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## Editorial

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**Biographical notes:** Aurélio Lima Araújo is an Assistant Professor at Instituto Superior Técnico (IST), Universidade de Lisboa and Researcher of Instituto de Engenharia Mecânica - IDMEC/IST. He has a PhD in Mechanical Engineering from Universidade Técnica de Lisboa. His research activities have been related to modelling, optimisation and testing of composite and adaptive structures, inverse characterisation of composite and piezoelectric materials, sandwich structures, structural damping and active control of multifunctional structures for noise and vibration attenuation. He is also a member of the Editorial Board of International Journal of Automotive Composites.

Cristóvão Manuel Mota Soares is a 'Jubilate' Associate Professor of Instituto Superior Técnico (IST), Universidade de Lisboa and Researcher of Instituto de Engenharia Mecânica - IDMEC/IST. He has BSc in Mechanical and Electrical Engineering by Instituto Industrial do Porto, MSc in Solid Mechanics and PhD both by Aston University, UK. He is a Doctor in Mechanical Engineering (Equivalence) by University of Porto. He has lectured in the area of Solid Mechanics and Design (Structural Mechanics, Plates and Shells, Composite Material and Structures, Design, and Finite Element Methods, among other subjects). His research activities have been related with structural optimisation of pressure vessels, characterisation of composite materials by inverse techniques, structural optimisation of composite, sandwich and adaptive structures and recently functionally graded material structures. He is a member of the Editorial Board of the Journals Computers and Structures and Composites Part B: Engineering. Over the years he has been recipient of several awards.

João Ramôa Correia is an Associate Professor at Instituto Superior Técnico (IST), University of Lisbon. He has a 5-year degree in Civil (Structural) Engineering, MSc in Construction and PhD in Civil Engineering. He

coordinates a research laboratory (CORE Lab) at IST, which conducts research, development and teaching activities on advanced fibre-reinforced polymer (FRP) composite systems for civil engineering applications. Members of the CORE Lab specialise in different types of FRP composite systems, namely pultruded profiles, strengthening systems, sandwich construction and hybrid construction, combining FRP composites with other construction materials. The main research areas of the CORE Lab are the mechanical behaviour of FRP composite systems, connection technology, long-term performance, durability, fire behaviour and sustainability. He is a member of the Editorial Board of Composite Structures and Advances in Structural Engineering. In 2012, he was the recipient of the IABSE Prize and in 2016 he received the IIFC Distinguished Young Researcher Award.

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The present special issue of the International Journal of Automotive Composites contains three of the papers presented at the 10th International Conference on Composite Science and Technology (ICCST/10), held on 2-4 September 2015 at Instituto Superior Técnico, Lisboa, Portugal. The first edition of this international conference took place in 1996 at Durban, South Africa, and in recent years it has been held in UAE (Sharjah), Malaysia (Kuala Lumpur) and Italy (Sorrento). The objective of ICCST/10 was to bring together composite scientists, engineers and technologists, to exchange ideas, to discuss the latest developments in composites and to present their work to the international composites community. In this 10th edition, more than 160 participants from 40 countries attended the conference, with a total of around 160 presentations in both oral and poster formats, which made this edition one of the largest ever.

The three papers included in this special issue are closely related to automotive composites. The paper by Herzog *et al.* addresses the laser cutting of carbon fibre preforms, as an alternative cutting method to increase the degree of automation and reduce costs during the manufacturing process. The authors conclude that it is already possible to apply laser cutting to typical automotive applications, but some aspects still need to be improved. The paper by Brecher *et al.* discusses cost-efficient production technologies for lightweight composite components, namely selective high-speed tape placement. In this work, the functionality of the cutting on the fly process for tape placement could be verified, although the process can still be improved. Finally, the paper by Lopes *et al.* addresses the mechanical characterisation of CFRP/steel hybrid composites, which have applications in both aerospace and automotive structures and are easy to manufacture. The authors conclude that the inclusion of steel foils in CFRP laminates enables an increase in the bearing strength when compared with the reference CFRP, also with the excellent fatigue properties.

The guest editors of this special issue would like to express their gratitude to the authors that accepted the invitation to prepare and submit extended versions of their conference papers and also to the reviewers for their help in assessing the suitability of the manuscripts for publication in this journal. We hope that the papers of this issue help providing an insight into the latest developments and future trends in composites science and technology and their applications to automotive composites. The guest editors would also like to acknowledge the Editor-in-Chief, Professor Ahmed Elmarakbi, and Inderscience Publishers for the opportunity to organise this special issue.