

CONTENTS

- v A foreword from the Editor**
- 1 Anatoliy Melnyk**
Cyber-Physical Systems Multilayer Platform
and Research Framework
- 7 Mykola Mykyychuk, Svyatoslav Yatsyshyn,
Bohdan Stadnyk, Yaroslav Lutsyk**
Smart Measuring Instruments for Cyber-Physical Systems
- 17 Vasyl Yatsuk and Mykola Mykyjchuk**
Remote Errors Correction of Multi-Channel
Cyber-Physical Measuring Systems
- 23 Ihor Buchma**
Errors of Phase Shift Measuring by Algorithmic Sum-Difference
Methods from Amplitudes Inequality and Their Reduction Methods
- 31 Anatoliy Melnyk, Viktor Melnyk, Liubomyr Tsyhylyk**
Tasks Scaling with Chameleon® C2HDL Design Tool
in Self-Configurable Computer Systems Based on Partially
Reconfigurable FPGAs
- 39 Viktor Melnyk**
Self-Configurable FPGA-Based Computer Systems:
Basics and Proof of Concept
- 51 Maxim Musiyenko, Iryna Zhuravska,
Ivan Burlachenko, Oleksii Denysov**
The Principles of the Cyber-Physical Components'
Organization Based on the Methods
of the Multi-Agent Interaction of the Moving Objects
- 61 Andriy Salo**
Vending Cyber-Physical Systems Architecture