Preface

This volume contains peer-reviewed papers prepared as the event of the National Contact Point "Secure, Clean and Efficient Energy" (9-11 November 2020, Dnipro, Ukraine) under the support of the Ministry of Education and Science of Ukraine. Funding was carried out as part of the project "Belt and Road Initiative Institute for Chinese-European studies (BRIICES)" and was funded by the Guangdong University of Petrochemical Technology.

Selected papers cover a wide range of topics regarding solving actual challenges in theoretical and practical research in applied materials science in the context of synthesis, analysis of properties, the technology of materials processing, and their use. A number of effective processes have also been developed for the fabrication of carbonaceous materials.

The book will be interesting and useful for specialists and researchers from various branches of engineering and essential reading for those in the related areas and will inspire future studies and achievement.

A significant issue of this collection is the geography of presented works. The authors who had submitted the research papers for consideration were from China, India, Indonesia, Iraq, Jordan, Kyrgyzstan, Malaysia, Nigeria, Peru, Poland, Russia, South Africa, and Ukraine. More than half of the presented research results obtained by authors in international cooperation and are successful.

Editors acknowledge the contribution of the organization staff, members of program committees, authors, and expert referees who spared their valuable time. Special gratitude to the reviewers for their valuable recommendations has been taken into account to improve the selected papers' quality significantly.

We would like to express the warmest thanks to participants and sponsors for their support. Finally, we express our special heartfelt thanks and gratitude to the Trans Tech Publication team with a dedicated editorial team and rigorous but fair and friendly service.

Editors

Oleg Bazaluk, Belt and Road Initiative Institute for Chinese-European studies (BRIICES), Guangdong University of Petrochemical Technology

Gennadiy Pivnyak, Dnipro University of Technology

Roman Dychkovskyi, Dnipro University of Technology

Vasyl Lozynskyi, Dnipro University of Technology

Pavlo Saik, Dnipro University of Technology

Daria Pilova, Dnipro University of Technology