

Panagiotis M. Vlamos

Curriculum Vitae



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Dr. Panayiotis Vlamos is a **Professor** and **Head of the Department of Informatics, Ionian University**, with Diploma in Mathematics from the University of Athens and Ph.D. in Mathematics from the Department of Mathematics of National Technical University of Athens. He is also **Director of the two Research Laboratories: Computational Modeling Laboratory (CModLab)** and **Bioinformatics and Human Electrophysiology Laboratory (BiHeLab)**.

His **research interests** mainly concern protocols for early diagnosis of neurogenerative disease associated with mitochondrial dysfunctions and control mild cognitive disorder, mathematical modeling in Bioinformatics, algorithms on recent advances in Neuroinformatics, image restoration problems and physical- chemical engineering problems.

- Studies

- Doctor of Mathematics of Department Applied Mathematics and Natural Sciences, National Technical University of Athens (NTUA) (1997).
- Degree of Mathematics, Athens University (1991).

Scientific Work

- International Journals

- 1) Lacey A. A., Tzanetis D. E. & Vlamos P. M. “Behaviour of a non-local reactive convective problem modelling ohmic heating of foods”, *Quarterly Journal of Mechanics and Applied Mathematics* 52 (4), 1999, 623 - 644.
- 2) Polyzou A., Vlamos P.M., Dimakos G.M., Yakoumis I.V. & Kontogeorgis G.M. “Assesment of Activity Coefficient Models for Predicting Solid-Liquid Equilibria of Asymmetric Binary Alkane Systems”, *Industrial & Engineering Chemistry Research*, 38, 1999, 316 - 323.
- 3) Vlamos P. M. “Heat Conduction dominated by Electromagnetic Radiation”, *Bulletin of the Greek Mathematical Society*, 41, 1999, 101-108.
- 4) Kontogeorgis G. M., Vlamos P. M. & Bilchev S.J. “Limiting Cases of Thermodynamic Functions”, *Bulletin of the Univ. Baia Mare*, XV, 1-2, 1999, 9-16.
- 5) Vlamos P.M. “Behavior of Reaction-Diffusion Problems with Critical Values out of the spectrum”, *The Annals of Ovidius University, Math. Series*, 7, 2, 1999, 81-88.
- 6) Kontogeorgis G. M., Yakoumis I. V. & Vlamos P. M. “Application of the sCPA Equation of State for Polymer Solutions”, *Computational and Theoretical Polymer Science* 10, 2000, 501-506.
- 7) Countinho J. A. P., Vlamos P. M. & Kontogeorgis G. M. “General Form of the Cross-Energy Parameter of Equations of State”, *Industrial & Engineering Chemistry Research*, 39, 2000, 3076-3082.

- 8) Kontogeorgis G. M. & Vlamos P. M. "An interpretation of the behavior of EoS/G^E models for assymetric systems", *Chemical Engineering Science* 55, 2000, 2351-2358.
- 9) Psarakos P.J. & Vlamos P. M. "The q-numerical range of matrix polynomials", *Linear & Multilinear Algebr*, 47, 2000, 1 - 10.
- 10) Baralis G., Malafekas Th., Rappos E. & Vlamos P. "The instruction of Euclidean Geometry with the use of educational software in multilingual classes", *The teaching of Mathematics*, III, 2, 2000, 105-113.
- 11) State L. & Vlamos P. "Informational Analysis of the Genetic Search", *The Annals of Bucharest University XLIX*, 2000, 113-122.
- 12) Vlamos P.M. "Diffusion Dependence and Stability in a Porous Media Model from Plasma Physics", *The Annals of University Spiru Haret*, 2000.
- 13) State L. & Vlamos P. "The POMDP modeling in the Analysis of Genetic Algorithms", *The Annals of Bucharest University XLIX*, 2000, 123-133.
- 14) Vlamos P.M. "Properties of the function $f(x)=x/\pi(x)$ ", *International Journal of Mathematics and Mathematical Sciences*, 28, 5, 2001, 307-311.
- 15) Tzanetis D. E. & Vlamos P. M. "A Nonlocal Problem modelling Ohmic Heating with variable Thermal Conductivity", *Nonlinear Analysis: Real world Applications* 2, 2001, 443-454.
- 16) Tzanetis D. E. & Vlamos P. M. "Some Interesting Special Cases of a Nonlocal Problem Modelling Ohmic Heating with Variable Thermal Conductivity", *Proceedings of the Edinburgh Mathematical Society*, 44, 2001, 585-595.
- 17) Vlamos P.M. "Inequalities involving the sequence of differences of the prime numbers", *Centre des Rech. Maths Pures*, 1, 32, 2001, 32-40.
- 18) Bokov V., Bilchev S.J. & Vlamos P.M. "A Model of Management of targeted Capital structure of a company", *Bulletin of the Univ.of Baia Mare*, B, XVII, 1-2, 2001, 13-22.
- 19) Bilchev S.J. & Vlamos P.M. "A New Glance on the Fundamental Triangle Inequality", *Mathematics, Informatics & Physics, Union of Scientists-Russe*, 5 (1), 2001, 69-73.
- 20) Bilchev S.J. & Vlamos P.M. "About a strange Walther Janous' problem", *Mathematics, Informatics & Physics, Union of Scientists-Russe*, 5 (1), 2001, 83-87.
- 21) Vlamos P.M. "On P. Mandl's inequality", *Centre des Rech. Maths Pures*, 2, 20, 2002, 34-38.
- 22) Vlamos P.M. "On the monotony of certain sequences", *Octagon*, 10, 1, 2002, 370-371.
- 23) Vlamos P.M. "Sequences and series involving the sequence of composite numbers", *International Journal of Mathematics and Mathematical Sciences* 31:1, 2002, 31-36.
- 24) Velikova E., Bilchev S.J. & Vlamos P.M. "Hard Problems Created by Gifted Students", *Revista Escolar de la Olimpiada Iberoamericana de Matematicas*, 2, 2002 (e-journal).
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- 26) Vlamos P.M. "Behavior of the first eigenvalue of the steady-state problem of Reaction-Diffusion Processes", *Bulletin of the Technical University of Bucharest (Constructions dep.)*, 2, 2003, 69-74.
- 27) State L, Cocianu C. & Vlamos P. "Neural Network for Principal Component Analysis with Applications in Image Compression", *Journal of Systemics, Cybernetics and Informatics*, 2, 6, 2005.
- 28) Vlamos P.M. "On The Numbers of Solutions for the Equation $n-\varphi(n) = m$ ", *Journal of Algebra Number Theory and Applications*, 6 (3), 2006, 609-613.
- 29) State L, Cocianu C. & Vlamos P, "The Use of Features Extracted from Noisy Samples for Image Restoration Purposes", *Informatica Economica Journal*, 41 (1), 2007, 73-78
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- 33) Cocianu.C, State.L, Vlamos.P, "Principal Axes-Based Classification with Application in Gaussian Distributed Sample Recognition", *Economic Computation and Economic Cybernetics Studies and Research*, 41, (1-2), 2007.
- 34) State L, Cocianu C, Stefanescu V, Vlamos P, "Fuzzy modeling and Bayesian Interface Network", *Informatica Economica Journal*, 44 (4), 2007, 68-71.
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- 39) Floros A., Avlonitis M., Vlamos P., "Frequency-Domain Stochastic Error Concealment for Wireless Audio Applications", *Journal of Mobile Networks and Applications*, 13 (3-4), 2008, 357-365.
- 40) Arvanitis.M, Vlamos.P, "Bayesian analysis of data and model uncertainty in 3D seismic travel-time tomography", *Cent. Eur. J. Geosci*, 1(2), 2009, 227-231
- 41) Sioutas S, Sofotassios D, Tsihlias K, Sotiropoulos D. & Vlamos P. "Canonical Polygon Queries on the Plane: A New Approach", *Journal of Computers*, 4 (9), 2009, 913-919.

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- 43) State, L., Cocianu, C & Vlamos, P. "New and Old Developments in Solving Specific Image Processing", *Journal of Economic Computation and Economic Cybernetics Studies and Research*, 44 (4),2010, 67-87.
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- 47) Alexiou A., Psiha M & Vlamos P., "A Stochastic Model for protein Synthesis and Activation through RNA-Protein Interaction in BioAmbients Calculus", *Computer Technology and Application*, 7 (2), 2011.
- 48) Alexiou A., Vlamos P., "A new Motzkin class for joint RNA secondary structures", *Bioinformation*, 6 (4), 162-163, 2011.
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- 55) Vlamos P, Lefkimmiatis K, Cocianu C, State L, Luo Z "Artificial Intelligence Applications in Biomedicine", Editorial, *Hindawi Publishing Corporation, Advances in Artificial Intelligence*, Volume 2012, Article ID 219137, 2 pages, doi:10.1155/2012/219137

- 56) Panayotopoulos A, Vlamos P “Cutting degree of meanders”, *8th Artificial Intelligence Applications & Innovations, Springer IFIP Advances in Information and Communication Technology series*, Volume 382/2012, 480-489, DOI: 10.1007/978-3-642-33412-2_49
- 57) Panayotopoulos A, Vlamos P “Compression of meanders”, *Journal of Discrete Mathematics Hindawi Publishing*, Volume 2013 (2013), Article ID 851751, 6 pages, <http://dx.doi.org/10.1155/2013/851751>
- 58) Alexiou A, Psiha M, Vlamos P “Towards an Expert System for Accurate Diagnosis and Progress Monitoring of Parkinson's disease”, *Springer, Advances in Experimental Medicine and Biology (AEMB)*, 2014
- 59) Polychronidou E, Vlachakis D, Vlamos P, Baumann M and Kossida S. “Notch Signaling and Ageing”, *Springer, Advances in Experimental Medicine and Biology (AEMB)*, 2014
- 60) Theocharopoulou G, Vlamos P “Modeling Protein Misfolding in Charcot Marie Tooth Disease” *Springer, Advances in Experimental Medicine and Biology (AEMB)*, 2014
- 61) Panayotopoulos A, Vlamos P “Modelling k-noncrossing closed RNA Secondary Structures via Meandric Compression” *Springer, Advances in Experimental Medicine and Biology (AEMB)*, 2014
- 62) Psiha M, Vlamos P “Modeling Neural Circuits in Parkinson's Disease”, *Springer, Advances in Experimental Medicine and Biology (AEMB)*, 2014

- International Conference Proceedings

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- 2) Vlamos P.M., Bilchev S.J. & Papanagiotakis D.C. “ActiveWeb Mathematics”, *International Conference'99 devoted to 45-anniversary of the University of Rousse, Section 8, Mathematics and Informatics*, 1999.
- 3) Vlamos P.M. “Asymptotic Behaviour and Blow-up of solutions of a class of Semilinear Nonlocal Parabolic Equations”, *16th IMACS WORLD CONGRESS 2000 on Scientific Computation, Applied Mathematics and Simulation*, 2000.
- 4) Vlamos P.M. “Asymptotic Stability in Nonlinear Non-local models”, *Alhambra 2000 Symposium on Non-linear Problems*, 2000.
- 5) Rappos E., Psarrakos P. & Vlamos P. “Mathematical Modeling in Secondary Education”, *Alhambra 2000 Symposium on Public Mathematics*, 2000.
- 6) State L., Cocianu C. & Vlamos P. “Attempts in using Statistical Tools for Image Restoration Purposes”, *5th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI2001)*, 2001.

- 7) State L., Cocianu C. & Vlamos P. "A regressive technique of Image Restoration", *29th International Conference on Computers and Industrial Engineering*, 2001.
- 8) Cocianu C., State L. & Vlamos P. "A multiresolution based approach of data compression / decompression", *29th International Conference on Computers and Industrial Engineering*, 2001.
- 9) State L., Cocianu C. & Vlamos P. "A Comparative Study of the efficiency of Noise removal Algorithms", *30th International Conference on Computers and Industrial Engineering (ICC&IE)*, 2002.
- 10) State L., Cocianu C. & Vlamos P. "Nonparametric Approach to learning the Bayesian Procedure for Hidden Markov Models", *6th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI2002)*, 2002.
- 11) State L., Cocianu C. & Vlamos P. "HMM Modeling in learning the Bayesian Recognition Procedure", *4th International Conference on Material Handling and Logistics Systems (ICMH/LS'2002)*, 2002.
- 12) State L., Cocianu C., Vlamos P. & Miroiu M. "A specialized Neural Network for implementing the HMM approach in Learning the Bayesian Procedure", *4th International Workshop on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 02)*, 2002.
- 13) State L., Cocianu C. & Vlamos P. "A Neural Architecture in HMM Modeling of the Bayesian Procedure for Pattern Recognition Purposes", *31st International Conference on Computers and Industrial Engineering (ICC & IE)*, 2002.
- 14) Cocianu C., State L. & Vlamos P. "On a certain Class of Algorithms for Noise Removal in Image Processing: A Comparative study", *International Symposium on Information Technology (ITCC 2002)*, 2002.
- 15) Velikova E. & Vlamos P. "Creative Education on Mathematics for Gifted students", *2nd International Conference "Creativity in Mathematics Education and the Education of Gifted students"*, 2002.
- 16) Cocianu C., State L., Stefanescu V. & Vlamos P., "Noise Removal Techniques using the multiresolution representation", *32nd International Conference on Computers and Industrial Engineering (ICC & IE)*, 2003.
- 17) State L., Cocianu C. & Vlamos P. "On the efficiency of a Class of PCA Algorithms in Digital Signal Processing", *5th International Workshop on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 03)*, 2003.
- 18) Cocianu C., State L., Stefanescu V. & Vlamos P., "The Use of Wavelet Representation for Noise Removal Purposes in Image Processing", *The International Conference on Computing, Communications and Control Technologies (CCCT 2004)*, 2004.

- 19) Cocianu C., State L., Stefanescu V. & Vlamos P., "Wavelet Based Techniques in Image Processing", *8th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI2004)*, 2004.
- 20) Cocianu C., State L., Stefanescu V. & Vlamos P., "Using the noise features in Image Restoration", *33rd International Conference on Computers and Industrial Engineering*, 2004.
- 21) State L., Cocianu C., Vlamos P. & Stefanescu V., "Toward the Use of Neural Networks for Learning the Bayesian Classification procedure", *34th International Conference on Computers and Industrial Engineering*, 2004.
- 22) Cocianu C., State L., Stefanescu V. & Vlamos P., "On the Efficiency of a Certain Class of Noise Removal Algorithms in Solving Image Processing Tasks", *1st International Conference on Informatics in Control, Automation and Robotics (ICINCO)*, 2004.
- 23) Cocianu C., State L., Stefanescu V. & Vlamos P., "A Neural Network Framework for Implementing the Bayesian Learning", *1st International Conference on Informatics in Control, Automation and Robotics (ICINCO)*, 2004.
- 24) Cocianu C., State L., Vlamos P. & Stefanescu V., "PCA Based Shrinkage Attempt to noise Removal", *35th International Conference on Computers and Industrial Engineering*, 2005.
- 25) Cocianu C., State L., Stefanescu V. & Vlamos P., "New Attempts in Boundary Detection", *3rd International Conference on Computing, Communications and Control Technologies (CCCT 2005)*, 2005.
- 26) State L., Cocianu C., Stefanescu V. & Vlamos P., "Noise Removal Algorithm Based on Code Shrinkage Techniques", *9th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI2005)*, 2005.
- 27) State L., Cocianu C. & Vlamos P., "A New Noise reduction method in developing Image Restoration Applications", *5th International Conference on Material Handling (ICMH'2005)*, 2005.
- 28) State L., Cocianu C. & Vlamos P., "Using The Adapted Innovation Algorithm For Noise Reduction In Image Processing", *7th International Workshop on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'05), NATO Series, RISC Institute*, 2005.
- 29) State L., Cocianu C., Stefanescu V. & Vlamos P. "PCA-Based Data Mining Probabilistic and Approaches with Applications in Pattern Recognition", *International Conference on Software and Data Technologies (ICSOFT 2006)*, 2006.
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- 33) Poulos M., Vlamos P, Bokos G. & Evangelou A. "Semantic EEG Description", 8th Congress, *Italian Association of Telemedicine and Medical Informatics, (AITIM 2007)* 2007.
- 34) Avlonitis M. & Vlamos P. "On an analytical signal reconstruction in the presence of additive white noise", 8th Congress, *Italian Association of Telemedicine and Medical Informatics, (AITIM 2007)*, 2007.
- 35) Avlonitis M, Vlamos P. & Oikonomou K. "A Space-Time Analytical Model for Energy Consumption in Wireless Sensor Networks", 6th Annual Mediterranean Ad Hoc Networking Workshop (*Med Hoc Net 2007*), 2007
- 36) State L., Cocianu C., Stefanescu V. & Vlamos P. "A Connectionist Approach in Bayesian Classification", 9th International Conference on Enterprise Information Systems (*ICEIS 2007*), 2007.
- 37) State L., Cocianu C. & Vlamos P. "A New Adaptive Classification Scheme Based on Skeleton Information", *International Conference on Signal Processing and Multimedia Applications (SIGMAP 2007)*, 2007.
- 38) State L., Cocianu C., Vlamos P. & Constantin D. "Principal Directions – Based Algorithm for Classification Tasks", 9th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (*SYNASC 2007*) , *IEEE Computer Society Press*, 2007.
- 39) Deliyannis I, Vlamos P, Floros A, Tsiridou T. & Simpsiri C. "Teaching Basic Number Theory to Students with Speech and Communication Disabilities Using Multimedia", *International Conference on Information Communication Technologies in Education (ICICTE 2008)*, 2008.
- 40) State L., Cocianu C., Rosca I. & Vlamos P. "A New Learning Algorithm for Classification in the Reduced Space", *10th International Conference on Enterprise Information Systems (ICEIS 2008)*, 2008.
- 41) Vlamos. P. "Points of Intersection of Symmetrical Solutions of Reaction-Diffusion Processes", *World Congress on Engineering 2008 (WCE 2008)*, 2008.
- 42) State L., Cocianu C. & Vlamos P. "An Unsupervised Skeleton Based Method to Discover the Structure of the Class System", *Research Challenges in Information Sciences (RCIS 2008)*, *IEEE Computer Society Press*, 2008.
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- 44) State L., Cocianu C., Vlamos P. & Constantine D., "Neural Approaches to Image Compression/Decompression Using PCA Based Learning Algorithm" *8th International Workshop on Pattern Recognition on Informatics Systems (PRIS 2008)*, 2008.
- 45) Avlonitis A., Anagnostou K. & Vlamos P. "On a Probabilistic Method for Exact Spatial Interpolation of Sampling Data: Application to Oliva Fruit Fly Population Data", *International Advanced Workshop on Information and Communication Technologies for Sustainable Agro-Production and Environment (AWICTSAE 2008)*, 2008.
- 46) State L., Cocianu C. & Vlamos P. "A new adaptive PCA scheme for noise removal in image processing", *50th International Symposium ELMAR-2008, IEEE Computer Society Press 2008*.
- 47) Deliyannis I, Floros A, Vlamos P., Arvanitis M. & Tsiridou T, "Bringing Digital Multimedia in Mathematics Education", *7th European Conference on e-Learning , (ECEL 2008)*, 2008.
- 48) Alexiou A. & Vlamos P. "Ethics at the Crossroads of Bioinformatics and Nanotechnology" *7th International Conference of Computer Ethics (CEPE 2009)*, 2009.
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- 50) Cocianu C., State L., Vlamos P., Constantine D. & Sararu C. "PCA Supervised and Unsupervised Classifiers in Signal Processing", *9th International Workshop on Pattern Recognition on Informatics Systems (PRIS 2009)*, 2009.
- 51) State L., Sararu C., Cocianu C. & Vlamos P. "New Approaches in Image Compression and Noise Removal", *1st International Conference on Advances in Satellite and Space Communications (SPACOMM 09)*, 2009.
- 52) State L., Cocianu C., Constantine D., Sararu C. & Vlamos P. "Toward a Semi-Supervised Approach in Classification based on Principal Directions", *International Conference on Signal Processing and Multimedia Applications (SIGMAP 2009)*, 2009.
- 53) Alexiou A. & Vlamos P. "Artificial Intelligence Techniques on Biological Secondary Structures", *10th International Conference on Artificial Intelligence and Symbolic Computation, (AISC 2010)*, 2010.
- 54) Alexiou A., Vlamos P. & Volikas K. "A theoretical Artificial Approach on reducing mitochondrial abnormalities on Alzheimer's disease", *10th International Conference on Information Technology and Applications in Biomedicine, (ITAB 2010)*, 2010.
- 55) Vlamos P., Floros A., Giannakos M. & Drossos K. "Towards an Interactive e-learning System Based on Emotions and Affective Cognition", *International Conference on Information Communication Technologies in Education (ICICTE 2010)*, 2010.

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- 58) Giannakos, M.N., Doukakis, S., Vlamos, P., & Koiliias, C. "Programming in Secondary Education: Benefits and Perspectives", *Proceedings of the 16th annual conference on Innovation and technology in computer science education, (ITICSE '11)*, 2011.
- 59) Alexiou A., Psiha M., Vlamos P., "Ethical issues of Artificial Biomedical Applications", *7th Artificial Intelligence Applications & Innovations (AIAI 2011)*, Vol. 364, *IFIP Advances in Information and Communication Technology series*, 2011.
- 60) Alexiou A, Psiha M, Vlamos P. "Applying Case-Based Reasoning to Customer Relationship Management Systems in targeted advertising for airplane passengers", *1st Conference of Hellenic Mathematical Society & Hellenic Association of Operational Researches (EME_EEEE)*, 2011.
- 61) Anagnostou K. & Vlamos P., "Square AR: Using Augmented Reality for Urban Planning", *3rd International Conference in Games and Virtual Worlds for Serious Applications, (VS-Games)*, 2011.
- 62) Alexiou A, Psiha M, Vlamos P. "E-lab on Innovative Techniques in Bioinformatics", *3rd Conference in Education (CIE)*
- 63) Cocianu C., State L. & Vlamos P., "A New method for learning the Support Vector Machines", *International Conference on Software and Data Technologies (ICSOFT 2011)*, 2011.
- 64) Alexiou A, Psiha M, Vlamos P. "An integrated ontology-based model for the early diagnosis of Parkinson's disease", *8th Artificial Intelligence Applications and Innovations Conference*, 1st Mining Humanistic Data Workshop, Springer IFIP, 2012,
- 65) Alexiou A, Vlamos P. "Optimizing Algorithms of Simulation Procedures for Large Scale Wind-Turbines", *23rd Conference for Management of Energy Resources/Systems, Hellenic Association of Operational Researches*, 2012
- 66) Alexiou A, Vlamos P. "Modeling of mitochondrial dynamics. The phenomenon of electric thromboses" (*keynote speakers*), *4th International Week Dedicated to Maths, Hellenic Mathematical Society*, 2012

- Books

1. "Mathematics" for technical lyceum, Organism of Publication of Instructive Books, 1999
2. "Educational Software in the Analytic Geometry", CD-ROM, 1999, Department of Chemical Engineers N.T.U.A.
3. "Numbers theory", H.M.S. (Hellenic Mathematical Society), 2000.
4. "International Mathematic Olympic Games", H.M.S.(Hellenic Mathematical Society), 2001.
5. "Geometry" for lyceum, O.E.Δ.B.(Organism of Publication of Instructive Books), 2001.
6. "Euclid Elements – Numbers theory, Books VII – X", Centre of Research of Science and Education), 2001.
7. "Balkan Mathematic Olympic Games", H.M.S.(Hellenic Mathematical Society), 2002.
8. "Mathematics I", alternative instructive material for the units 5, 6, 7, 8, 9 "One Variable Calculus" in the thematic area of "Study in the Natural Sciences", Hellenic Open University, 2005
9. "Mathematics 2nd class of High school", O.E.B.Δ.(Organism of Publication of Instructive Books), 2007,
10. "Mathematics I", Hypertext for the Unit «Complex numbers» in the thematic area of "Study in the Natural Sciences", Hellenic Open University, 2008.
11. "Mathematics I", Webcasts for the Unit «Complex numbers» in the thematic area of "Study in the Natural Sciences", Hellenic Open University, 2008.
12. "Mathematic Models in the Natural Sciences", Hypertext for the Unit "Postgraduate study in the Mathematics", Hellenic Open University, 2008.
13. "Basic Theories and Methods in the Mathematics", Webcasts for the Unit "Postgraduate study in the Mathematics", Hellenic Open University, 2008.
14. "Calculating Methods and Software in the Mathematics", Webcasts for the Unit "Postgraduate study in the Mathematics", Hellenic Open University, 2008
15. "Calculating Methods and Software in the Mathematics", Hypertext for the Unit "Postgraduate study in the Mathematics", Hellenic Open University, 2008
16. Author of the mathematical Portal, "Mathematics in Biosciences", Hellenic Open University, 2008

- Book Chapters

- 1) Lacey A. A., Tzanetis D. E. & Vlamos P. M. “Global existence and Finite - Time Blow-Up of a Nonlocal Hyperbolic Problem Modelling Ohmic Heating of Foods”, *Mathematical Methods in Scattering Theory and Biomedical Technology*, Pitman Research Notes In Mathematics Series, 1998, 20-32.
- 2) Vlamos P.M. “Diffusion Dominated by the Source Term in Nonlinear Non-local Models”, *Scattering Theory and Biomedical Engineering Modelling and Applications*, World Scientific, 2000,185-191.
- 3) Bilchev S.J. & Vlamos P.M. “About some Improvements of the Finsler-Hadwiger’s Inequality”, *Geometry & Mathematics Competitions, papers contributed to Topic Area 1, 4th Congress of the World Federation of National Mathematical Competitions*, 2002, 19-36.
- 4) Velikova E., Bilchev S.J. & Vlamos P.M. “Student’s Hard Geometry Problems”, *Geometry & Mathematics Competitions, papers contributed to Topic Area 1, 4th Congress of the World Federation of National Mathematical Competitions* 2002, 227-234.
- 5) Vlamos P.M. “Inequalities involving the sequence of the composite numbers”, *Piraeus University, Prof. A.Panagiotopoulou* , 2006.
- 6) Alexandris N., Alexiou A. & Vlamos P. “Hidden Markov Models for representation of Biological Data”, *Piraeus University, Prof. Karvouni*, 2010.
- 7) Alexiou A., Psiha M. & Vlamos P., “Gene Regulatory Networks”, *Chapter Book, “The Network Design Problem. Methods, Algorithms and Extensions”, Studies in Computational Intelligence, Springer*, 2012.

- Research Experience

1. “AdriHealthMob-Adriatic Model of Sustainable Mobility in the health & Care Sector”, Adriatic IPA Cross boarder Corporation Program. **He participated as principal investigator.** For further information, please visit the official site of the Research Committee of Ionian University: <http://rc.ionio.gr/>
2. “ADRIATinn-An Adriatic Network for Advancing Research Development and Innovation towards the Creation of new Policies for Sustainable Competiveness and Technological Capacity of SMEs”, Adriatic IPA Cross boarder Corporation Program. **He participated as member of the research group.**

- 3.
4. “BIG- “Improving governance, management and sustainability of rural and coastal protected areas and contributing to the implementation of the Natura 2000 provisions in IT and GR” , European Cooperation Program Greece- Italy, 2007-2013. ***He participated as member of the research group***
5. “PACINNO-Platform for trans-Academic Cooperation in Innovation”, IPA Adriatic Cross Border Cooperation 2007-2013. ***He participated as member of the research group***
6. “S.M.ART. BUIL.T.-Structural Monitoring of Artistic and historical Building Testimonies”. ***He participated as principal investigator***
7. “EuDML-European Digital Mathematical Libraries”, FP7. ***He participated as principal investigator.*** For further information, please visit the official site of the Research Committee of Ionian University: <http://rc.ionio.gr/> .
8. “DAKOS-Modelling of Dynamic Self-Organization and Repression of Population of Dakos in Real Ecosystem of Municipality of Saint George, Corfu”. ***He participated as member of the research group.*** The Project partners were: the municipality of Saint George, Corfu, the Department of Informatics, Ionian University and the Olive Research Center of Corfu.
9. MAVITRA- “The potential the labor market in the Mediterranean Basin”, INTERREG IIIB. ***He participated as principal investigator.*** For further information, please visit MAVITRA project homepage: <http://www.mavitra.org>
10. “The e-Government Portal of Kefalonia”, is being funded in the 3rd Community Support Programme (Measure 2.1 electronic government for the consumers’ service: business plans, studies and pilot works. Act category 3: innovative and pilot applications). ***He participated as principal investigator of the subproject.*** For further information, please visit the official site of the Research Committee of Ionian University: <http://rc.ionio.gr/> .
11. “PELAGOS-Development and strengthening of surveillance systems, security and control,” in cooperation with the Technical University of Bari (Politecnico di Bari), INTERREG IIIA Greece-Italy. ***He participated as member of the research group.*** For further information, please visit the official site of the Research Committee of Ionian University: <http://rc.ionio.gr/> .
12. “SWEB - Secure, Interoperable, cross border m-services contributing towards a trustful European cooperation with the non-EU member Western Balkan countries”, FP7. ***He participated as member of the research group.*** For further information, please visit the official site of the Research Committee of Ionian University: <http://rc.ionio.gr/> .

13. "TARD - The Development of an Automated System for Risk Analysis in the Assistance of Medical Diagnosis and Therapy Decision - Pilot Project". ***He participated as principal investigator of the subproject.*** For further information, please visit the official site of the Research Committee of Ionian University: <http://rc.ionio.gr/>.
14. ***Head of the research group:*** "Innovation through Mathematical Modeling and Simulation", Euroscience.
15. "Eudoxus", Distance Learning, University of Piraeus & Hellenic Mathematical Society
16. "Learning Mathematics with multimedia", Hellenic Mathematical Society
17. "Ancient Greek Mathematics", Centre of Educational Research
18. "Large Infrastructure in Mathematics - Enhanced Services", European Mathematical Society
19. "Reference Levels in School Mathematics Education in Europe", European Mathematical Society
20. "Modelling of Dynamic and Repression of population of olive fly in real Ecosystems", General Secretariat of Research and Technology
21. "eBusiness Forum", Broadband and remotely advisory services in human resources, General Secretariat of Research and Technology.
22. Developing International Education Digital Communications Standards: Creating A Domain Model And Recommended Student Assessment Procedures, White paper NECC 2006

Reviewer-Editorial Board

- Member of the Editorial Board of "Hellenic Mathematical Review", H.M.S., 1993-2011.
- Member of the Editorial Board of "The Teaching of Mathematics", Mathematical Society of Serbia, 2000-2003.
- Member of the Editorial Board of "Eycleidis C", H.M.S., 2007-2011.
- Editor in Chief, Hellenic Digital Mathematical Library, Fiz-Karshlrue
- Member of the Editorial Board of "Computer and Information Science", CCSE, 2009-2011.
- Member of the Editorial Board of "MASAUM Journal of Basic and Applied Sciences", 2009-2011.
- Member of the Editorial Board of the Proceedings of THESEUS/ImageCLEF Pre-Workshop, 2009.
- Member of the Editorial Board of "Journal of Computing and Applications", JCA, 2010-2011.
- Associate editor of the "Journal of Statistics and Mathematics", Bioinfo Applications, 2010-2011.

- Member of the Editorial Board of the Mindshare International Research Journal, 2011.
- Member of the Editorial Board of the British Journal of Mathematics and Computer Science, 2011.
- Reviewer of Zentralblatt MATH,
- Reviewer of “Journal of Mathematics Research”, CCSE
- Reviewer of “International Education Studies”, CCSE
- Reviewer of “Modern Applied Science”, Canadian CCSE
- Reviewer of “Computer Science and Information Systems”, ComSIS.
- Reviewer of “Chinese Optics Letter”, COL
- Reviewer of “Journal of Computers”
- Reviewer of “Scientific Journals International” (SJI)
- Reviewer of “Journal of Studies in Education”, Macrothink Institute-USA.

- Scientific-Organizing Committees

- 1) Member of Greek Mathematic Society.
- 2) Member of Mathematic Society of Edinburgh.
- 3) Member of American Mathematic Society.
- 4) Member of European Mathematic Society.
- 5) General Secretary of the “Mathematical Society of South-Eastern Europe”, (MASSEE), until 2012
- 7) International Congress of the Mathematical Association of South Eastern Europe, 2003.
- 8) International Conference “Creativity in Mathematics Education and the Education of Gifted students”, 2003
- 9) “Mediterranean Conference on Mathematics Education”, (MedConf 2007)
- 10) “South Eastern European Olympiad for University Students”
- 11) 1st Summer School “Mathematical Software towards Education Modeling and Simulation” 2008
- 12) Greek Mathematical Week 2008
- 1) First International Seminar of Information law “The Changing Facets of Information in Information Law” 2008
- 2) Conference on Methodologies, Technologies and Tools Enabling e-Government”, (MeTTeG 2008)
- 3) “International Conference on Information Communication Technologies in Education”, (ICICTE 2008)
- 4) “International Congress on Pervasive Computing and Management”, (ICPCM 2008)
- 5) “International Conference of Computer Ethics”, (CEPE 2009), 2009
- 6) “International Congress on Mathematics”, MICOM 2009

- 7) “International Conference on Information Communication Technologies in Education”, (ICICTE 2009)
- 8) “Workshop on Informatics in Education”, WIE 2009
- 9) “13th Panhellenic Conference on Informatics”, PCI 2009
- 10) “8th Artificial Intelligence Applications and Innovations Conference 2012, IFIP (International Federation for Information Processing), 1st Mining Humanistic Data Workshop (MHDW 2012), Member of the Workshop’s Program Committee
- 11) “14th Engineering Applications of Neural Networks Conference” 2013, International Neural Network Society, Springer, Member of the Program Committee