

**Casimir Pulaski Radom University**



**Journal of Automation,  
Electronics  
and Electrical Engineering**

**Volume 6  
No. 2**

**Radom 2024**

## **Reviewers**

Prof. Jacek Paś (POLAND)

Prof. Adam Rosiński (POLAND)

## **Editorial Committee Contact**

**Journal of Automation, Electronics and Electrical Engineering  
JAEEE**

**Casimir Pulaski Radom University**

**Faculty of Transport, Electrical Engineering and Computer Science**

**Malczewskiego 29, 26-600 Radom, Poland**

**email: [jaeed@uthrad.pl](mailto:jaeed@uthrad.pl)**

**[www.jaeed.uniwersytetradom.pl](http://www.jaeed.uniwersytetradom.pl)**

**ISSN 2658-2058**

**Copyright@2024 by Publishing House Casimir Pulaski Radom University**

**All rights reserved. No part of this publication may be modified, reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from publisher.**

# Journal of Automation, Electronics and Electrical Engineering Journal

## JAEÉE

### Scientific and Editorial Board

#### **Prof. Zbigniew Łukasik - Chairman of Scientific Board**

Casimir Pulaski Radom University, Poland

#### **Prof. Mirosław Luft - Editor\_in\_Chief**

Casimir Pulaski Radom University, Poland, Poland

Prof. Miroslav Gutten - The University of Žilina, Slovakia

Prof. Daniel Korenčiak - The University of Žilina, Slovakia

Prof. Jacek Kozyra - Casimir Pulaski Radom University, Poland

Prof. Andrzej Lewiński - Casimir Pulaski Radom University, Poland

Prof. Mareks Mezitis - Transport Academy, Latvia

Prof. Andrzej Wac-Włodarczyk - Lublin University of Technology, Poland

Prof. Waldemar Wójcik - Lublin University of Technology, Poland

Prof. Tadeusz Kaczorek - Bialystok University of Technology, Poland

Prof. Krzysztof Kluszczyński - Tadeusz Kościuszko University of Technology, Poland

Prof. Józef Lisowski - The Gdynia Maritime University, Poland

Prof. Erwin Smet - The University of Antwerp, Belgium

Prof. Aleš Janota - The University of Žilina, Slovakia

#### **Science Secretary**

Daniel Pietruszczak, BEng, PhD - Casimir Pulaski Radom University, Poland

#### **Layout Design**

Prof. Mariusz Dański - Casimir Pulaski Radom University, Poland

#### **Computer Formatting, Website Suport**

Wojciech Chamela, BEng, MSc - Casimir Pulaski Radom University, Poland

**Publishing House**  
**Casimir Pulaski Radom University**  
**Faculty of Transport, Electrical Engineering and Computer Science**  
**Malczewskiego 29, 26-600 Radom, Poland**  
**email: [wydawnictwo@uthrad.pl](mailto:wydawnictwo@uthrad.pl)**

**Printing and binding:**  
**Printing Department of the Casimir Pulaski Radom University, Poland**

## Contents

<b>Tadeusz KACZOREK</b>	A new approach to the stabilization problem of linear systems	7
<b>Tadeusz KACZOREK</b>	Transformations of the discrete-time linear systems to the positive asymptotically stable forms	23
<b>Juha KALLUNKI</b>	An evaluation of the portable anechoic chamber for electromagnetic compatibility (EMC) studies	35
<b>Cezary WANKO Roman PNIEWSKI</b>	Optimisation of the production line for safety equipment in rail traffic using the RHR-95 drive as an example	45

