



MURAT SARI

EDUCATION

- 2000: Ph.D. University of South Wales, UK
Ph.D. Thesis and Supervisor: Seismic Wave Modelling Using the Boundary Element Method, Prof. Ron J. Wiltshire
- 1997: MPhil (transferred to Ph.D.)- University of South Wales, UK
- 1991: B.Sc.- Ondokuz Mayıs University, TR

WORK EXPERIENCE

- 1992-1993 : Mathematics Teacher in a State High School.
- 1993-2001 : Research Assistant- Pamukkale University, Department of Mathematics
- 1995-2000 : Part-time English-Turkish Interpreter
- 2001 Summer : Visiting Researcher- University of South Wales, Division of Mathematics and Statistics
- 2001-2001 : Research Assistant Doctor- Pamukkale University, Department of Mathematics
- 2001-2002 : Lecturer Dr.- Pamukkale University, Department of Mathematics
- 2002- 2012 : Assistant Prof. Dr.- Pamukkale University, Department of Mathematics
- 2012-2015 : Associate Prof. Dr.- Pamukkale University, Department of Mathematics
- 2015- 2018 : Associate Prof. Dr.- Yildiz Technical University, Department of Mathematics
- 2018- --- : Prof. Dr.- Yildiz Technical University, Department of Mathematics

Administrative Duties and Academic Services:

- 2003-2012 : Deputy Head of Department- Pamukkale University, Department of Mathematics
- 2004-2004 : Head of Division of Topology
- 2005-2013 : International Relations Departmental Coordinator- Pamukkale University, Department of Mathematics
- 2010-2015 : Science Ambassador of Pamukkale University to Petroleum-Gas University of Ploiesti, Romania.
- 2014-2015 : Deputy Coordinator of International Relations of Pamukkale University
- 2015-2019 : International Relations Departmental Coordinator- Yildiz Technical University
- 2018-2019 : International Relations Vice Coordinator- Yildiz Technical University
- 2019- --- : International Relations Coordinator- Yildiz Technical University

ACADEMIC ACTIVITY

Research Interests

- Computational Methods
- Numerical Methods
- Heuristic Methods
- Numerical Solutions of Differential Equations
- Modelling of Nonlinear Behaviours
- Economical Modelling
- Biomechanical/Biomedical Modelling

Supervised M.Sc. Dissertations

- T. Koparan, Scalar Wave Modelling Using Numerical Methods, Pamukkale University, Denizli, 2005.
- S. Yildirim, Time Integrals in Boundary Element Method, Pamukkale University, Denizli, 2006.
- S. Salinan, Heat Conduction Modelling using the Differential Transform Method, Pamukkale University Denizli, 2008.
- A. Gunay, Finite Difference Solutions of Fundamental Model Problems of Fluid Dynamics, Pamukkale University, Denizli, 2010.
- A. Zeytinoglu, Some Approximate Solutions of Burgers Equations, Süleyman Demirel University, Isparta, 2010 (Co-supervisor).
- E. Dincer, Solution of Burgers Equation by Various Finite Difference Schemes, Pamukkale University, Denizli, 2015.
- T. Yildirim, Various Finite Difference Solutions of Option Pricing Models, Yildiz Technical University, Istanbul, 2016.
- Lamyaa J.M. Almashhadani, Numerical Behaviour of Advection-Diffusion Equation, Yildiz Technical University, Istanbul, 2016.
- M. Bayraktar, Solution of Burgers Equation by Petrov-Galerkin Finite Element Method, Pamukkale University, Denizli, 2017.
- H. Tunc, Yildiz Technical University, Various Finite Element Techniques for Advection-Diffusion-Reaction Processes, Istanbul, 2017.
- H. Uslu, Behaviour of First Order Differential Equations through a Monte Carlo Based Algorithm, Yildiz Technical University, Istanbul, 2018.
- E. Kasap, Yildiz Technical University, Hepatitis B Modelling using Genetic Algorithm, Istanbul, 2019.
- S. Hamad Mussa, Yildiz Technical University, Numerical Discussions of Advection Diffusion Models, Istanbul, 2019.
- H. Sav, Yildiz Technical University (to be continued).
- E. Yaganoglu, Yildiz Technical University (to be continued).
- K. Gur, Yildiz Technical University (to be continued).
- P. Emecan, Yildiz Technical University (to be continued).
- R. Nashebi, Yildiz Technical University (to be continued).

Supervised Ph.D. Dissertations

- A. Zeytinoglu, Hybrid Approaches for Computational Fluid Dynamics, Suleyman Demirel University, Isparta, 2017 (Co-supervisor).
- A. A. Ahmad, Yildiz Technical University, Mathematical Modeling to Predict the Anemia Based on Medical Data, Istanbul, 2020.
- S. A. Tahir, Yildiz Technical University (to be continued).
- T. Cosgun, Yildiz Technical University (to be continued).
- H. Tunc, Yildiz Technical University (to be continued).
- H. Uslu, Yildiz Technical University (to be continued).
- C. Tuna, Yildiz Technical University (to be continued).

Publications

A) International Reviewed Papers

- 1) H. Tunc, M. Sari, “Simulations of Nonlinear Advection-Diffusion Models through Various Finite Element Techniques”, Scientia Iranica (SCI), 2020 (accepted). (Q2)
- 2) H. Uslu, M. Sari, T. Cosgun, “Qualitative Behavior of Stiff ODEs through A Stochastic Approach”, An International Journal of Optimization and Control: Theories & Applications (ESCI), 10(2), 181-187, 2020.
- 3) H. Uslu, M. Sari, “Monte Carlo Based Stochastic Approach for First Order Nonlinear ODE Systems”, Pamukkale University Journal of Engineering Sciences (ESCI), 26(1), pp. 133-139, 2020.
- 4) A.A. Ahmad, M. Sari, “Anemia Prediction with Multiple Regression Support in System Medicinal Internet of Things”, Journal of Medical Imaging and Health Informatics (SCI), 10, pp. 261-267, 2020. (Q4)
- 5) M. Sari, S.H. Mussa and H. Tunc, “Higher Order Compact Scheme for the Nonlinear Advection Diffusion Processes”, Proceedings of the Institute of Mathematics and Mechanics (ESCI), 45(2), pp. 295-310, 2019. (Q4)
- 6) M. Sari, A.A. Ahmad, “Parameter Estimation to an Anemia Model Using The Particle Swarm Optimization”, Sigma Journal of Engineering and Natural Sciences (ESCI), 37(2), pp. 1331-1343, 2019.
- 7) M. Sari, E. Gulbandilar, N. Dalkilic, “Risk Assessment with Decision Tree in Professional Liability Insurance: In Accounting”, Journal of Artificial Intelligence, 12, pp.18-243, 2019. (Q4)
- 8) H. Uslu, M. Sari, “A Stochastic Treatment for Oscillatory Behaviour with Damping”, Sigma Journal of Engineering and Natural Sciences (ESCI), 10(2), pp. 179-186, 2019.
- 9) S. Gulen, C. Popescu, M.Sari, “A New Approach for the Black–Scholes Model with Linear and Nonlinear Volatilities”, Mathematics (SCIE), 7 pp. 760, 2019. (Q1)
- 10) S. Ali Tahir, M. Sari, “A B-Spline-SSPRK54 Method for Advection-Diffusion Processes”, Bulletin of Mathematical Analysis and Applications, 11(3), pp.1-10, 2019.
- 11) M. Sari, A.A. Ahmad, “Anemia Modelling Using the Multiple Regression Analysis”, International Journal of Analysis and Applications (ESCI), 17, pp.838-849, 2019.
- 12) M. Sari, S. Ali Tahir, A. Bouhamidi, “Behaviour of advection-diffusion-reaction processes with forcing terms”, Carpathian Journal of Mathematics (SCI), 35(2), pp.201-220, 2019. (Q3)

- 13) H. Tunc, M. Sari, "An Efficient Local Transform Method for Initial Value Problems", *Sigma Journal of Engineering and Natural Sciences (ESCI)*, 37(1), pp. 163-174, 2019.
- 14) M. Sari, H. Tunc, M. Seydaoglu, "Higher order splitting approaches in analysis of the Burgers equation", *Kuwait Journal of Science (SCI)*, 46(1), pp.1-14, 2019. (Q1)
- 15) H. Tunc, M. Sari, "A local differential transform approach for the cubic nonlinear Duffing oscillator with damping term", *Scientia Iranica (SCI)*, 26(2), 2019. (Q2)
- 16) E. Gulbandilar, M. Sari, A. Cimbiz, "A decision support system for fall risk through biomechanical characteristics: A striking application", *Afyon Kocatepe University Journal of Sciences and Engineering (ESCI)*, vol.18, pp.486-494, 2018.
- 17) S. Ali Tahir, A. Bouhamidi, M. Sari, "Designing a Response Approach in Chaotic Systems", *Sigma Journal of Engineering and Natural Sciences (ESCI)*, 36, pp.441-457, 2018.
- 18) F.F. Altinoglu, M. Sari, A. Aydin, "Shallow Crust Structure of the Büyük Menderes Graben through an Analysis of Gravity Data ", *Turkish Journal of Earth Sciences, (SCI)* 2018. (Q2)
- 19) M. Sari, H. Tunc, "Finite element based hybrid techniques for advection-diffusion-reaction processes", *An International Journal of Optimization and Control: Theories Applications (ESCI)*, 8, pp.127-136, 2018.
- 20) U. Erdogan, M. Sari, H. Kocak, "Efficient Numerical Treatment of Nonlinearities in the Advection-Diffusion-Reaction Equations", *International Journal of Numerical Methods for Heat and Fluid Flow (SCI)*, 2018. (Q2)
- 21) A. Zeytinoglu, M. Sari, B.P. Allahverdiev, "A Hybrid Approach for the Regularized Long Wave-Burgers Equation", *An International Journal of Optimization and Control: Theories & Applications (ESCI)*, 7(2), pp.8-16, 2018.
- 22) M. Sari, C. Tuna, "Prediction of pathological subjects using genetic algorithms", *Computational and Mathematical Methods in Medicine (SCI)*, Article ID 6154025, 9 pages, 2018. (Q3)
- 23) A. Zeytinoglu, M. Sari, B. P. Allahverdiev, "Numerical Simulations of Shock Wave Propagating by a Hybrid Approximation Based on High-order Finite Difference Schemes", *Acta Physica Polonica A (SCI)*, 133(1), pp.369-386, 2018. (Q3)
- 24) M. Sari, C. Tuna, S. Akogul, "Prediction of Tibial Rotation Pathologies Using Particle Swarm Optimization and K-Means Algorithms", *Journal of Clinical Medicine (SCI)*, vol.7, pp.65-65, 2018. (Q1)
- 25) S. Selim, G. Elver, M. Sari, "Numerical behaviour of singular two-point boundary value problems in a comparative way", *An International Journal of Optimization and Control: Theories & Applications (ESCI)*, 7(3), pp.288-292, 2017.
- 26) M. Sari, H. Tunc, "An Optimization Technique in Analysing the Burgers Equation", *Sigma Journal of Engineering and Natural Sciences (ESCI)*, 35(2), pp. 369-386, 2017.
- 27) F.F. Altinoglu, M. Sari, A. Aydin, "Detection of Lineaments in Denizli Basin of Western Anatolia Region Using Bouguer Gravity Data", *Pure and Applied Geophysics (SCI)*, 172, pp. 415-425, 2015. (Q2)
- 28) E. Gulbandilar, M. Sari, A Cimbiz, "Prediction of low back pain using a fuzzy logic algorithm", *American Journal of Biomedical Science and Engineering*, 1(5), pp. 58-62, 2015.
- 29) M. Sari, A. Gunay, G. Gurarslan, "A solution to the telegraph equation by using DGJ method", *International Journal of Nonlinear Science*, 17(1), pp. 1757-66, 2014.

- 30) M. Sari, A. Sari, C. Popescu, Effects of imported goods on export and import of Turkey, Annals of the Constantin Brancusi University of Targu Jiu, Economy Series, Special Issue/2014- Information society and sustainable development, 2014.
- 31) A Cimbiz, M. Sari, E. Gulbandilar, "Analysis of skin resistance level on lumbar paravertebral area in low back pain patients", Journal of Qafqaz University, 2(2): 139-145, 2014.
- 32) A. Sari, M. Sari, C. Popescu, Effects of various economic factors on Turkish imports, Economic Insights–Trends and Challenges, Vol.III (LXVI), No. 1/2014 pp.1-9, 2014.
- 33) M. Aydin, M. Sari, Relationship between GDP and export in Turkey, Annals of the Constantin Brancuși University of Targu Jiu, Economy Series, Special Issue/2014- Information Society and Sustainable development, pp. 282-288, 2014.
- 34) I. Dag, D. Irk, M. Sari, "The extended cubic B-spline algorithm for a modified regularized long wave equation", Chinese Physics B (SCI), 22(4) 040207, 2013. (Q3)
- 35) M. Adak, O. Sert, M. Kalay, M. Sari, "Symmetric Teleparallel Gravity: Some exact solutions and spinor couplings", International Journal of Modern Physics A (SCI), 28(32) 1350167 (16 pages), 2013. (Q2)
- 36) G. Gurarслан, H. Karahan, D. Alkaya, M. Sari, and M. Yasar, "Numerical solution of advection-diffusion equation by using a sixth-order compact finite difference method", Mathematical Problems in Engineering (SCI), 7 pages, 2013. (Q2)
- 37) M. Sari, E. Gulbandilar, A. Cimbiz, "Prediction of Low Back Pain with Two Expert Systems", Journal of Medical Systems (SCI), 36, pp.1523-1527, 2012. (Q2)
- 38) M. Sari, G. Gurarслан, A. Zeytinoglu, "High-order finite difference schemes for numerical solutions of the generalized Burgers–Huxley equation", Numerical Methods for Partial Differential Equations (SCI), 27(5), pp.1313-1326, 2012. (Q1)
- 39) M. Sari, G. Gurarслан, "A sixth-order compact finite difference method for the one-dimensional sine-Gordon equation", International Journal for Numerical Methods in Biomedical Engineering (SCI), vol.27 pp.1126-1138, 2011.(Q1)
- 40) G. Gurarслан, M. Sari, "Numerical solutions of linear and nonlinear diffusion equations by a differential quadrature method (DQM)", International Journal for Numerical Methods in Biomedical Engineering (SCI), 27, pp. 69–77, 2011. (Q1)
- 41) M. Sari, G. Gurarслан, A. Zeytinoglu, "High-order finite difference schemes for the solution of the generalized Burgers–Fisher equation", International Journal for Numerical Methods in Biomedical Engineering (SCI), 27, pp. 1296–1308, 2011. (Q1)
- 42) M. Sari, "Differential quadrature solutions of the generalized Burgers–Fisher equation with a strong stability preserving high-order time integration", Mathematical and Computational Applications, pp. 477-486, 2011.
- 43) M. Sari, A. Gunay, G. Gurarслан, "Approximate solutions of linear and nonlinear diffusion equations by using Daftardar-Gejji-Jafari's method", Int. J. Math. Modell. Numer. Optimisation, pp. 376-386, 2011.

- 44) M. Sari, G. Gurarlan, I. Dag, "A compact finite difference method for the solution of the generalized Burgers-Fisher equation", *Numerical Methods for Partial Differential Equations (SCI)*, pp. 25–134, 2010. (Q1)
- 45) A. Canivar, M. Sari, I. Dag, "A Taylor–Galerkin finite element method for the KdV equation using cubic B-splines", *Physica B (SCI)*, pp.3376–3383, 2010. (Q2)
- 46) M. Tekkoyun, M. Sari, "Bi-para-mechanical systems on the bi-Lagrangian manifold", *Physica B (SCI)*, pp. 2390-2393, 2010. (Q2)
- 47) M. Sari, G. Gurarlan, A. Zeytinoglu, "High-order finite difference schemes for solving the advection-diffusion equation", *Mathematical and Computational Applications (SCI)*, 15(3), pp. 449-460, 2010. (Q2)
- 48) B.G. Cetiner, M. Sari, "Tibial motion assessment using artificial neural networks", *Mathematical and Computational Applications (SCI)*, 15(3), pp. 34-44, 2010. (Q2)
- 49) B. G. Cetiner, M. Sari, O. Borat, "A neural network based traffic-flow prediction model", *Mathematical and Computational Applications (SCI)*, 269-278 pp., 2010. (Q2)
- 50) H.M. Aburas, B.G. Cetiner, M. Sari, "Dengue confirmed-cases prediction: A neural network model", *Expert Systems with Applications (SCI)*, 4256–4260 pp., 2010. (Q1)
- 51) M. Sari, G. Gurarlan, "A sixth order compact finite difference scheme to the numerical solutions of Burgers' equation", *Applied Mathematics and Computation (SCI)*, 208 (2), pp. 475-483, 2009. (Q1)
- 52) M. Sari, G. Gurarlan, "Numerical solutions of the generalized Burgers–Huxley equation by a differential quadrature method", *Mathematical Problems in Engineering (SCI)*, 11 pages, 2009. (Q2)
- 53) U. Yucel, M. Sari, "Differential quadrature method (DQM) for a class of singular two-point boundary value problems", *International Journal of Computer Mathematics (SCI)*, 86(3), 465–475 pp., 2009. (Q2)
- 54) M. Sari, "Solution of the porous media equation by a compact finite difference method", *Mathematical Problems in Engineering (SCI)*, 13 pages, 2009. (Q2)
- 55) M. Sari, B.G. Cetiner, "Predicting effect of physical factors on tibial motion using artificial neural networks", *Expert Systems with Applications (SCI)*, 36(6), pp. 9743–9746, 2009. (Q1)
- 56) E. Gulbandilar, A. Cimbiz, M. Sari, H. Ozden, "Relationship between skin resistance level and static balance in type II diabetic subjects", *Diabetes Research and Clinical Practice (SCI)*, 82(3), pp. 335–339, 2008. (Q1)
- 57) M. Sari, O. Mutlu, A. Zeytinoglu, "Effects of human and external factors on traffic accidents", *Petroleum-Gas University of Ploiesti Bulletin (Mathematics-Informatics-Physics Series)*, pp. 9-17, 2009.
- 58) M. Sari, "Differential quadrature method for singularly perturbed two-point boundary value problems", *Journal of Applied Sciences*, 8, pp. 1091-1096, 2008.

- 59) M. Sari, "Relationship between physical factors and tibial motion in healthy subjects: 2D and 3D analysis", *Advances in Therapy (SCI)*, 24, pp. 772-783, 2007. (Q1)
- 60) E.O. Oguz, E.S. Conkur, M. Sari, "SHETEREOM I Simple Windows based software for stereology. Volume and Number Estimations", *Image Anal. Stereol.* pp. 45–50, 2007.
- 61) M. Sari, I. Demir, "Wave modelling through layered media using the BEM", *Journal of Applied Sciences*, 1703-1711 pp., 2006
- 62) A. Cimbiz, U. Cavlak, M. Sari, H. Hallaceli, F. Beydemir, "A new clinical design measuring the vertical axial rotation through tibial shaft resulting from passive knee and subtalar joints rotation in healthy subjects: A reliability study", *Journal of Medical Sciences*, 751–757 pp., 2006.
- 63) M. Sari, "The time domain boundary element method for scalar wave problems", *Pamukkale University Journal of Engineering Sciences*, 9(1), pp. 129-136, 2003.
- 64) M. Sari, I. Demir, "Acoustic wave modelling using two different numerical methods", *Pamukkale University Journal of Engineering Sciences*, 8(2) pp. 211-217, 2002.

A.10b Writing a Book Chapter

1. T. Cosgun, M. Sari, H. Uslu. "A New Approach for the Solution of the Generalized Abel Integral Equation" in: Machado J., Ozdemir N., Baleanu D. (eds) *Numerical Solutions of Realistic Nonlinear Phenomena. Nonlinear Systems and Complexity*, vol 31. Springer, Cham, 2020.
2. A.A. Ahmad, M. Sari, T. Cosgun. "A Medical Modelling Using Multiple Linear Regression" in: Machado J., Ozdemir N., Baleanu D. (eds) *Mathematical Modelling and Optimization of Engineering Problems. Nonlinear Systems and Complexity*, vol 30. Springer, Cham, 2020.
3. A. Zeytinoglu, M. Sari, "Some Difference Algorithms for Nonlinear Klein-Gordon Equations", in: *Lecture Notes in Computer Science book series (LNCS, volume 11189)- Numerical Methods and Applications*, Nikolov Geno, Kolkovska Natalia, Georgiev Krassimir, Eds., Springer, pp.491-498, 2019.
4. M. Sari, T. Olcer, *Burgers Denkleminin bir Kapalı SFY Çözümü için MATLAB Kodunun Üretimi*, Prof. Dr. Önder Göçgün'ün Armağan Kitabı, Cilt 2, 2013 (in Turkish).

A.10d. Chapter in an Encyclopaedia

M. Sari, Fisher's Equation, *Encyclopaedia of Applied and Computational Mathematics*, Springer, 2016.

A.11 Interpreting Book/Book Chapter

M. Sari, "Ayrık Matematik ve Uygulamaları", Turkish translation of "K.H. Rosen, 2012, *Discrete Mathematics and its Applications*", Member of Translation Committee, 2015.

B) National Reviewed Papers

- 1) S. Toprak, E. Nacaroglu, A.C. Koc, M. Sari, U.S. Yildirim and V. Helva, "Christchurch, New Zealand Earthquake Effects on Buried Pipelines in Avonside Area", *Eighth National Conference on Earthquake Engineering*, 11-14 May 2015, Istanbul, Turkey (in Turkish).

- 2) C. Ergin, E.O. Oguz, I. Kaleli, M. Sari, M. Sengül, R. Kutlubay, "Alan tahmini yöntemi ile microsporum canis büyüme dinamiklerinin dört farklı besiyerinde değerlendirilmesi", Turk Mikrobiyol. Cem. Derg., 129-132 pp., 2006 (in Turkish).
- 3) M. Sari, Y.S. Murat, M. Kirabali, "Fuzzy modelling approach and applications", Dumlupinar University Journal of Institute of Sciences, 9(9), pp. 77-92, 2005.
- 4) E.O. Oguz, M. Sari, Morfometri için Tarafsız Stereoloji Neden ve Nasıl? Son İlerlemeler I, Pamukkale Tıp Dergisi, 9, pp. 58-66, 2003 (in Turkish).
- 5) E.O. Oguz, M. Sari, Morfometri için Tarafsız Stereoloji Neden ve Nasıl? Son İlerlemeler II, Pamukkale Tıp Dergisi, 9, pp. 67-76, 2003 (in Turkish).

C) International Proceedings and Posters

- 1) M. Sari, A. Balacescu, "Discrete Algorithms for Black Scholes Option Pricing Economic Model", Business and Applied Economics, 1 November 2018, Belgrade, Serbia.
- 2) M. Sari, **Plenary Speaker**, "Modelling of Nonlinear Behaviour", The Second International Conference on Modelling and Scientific Computing in Mathematical Engineering (MOCASIM2017), 18 April 2017, Marrakesh, Morocco.
- 3) M. Sari, C. Popescu, J. Zahradka, "Comparative Algorithms for the Black-Scholes Option Pricing Model", International Scientific Conference "Information Society and Sustainable Development", 4th edition, 28-29 May 2017, Targu Jiu, Romania.
- 4) M. Sari, C. Popescu, J. Zahradka, "Numerical Behaviours of Some Option Pricing Models", European Economy and Digital Society in the Current Geopolitical Context (EEDS 2017), 16-18 December 2017, Ploiești, Romania.
- 5) S. Toprak, E. Nacaroglu, A.C. Koc, M. Sari, U.S. Yildirim, "Seismic damages in pipelines in the light of preventive maintenance", The 9th European Water Resources Association (EWRA), June 10-13, 2015, Istanbul, Turkey.
- 6) M. Sari, J. Zahradka, E. Dincer, "A Numerical Algorithm For Black Scholes Economic Model of American Option Pricing", Second International Scientific Symposium with theme Information Society and Sustainable Development, 24-25 April 2015, Azuga, Prahova, Romania.
- 7) A. Sari, M. Sari, "Sustainable Development and Green Transport In Australia", Second International Scientific Symposium with theme Information Society and Sustainable Development, 24-25 April 2015, Azuga, Prahova, Romania.
- 8) M. Sari, A. Balacescu, M. Zaharia, "Some Numerical Algorithms for the Black Scholes Economic Model: European Option Pricing Model", Second International Scientific Symposium with theme Information Society and Sustainable Development, 24-25 April 2015, Azuga, Prahova, Romania.
- 9) M. Sari, C. Popescu, E. Dincer, "Numerical Algorithms for Black Scholes Economic Model: American Option Pricing Model", Second International Scientific Symposium with theme Information Society and Sustainable Development, 24-25 April 2015, Azuga, Prahova, Romania.
- 10) M. Sari, M. Zaharia, A. Balacescu, A comparative analysis of labour productivity from the perspective of employment: Romania vs. Turkey, Proceedings of the International Scientific

Conference ECO-TREND: Performance, Competitiveness, Creativity, XIth Edition, November 28-29, 2014, Târgu Jiu, Romania.

- 11) M. Sari, A. Sari, C. Popescu, "Effects of Intermediate Goods, Capital Goods and Consumer Goods on Export and Import of Turkey", 1st International Scientific Symposium with theme Information Society and Sustainable Development, 4-5 April 2014, Ranca, Gorj, Romania.
- 12) M. Aydin, M. Sari, "Relationship between GDP and Export in Turkey", 1st International Scientific Symposium with theme Information Society and Sustainable Development, 4-5 April 2014, Ranca, Gorj, Romania.
- 13) S.S. Orhan, M. Sari, "Methodological Consensus in Mainstream Economics: DSGE Models, Taylor Rule", 1st International Scientific Symposium with theme Information Society and Sustainable Development, 4-5 April 2014, Ranca, Gorj, Romania.
- 14) F.F.Altinoglu, A. Aydin, M. Sari, "Detecting of 3D crust model and lineaments of Denizli graben by using gravity data" The 20th International Geophysical Congress and Exhibition of Turkey, 25-27 November 2013, Antalya, Turkey
- 15) M. Ivrendi, M. Sari, The Effects of Monetary Policy Shocks on Macroeconomic Variables in Turkey and Romania, First International Workshop on "Education and Sustainable Development Within EU'28", November 8, 2013, Ploiești, Romania.
- 16) A. Sari, M. Sari, Effects of Exchange Rate Changes and Periods of Crisis to Imports of Turkey: the Period of 1986-2013, First International Workshop on "Education and Sustainable Development Within EU'28", November 8, 2013, Ploiești, Romania.
- 17) S.S. Orhan, M. Sari, Modern Macroeconomic Consensus in the Last Three Decades, First International Workshop on "Education and Sustainable Development Within EU'28", November 8, 2013, Ploiești, Romania.
- 18) M. Sari, "Wave Modelling Using the Boundary Element Method", International Geoscience Workshop of Korea, Azerbaijan and Turkey, 05-07 November 2012, Denizli, Turkey.
- 19) M. Sari, I. Dag, "Numerical modelling of systems of partial differential equations by a high-order compact finite difference method", Fourth International Conference on Mathematical Sciences, 11-14 March, 2012, Al-Ain, UAE.
- 20) I. Dag, D. Irk, M. Sari, "The extended cubic B-spline algorithm for modified regularized long wave equation", Fourth International Conference on Mathematical Sciences, 11-14 March, 2012, Al-Ain, UAE.
- 21) M. Sari, "2D Wave Propagation through Layered Media using the Boundary Element Method", International Workshop on Computational Methods in Mathematics, **Invited-nominated Speaker**, Islamabad, 7-9 May 2012, Pakistan.
- 22) M. Sari, S.G. Kangalli, U. Uyar, "Ortalama varyansa dayalı Markowitz modeli ile optimal portföy seçimine nümerik bir yaklaşım", International Symposium on Econometrics Statistics and Operations Research, May 26-29, 2011, Denizli, Turkey.
- 23) B.G. Cetiner, M. Sari, H.M. Aburas, 5th International Advanced Technologies Symposium IATS'09 in "5th International Advanced Technologies Symposium IATS'09", "Recognition of

dengue disease patterns using artificial neural networks", 359-362, May 13-15, 2009, Karabuk, Turkey.

- 24) M. Sari, R.J. Wiltshire, R.W. Williams, "Two dimensional scalar waves through layered media using the time domain direct BEM", IMA Second International Conference on Boundary Integral Methods: Theory and Applications, September 2000, Bristol, UK.

D) Other Publications/Talks

- 1) M. Sari, Medical Modelling, Pamukkale University, Faculty of Medicine, 17 December 2014, Denizli, Turkey.
- 2) M. Sari, Economical Modelling, 10-14 November 2014, University of Pardubice, Pardubice, Czech Republic.
- 3) M. Sari, University of Pardubice, Modelling, 10-14 November 2014, Pardubice, Czech Republic.
- 4) M. Sari, Ningbo University, Seismic Wave Modelling Using the BEM, 5-13 September 2014, Ningbo, China.
- 5) M. Sari, Ningbo University, Economical Modelling, 5-13 September 2014, Ningbo, China.
- 6) T. Koparan, M. Sari, "Effects of Boundary Conditions on Scalar Wave Modelling by Using Finite Difference Method", 13th Mathematics Symposium, 15-17 May 2014, Karabuk, Turkey (in Turkish).
- 7) M. Sari, "Mathematical Modelling of Seismic Waves using the BEM", Université Toulouse III-Paul Sabatier, 22-23 January 2014, Toulouse, France.
- 8) M. Sari, "Seismic Wave Modelling", Pamukkale University, 16 Ocak 2014, Denizli, Turkey (in Turkish).
- 9) M. Sari, "Seismic Wave Modelling", Boğaziçi (Bosphorus) University, 10 January 2014, Istanbul, Turkey (in Turkish).
- 10) M. Sari, "Seismic Wave Modelling", Yildiz Technical University, 19 December 2013, Istanbul, Turkey (in Turkish).
- 11) M. Sari, "Numerical Modelling of Seismic Waves", Dumlupinar University, 26 April 2013, Kutahya, Turkey (in Turkish).
- 12) M. Sari, "Mathematics for Children", Invited Speaker, June 2012, Denizli, Turkey (in Turkish).
- 13) M. Sari, "Mathematical Modelling of Seismic Waves", Erzincan University, 23 November 2012, Erzincan, Turkey.
- 14) M. Sari, **Invited Speaker**, "Artificial Intelligence Modelling and Rehabilitation", XIII. Symposium on Advances in Physiotherapy, 7-9 October 2010, Antakya, Hatay, (in Turkish).
- 15) M. Sari, "Scalar Waves through Layered Media using the Boundary Element Method", Workshop on Differential Equations and Applications, Pamukkale University, 2008, Denizli, Turkey.
- 16) M. Sari, "Basic Biomechanical Principles of the Human Motion", Clinical and Cultural Exchange Program between **Pamukkale University** and **Osnabrück University**, 2007, Denizli.

- 17) M. Sari, “Applied Mathematics and Rehabilitation”, **Invited Speaker**, Dumlupinar University, II. Conventional Physiotherapy Seminars, 4-6 May 2005, Kutahya, Turkey (in Turkish).

Membership of Scientific/Organizing Committee

- 1) 24-26 June 2020, International Conference on Applied Mathematics in Engineering (ICAME'20) Balikesir, Turkey.
- 2) 10-11 May 2019, International Conference VIth Edition, Information Society and Sustainable Development, Targu Jiu, Gorj, Romania.
- 3) 27-29 June 2018, International Conference on Applied Mathematics in Engineering (ICAME'18) Burhaniye, Turkey.
- 4) 17-20 April 2017, The Second International Conference on Modelling and Scientific Computing in Mathematical Engineering (MOCASIM2017), Marrakesh, Morocco.
- 5) 14-16 May 2015, 14th Mathematics Symposium, Nigde University, Nigde, Turkey
- 6) 24-25 April 2015, International Scientific Symposium 2st Edition, Information Society and Sustainable Development, Azuga, Romania.
- 7) 15-17 May 2014, 13th Mathematics Symposium, Karabuk University, Karabuk, Turkey.
- 8) 4-5 April 2014, International Scientific Symposium Ist Edition, Information Society and Sustainable Development, Ranca, Gorj, Romania.
- 9) 23-25 May 2013, 12th Mathematics Symposium, Hacettepe University, Ankara, Turkey.
- 10) 18-20 April, 2008, Workshop on Differential Equations and Applications, Pamukkale University, Denizli.

Projects

- 1) A TUBITAK project (to be continued)
- 2) Finite Difference Solutions of Fundamental Model Problems in Fluid Mechanics, Pamukkale University BAP, 2010FBE004, Project Director, 2010.
- 3) Numerical Modelling of Noise Pollution in a Residential Area, Pamukkale University BAP, 2006 FEF007, Project Director, 2008.
- 4) Solutions of Boundary Value Problems in Sturm-Liouville Form by Differential Quadrature Method, Pamukkale University BAP, 2006FEF008, Project Researcher, 2006.

Prizes

1. YÖK-International Graduate Grants for M.Sc. and Ph.D.
2. Many TUBITAK publication encouragement awards

International Journals Refereeing (Lately)

- Sains Malaysiana
- Medical and Biological Engineering and Computing
- Journal of Sports Science and Medicine
- IET Intelligent Transport Systems
- Mathematical Problems in Engineering

- International Journal for Numerical Methods in Fluids
- Numerical Methods for Partial Differential Equations
- Neural Computing and Applications
- International Journal of Computer Mathematics
- Applied Mathematical Modelling
- Boundary Value Problems
- Applicable Analysis
- ANZIAM Journal
- Expert Systems
- Computer Physics Communications
- Applied Mathematics and Computation
- Computer Methods and Programs in Biomedicine
- Computer Applications in Engineering Education
- African Journal of Agricultural Research
- International Journal of Nonlinear Science
- Journal of Computational Science
- Bulletin of the Malaysian Mathematical Sciences Society
- Engineering Applications of Artificial Intelligence
- Advances in Engineering Software
- SDU Journal of Science
- International Journal of Modern Mathematical Sciences

Editor

- Computational and Mathematical Methods in Medicine
- Journal of Applied Sciences
- Singaporean Journal of Scientific Research
- Journal of Artificial Intelligence
- Journal of New Theory
- Journal of Applied Computer Science & Mathematics

Project Refereeing

- TUBITAK project refereeing (2012)
- TUBITAK project refereeing (2015, 2)
- TUBITAK project refereeing (2016, 2)
- TUBITAK project refereeing (2018, 2)
- TUBITAK project refereeing (2019, 1)

Universities Attended for Conference/Seminar/Lecture under various programs

- University of South Wales, UK, 1994
- Bielefeld University, Germany, 2007
- Petroleum-Gas University of Ploiesti, Romania, 2009, 2010, 2013
- Pardubice University, Czech Republic, 2012, 2014
- Université Toulouse III - Paul Sabatier, France, 2014

- Czech Technical University in Prague, Czech Republic, 2014
- Ningbo University, 3-13 September 2014, Ningbo, China.
- EAIE Prague, The 26th Annual EAIE Conference, “Stepping into a New Era”, 16-19 September 2014, Czech Republic.

In recent years some undergraduate/graduate courses

- Advanced Computer Programming
 - Partial Differential Equations and Applications
 - Numerical Analysis
 - Differential Equations
 - Mathematical Economics
 - Applied Numerical Methods
 - Boundary Element Method
 - Econometric and Statistical Software
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SKILLS AND ABILITIES

Computer

- Programming Skills : MATLAB, MAPLE, Visual Basic, FORTRAN, C#, SPSS, SURFER

Languages

- Turkish – Native
 - English – Advanced Level
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PERSONAL CHARACTERISTICS

- Open to communication
- Compatible to do academic collaboration
- Attempts to create analytical thinking
- Interested in international affairs