

## LISTA DE LUCRĂRI

### I Activitate didactică

În timpul activității mele didactice la “Academia Tehnica Militara” am predat următoarele discipline:

“Aerodinamica avioanelor și elicopterelor”; “Mecanica Fluidelor”; “Aeronave fără pilot”; “Sisteme de propulsie aerospațiale”;

### II Domenii de interes științific

Printre domeniile mele de interes științific menționez: Mecanică, Rezistența Materialelor, Analiza cu Elemente Finite, Metode Numerice, Dinamica Zborului, Mecanica Zborului, Aeronave fără Pilot, CAD,CFD,FEM software (SolidWorks, Cosmos, Fluent).

### III Activitate științifică

#### Publicații

#### Lucrări științifice:

10 publicații cotate ISI (dintre care 4 în reviste ISI), 8 publicații indexate BDI, 8 lucrări la sesiuni de comunicări internaționale

#### Carti:

1. Pahonie Radu - „Sisteme de propulsie aeroreactoare și aeropropulsoare. Aplicații numerice de calcul” (în curs de tipărire, 2021)

#### Articole științifice:

#### ISI:

1. Boscoianu M, **Pahonie R.** et all., “*A method to predict the flapping wing MAV global aerodynamic performances*”,WSEAS International Conference on Fluid Mechanics and Aerodynamics, Rhodes,Greece, August 20-22, 2008, ISI Publication

2. M.Boscoianu, **R.Pahonie**, A.Coman “*Some Aspects Regarding the Adaptative control of a flying wing micro aerial vehicle with flexible wing tips*”, WSEAS TRANSACTIONS on SYSTEMS Issue 6, Volume 7, June 2008, ISI Publication

3. **Pahonie R.** et all., “*An analysis of different wing micro air vehicles solutions*”, Metalurgia International volXIV (2009) no.7 special issue 43, Editura științifică F.M.R.,2009, ISI Publication

4. R. V. Mihai, C. Vidan, **R. C. Pahonie**, et all., "*A semi-autonomous small scale paramotor used for medical emergency situations*," E-Health and Bioengineering Conference (EHB), 2015, Iasi, 2015,pp.1-4.doi: 10.1109/EHB.2015.7391531, ISI Publication

5. **R. C. Pahonie**, et all, "*Biomechanics of flexible wing drones usable for emergency medical transport operations*," E-Health and Bioengineering Conference (EHB), 2015, Iasi, 2015, pp.1-4. doi: 10.1109/EHB.2015.7391538, ISI Publication

6. M Mihaila-Andres, PV Rosu, CM Larco, **RC Pahonie**, *Aeroelastic tailoring of thin-walled, closed-section wing box with bend-twist coupling*, Mechanical and Aerospace Engineering (ICMAE), 2017 8th International
7. C Larco, **R Pahonie**, M Mihaila-Andres, *Experimental study on mode I fracture of fibredux unidirectional prepreg* AIP Conference Proceedings 1836 (1), 020037
8. **Radu Călin Pahonie**, Amado Ștefan, Carmen Luiza Costuleanu, Daniel Boldureanu, Gabriela Gladiola Andrusac, "*Managing and Analyzing the Constructive and Functional Parameters on Fiberglass Custom Sensor Design for an Aerodynamic Balance*", Revista de Materiale Plastice, 54, nr 1, 2017,
9. **Radu Călin Pahonie**, Amado Ștefan, Ioana Raluca Adochiei, Carmen Luiza Costuleanu, Gabriela Gladiola Andrusac, George Ungureanu, Dragoș Petrică Sărdaru, "*Experimental Characterisation of the Mechanical Properties of Lightweight 3D Printed Polymer Materials for Biomechanical Application in Ankle-Foot Orthosis*", Revista de Materiale Plastice, 54, nr 2, 2017,
- 10 **Pahonie Radu Călin**, Larco Ciprian, Mihăilă-Andres Mihai, Năstăsescu Vasile, Barbu Cristian Experimental characterisation of hyperelastic materials for use in a passive-adaptivemembrane on MAVs wing , Revista de Materiale Plastice, dec 2017 (in curs de publicare)

#### **BDI:**

1. Boscoianu M., Axinte C., **Pahonie R.**, "Some Aspects Regarding the cooperative control problem "Proceedings of the 10th WSEAS International Conference on Mathematical Methods and Computational Techniques, 2008.
- 2 Ciprian Larco, Amado-George Ștefan, **Radu-Călin Pahonie**, Ionuț Nicolaescu, „*Modeling and Structural Analysis of a Composite Wing for UAV Research*” MTA Review, Military Technical Academy Publishing House ISSN: 1843-3391, Volume XXV, No. 2, Jun. 2015
3. Ciprian Larco, Radu-Călin Pahonie, Ioana Edu, *High Rate Delamination Behavior Tests*, MTA Review,, Military Technical Academy Publishing House, ISSN: 1843-3391, Vol. XXV, No. 3, pp. 349-358, Sep. 2015
4. Ciprian LARCO, **Radu PAHONIE**, Ioana EDU, “*The effects of fibre volume fraction on a glass-epoxy composite material*”, Incas bulletin, volume 7, issue 3, July– September 2015, ISSN 2247-4528
5. Răzvan Viorel MIHAI, **Radu PAHONIE**, Ioana EDU, “*A practical method to estimate the aerodynamic coefficients of a small scale paramotor*”, Incas bulletin, volume 6, issue 4, october – december 2014, ISSN 2247-4528
6. **Pahonie Radu**, s.a, “*Towards flexible-winged unmanned aircraft systems*”, INCAS BULLETIN, volume 6, Issue 4, January-March 2015, Bucharest Romania, ISSN 2066-8201

7 .Andra Negru, **Radu-Călin Pahonie**, Mihai Mihăilă-Andres, Răzvan-Viorel Mihai, "Tailoring Capabilities of Carbon Fiber Angle Ply Composites",MTA REVIEW,Volume XXVI, No. 4, Dec. 2016, pag 337-350

8. Răzvan-Viorel Mihai, Mihai Mihăilă-Andres, Paul-Virgil Rosu, **Radu Calin Pahonie**, Andra Negru "Designing a Low-Cost Data Acquisition System for Vibration Measurements",MTA REVIEW,Volume XXVI, No. 4, Dec. 2016, pag 369-378

#### **IV Participări la conferințe**

1. Boscoianu M, **Pahonie R.** "Emerging solutions to improve the capabilities and performances of low cost small UAVs platforms" International Conference UAV World, Frankfurt/Main, Germany, 12-13 November 2008

2. **Pahonie R.**, „High Rate Delamination Of Fibredux Composite Specimens– Test procedure”, Proceedings of the NCAS 2013 International Conference, 7-8 november 2013

3. **Pahonie R.**, „High Rate Delamination Of Fibredux Composite Specimens– Results”, Proceedings of the NCAS 2013 International Conference, 7-8 november 2013

4. Amado Ștefan, Ciprian Larco, **Radu-Călin Pahonie**, Ionut Nicolaescu „Coupled transient analysis of a uav composite wing”, AFASES 2015, The 17th International Conference „Scientific Research and Education in the Air Force”, , ISSN, ISSN-L:2247-3173

5. Ciprian-Marius Larco, Ștefan-Mircea Mustață, **Radu-Călin Pahonie** “Composite multilayer structures obtained by explosive method”, AFASES 2015, The 17th International Conference „Scientific Research and Education in the Air Force”, ISSN, ISSN-L:2247-3173

6. Bogdan-Alexandru Belega, **Radu Pahonie** Analysis of bird strike on the F-16 wing during takeoff, 2nd International Conference New Challenges in Aerospace Sciences "NCAS 2015" November 5-6, 2015, Bucharest, Romania

7. **Radu Calin Pahonie**, Razvan-Viorel Mihai, Ciprian Larco, "Towards Flexible-Winged Unmanned Aircraft Systems", International Conference of Aerospace Sciences "AEROSPATIAL 2014", 18 - 19 September 2014, Bucharest, Romania

8. Razvan-Viorel Mihai, **Radu Calin Pahonie**, Ciprian Larco, "The Aerodynamic Coefficients Estimation of a Small-Scale Paramotor", International Conference of Aerospace Sciences "AEROSPATIAL 2014", 18 - 19 September 2014, Bucharest, Romania