

CONTENTS

AEROSPACE SYSTEMS FOR MONITORING AND CONTROL

<i>Volodymyr Kharchenko, Wang Bo, Andrii Grekhov, Daria Bezsmertna</i> Investigation of modulation scheme and transmitter nonlinearity impact on ADS-B messages transmission via OFDM satellite link	7
<i>Volodymyr Kharchenko, Wang Bo, Andrii Grekhov, Julia Kostynska</i> Modeling of ADS-B messages transmission via satellite using MIMO systems	15
<i>Volodymyr Kharchenko, Vitaliy Larin, Iana Savitskaya</i> The methodics of signal type identification accuracy with hardware tools	22
<i>Volodymyr Kharchenko, Kateryna Tapia</i> Analysis of aircraft delays at the stage of arrival at airport	28
<i>Ievgen Udartsev, Alexandr Bondar, Ievgen Plakhotniuk</i> Navigation range and duration of flight of unmanned aerial vehicle	33
<i>Alexandr Luppo, Gennadiy Argunov, Oleksandr Prygara</i> European Centralized Services of air navigation system	43
<i>Ludmila Blahaia, Sergey Polishchuk</i> Concept of automated control system with analyzing condition of the ergatic component	49

AIRPORTS AND THEIR INFRASTRUCTURE

<i>Dmitry Prusov</i> The concept of the urban areas reconstruction planning on the basis of the scientific and engineering substantiation	54
<i>Taras Bliznyuk</i> Theoretical aspects of lightweight helipad pavement calculation	59

INFORMATION TECHNOLOGY

<i>Yevgeniy Tolbatov</i> The solution of the equations applying the general series of Fibonacci	65
<i>Svetlana Kredentsar, Sergey Rudas, Hanna Ivlieva</i> Algorithm and software implementation of international meteorological codes decoding method	73

ENVIRONMENT PROTECTION

<i>Lesia Pavliukh</i> Environmental awareness of university students	77
<i>Natalia Borul</i> Evolution of Cs-137 content of private sector milk in settlements of Dubrovysia district of Rivne region	80

CHEMMOTOLOGY AND CHEMICAL TECHNOLOGY*Volodymyr Tanin, Vsevolod Tanchuk*

Docking studies of typical conformations of protein tyrosine phosphatase 1B 87

Volodymyr Ledovskykh, Oleksandr Davydenko, Eugenia Rogova

Cathode reduction of aliphatic aldehydes on cadmium electrode for regeneration of used motor oils 93

Volodymyr Ledovskykh, Nikolay Stepanov, Ekaterina Freimantal

Influence of surfactants on surface tension and saturated vapor pressure of hydrocarbons 98

PROFESSIONAL EDUCATION*Volodymyr Kharchenko, Dmitry Prusov*

Strategy for the training of highly qualified scientific personnel at the National Aviation University 103

Olena Petrashchuk, Olena Skypalska

Video based teaching of Aviation English 109

Instructions for authors

116