

**ATE  
HEFAT  
2021**



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

# CERTIFICATE

OF

## ORAL PRESENTATION

AWARDED TO

**WAJIHA TASNIM**

**FOR PRESENTING**

**EXPERIMENTAL ANALYSIS ON VISCOSITY AND RHEOLOGICAL BEHAVIOUR OF  
PVP DISPERSANT APPLIED WATER-ETHYLENE GLYCOL (60:40) BASED TIO<sub>2</sub>-  
AL<sub>2</sub>O<sub>3</sub> (80:20) HYBRID NANOFLUIDS**

Wajiha Urmi and Ts Dr Md Mustafizur Rahman (University Malaysia Pahang, Malaysia)

AT

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

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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## ORAL PRESENTATION

AWARDED TO

**WAJIHA TASNIM**

**FOR PRESENTING**

**EXPERIMENTAL INVESTIGATION ON THE THERMAL BEHAVIOUR AND THE  
EFFECT OF SURFACTANT ON 40% EG BASED TiO<sub>2</sub>-AL<sub>2</sub>O<sub>3</sub> HYBRID NANOFLUIDS**

Wajiha Urmi and Ts Dr Md Mustafizur Rahman (University Malaysia Pahang, Malaysia)

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 be "J.P. Meyer", written in a cursive style.

Prof. J.P. Meyer  
ATE-HEFAT 2021 | Conference Chair  
Head of Mechanical and Aeronautical Engineering,  
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## ORAL PRESENTATION

AWARDED TO

**WAJIHA TASNIM**

**FOR PRESENTING**

**IMPACT ASSESSMENT OF THERMOPHYSICAL PROPERTIES BASED ON  
SURFACTANT AND STABILITY OF WATER-EG (60:40) BASED TIO<sub>2</sub>-AL<sub>2</sub>O<sub>3</sub> (50:50)  
HYBRID NANOFLUID**

Wajiha Urmi and Ts Dr Md Mustafizur Rahman (University Malaysia Pahang, Malaysia)

AT

**THE 15<sup>th</sup> INTERNATIONAL CONFERENCE ON HEAT TRANSFER, FLUID  
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