## FOREWORD

The 5th International Symposium on Natural Hazards and Disaster Management (ISHAD2021) was held Online on the 6th November 2021 in partnership with the Academic Platform and Sakarya University of Applied Sciences, and it immensely gives us pleasure to release the proceedings of the ISHAD2021.

International Symposium on Natural Hazards and Disaster Management is an annual symposium organized by Academic Platform since 2016. It provides a forum for publishing original, most recent researches and critical reviews dealing with aspects of natural hazards and disaster management. In this framework, the conference creates a platform to bring together academicians, experts, bureaucrats, administrators, institutions, students, local governments, and non-governmental organizations to share, exchange and upgrade for a better understanding of natural hazards, disasters, and disasters management. The symposium aims at connecting academicians, experts, bureaucrats, administrators, local governments, and non-governmental organizations to facilitate the exchange of ideas on topics of mutual interest and to serve as a platform for connecting the stakeholders.

ISHAD2021 performed both in English and Turkish and successfully organized parallel sessions. We would like to express our gratitude to the Rector of Sakarya University of Applied Sciences, Prof. Dr. Mehmet Sarıbıyık. Our keynote speakers, Dr. Maki Koyama and Dr. Doğan Kalafat deserve special appreciations for their valuable, interesting and informative speeches. As an invited speaker, Dr. Ana Petrović provided a great amount of knowledge to the audiences. In addition, we aimed at encouraging the junior researchers during the symposium, and many young researchers had a chance to share their works with the world.

The success of the conference was due to the collective efforts of a large number of individuals. These Proceedings will furnish the scientists of the world with an excellent reference book. We also believe that this will be an impetus to stimulate further study and research in all these areas.

Chair of Academic Platform Chair of ISHAD2021 *Prof. Dr. Naci Çağlar* 

Co-Chair of ISHAD2021 Dr. Tuba Tatar