

**ATE  
HEFAT  
2021**



Heat Transfer Fluid Mechanics  
and Thermodynamics  
Applied Thermal Engineering  
**VIRTUAL CONFERENCE**  
26-28 July 2021

# CERTIFICATE

OF

## ORAL PRESENTATION

AWARDED TO

**Toshio Tagawa**

**FOR PRESENTING**

**PERIODIC DISTURBANCES OF NATURAL CONVECTION IN AN ANNULAR  
ENCLOSURE FILLED WITH A LOW-PRANDTL-NUMBER FLUID**

Takuya Masuda and Toshio Tagawa (Tokyo Metropolitan University, Japan)

AT

**THE 15<sup>th</sup> INTERNATIONAL CONFERENCE ON HEAT TRANSFER, FLUID  
MECHANICS AND THERMODYNAMICS (HEFAT) AND EDITORIAL  
BOARD OF APPLIED THERMAL ENGINEERING (ATE)**

A handwritten signature in black ink, appearing to read "J.P. Meyer", is positioned above the printed name.

Prof. J.P. Meyer  
ATE-HEFAT 2021 | Conference Chair  
Head of Mechanical and Aeronautical Engineering,  
Faculty of Engineering, Built Environment & IT  
University of Pretoria

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**SESSION CHAIR**

AWARDED TO

**Toshio Tagawa**

**FOR CHAIRING**

**BOILING 1**

AT

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**BOILING 3**

AT

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