

## Model F17 - Memoriul științific al studentului doctorand

### MEMORIU ȘTIINȚIFIC Drd. Mihai-Vlăduț HOTHAZIE

#### Studii de doctorat

Perioada: 03.10.2022 – 05.09.2025

Conducător științific: Prof.dr.ing. Daniel-Eugeniu CRUNȚEANU

Domeniu: Inginerie Aerospațială

Titlul tezei de doctorat: CONTRIBUȚII PRIVIND OPTIMIZAREA AERODINAMICĂ A UNUI AVION  
COMERCIAL CU ARIPĂ ȘI MONTANT

#### Activitate științifică

##### A. Lista de lucrări științifice (articole în reviste sau volume)

1. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., & Bunescu, I., "Exploring the Impact of Strut Geometry on Strut-Braced Wing Configurations", MDPI Aerospace, 12(6), 473, 2025;
2. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I., Negoită M.-F., & Stoican M.-G., "Design Exploration of the NACA Airfoil Family Using High-Fidelity CFD Analysis", INCAS BULLETIN, Volume 17, Issue 2/ 2025, pp. 35 – 45, 2023;
3. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I. & Stoican M.-G., "CFD Numerical Simulations of the Strut Braced Wing Configuration using Overset Grid Technique", AIP, in press, 2024;
4. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., & Bunescu, I., "Studies Regarding Aerodynamic Optimization Processes of Supercritical Airfoils", AIP, in press, 2023;
5. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I. & Onel A.-O., "Studies Regarding the Aerodynamic Performance of Truss-Braced Wing Configurations in Transonic Regime ", AIP, in press, 2023;
6. Hothazie, M.-V., Bunescu, I., Stoican M.-G. & Chelemen D.-S., "Investigating the Effectiveness of Vortex Generators in Aviation through High-Fidelity CFD Analysis", INCAS BULLETIN, Volume 16, Issue 3/ 2024, pp. 51 – 60, 2024;
7. Negoita M.-F. & Hothazie, M.-V. "A Machine Learning-Based Approach for Predicting Aerodynamic Coefficients Using Deep Neural Networks and CFD Data", INCAS BULLETIN, Volume 16, Issue 4/ 2024, pp. 91 – 104, 2024;
8. Negoita M.-F., Crunțeanu, D.-E., Hothazie, M.-V., & Pricop, M.-V., "Enhancing Airfoil Performance through Artificial Neural Networks and Genetic Algorithm Optimization", INCAS BULLETIN, Volume 15, Issue 4/ 2023, pp. 199 – 209, 2023;

##### B. Participări la conferințe/workshop-uri

1. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., & Bunescu, I. "Exploring the Impact of Strut Geometry on Strut-Braced Wing Configurations", AIAA Sci-Tech Forum, Hyatt Regency Orlando Orlando, FL, Ianuarie 2025;
2. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I., Stoican, M.-G., & Chelemen, D.-Ș "Strut Braced Wing Configuration Investigation Using High-Fidelity CFD Analysis", International Conference of Aerospace Sciences, Bucharest, Romania, 17-18 October 2024.
3. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I. & Stoican M.-G., "CFD Numerical Simulations of the Strut Braced Wing Configuration using Overset Grid Technique", The 22nd International Conference of Numerical Analysis and Applied Mathematics, Crete, Greece, 16 – 22 September 2024.

4. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I. & Stoican, M.-G., “*Investigating Truss-Braced Wing Configuration through CFD Based Analysis*”, The 9th European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS Congress 2024, Lisbon, Portugal, 3 – 7 June 2024.
  5. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I. & Stoican M.-G., “*Studies Regarding the Aerodynamic Performance of Truss-Braced Wing Configurations in Transonic Regime*”, The 21st International Conference of Numerical Analysis and Applied Mathematics, Crete, Greece, 16 – 22 September 2023.
  6. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., & Bunescu, I. (2023), “*Studies Regarding Aerodynamic Optimization Processes of Supercritical Airfoils*”, ICNPAA, Prague, Czech Republic, 27 – 30 June 2023.
  7. Hothazie, M.-V., Pricop, M.-V. & Bunescu, I., “Investigating the Effectiveness of Vortex Generators in Aviation through High-Fidelity CFD Analysis”, Aerospace Europe Conference 2023, Joint 10th EUCASS – 9th CEAS Conference, Switzerland, 9-13 July, 2023.
  8. Hothazie, M.-V., Crunțeanu, D.-E., Pricop, M.-V., Bunescu, I. & Stoican M.-G., “Low-speed airfoil shape optimization using high-fidelity CFD analysis”, AIAA Sci-Tech Forum, National Harbor, MD & ONLINE, 23–27 January 2023.
- C. Membru în comitete de organizare sau comitete științifice ale conferințelor/colective de redacție ale unor reviste**
1. International Conference of Aerospace Sciences “AEROSPATIAL 2024”, 17-18 October, Bucharest, Romania
  2. The 41st “Caius Iacob” Conference on Fluid Mechanics and its Technical Applications, 30-31 October 2025, Bucharest Romania

Student-doctorand

*Mihai-Vlăduț HOTHAZIE*