

Dr. Bulent Yesilata

Professor, Harran University, Engineering Faculty,
Mechanical Engineering Dept., Sanliurfa, Turkey



EDUCATION

Ph.D.	Mechanical Engineering, January 1999 Lehigh University, USA
MS & BS	Mechanical Engineering, 1990 & 1987 Firat University, Turkey

EMPLOYMENT

1999 – Present	Harran University, Sanliurfa, Turkey/ Faculty Member, ME Department
2002 - 2003	Massachusetts Institute of Technology, Cambridge, MA, USA Visiting Scientist, Hatsopoulos Microfluid Lab.
1994 - 1999	Lehigh University, Bethlehem, PA, USA Project Assistant, Teaching Assistant and Part-time Supervisor:
1988 – 1993	Firat University, Elazig Turkey Research Assistant, Teaching Assistant

RESEARCH INTERESTS

Sustainable clean energy technologies, regional green growth strategies, Energy-efficient building materials and technologies, thermo-economical analysis and optimization of energy systems, photovoltaic (PV) powered applications, solar irrigation, transport phenomena of PEM fuel cells, nonlinear dynamics of energy and thermo-fluid systems, rheology of complex fluids.

SELECTED PUBLICATIONS

1. Nonlinear shear and extensional flow dynamics of wormlike surfactant solutions, B Yesilata, C Clasen, GH McKinley, *Journal of Non-Newtonian Fluid Mechanics* 133 (2), 73-90, 90, 2006.
2. Thermal insulation enhancement in concretes by adding waste PET and rubber pieces, B Yesilata, Y Isiker, P Turgut, *Construction and Building Materials* 23 (5), 1878-1882, 78, 2009.
3. Physico-mechanical and thermal performances of newly developed rubber-added bricks, P Turgut, B Yesilata, *Energy and Buildings* 40 (5), 679-688, 77, 2008.
4. New approaches on the optimization of directly coupled PV pumping systems, ZA Firatoglu, B Yesilata, *Solar Energy* 77 (1), 81-93, 71, 2004.
5. A simple dynamic measurement technique for comparing thermal insulation performances of anisotropic building materials, B Yesilata, P Turgut, *Energy and Buildings* 39 (9), 1027-1034, 42, 2007.

6. Instabilities in viscoelastic flow through an axisymmetric sudden contraction, B Yesilata, A Öztekin, S Neti, *Journal of Non-Newtonian Fluid Mechanics* 85 (1), 35-62, 28, 1999.
7. Nonlinear flow and heat transfer dynamics of impinging jets onto slightly-curved surfaces, H Eren, B Yesilata, N Celik, *Applied Thermal Engineering* 27 (14), 2600-2608, 20, 2007.
8. Effect of Viscous Dissipation on Polymeric Flows Between Two Rotating Coaxial Parallel Discs, B Yesilata, *International communications in heat and mass transfer* 29 (5), 589-600, 18, 2002.
9. Experimental study on thermal behavior of a building structure using rubberized exterior-walls, B Yesilata, H Bulut, P Turgut, *Energy and Buildings* 43 (2), 393-399, 13, 2011.
10. A simple moisture transfer model for drying of sliced foods, B Yesilata, MA Aktacir, *Applied Thermal Engineering* 29 (4), 748-752, 13, 2009.