



Ministry of Research and Innovation



INCAS – National Institute for Aerospace Research “Elie Carafoli”
(Under the aegis of The Romanian Academy)

International Conference of Aerospace Sciences, “AEROSPATIAL 2018”

25 – 26 October 2018, Bucharest, Romania

The conference is held under the aegis of the Ministry of Research and Innovation.

CONFERENCE DETAILED PROGRAM - “Nicolae TIPEI” Amphitheatre

Time	ID	Title	Authors and affiliation
Day 1: Thursday, October 25th, 2018			
Session 1 (Section works). Materials and Structures			
Session Chairs: Victor MANOLIU (AEROSPACE Consulting, Bucharest, Romania), Adriana STEFAN (INCAS – National Institute for Aerospace Research “Elie Carafoli”, Bucharest, Romania), Viorel ANGHEL (POLITEHNICA University of Bucharest, Romania)			
14:30 - 14:45	S4.1	<i>Material Selection for Lightweight Design in Aerospace and Defence Engineering Workflow</i>	Mariagrazia VOTTARI, Viktor POCAJT (Key to Metals AG, Doldertal 32, 8032 Zürich, Switzerland, www.totalmateria.com)
14:45 - 15:00	S4.2	<i>Special with Topic Additive Manufacturing</i>	Oleg YENTIN (GE Additive company, https://www.ge.com/additive/ Concept Laser GmbH An der Zeil 8 D-96215 Lichtenfels)
15:00 - 15:15	S4.3	<i>FEM analysis of the helicopter landing gear hinge</i>	Juraj HUB, Adam BLATNÝ (Department of Air Force and Aircraft Technology, Faculty of Military Technologies, University of Defence, Kounicova 65 / 662 10 Brno / Czech Republic)
15:15 - 15:30	S4.4	<i>Lightweight vitreous carbon material: approaches to making open-pore cellular structure</i>	Oleg SMORYGO (Powder Metallurgy Institute, 41 Platonov str., Minsk, 220005, Belarus), Alexander MARUKOVICH (Powder Metallurgy Institute, 41 Platonov str., Minsk, 220005, Belarus), A. VAZHNOVA (Powder Metallurgy Institute, 41 Platonov str., Minsk, 220005, Belarus), Aliaksandr ILYUSHCHANKA (Powder Metallurgy Institute, 41 Platonov str., Minsk, 220005, Belarus), Adriana STEFAN (INCAS – National Institute for Aerospace Research “Elie Carafoli”, Bucharest, Romania), Cristina-Elisabeta PELIN (INCAS – National Institute for Aerospace Research “Elie Carafoli”, Bucharest, Romania)

15:30 - 15:45	S4.5	<i>Buckling Analysis of Straight Beams with different Boundary Conditions using an Integral Formulation of Corresponding Differential Equations</i>	Viorel ANGHEL ("POLITEHNICA" University of Bucharest, Strength of Materials Department, Splaiul Independenței 313, 060042, Bucharest, Romania)
15:45 - 16:00	S4.6	<i>Finite Element Method Structural Analysis specific approaches for computing methods of aeronautical component</i>	Mircea BOCIOAGA (S.C. MAGIC ENGINEERING S.R.L, Str. Mugurului, Nr.4, Ap.1, Brasov 500301, Romania), Ion DIMA (INCAS – National Institute for Aerospace Research "Elie Carafoli", Bucharest, Romania)
16:00 - 16:15	S4.7	<i>Temperature Effects on Damage Mechanisms of Hybrid Metal – Composite Bolted Joints Using SHM Testing Method</i>	Calin-Dumitru COMAN, Ion DIMA, Ștefan HOTHAZIE, George PELIN, Tiberiu SALAORU (INCAS – National Institute for Aerospace Research "Elie Carafoli", Bucharest, Romania)
16:15 - 16:30	Coffee break		
Session 2 (Section works). Materials and Structures Session Chairs: Claudia NICULESCU (National R&D Institute for Textile and Leather Bucharest (INCDTP), Bucharest, Romania), Stefan SOROHAN (POLITEHNICA University of Bucharest, Romania)			
16:30 - 16:45	S4.8	<i>Evaluation of the effective elastic out-of-plane properties of hexagonal honeycombs by considering the influence of curvature radius and adhesive layer</i>	Stefan SOROHAN, Dan Mihai CONSTANTINESCU, Marin SANDU, Adriana Georgeta SANDU (Department of Strength of Materials, University POLITEHNICA of Bucharest, Splaiul Independenței 313, 060042, Bucharest, Romania)
16:45 - 17:00	S4.9	<i>Integrated UAS System for Intervention in Emergency Situations</i>	Adrian SALISTEAN, Doina TOMA, Claudia NICULESCU, Sabina OLARU (National R&D Institute for Textile and Leather Bucharest (INCDTP), 16, Lucretiu Patrascanu, 030508 Bucharest, Romania)
Session 3 (Section works). Materials and Structures Session Chair: Lorena DELEANU ("Dunarea de Jos" University, Galati, Romania)			
17:00 - 17:15	S4.10	<i>Wind turbine optimization using an open-source code written in PHP</i>	Felix RĂDUICĂ, Ionel SIMION (University "POLITEHNICA" of Bucharest, Department "Engineering Graphics and Industrial Design", Faculty of Aerospace Engineering, Bucharest, Romania)
17:15 - 17:30	S4.11	<i>Influence of the Additive Nature in Soybean Oil on Rheological Behavior</i>	George Catalin CRISTEA (INCAS – National Institute for Aerospace Research "Elie Carafoli", Bucharest, Romania), Alexandru RĂDULESCU (Department of Machine Design and Tribology, "POLITEHNICA" University of Bucharest, Romania), Constantin GEORGESCU (Department of Mechanical Engineering, Faculty of Engineering, "Dunarea de Jos" University, Galati, Romania), Irina RĂDULESCU (Department of Machine Design and Tribology, "POLITEHNICA" University of Bucharest, Romania), Lorena DELEANU (Department of Mechanical Engineering, Faculty of Engineering, "Dunarea de Jos" University, Galati, Romania)

Session 4 (Section works). Flight Mechanics			
Session Chairs: Ion STROE (<i>POLITEHNICA University of Bucharest, Romania</i>), Andrei CRAIFALEANU (<i>POLITEHNICA University of Bucharest, Romania</i>)			
17:30 - 17:45	S2.1	<i>Horizontal Flight Dynamics Simulations Using a Simplified Airplane Model and Considering Wind Perturbation</i>	Dan N. DUMITRIU (<i>SIMULTEC INGINERIE S.R.L.; POLITEHNICA University of Bucharest, Romania</i>), Andrei CRAIFALEANU (<i>University POLITEHNICA of Bucharest, Romania</i>), Ion STROE (<i>University POLITEHNICA of Bucharest, Romania</i>)
17:45 - 18:00	S2.2	<i>Validation of a helicopter turbulence model on PUMA 330 dynamics</i>	Irina-Beatrice STEFANESCU (<i>Romanian Space Agency and University Politehnica of Bucharest, Romania</i>), Andreea Irina AFLOARE (<i>INCAS – National Institute for Aerospace Research “Elie Carafoli”, Bucharest, Romania</i>), Achim IONITA (<i>INCAS – National Institute for Aerospace Research “Elie Carafoli”, Bucharest, Romania</i>)
18:00 - 18:15	S2.3	<i>Dinamical problem for the aircraft’s running on the ground</i>	Sorin RADNEF (<i>INCAS – National Institute for Aerospace Research “Elie Carafoli”, Bucharest, Romania</i>)
18:15 - 18:30	S2.4	<i>Performance in Transition Flight of Quad Tandem UAV</i>	Andrei LUNGOCI , Achim IONITA (<i>INCAS – National Institute for Aerospace Research “Elie Carafoli”, Bucharest, Romania</i>)
Session 5 (Section works). Management in Aerospace Activities			
Session Chair: Dan N. DUMITRIU (<i>SIMULTEC INGINERIE S.R.L., Romania; POLITEHNICA University of Bucharest, Romania</i>)			
18:30 - 18:45	S8.1	<i>The importance of pre-flight weather briefing for general aviation in Romania</i>	Vlad MARAZAN (<i>Politehnica University Timisoara, Department ExperimentariumTM, Romania</i>)
19:00	Gala Dinner – Restaurant “Turbotequila”		