

List of Selected Scientific Papers and Articles (titles):

In the last decade, EDePro's experts cooperated with the professors and associates from the University of Belgrade – namely, the Faculty of Mechanical Engineering – in various scientific research. As a result of this cooperation, they published the following scientific papers:

I Monography chapters

1. Ognjanović, M., Miloš, M., Kolarević, N. (2016). *Testing and prediction of structural failures caused by fretting*. *Materials Today: Proceedings*, 3(4), 1103–1107.
<http://www.sciencedirect.com/science/article/pii/S2214785316002613?via%3Dihub>

II Papers published in prestigious scientific journals (both national and international):

1. Khan, M. A., Todić, I., Miloš, M., Stefanović, Z., Blagojević, Đ. (2010). *Control of electro-mechanical actuator for aerospace applications*. *Strojarstvo*, 52(3), 303–313.
2. Todić, I., Miloš, M., Pavišić, M. (2013). *Velocity and position control of electromechanical actuator for aerospace applications*. *Tehnički vjesnik*, 20(5), 853–860.
3. Kolarević, N., Ognjenović, M., Miloš, M. (2018). *Failures of multifunctional bulkhead caused by high gradient of temperature, pressure and speed of rotation*. *Engineering Failure Analysis*.
<https://doi.org/10.1016/j.engfailanal.2018.02.022>
4. Šekutkovski, B., Grbović, A., Todić, I., Pejčev, A. (2021). *A partitioned solution approach for the fluid-structure interaction of thin-walled structures and high-Reynolds number flows using RANS and hybrid RANS-LES turbulence models*. *Aerospace Science and Technology*, 113.
<https://doi.org/10.1016/j.ast.2021.106629>
5. Nauparac, D., Pršić, D., Miloš, M., Todić, I. (2015). *Different modeling technologies of hydraulic load simulator for thrust vector control actuator*. *Technical Gazette*, 22(3), 599–606.
<https://doi.org/10.17559/TV-20140621063240>
6. Davidović, N., Miloš, P., Jojić, B., Miloš, M. (2015). *Contribution to research of spoiler and dome deflector TVC systems in rocket propulsion*. *Technical Gazette*, 22(4), 907–915.
<https://doi.org/10.17559/TV-20140621063849>
7. Miloš, P., Davidović, N., Jojić, B., Miloš, M., Todić, I. (2015). *A novel 6 DOF thrust vector control test stand*. *Technical Gazette*, 22(5), 1247–1254. <https://doi.org/10.17559/TV-20140621064603>
8. Todić, I., Kuzmanović, V. (2018). *Code optimization for strapdown inertial navigation system algorithm*. In Dekoulis, G. (Ed.), *Space Flight* (pp. 59–78). IntechOpen.
<https://doi.org/10.5772/intechopen.71732>

III Articles from international symposiums and conferences:

1. Jojić, B., Blagojević, Đ., Memon, G., Miloš, M., Todić, I. (2011). *Tactical missile system LORANA*. *Proceedings of the Fourth International Scientific Conference on Defensive Technologies OTEH 2011*, Republic of Serbia, 4, 224–227.
https://www.researchgate.net/publication/325870654_Tactical_Missile_System_LORANA

List of Selected Scientific Papers and Articles

2. Todić, I., Kuzmanović, V. (2019). *Hardware in the loop simulation for homing missiles*. Materials Today: Proceedings, 12, 514–520.
<https://doi.org/10.1016/j.matpr.2019.03.157>
3. Kuzmanović, V., Miličić, L., Todić, I. (2021). *Temperature stabilization using Peltier modules in highly dynamic environment*. Proceedings of the Seventh International Congress 'Engineering, Environment and Materials in Process Industry EEM2021', Republic of Bosnia and Herzegovina, 295–303. (ISBN: 978-99955-81-40-4)
4. Kolarević, N., Kosanović, N., Miloš, M. (2018). *Tip-Jet helicopter propulsion system testing*. Proceedings of the Ninth International Conference on Machine and Industrial Design in Mechanical Engineering KOD 2016, Hungary, 221–224. (ISBN 978-86-7892-821-5)
5. Pršić, D., Nauparac, D., Miloš, M. (2018). *Stateflow alat za modeliranje elektro-hidrauličkog akuatora*. Proceedings of the Seventeenth International Symposium INFOTEH-JAHORINA, Republic of Bosnia and Herzegovina, 475–479.
<http://web.archive.org/web/20210125044700/https://infoteh.etf.ues.rs.ba/zbornik/2018/radovi/SUP/SUP-10.pdf>
6. Kolarević, N., Kosanović, N., Miloš, M. (2018). *Crucial parameters of gas generator on tip-jet helicopter*. Materials Today: Proceedings, 5(13), 26715–26720.
<https://doi.org/10.1016/j.matpr.2018.08.141>
7. Tanasković, M., Ristanović, M., Stojanović, S., Lazić, D., Miloš, M. (2018). *Design of electro-mechanical actuator for medium sized helicopter and a test platform for its testing and verification*. Proceedings of the Tenth International Conference on Machine and Industrial Design in Mechanical Engineering KOD 2018, Republic of Serbia, 393, 1–7. <https://doi.org/10.1088/1757-899X/393/1/012008>
8. Kolarević, N., Micković, D., Crnojević, S., Stanković, M., Ognjanović, M., Miloš, M. (2018). *Dynamic stability of high speed turboshaft engine with reducer*. Proceedings of the Tenth International Conference on Machine and Industrial Design in Mechanical Engineering KOD 2018, Republic of Serbia, 393, 1–8.
<https://doi.org/10.1088/1757-899X/393/1/012070>
9. Kolarević, N., Stanković, M., Crnojević, S., Micković, D., Miloš, M. (2019). *Indirect approach of measuring the axial force on turbo-jet engine rotor*. Materials Today: Proceedings, 12(2), 335–339. <https://doi.org/10.1016/j.matpr.2019.03.132>
10. Kolarević, N., Crnojević, S., Latković, N., Stanković, M., Miloš, M. (2020). *Experimental verification of performance of tip-jet helicopter propulsion system*. Materials Today: Proceedings, 32(2), 112–117.
<https://doi.org/10.1016/j.matpr.2020.03.080>
11. Ognjanović, M., Kolarević, N., Miloš, M. (2015). *Fretting wear intensity identification in machine parts contacts*. Proceedings of the Fifth International Congress of Serbian Society of Mechanics, Republic of Serbia, 1–2. (ISBN 978-86-7892-715-7)
12. Kosanović, N., Kolarević, N., Miloš, M., Jojić, B. (2016). *Testing of tip-jet helicopter rotor lift force*. Proceedings of the Thirty-Third Danubia-Adria Symposium on Advances in Experimental Mechanics, Republic of Slovenia, 36–37. (ISBN 978-961-94081-0-0)
13. Ognjanović, M., Vasin, S., Miloš, M. (2016). *Testing rig and test procedure of gear transmission units with continual variation of transmission ratio for Wt-application*. Proceedings of the Thirty-Third Danubia-Adria Symposium on Advances in Experimental Mechanics, Republic of Slovenia, 176–177. (ISBN 978-961-94081-0-0)

List of Selected Scientific Papers and Articles

14. Kolarević, N., Kosanović, N., Miloš, M., Isaković, J. (2017). *Measuring parameters of Phoenix-100 gas-generator*. Proceedings of the Thirty-Fourth Danubia-Adria Symposium on Advances in Experimental Mechanics, Republic of Italy, 102–103. (ISBN 978-88-8303-863-1)
15. Kosanović, N., Kolarević, N., Miloš, M. (2017). *Laser welded inconel rotor blades for tip-jet helicopter*. Proceedings of the Thirty-Fourth Danubia-Adria Symposium on Advances in Experimental Mechanics, Republic of Italy, 175–176. (ISBN 978-88-8303-863-1)
16. Kolarević, N., Stanković, M., Crnojević, S., Micković, D., Miloš, M. (2018). *Measuring the axial force on turbo-jet engine rotor*. Proceedings of the Thirty-Fifth Danubia-Adria Symposium on Advances in Experimental Mechanics, Romania, 41–42. (ISBN 978-606-23-0874-2)
17. Crnojević, S., Latković, N., Kolarević, N., Miloš, M. (2019). *Experimental verification of numerical simulation of the flow inside the tip-jet helicopter propulsion system*. Proceedings of the Thirty-Sixth Danubia-Adria Symposium on Advances in Experimental Mechanics, Czech Republic, 135–136. (ISBN 978-80-261-0876-4)

IV Innovative technical designs implemented in the Republic of Serbia:

1. Blagojević, Đ., Miloš, M., Kovačević, M., Lazić, D., Todić, I. (2010). *GNC-3 guidance, navigation and control system*.

The technical design was created in Project TP35044 of the Ministry of Education, Science and Technological Development, according to Decision No 411/2 of the Research Council of the Faculty of Mechanical Engineering, University of Belgrade, dated 30 June 2010. The design is used by EDePro d. o. o. in its international agreements.

2. Jojić, B., Blagojević, Đ., Memon, G., Miloš, M., Todić, I., Davidović, N., Miloš, P. (2010). *Tehničko rešenje sistema vođenja i upravljanja projektila LORANA*.

According to Decision No 412/2 of the Research Council of the Faculty of Mechanical Engineering, University of Belgrade, dated 30 June 2010. The design is used by EDePro d. o. o.

3. Miloš, M., Todić, I., Blagojević, Đ. (2010). *Technical solution of electro-mechanical actuator (EMA) for aerospace applications*.

The technical design was created in Project TP35044 of the Ministry of Education, Science and Technological Development, according to Decision No 511/2 of the Research Council of the Faculty of Mechanical Engineering, University of Belgrade, dated 30 June 2010. The design is used by EDePro d. o. o., which participated in Project TP35044, and by the Faculty of Mechanical Engineering.

4. Miloš, M., Todić, I., Blagojević, Đ. (2010). *Technical solution of test bench for electro-mechanical actuator (EMA)*.

The technical design was created in Project TP35044 of the Ministry of Education, Science and Technological Development, according to Decision No 512/2 of the Research Council of the Faculty of Mechanical Engineering, University of Belgrade, dated 30 June 2010. The design is used by EDePro d. o. o., which participated in Project TP35044, and by the Faculty of Mechanical Engineering.

List of Selected Scientific Papers and Articles

5. Jojić, B., Miloš, M., Davidović, N., Todić, I., Miloš, P. (2014). *Asistirani inercijalni navigacioni sistem – AINS v.1.0.*

The technical design was created in Project TP35044 of the Ministry of Education, Science and Technological Development, according to Decision No 3291/3 of the Academic Council of the Faculty of Mechanical Engineering, University of Belgrade, dated 26 December 2014. The design is used by EDePro d. o. o., which participated in Project TP35044.

V Enhanced technical designs implemented in the Republic of Serbia:

1. Jojić, B., Miloš, M., Davidović, N., Todić, I., Miloš, P. (2014). *Proces izrade komore sagorevanja tečnog raketnog motora.*

The technical design was created in Project TP35044 of the Ministry of Education, Science and Technological Development, according to Decision No 3293/3 of the Academic Council of the Faculty of Mechanical Engineering, University of Belgrade, dated 26 December 2014. The design is used by EDePro d. o. o., which participated in Project TP35044.

2. Jojić, B., Miloš, M., Davidović, N., Todić, I., Miloš, P. (2015). *Sistem napajanja raketnog motora sa tečnom pogonskom materijom.*

The technical design was created in Project TP35044 of the Ministry of Education, Science and Technological Development, according to Decision No 1382/1 of the Academic Council of the Faculty of Mechanical Engineering, University of Belgrade, dated 10 July 2015. The design is used by EDePro d. o. o., which participated in Project TP35044.

VI Participations in projects financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia:

1. Faculty of Mechanical Engineering. (2011). *Kosmički transportni sistemi niske cene*, TP-35044. Technology Development Center, University of Belgrade