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PERSONEL DATA

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EDUCATION

B.S. 1997-2002 Kocaeli University, Department of Mathematics, Turkey

M.S. 2002-2005 Kocaeli University, Department of Mathematics, Applied Mathematics, Turkey

Ph.D. 2005- Kocaeli University, Department of Mathematics, Applied Mathematics, Turkey

PROFESSIONAL ACTIVITIES

- 2003-2007** Kocaeli University, Applied Mathematical Sciences Research Center, Senior Res
- 2007** Kocaeli University, Department of Mathematics, Senior Res

PROJECTS

National Projects

1. Computational Diagnostics of Materials, 2002, Research Fund of Kocaeli University, Turkey
- 2 Mathematics Olympiads for Kocaeli Elementary Schools Kocaeli Governorship- Applied Mathematical Sciences Research Center, Kocaeli University, May 2004, Kocaeli, Turkey.
- 3 The Population Model and Projectional Database for Kocaeli Region, November, 2004, Kocaeli, Turkey.
- 4 Numerical Modeling for Differential Equations with Monotone Operators, September 2006, Research Fund of Kocaeli University, Turkey
5. Monotonicity of Input-Output Mappings in Inverse Parabolic Problems, 2007-2009, Research Fund of Kocaeli University, Turkey

International Projects

- 1 Development of a Unified Approach and Software for Numerically Solving Inverse and Optimization Problems, September 2006, INTAS (The International Association formed by the European Community, for the Promotion of Co-operation with Scientists from the New Independent States of the Former Soviet Union)

INTERNATIONAL CONFERENCES

1. An analysis of the adjoint problem approach for parabolic inverse source problem with measured Dirichlet data, The Third International Conference "Inverse Problems: Modeling and Simulation", May 29-June 02, 2006, Fethiye, Turkey.
2. Differentiability and Lipschitz property of the cost function related to parabolic optimal control problems, International Conference, Pioneers Of Bulgarian Mathematics, July 8-10, 2006, Sofia, Bulgaria.
3. An analysis of the cost functional for parabolic inverse source problem, The International Conference on Modeling and Simulation (MS2006), August 28-30 2006, Konya, Turkey.
4. An adjoint problem approach for coefficient identification in a linear hyperbolic problem, The ISAAC (International Society for Analysis, its Applications and Computation) , August 13-18 , 2007, Ankara, Turkey

RESEARCH PUBLICATIONS

Inverse Problems

1. (with A. Hasanov and A. Demir) Monotonicity of input-output mappings in inverse coefficient and source problems for parabolic equations, the Journal of Mathematical Analysis and Applications, 335 -2 (2007), 1434-1451.
2. (with A. Hasanoglu) Determination of unknown coefficient in a nonlinear elliptic problem related to the elasto-plastic torsion of a bar, IMA Journal of Applied Mathematics, (<http://imamat.oxfordjournals.org/cgi/content/abstract/hxm056v1>).
3. (with M. Kaya) Differentiability and Lipschitz property of the cost function related to parabolic inverse problems, IMA Journal of Applied Mathematics (Submitted).
4. Monotonicity and Lipschitz continuity of input-output mappings in inverse coefficient problems for linear parabolic equations, Applicable Analysis (Submitted).

Numerical Methods

1. (with S. Pamuk) The Method of Lines for the Numerical Solution of a Mathematical Model for Capillary Formation: The Role of Endothelial Cells in the Capillary, Applied Mathematics and Computation, 186-1 (2007), 831-835..
2. (with S. Pamuk) The Method of Lines for the Numerical Solution of a Mathematical Model for Capillary Formation: The Role of Tumor Angiogenic Factor in the Extra-Cellular Matrix, Applied Mathematics and Computation, 186-1 (2007), 891-897.

Mathematical Modeling

1. (with S. Hasanoglu) Relationship between current response and time in ion transport problem including diffusion and convection. 2. Numerical approach, the Journal of Mathematical Chemistry (accepted for publication).

AWARDS

1. Highest undergraduate student award, Kocaeli University, 2002
2. The Third International Conference "Inverse Problems: Modeling and Simulation" Award, 2006

MEMBERSHIP in INTERNATIONAL PROGRAM/ORGANIZING COMMITTEES

1. The Third International Conference "Inverse Problems: Modeling and Simulation" (Local Organizing Committees), Fethiye - Turkey, May 29 - June 02, 2006.
2. The Fourth International Conference "Inverse Problems: Modeling and Simulation" (International Organizing Committees), Fethiye - Turkey, May 26-30, 2008.
3. EUROPT - The Continuous Optimization Working Group of EURO.