Guest editorial

Special issue devoted to 2015 and 2016 AIRTEC congresses

This issue of the International Journal *Aircraft Engineering and Aerospace Technology* is directly linked to the yearly organized International AIRTEC Congress, which is embedded in the International Aerospace Supply Fair AIRTEC (www.airtec.aero) held in Munich, Germany. The selected papers presented here are from the AIRTEC congresses 2015 and 2016. It covered scientific and industrial presentations, connecting practice and science by more than 200 speakers from 20 nations. The program covered the following timely topics on emerging technologies for aerospace:

- 1 aeronautics:
 - R&D Summits with the topics “Future aircraft design” and “Composites”;
 - Supply Chain Summit;
 - additive manufacturing;
 - composite and metallic structures; and
 - manufacturing/production.
- 2 space;
- 3 helicopters;
- 4 UAS;
- 5 testing; and
- 6 sensors.

The highlights were top keynote presentations or presentations in the Summits. The yearly event is an ideal meeting place for professionals from the area of development, engineering, project management, business administration, production, manufacturing, procurement and related fields. Especially the inclusion of the conference in the AIRTEC exhibition allows excellent discussions between science and industry.

The following ten conference papers have been selected and for publication in this peer-reviewed special issue:

- 1 Majerski, Krzysztof; Surowska, Barbara; Bieniaś, Jarosław; Szusta, Jarosław, “Study of low-cycle fatigue of glass-hybrid laminates”;
- 2 Zagórski, Ireneusz; Kuczmazewski, Jozef, “Temperature measurements in the cutting zone, mass, chip fragmentation and analysis of chip metallography images during AZ31 and AZ91HP magnesium alloy milling”;
- 3 Jakubczak, Patryk; Bieniaś, Jarosław; Mania, Radosław; Majerski, Krzysztof, “Forming of thin-walled profiles made of FML in autoclave process”;

- 4 Matuszak, Jakub; Zaleski, Kazimierz, “Analysis of deburring effectiveness and surface layer properties around edges of workpieces made of 7075 aluminium alloy”;
- 5 Dziubińska, Anna; Gontarz, Andrzej; Zagórski, Ireneusz, “Qualitative research on AZ31 magnesium alloy aircraft brackets with a triangular rib produced by a new forging method”;
- 6 Frulla, Giacomo; Danzi, Francesco; Romeo, Giulio, “An invariant-based performance-oriented procedure for preliminary design of composite structures”;
- 7 Olivero, Mattia; Ferrai, Matteo; Pantaleone, Piero; Perkovic, Ivan; D'amato, Antonella; Moroni, David; Perugini, Pierluigi; Tirelli, Matteo, “Lumped parameter modelling for the thermal analysis of the launch vehicle Vega C”;
- 8 Novaro Mascarello, Laura; Quagliotti, Fulvia, “Design of inoffensive sUAS for humanitarian missions”;
- 9 Dziubińska, Anna; Gontarz, Andrzej; Drozdowski, Krzysztof; Winiarski, Grzegorz, “A study of a new screw press forging process for producing aircraft drop forgings made of magnesium alloy AZ61A”;
- 10 Djojodihardjo, Harijono, “Overview of green quad bubble business jet aerodynamic configuration design”.

The articles deal with different solutions for future aerospace challenges in the areas of metallic and composite materials, manufacturing, design of launcher structures, design of UAS and aerodynamics.

With great pleasure we would like to thank all authors for writing such excellent technical papers. Further, the reviewers deserve praise and appreciation for their insightful critique and suggestions, which contributed directly to improve the technical content of this special issue. Finally, we would like to thank the Editor-in-Chief of the journal *Aircraft Engineering and Aerospace Technology*, Dr Askin T. Isikveren, for his agreement and support in making this issue possible.

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