modelling (Elsevier) (1 *Refereed Work*).
2. Applied Thermal Engineering (Elsevier) (3 *Refereed Works*).
3. Computers and Fluids (Elsevier) (3 *Refereed Works*).
4. Heat transfer Engineering (Taylor & Francis) (1 *Refereed Work*).
5. International Journal for Numerical Methods in Fluids (Wiley) (1 *Refereed Work*).
6. International Journal of Heat and Mass Transfer (Elsevier) (1 *Refereed Work*).
7. International Journal of Numerical Methods for Heat and Fluid Flow (Emelard) (2 *Refereed Works*).
8. International Journal of Thermal Sciences (Elsevier) (1 *Refereed Work*).
9. Numerical Heat Transfer (Taylor & Francis) (1 *Refereed Work*).
10. Ocean Engineering (Elsevier) (1 *Refereed Work*).
11. Thermal Science (Vinča Institute of Nuclear Sciences) (3 *Refereed Works*).