# **CONTENTS**

### 1 Gursky Volodymyr, Kuzio Ihor

Nonlinear Analysis in Synthesis of the Resonant Vibro-Impact Systems

## 11 Malashchenko Volodymyr, Strilets Oleh, Strilets Volodymyr

Fundamentals of Creation of New Devices for Speed Change Management

### 21 Korendiy Vitaliy

Analysis of Structure and Kinematics of Four-Bar Crank-Rocker Walking Mechanism

### 35 Diveyev Bohdan

Impact and Particle Buffered Vibration Absorbers Optimization and Design

### 51 Andrusyk Yaroslav

Propagation of Elastic-Tough-Plastic Wave in a Rod of Ideally Plastic Material which Possesses the Property of Yield Delay

### 67 Hromniuk Serhii, Hrytsai Ihor

Cutter Force and Influence of Elastic Deformation of Technological System of Gear-Hobbing Machine on Precision of Radial-Circumferential Method of Gear Cutting

#### 75 Huliieva Nataliia

Determination of Porosity of Materials by means of Metallographic Methods with a help of Application Programs

# 85 Dvoryanyn Hrystyna, Shvachco Sergiy

Ways of Improvement of Technological Process of Copper Wire Rod Production