

Preface

These proceedings include the selected papers presented at the 13th International Conference: Innovative Technologies for Joining Advanced Materials (TIMA22) held in Timișoara, România, via videoconference, during November 24-25, 2022. The conference takes place every year and is traditionally organized by the National R&D Institute for Welding and Material Testing - ISIM Timișoara in cooperation with “Politehnica” University of Timișoara and Romanian Academy of Technical Science, Timișoara Branch.

The conference aims to provide a platform for useful interaction on actual problems in the field of advanced materials joining and testing procedures. Particular attention was given to practical problems coming from the industry. The event brought together researchers from institutes, universities and economic fields from different countries in order to discuss the following actual topics:

- New joining technologies;
- Modelling and simulation of welding processes;
- Specific problems in advanced materials joining;
- Characterization of advanced materials and joints;
- Fracture mechanics, damage of advanced materials and remaining life assessment;
- Quality of welded joints and welded structures;
- Engineering applications of surface coatings;
- Non-Destructive Testing (NDT);
- Nanoscience, nanotechnology and composites.

In their articles, the authors revealed the results of their own research and development activity, carried out in the frame of their institutes, universities and economic fields from Romania, Italy, Portugal, Hungary, Slovenia, Ukraine, Serbia, and Latvia.

We would like to thank all the authors who have contributed to this proceeding and also the Organizing Committee, reviewers, speakers, chairpersons, sponsors, and all the conference participants for their support for a successful scientific meeting.

Editor,

Dr. eng. Nicușor-Alin SÎRBU

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