

**6** – **A** INTERNATIONAL CONFERENCE ON AUTOMOTIVE, MANUFACTURING, AND MECHANICAL ENGINEERING



### **CALL FOR** PAPER

The decrease of natural energy reserves encourages researchers to search for alternative energy and more efficient equipment and machines. As an effort to contribute in distributing research outcomes, the Mechanical Engineering (ME) Department of Petra Christian University conducted national conferences in the past 12 years. To reach a broader audience, starting from 2018 the ME Department conducts an international conference, an event that is expected to allow local researchers to interact with their overseas fellows. In addition, this conference is designed to encourage local authors to publish their research works in reputable journals and proceedings.



All accepted papers will be published in MATEC Web of Conferences (Scopusindexed proceedings). Selected Papers will be offered to be published in Scopus Indexed Journal.

Venue : Holiday Inn Resort Baruna Bali JI Wana Segara no 33, Tuban, Kuta, Kab. Badung, Bali - 80361 (0361)755577

#### TOPICS OF THE CONFERENCE

1 Automotive Engineering :

- Powertrain & Emission
  Fuels & Lubricants
  Noise & Vibration
  Vehicle Dynamics
  Active & Passive Safety
  Electric & Hybrid Vehicles
- Autonomous & Connected Vehicles

#### 3 Manufacturing :

- Manufacturing
  & Production Processes
  CAD/CAM
- Manufacturing System & Simulation
- Manufacturing System
  Manufacturing Robots
  Product Design
  Materials Behaviour
  Materials Forming
  Composite Materials
  Rapid Prototyping







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Mechanical Vibration :

#### 4 Energy Conversion :

- Aerodynamics
  Heat & Mass Transfer
  Internal Combustion Engines
  New & Renewable Energy
  Energy Engineering & Management
  Computational Fluid Dynamic

- Fuels & Combustion · HVAC



### MAY 11" 2018 -EXTENDED ABSTRACT SUBMISSION DEADLINE-

amme.petra.ac.id

### MAY 25™- AUGUST 06™2018

EARLY BIRD REGISTRATION DEADLINE

#### JULY 11™ 2018 JULY 25™ 2018 FULL PAPER SUBMISSION DEADLINE

AUGUST 10<sup>TH</sup> 2018 NOTIFICATION OF FULL PAPER DECISION

\*Rolling process, paper decision will be given within three weeks after submission.

## SEPT 26<sup>™</sup>-28<sup>™</sup>2018 CONFERENC **BALI, INDONESIA**

#### **KEYNOTE SPEECHES**





Professor Béla Pukánszky Budapest University of Technology and Economics



National Taiwan University of Science and Technology

#### Co-Host Uni







Distinguished Professor Emeritus Walter Bradley Baylor University



Distinguished Professor Kung-Jeng Wang Professor Sunaryo University of Indonesia





The 1<sup>st</sup> International Conference on Automotive, Manufacturing, and Mechanical Engineering

SEPTEMBER 26 - 28, 2018 BALI, INDONESIA









# **Preface IC-AMME**

The 1<sup>st</sup> International Conference on Automotive, Manufacturing, and Mechanical Engineering (IC-AMME 2018) has been organized by Mechanical Engineering Department and Continuing Education Center, Petra Christian University, Surabaya, Indonesia. This event was held on September 26–28, 2018 in Bali, Indonesia. As an effort to contribute in distributing research outcomes especially to search for alternative energy and more efficient equipment and machines.

IC-AMME 2018 presented three international honorable keynote speakers from representative countries: 1) Prof. Béla Pukánszky, Budapest University of Technology and Economics, Budapest, Hungary; 2) Prof. Sunaryo, University of Indonesia, Jakarta, Indonesia; and 3) Prof. Walter L. Bradley, Distinguished Professor Emiritus of Mechanical Engineering, Baylor University, Texas, USA (2012), Professor Emeritus of Mechanical Engineering, Texas A&M University, Texas, USA (2000). To reach a broader network of researchers, this event selected local researchers and overseas fellows to share their best research works in this conference. Over 100 representatives from 51 institutions participated in this event, involving more than 80 abstracts submitted. After a rigorous selection process, the Scientific & Editorial Board decided to publish 42 papers in E3S Web of Conferences, an open-access proceedings in environment, energy and earth sciences, managed by EDP Sciences, Paris, and indexed on Scopus, Scimago, Conference Proceedings Citation Index-Science (CPCI-S) of Clarivate Analytics's Web of Science, DOAJ (Directory of Open Access Journals) and the like.

Of 42 selected papers, 27 papers were the result of joint researches between Indonesia and various countries such as Australia, England, Germany, Japan, Lithuania, Malaysia, Nigeria, Republic of China, the Republic of Korea, Republic of Singapore, Sweden, and United States of America. Each of the 42 papers in E3S Web of Conferences was reviewed by at least two experts using the double-blind system. The published papers have passed all necessary improvement requirements in accordance to the Web of Conferences standard, reviewer's comments, SI (*Système International d'Unités*), similarity tests by Turnitin program (with the highest threshold of 20 %), 90 % of references must be at least dated from 15 years, and reflected on Google, as well as editing procedure by professional editors from seven countries (Georgia, India, Indonesia, Latvia, Lithuania, Malaysia, and Sweden).

We would like to express our gratitude to the official committee, scientific & editorial boards, and organizing partners. Special thanks as well to our co-host partners: University of Indonesia, Binus University, Binus ASO School of Engineering, Sebelas Maret University, Tarumanegara University, and *Badan Kerja Sama Teknik Mesin Indonesia* (Indonesian Mechanical Engineering Cooperation Agency) for trusting and supporting this conference.

Finally, we would like to briefly thank all presenters and attendees for their participations to share the wonderful ideas and take creative decision to inspire further research and exchange scientific reason. We hope this time, all papers can be compiled into scientific works as first publication of the 2018 IC-AMME. Lastly, we hope that this conference encourage further research collaboration. Also, everyone should be proud of this result.

Assoc. Prof. Dr. Didik Wahjudi Conference Chair

Editor in Chief: Roy Hendroko Setyobudi (Malang, IDN)

**Board of Editor:** Fandi Dwiputra Suprianto (Surabaya, IDN), Maizirwan Mel (Kuala Lumpur, MYS), Olga Anne (Klaipėda, LTU), Peeyush Soni (Kharagpur, IND), Tsitsino Turkadze (Kutaisi, GEO), Yahya Jani (Kalmar, SWD), and Zane Vincēviča-Gaile (Riga, LVA).

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## **IC-AMME organized by:**



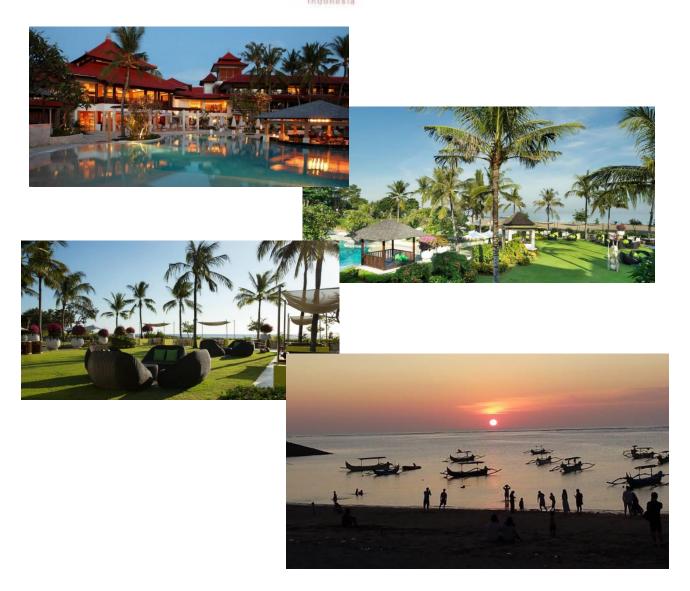


## **Co-Host Universities:**



## **PHOTOS IC-AMME 2018**





Holiday Inn Resort Baruna Bali, Indonesia: IC-AMME 2018 Venue



### Left to Right:

-Roy Hendroko Setyobudi (Editor in Chief)

-Juliana Anggono (Dean of Faculty of Industrial Technology – Petra Christian University)

-Didik Wahjudi (the 1<sup>st</sup> IC-AMME Conference Chair)



## IC-AMME 2018: Opening Ceremony



**Keynote Speakers:** 

- Prof. Dr. Béla Pukánszky
- Prof. Dr. Walter L. Bradley
- Prof. Dr. Sunaryo



Participants of the 1st International Conference on Automotive, Manufacturing, and Mechanical Engineering (IC-AMME 2018)



**IC-AMME 2018: Parallel Session**