

## **Virtual 4th International Conference on Structural Integrity (ICSI2021)**

Thematic symposium

### **Structural integrity of 3D printed metal components**

3D printing of metal parts offers designers an extraordinary opportunity in terms of freedom of shape and the possibility of topological optimization. However, the introduction of metal parts produced by various additive manufacturing methods into the operation of structures and machines is still a great challenge for R&D teams. This manufacturing technology opens up new possibilities in the shape and arrangement of structural elements, but also brings new problems in terms of their structural integrity. We mean, for example, internal defects, residual stresses, surface quality and consequences of its final treatment, including applications of laser technologies, etc. We believe in an interesting mutual discussion about the integrity of printed metal components in real operation, including experience with verifying and improving their properties in laboratory conditions.

If you are interested in participating in this thematic symposium, please contact either Mr. Miloslav Kepka ([kepkam@rti.zcu.cz](mailto:kepkam@rti.zcu.cz)) or Mr. Vladimír Chmelko ([vladimir.chmelko@stuba.sk](mailto:vladimir.chmelko@stuba.sk)).