

Name

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## Short Biography

Krastin Yordanov is an Associate Professor of Industrial Heat Engineering at the Technical University - Varna, Bulgaria. He received a bachelor's degree in 2009 and a master's degree in 2011 at the Technical University - Varna in Thermal Engineering. He defended his doctoral degree in theoretical thermal engineering at the same institution, graduating in 2017. Since 2013, he has been appointed as an assistant in the Department of Thermal Engineering at the Faculty of Shipbuilding at the Technical University - Varna, and in 2018 he was appointed as the main assistant. Since 2023, he has been the deputy dean of the Shipbuilding Faculty. His practical, research and teaching experience covers a wide range of areas in various industries including materials engineering, porous materials, gasification, combustion, heat and mass transfer, thermodynamics, numerical modelling, application of phase change materials, renewable energy and energy efficiency. Dr. Yordanov has undergone specialized training in refrigeration, air conditioning and fuel technologies, materials science, energy efficiency and renewable energy in Bulgaria, Greece and Romania. He has also contributed as a guest lecturer at Constantin Brancusi University in Tăgău, Romania. To date, Dr. Yordanov is the author of more than 40 scientific publications, more than 20 of which are indexed in large databases such as Scopus, Web of Science, etc.

## **Research Keywords**

Combustion Thermodynamics Renewable energy (wind and solar energy)

Energy Efficiency and Optimisation Refrigerating engineering

CFD (Computational Fluid Dynamics) HVAC (Heating, Ventilation and Air Conditioning)

Numerical modelling



Conference Paper  An analysis of natural refrigerants in modern heat pump systems  01 August 2025
IOP Conference Series: Earth and Environmental Science
Journal Article Influence of Limestone Dust on PV Panel Efficiency in a Small Solar Park in Bulgaria 09 January 2025 Eng
Journal Article  Consumer preferences for solid biomass fuels for energy purposes  16 November 2024  International Journal of Renewable Energy Development
Journal Article  NUMERICAL SIMULATION OF DOUBLE SKIN FACADES IN WINTER CLIMATES  06 November 2024  Journal of Chemical Technology and Metallurgy
Other  Experimental study into the effect of the addition of fuels from renewable sources on the thermal state of body parts in spark ignition engines  01 January 2024
Other  Methodology for studying the thermal state of engine body parts  01 January 2023  AIP Conference Proceedings
Conference Paper  Electronic measuring system design for photovoltaic panels analysis  22 November 2021  E3S Web of Conferences
Conference Paper  Study of regime parameters of the fermenter in the production of biogas from animal liquid waste materials  12 July 2021
Journal Article

## A Comparative Thermal Analysis of Walls Composed of Traditional and Alternative Building Materials

01 December 2020

Civil and Environmental Engineering

Conference Paper

A study of the thermal properties of an alternative straw-containing building material

18 November 2020

Conference Paper

Electronic equipment measuring device for heat quantity through a flat wall

18 November 2020

Conference Paper

An Analysis of Energy Resources in Bulgaria and Romania

01 June 2020

Journal Article

**Application of Raster to Vector Conversion in Power Electronics Thermal Infrared Images** 

27 May 2020

TEM Journal

Journal Article

**Precision of Infrared Cameras in Imaging Power Electronics Elements** 

30 November 2019

TEM Journal

Conference Paper

Stiffness design of machine tools structures by topology management optimization approach

01 October 2019

IOP Conference Series: Materials Science and Engineering

Conference Paper

Comparative analysis of the study of microclimate parameters in wooden houses in North-

Eastern Bulgaria

01 September 2019

IOP Conference Series: Materials Science and Engineering

Conference Paper

Experimental study of heat pump type air-water for heating system performance

20 August 2019

## E3S Web of Conferences

Conference Paper

Testing and clearing the high temperature module error from 0 to 1250°C for measurement with 16 K-type thermocouples

01 June 2018

**Book Chapter** 

Determination of the Temperature of Cathode Unit of Indirect Plasma Burner Through a Computer Simulation Model

30 September 2017



Journal Article

Determining the Properties and Structure of Welded Copper Plates and Establishing their Connection with the Temperature Field Distribution in the Studied Zones

07 July 2015

Advanced Materials Research