## **PREFACE**

Welcome to the 2<sup>th</sup> International Conference on Recent Advances in Automotive Engineering and Mobility Research (ReCAR) 2013, held in the city of Kuala Lumpur from December 16<sup>th</sup> to 18<sup>th</sup>, 2013. This year, ReCAR is held with the aim of creating a platform for reviewing and sharing current technology; for the presentation of latest discoveries, findings and innovations; and for the exchange of ideas amongst engineers, researchers and practitioners in the field of automotive engineering, mobility research and related issues. I strongly hope that the outcome of this conference will stimulate and accelerate advancement in knowledge and technology innovation which are critical for the successful future development of Malaysia especially towards achieving zero emission and green environment.

Researchers in the Faculty of Engineering and Built Environment, UKM are intensely conscious of energy harvesting and eco-based technology. Lowering vehicle emissions through the utilization of green fuels has been a primary goal of researchers at the Centre for Automotive Research. This includes developing vehicles power by alternative fuels such as biodiesels and renewable sources. Solar and fuel cell driven electric vehicles are examples of work currently conducted at the centre.

This is the second edition of the ReCAR conference series, following the successful event organised in 2011. This time around, the conference features four Keynote Addresses which has been delivered by the eminent speakers:

- Professor Reza N. Jazar, Professor of Mechanical Engineering, RMIT Australia
- Dr. Norlen Bin Mohamed, Director of the Vehicle Safety and Biomechanics Research Centre, Malaysian Institute of Road Safety Research (MIROS).
- Professor Dato' Ir. Dr. Wan Ramli Wan Daud, Founding Director, Fuel Cell Institute, Universiti Kebangsaan Malaysia.
- Associate Professor Dr. Talal Yusaf, University of Southern Queensland, Australia.

A total of more than 100 papers have been selected and presented at the conference. These contributions come from around the globe including from Australia, India, Indonesia, Iran, Iraq, Libya as well as Malaysia. Many people have assisted in making this conference a success.

I would like to convey my most sincere appreciation to all conference participants, invited speakers for your participation and full support. I am particularly indebted to the organising committee members for their relentless efforts in ensuring the success of this conference, the international advisory committee and also, all paper reviewers for spending much valuable time in reviewing the submissions. Last but by no means least, this conference would not have been possible without our benevolently generous sponsors and supporters, to whom we are most grateful.

Rozli Zulkifli Chairperson, Organizing Committee ReCAR2013

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# **ACKNOWLEDGEMENTS**

The ReCAR2013 Organising Committee expresses its utmost gratitude for the sponsorship and support given by the following Universiti Kebangsaan Malaysia research grants:

Advanced Vehicle Technology and System: DPP-2013-050

Advanced Materials, Processing and Integrity: DPP-2013-033

Computational and Experimental Mechanics: DPP-2013-031

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