Publications

- [22] Šedek J. and Růžek R., **Using Modified Strip Yield Model for Crack Growth under Variable Amplitude Loading in AA 2124 and AA 7475**, Material and Technology, Institute of Metals and Technology, Ljubljana, Slovenia, 2019, ISSN 1580-2949 [v přípravě]
- [21] Šedek J. and Růžek R., Thickness effect analysis on fatigue crack propagation of 7475 plate material under variable amplitude loading, ICEAF VI 5th International Conference of Engineering Against Failure, 20-22 June 2018, Chios Island Greece, 2018 [v tisku]
- [20] Šedek J., Development of the plastic zone at the crack tip under cyclic loading in the middle-cracked tension specimen, Lufinka A. et al., (eds.). Experimental Stress Analysis 2018, Book of extended abstracts, June 5th 7th, 2018, Harrachov, Czech Republic: Czech Society for Mechanics, 2018. pp. 135-136, ISBN 978-80-270-4061-2
- [19] Kadlec M., Šedek J., **Delamination Growth under Mixed Mode I Mode II Fatigue Loading in Polymer Composite**, Lufinka A. et al., (eds.). Experimental Stress Analysis 2018, Book of extended abstracts, June 5th 7th, 2018, Harrachov, Czech Republic: Czech Society for Mechanics, 2018. pp. 168-175, ISBN 978-80-270-4061-2
- [18] Šedek, J. Modelling the failure of near-edge impacted carbon fibre-reinforced composite subjected to shear loading. IOP Conference Series: Materials Science and Engineering [online]. 2018, 369, 012035- [cit. 2018-07-23]. DOI: 10.1088/1757-899X/369/1/012035. ISSN 1757-8981. Dostupné z: http://stacks.iop.org/1757-899X/369/i=1/a=012035?key=crossref.6e25e529f7624cd5aa0cc89113d67109
- [17] Šedek J. Bělský P. **Numerical evaluation of barely visible impact damage in carbon -fibre reinforced composite panel loaded in shear**. Numerical evaluation of barely visible impact damage in carbon -fibre reinforced composite panel loaded in shear. In 8th International Conference on Computational Methods and Experiments in Material and Contact Characterisation, Materials Characterisation 2017; Tallinn; Estonia; 21 June 2017 through 23 June 2017; WIT Transactions on Engineering Sciences 116, 2017, pp. 73-85 ISSN:2046-0546
- [16] Šedek, J. Numerical Investigation of 3-D Strain Constraint in Lab Test Specimens, Trebuňa F. et al., (eds.). Experimental Stress Analysis 2017: Conference Proceedings, May 30th June 1st, 2017, Nový Smokovec, Slovakia: Košice, Technical university of Košice Faculty of mechanical Engineering, 2017. 760 pages, ISBN 978-80-553-3167-6
- [15] Šedek, J. Performance of Impacted Non-Conventional Carbon Fiber–Reinforced Polymer in Shear Test and Finite Element Analysis, in proceeding of the 12th World Congress on Computational Mechanics (WCCM XII) and 6th Asia-Pacific Congress on Computational Mechanics (APCOM VI), 24-29 July, Seoul, Korea, 2016, 2694 pages.
- [14] Růžek R., Šedek J., Kodlec M., Kucharský, P. Mechanical behavior of thermoplastic rib under loading representing real structure conditions, In Plánička F., Krystek J. (eds.), 54th International Conference on Experimental Stress Analysis, EAN 2016; Hotel Srni; Czech Republic; May 30 – June 2, 2016, Srní, Czech Republic, ISBN 978-80-261-0623-4
- [13] Šedek, J. Optimization of composite airframe rib using tailoring blank technology, Optimization of composite airframe rib using tailoring blank technology, In Plánička F., Krystek J. (eds.), 54th International Conference on Experimental Stress Analysis, EAN 2016; Hotel Srni; Czech Republic; May 30 June 2, 2016, Srní, Czech Republic, ISBN 978-80-261-0623-4

- [12] Šedek J., Hron R., Kadlec M., **Bond Joint Analysis of Thermoplastic Composite Made from Stacked Tailored Blanks**., Applied Mechanics and Materials, Vol. 827 (2016), pp. 161-168, ISBN-13: 978-3-03835-531-1
- [11] Šedek, J., Hron, R. Kadlec, M. **Evaluation of a bond joint in a carbon weave reinforced thermoplastic manufactured from stacked tailored blanks**. In: 53rd Experimental Stress Analysis (EAN2015). Český krumlov (CZ), 1 4 June 2015, pp. 399-402.
- [10] Šedek J., Raška J., Růžek R., Běhal J.: Fatigue life of a flat panel under variable amplitude loading and dependency of predicted life on parameters of material model. Czech Aerospace proceedings, 1/2015, pp.29-35, ISSN: 1211-877x.
- [9] Kadlec M., Šedek J., Fatigue delamination of a carbon fabric reinforced epoxy composite with carbon nanotubes, ICCM, Copenhagen, Denmark, 2015
- [8] Šedek J., Hron R., Evaluation of a bond joint in the carbon weave reinforced thermoplast manufactured by stacked tailored blanks, In Padevět P. and Bittnar P. (ed.), EAN 2015, 53rd Conference on Experimental Stress Analysis, 2015, Český Krumlov, Czech Republic, pp. 399-402, ISBN 978-80-01-05734-6.
- [7] Šedek J., Raška J., Růžek R., Běhal J., **Comparative study of prediction methods for fatigue life evaluation of an integral skin-stringer panel**, 1st International Conference on Structural Integrity, ICSI 2015; Funchal, Madeira; Portugal; September 1 4 2014, Procedia Engineering, Vol. 114, 2015, pp. 124-131, doi: 10.1016/j.proeng.2015.08.050
- [6] Šedek J., Raška J., Růžek R., Běhal J., **Fatigue life evaluation of a flat panel by prediction** method of crack growth under variable amplitude loading and its dependency on material data processing, Czech Aerospace Proceedings, 2015, No. 1, pp. 29-33.ISSN 1211-877x.
- [5] Šedek J., Běhal J., Siegl J., **Structure overloading evaluation based on the identification of subcritical crack increments**, Engineering Failure Analysis, vol. 56, 2015, Elsevier, 265-274.
- [4] Horák V., Oberthor M., Šedek J. and Raška J., Evaluation of the Laboratory Fatigue Test and the Fatigue Behaviour of an Innovated Metal Aircraft Principal Structure Element. In: 4th International Conference of Engineering Against Failure (ICEAF IV), 24-26 June 2015, Skiathos, Greece. ISBN: 978-960-88104-5-7, ISSN: 2241-5890
- [3] Horák V., Oberthor M., Šedek J., Advanced evaluation method of fatigue properties of original and innovated aircraft metal principal structure elements. In The 3rd International Conference of Engineering Against Failure, 2013, Kos, Greece, Laboratory of Technology & Strength of Materials, University of Patras and Hellenic Metallurgical Society, pp. 89-97 ISBN: 978-960-88104-3-3p
- [2] Šedek, J., FE Modeling of Stiffness Equivalent Riveted Joints. In Fuis, V. (ed.). Proceedings of 17th International Conference Engineering Mechanics 2011: May 9-12, 2011, Svratka, Czech Republic. 1st edition. Prague: Institute of Thermomechanics, Academy of Science of the Czech Republic, v.v.i., 2011, pp. 591-594, ISBN: 978-80-87012-33-8.
- [1] Boháčová M., Šedek J., Pavlas J., Probability of Detection and Prediction of Fatigue Crack Growth in Aircraft Structures. Czech Aerospace Proceedings, 2010, No. 3, pp. 2-5. ISSN 1211-877X.