

CONTENTS

O. Bartoš: Formation of the water droplets at high speed	7
M. Byrtus, L. Půst: Dynamical analysis of bistable mechanical oscillator	11
O. Červená, M. Balda, M. Hajžman: Balancing of rotors considering their foundations ...	17
M. Hajžman, J. Špička, R. Bulín, P. Polach: Computational treatment of equations of motion in spatial multibody dynamics	21
Š. Chladek, L. Pešek, P. Sulc, J. Hala: Computation of aeroelastic stability of linear blade cascade	25
G. Chwalik, M. Kromka-Szydek, Z. Dziechciowski: The influence of wheelchair parameters and propulsion technique on users comfort	29
M. S. Kozień: Description of particle motion in synchrotron built of dipole and quadrupole magnets with influence of ground vibrations in vertical plane for deterministic case	31
J. Latałski, J. Warminski: Dynamics of a rotating composite thin-walled beam subjected to lateral base excitation	37
J. Náprstek, C. Fischer: Asymmetry of the response probability density of a system with parametric random noises	39
P. Oršanský, B. Ftorek: Asymptotic parametric oscillations of mechanical systems ...	43
L. Pešek, V. Bula, P. Šnábl, J. Cibulka: Experimental analysis of bladed wheel model with tie-boss couplings – steady and rotational states	47
C. S. Prasad, L. Pešek: Fast estimation of flutter parameters of steam turbine blades using boundary element methods	51
P. Procházka, V. Uruba, L. Pešek: The experimental study of aeroelastic coupling of the moveable blade grid with the flow field at Reynolds number up to 150 000	57
L. Půst, L. Pešek: Running flutter waves in the model of turbine blades cascade	61
V. Radolf, J. Horáček, J. Košina, T. Vampola: Acoustic characteristics of 3D human vocal tract model with nasal cavities – preliminary experimental results	65
Z. Szmit, J. Warminski: Synchronisation phenomenon in mistuned three-bladed rotor ...	69

J. Škoda, J. Šklíba: Viscous friction in the axes of gyroscopic stabilizer	71
P. Šulc, L. Pešek, V. Bula, J. Košina, J. Cibuka: Deformation energy of Yeoh hyperelastic model and constant hyperelastic proportional damping	75
E. Voronova, D. Maturkanič: Influence of excitation frequency and pulse width on blade vibration	79
J. Warminski, A. Warminska, E. Manoach: An effect of temperature on regular and chaotic oscillations of circular plates	83
J. Zapoměl, P. Ferfecki, A. Sudhakar, J. Kozánek: Vibration stability of a vertical flywheel lifted by permanent magnetic rings	87
D. Ziemiński, P. Mokrzycki: Modular data analysis system in Java for experimental measurements of ground motion in SOLARIS synchrotron	91
I. Zolotarev, V. Vlček, J. Kozánek: Self-excited oscillation properties of the profile NACA0015 in subsonic flow	95
Author index	99