## MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE National Aviation University

## **PROCEEDINGS**

## of the National Aviation University

\*

Scientific journal

\* 4 times a year

Established in November 1996

4 (73) 2017

## Proceedings of the National Aviation University, N 4 (73), 2017

http://jrnl.nau.edu.ua/index.php/visnik/

**Journal Scope:** *Proceedings of the National Aviation University* Scientific Journal is intended for publishing original research papers in English presenting results of experimental and theoretical studies in the air transport field. Our journal represents the following fields of research: aerospace systems for monitoring and control; modern aviation and space technology; airports and their infrastructure; information technology; environment protection; chemmotology and chemical technology; biotechnology; transport technologies; economic development strategy; professional education; law.

**History:** The Scientific Journal *Proceedings of the National Aviation University* was founded in 1996. The first volume of the Scientific Journal was published under the title Proceedings of the Kyiv International University of Civil Aviation in 1998. Since 2001 the Scientific Journal has been issued under the title Proceedings of the National Aviation University. Scientific journal "Proceedings of the National Aviation University" is referred to Ukrainian professional and scientific publications in the field of Engineering, Chemical (Ecological Safety) and Pedagogical Sciences.

Abstracts & Indexing: EBSCO, Google Scholar; Directory of Open Access Journals (DOAJ); CrossRef, Russian Science Citation Index (Elibrary.ru); Chemical Abstracts Service (CAS); Index Copernicus International (IC), WorldCat; DRIVER; Academic Journals Database, Simple Search Metadata (SSM); the Vernadsky National Library of Ukraine; Scientific and Technical Library of the National Aviation University; Bielefeld Academic Search Engine (BASE); Ulrichsweb global serials directory; Directory of Research Journal Indexing (DRJI); Journal TOCs; SHERPA/RoMEO; Journal Finder University Libraries, Sjournals, Universal Impact factor, Research Bible, Periodicos.capes.gov.br.

**Disclaimer:** The Editorial Board of the Scientific Journal "Proceedings of the National Aviation University" makes every effort to ensure the accuracy of all the information (the 'Content') contained in its publications. However, the Editorial Board is not responsible for authenticity of facts, names, photos and other Content of the article and disclaims all representations and warranties whether express or implied to the maximum extent permitted by effective legislation of Ukraine. Any views expressed in this publication are the views of the authors and are not necessarily the views of the Editorial Board of the Scientific Journal "Proceedings of the National Aviation University".

**Copyright** © **2017 National Aviation University.** All rights reserved. No part of this publication may be reproduced, stored, transmitted, or disseminated, in any form, or by any means, without prior written permission from National Aviation University, to whom all requests to reproduce copyright material should be directed, in writing.

Certificate of State Registration KV 5091 of 28 April 2001.

Approved for publication and distribution via the Internet by the Academic Council of the National Aviation University (Minutes 13 of 20 December 2017).

**Submissions:** All submissions should be made online at the Proceedings of the National Aviation University (http://jrnl.nau.edu.ua/index.php/visnik/author). Complete guidelines for preparing and submitting a manuscript to this Scientific Journal are provided at the Scientific Journal website.

Enquiries to Scientific Journal Proceedings of the National Aviation University should be addressed to the Editorial Board:

Kosmonavta Komarova avenue 1 Kyiv, Ukraine, 03680 Phone: +38044 408 24 29 Fax: +38044 406 72 12

E-mail: vestnik.nau@gmail.com