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## Preface

This issue is a collection of 12 selected papers. These papers are presented at the Fifth International Conference on Analysis and Applied Mathematics (ICAAM 2020) organized by Near East University, Lefkosa (Nicosia), Mersin 10, Turkey.

The meeting was held on September 23–30, 2020 in North Cyprus, Turkey. The main organizer of the conference is Near East University, Nicosia (Lefkosa), Mersin 10, Turkey. The conference was also supported by Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan and Analysis & PDE Center, Ghent University, Belgium.

The conference is organized biannually. Previous conferences were held in Gumushane, Turkey in 2012; in Shymkent, Kazakhstan in 2014; in Almaty, Kazakhstan in 2016; in 2018 Lefkosa, Mersin 10, Turkey. The proceedings of ICAAM 2012, ICAAM 2014, ICAAM 2016, and ICAAM 2018 were published in AIP Conference Proceedings (American Institute of Physics) and in some rating scientific journals.

Near East University was pleased to host the fifth conference which was focused on various topics of analysis and its applications, applied mathematics and modeling. The main aim of the International Conferences on Analysis and Applied Mathematics (ICAAM) is to bring mathematicians working in the area of analysis and applied mathematics together to share new trends of applications of mathematics. In mathematics, the developments in the field of applied mathematics open new research areas in analysis and vice versa. That is why, we planned to find the conference series to provide a forum for researches and scientists to communicate their recent developments and to present their original results in various fields of analysis and applied mathematics. This issue presents papers by authors from different countries: Azerbaijan, Iraq, Russia, Turkey, Turkmenistan, USA, Kazakhstan. Especially we are pleased with the fact that many articles are written by co-authors who work in different countries. We are confident that such international integration provides an opportunity for a significant increase in the quality and quantity of scientific publications.

Finally, but not least, we would like to thank the Editorial board of the "Bulletin of the Karaganda University - Mathematics", who kindly provided an opportunity for the formation of this special issue.

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**GUEST EDITORS:**

*Allaberen Ashyralyev*

Department of Mathematics, Near East University, Nicosia, TRNC, Mersin 10, Turkey;  
Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan;  
Peoples' Friendship University of Russia (RUDN University), Moscow, Russia;  
allaberen.ashyralyev@neu.edu.tr

*Makhmud A. Sadybekov*

Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan;  
sadybekov@math.kz