## **Editorial**

## Special issue devoted to 2014 AIRTEC Congress

This issue of 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 Frankfurt, and since 2015 in Munich, Germany. The selected papers presented here are from the AIRTEC congresses held on 28-30 October 2014 in Frankfurt. 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 proceedings of all the AIRTEC Congress are publically available under ISBN 2014: 978-3-942939-11-9 (2014) and 978-3-942939-12-6 (2015).

The following 14 conference papers have been selected for publication in this peer-reviewed special issue:

- 1 Lauffs, P., Holzapfel, F., "Hardware-in-the-loop platform for development of redundant smart actuators".
- 2 Maritano, L., Amoroso, S., Castelluccio, F., "Heliport network planning through OR methods and use of GIS".
- 3 Rokicki, P., Budzik, G., Kubiak, K., Dziubek, T., Zaborniak, M., Kozik, B., Bernaczek, J., Przeszłowski, Ł., Nowotnik, A., "The assessment of geometric accuracy of aircraft engine blades with the use of an optical coordinate scanner".
- 4 Bruni, C., Cestino, E., Frulla, G., "Parametric analysis of a fluttering piezoelectric wing".
- 5 Dziubińska, A., Kuczmaszewski, J., Zagórski, I., "Investigation of Ignition Temperature, Time to Ignition and Chip Morphology after the High-Speed Dry Milling of Magnesium Alloys".

- 6 Rokicki, P., Kozik, B., Budzik, G., Dziubek, T., Bernaczek, J., Przeszłowski, Ł., Markowska, O., Sobolewski, B., Rzucidło, A., "Manufacturing of aircraft engine transmission gear with SLS (DMLS) method".
- 7 Jakubczak, P., Bieniaś, J., "Comparison of quasi static indentation and dynamic loads of glass and carbon fibre aluminium laminates".
- 8 Chaves, C., Fernandez, F., "A Review on Aircraft Joints Design".
- 9 Kopecki, G., "Control computers diagnostics for UAV flight control system".
- 10 Lernbeiss, R., "Arrival Time Optimization at Hubs of Network Airlines".
- 11 Majka, A., "The Green Trajectory of an Aircraft Aided During Take-Off by Ground-Based System Using Magnetic Levitation Technology".
- 12 Sierra-Perez, J., Güemes, A., "Damage detection in aerostructures from strain measurements".
- 13 Dziubińska, A., Gontarz, A., "A New Technology for Producing AZ31 Magnesium Alloy Aircraft Brackets with a Triangular Outline".
- 14 Probst, A., González Peytaví, G., Eissfeller, B., Förstner, R., "Mission Concept Selection for an Asteroid Mining Mission".

The articles deal with different solutions for future aerospace challenges in the areas of smart actuators, manufacturing, engines, flutter, high-speed dry milling, joins, UAV and damage detection.

With great pleasure, we would like to thank all the 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 Aircraft Engineering and Aerospace Technology Journal, Dr Askin T. Isikveren, for his agreement and support in making this issue possible.



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