

International Journal of Thermodynamics

Editor-in-Chief

L. Kuddusi

Honorary Editors

A. Bejan

M. J. Moran

J. Szargut

G. Tsatsaronis

A. Valero

M. R. von Spakovsky

Abstracting and Indexing:

Chemical Abstracts Services, Copernicus, DOAJ, EBSCO, Emerging Sources Citation Index, Engineering Index, Google Scholar, Scopus, and ULAKBIM



***International Centre for
Applied Thermodynamics***

Editor-in-Chief

Prof. Dr. Lütfullah KUDDUSİ

Associate Editor-in-Chief

Assoc. Prof. Dr. Patrice ESTELLÉ

Prof. Dr. Enrico SCIUBBA

Associate Editor

Prof. Dr. Ali KOSAR

Prof. Dr. Rahul TEVATIA

Prof. Dr. Derya Burcu ÖZKAN

Prof. Dr. Mustafa ÖZDEMİR

Prof. Dr. Ahmet DURMAYAZ

Assoc. Prof. Dr. Onur TAYLAN

Prof. Dr. Mehmet ARİK

Prof. Dr. Ayşegül ABUŞOĞLU

Assoc. Prof. Dr. Ersin SAYAR

Prof. Dr. Hakan Fehmi ÖZTOP

Assoc. Prof. Dr. Silvio De Oliveira JUNIOR

Prof. Dr. G. Reza VAKİLİ-NEZHAAD

Prof. Dr. Bayram ŞAHİN

Editorial Board

Prof. Dr. Yasar DEMİREL

Prof. Dr. Lütfullah KUDDUSİ

Prof. Dr. Ahmet DURMAYAZ

Prof. Dr. Derya Burcu ÖZKAN

Prof. Dr. Mustafa ÖZDEMİR

Prof. Dr. Ali KOSAR

Assoc. Prof. Dr. Ersin SAYAR

Prof. Dr. Mehmet ARİK

Assoc. Prof. Dr. Abdussamet SUBASI

Daniel FAVRAT

Francois MARECHAL

Prof. Silvia Azucena NEBRA

Luis SERRA

Assoc. Prof. Dr. Onur TAYLAN

Rahul TEVATIA

Prof. Dr. Ayşegül ABUŞOĞLU

Vittorio VERDA

Gian Paolo BERETTA

Abel HERNANDEZ-GUERRERO

Nilufer EGRİCAN

Dr. Sean WRIGHT

Prof. Dr. Hakan Fehmi ÖZTOP

Assoc. Prof. Dr. Silvio De Oliveria JUNIOR

Prof. Dr. Enrico SCIUBBA

Prof. Dr. G. Reza VAKİLİ-NEZHAAD

Prof. Dr. Bayram ŞAHİN

Publishing Editor

Assoc. Prof. Dr. Abdussamet SUBASI

Assist Prof. Dr. Mustafa Yasin GÖKASLAN

Res. Assist. Ali Murat BİNARK

Language Editor

Assoc. Prof. Dr. Abdussamet SUBASI

Journal Contacts

Editor-in-Chief

Prof. Dr. Lütfullah Kuddusi

ISTANBUL TECHNICAL UNIVERSITY

kuddusi@itu.edu.tr

+902122931300/2452

Department of Mechanical Engineering

Istanbul Technical University

Gumussuyu, 34437 Istanbul Turkey

Volume: 26

Issue: 3

Web: <https://dergipark.org.tr/tr/pub/ijot>

International Journal of Thermodynamics (IJoT)

ISSN:1301-9724 / e-ISSN:2146-1511

CONTENTS	
<u>Research Article</u>	
1. Comparison Of The Electricity Generation Potentials Of Solar ORC Designed With Different Fluids Depending On Instantaneous Solar Radiation In Four Districts Of Türkiye	1-14
Serhat Yıldırım, Sadık Ata, Hüseyin Kurt, Ali Kahraman	
<u>Research Article</u>	
2. Performance Investigation of Ejector Assisted Power Cooling Absorption Cycle	15-24
Billal Mebarki	
<u>Research Article</u>	
3. Performances Investigation of the Eco-friendly Refrigerant R13I1 used as Working Fluid in the Ejector-Expansion Refrigeration Cycle	25-35
Youcef Maalem, Youcef Tamene, Hakim Madani	
<u>Research Article</u>	
4. Calculation of the Phase Diagrams (T – X and T – P) and the Thermodynamic Quantities for the Solid – Liquid Equilibria in n-tridecane	37-45
Ozlem Tari, Hamit Yurtseven	
<u>Review Article</u>	
5. Energy Structure Theory: A General Unified Thermodynamics Theory	47-62
Saeed Shahsavari, Seyed Mohammad Ali Boutorabi	