Kasım Toprak

IYTE, Department of Mechanical Engineering 35430 Urla/İzmir, Türkiye **☎** +90 232 750 6761 ⋈ kasimtoprak@iyte.edu.tr m www.linkedin.com/in/kasimtoprak



Education

2010 - 2014 Doctor of Engineering (PhD) in Mechanical Engineering, Rice University, USA.

2008 - 2010 Master of Science in Mechanical Engineering, Rice University, USA.

2002 - 2006 Bachelor of Science in Mechanical Engineering, Zonguldak Karaelmas University, Türkiye.

Professional Experience

2016 - Assistant Professor, İzmir Institute of Technology, Department of Mechanical Engineering, ongoing Türkiye.

2014 - 2016 Lecturer, İzmir Institute of Technology, Department of Mechanical Engineering, Türkiye.

Skills

Softwares C, C++, Python, Matlab, MPI, LAMMPS, GROMACS, ANSYS, Simcenter Amesim, LaTeX.

Research Interests

Thermal Analyzes of Nanoscaled Materials.

HVAC Systems and Energy Efficiency.

Thermal Energy Storage Systems.

Renewable Energy and Hybrid Systems.

Project grants

- 2019 Izmir Institute of Technology Scientific Research Project (IZTECH-BAP), Türkiye. Investigation of thermal properties of graphene-metal composites material.
- 2017 The Scientific and Technological Research Council of Türkiye (TÜBİTAK), Türkiye. Numerical and Experimental Investigation of Thermal Conductivity of Graphene Coated Metal.
- 2017 Izmir Institute of Technology Scientific Research Project (IZTECH-BAP), Türkiye. Heat Transfer Analysis of Alumina-Boron Carbide-Aluminun System.
- 2016 Izmir Institute of Technology Scientific Research Project (IZTECH-BAP), Türkiye. Coaxial Carbon nanotube - calculation of thermal conductivity of copper nanowire by molecular dynamics simulation.

Publications

https://orcid.org/0000-0002-0043-2941.

Master's Thesis direct supervision

- #1, Ahmet Berk Yılmaz, Izmir Institute of Technology Department of Energy Engineering, "Numerical and Experimental Investigation of Thermal Performance of Graphene Reinforced Aluminium", 2020.
- #2, Gizem Ersavaş, Izmir Institute of Technology Department of Energy Engineering, "Thermal Performance of Graphene Coating on Copper", 2019.
- #3, Kiswendsida Elias Ouedraogo, Izmir Institute of Technology Department of Energy Engineering, "Theoretical performance optimization of solar absorption chiller coupled to underground cooling tower", 2018.
- #4, Mustafa Dilşen, Izmir Institute of Technology Department of Energy Engineering, "Investigation of the rotor speed impact on the efficiency of rotary heat recovery ventilation devices", 2018.

Courses

Taught: Numerical Methods in Mechanical Engineering, HVAC System Design, Engineering Design, Refrigeration, Numerical Methods in Engineering, Fluid Mechanics, Thermodynamics, Applied Mathematics for Engineers, Basic Computer Science and Programming, (Izmir Institute of Technology).

Asistant:

Thermal Systems Design, Convective Heat Transfer, Heat Transfer, Fluid Mechanics, (Rice University).

Languages

English, Turkish

(KASIM TOPRAK)

Place: İzmir, Türkiye Date: 23rd March, 2024