

PAPERS

- 5 **Design of the blisk of an aircraft turbojet engine and verification of its resonance free operation**
Chromek L.
- 15 **Usage of the particle swarm optimization in problems of mechanics**
Hajžman M., Bulín R., Šika Z., Svatoš P.
- 27 **Using Fourier and Taylor series expansion in semi-analytical deformation analysis of thick-walled isotropic and wound composite structures**
Jiran L., Mareš T.
- 49 **Vibration modes of a single plate with general boundary conditions**
Phamová L., Vampola T.
- 57 **Mathematical modelling of friction-vibration interactions of nuclear fuel rods**
Zeman V., Hlaváč Z.