

## PREFACE

The 9-th International Conference on Thermal Equipment, Renewable Energy and Rural Development (TE-RE-RD 2019 - <http://www.tererd.pub.ro/>) was organized Online (powered by Microsoft Teams) in the period 26-27 June 2020, due to the restrictions caused by the COVID-19 pandemics.

**TE-RE-RD** is an International pluridisciplinary Conference aimed to be a forum for information exchange between scientists from academic, research and development communities around the world on topics related to thermal machines, equipments and technologies, equipments, technologies and policies for rural development, renewable energy sources conversion and other technical domains.

Another target of the Conference is to offer to the young people involved in research activities (PhD, Master, and regular students) the opportunity to disseminate their work results and learn from experimented scientists.

We also welcome people and entities from industry, agriculture, administration, trade, politics and media who want to cooperate with academic and R&D organizations in the fields of the Conference.

The main Organizers, University POLITEHNICA of Bucharest (Faculty of Mechanical Engineering and Mechatronics and Faculty of Biotechnical Systems Engineering), National Institute of Research – Development for Machines and Installations Designed to Agriculture and Food Industry and the Romanian Society of Agricultural Mechanical Engineers produce every year since 2012 an itinerant Conference in academic cities or touristic resorts. This year, the chosen partner was Constanța Maritime University, who offered its halls for the sessions and a part of his staff for the event success. Unfortunately, the social distance restrictions lead the Organizers to move the sessions online.

The main topics of the Conference were:

- Processes in thermal equipment
- Steam and hot water generators
- Steam and gas turbines
- Internal combustion engines
- Environmental protection
- Solar, wind, geothermal, biomass
- Building efficiency
- Equipment for rural development
- Politics of rural development
- Agricultural engineering
- Energy of rural space

For this year the Organizers continued to use the Conference Management Toolkit provided by Microsoft in order to manage the paper submissions and reviewing process. We received 106 papers distributed to 108 reviewers. 84 papers were accepted to be presented and 22 papers were rejected or retired by the authors after revision process.

The Conference was developed on 4 tracks:

- 17 papers in the section Thermal Equipments
- 20 papers in the section Renewable Energy
- 27 papers in the section Rural Development
- 20 papers in the section Miscellaneous

Besides the representatives of the Organizers, the Conference also welcomed researchers from University Angel Kanchev of Ruse (Bulgaria), Technical University of Varna (Bulgaria), Technical University of Sofia (Bulgaria), University of Telecommunications and Post Sofia (Bulgaria), Almaty University of Power Engineering and Telecommunications (Kazakhstan), Satpayev University (Kazakhstan), University of Food Technologies of Plovdiv (Bulgaria), Moscow State University of Civil Engineering (Russia), RUDN University (Russia), Al - Furat Al- Awsat Technical University (Iraq), University "Dunărea de Jos" of Galați (Romania), University of Craiova (Romania), Naval Academy Mircea cel Batran Constanța (România), "Ion Mincu" University of Architecture and Urbanism (Romania), INCD Comoti (Romania), INCD ICEMENERG (Romania), INOE2000-IHP Bucharest (Romania), Agricultural Research and Development Secuieni (Romania), Etudes et Productions Schlumberger, etc.

We hope that next edition the number and the value of papers will increase, the current participants will come back and new authors will attend.

See you again in 2021,

Prof. Gabriel Negreanu

Dr. Valentin Vlăduț

Prof. Mohand Tazerout

Editors of the Conference Proceedings TE-RE-RD 2020