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NANO, BIO, GREEN & SPACE – TECHNOLOGIES FOR A SUSTAINABLE FUTURE  
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**The International Multidisciplinary Scientific GeoConference SGEM (Survey, Geology, Ecology and Management) are focused on GLOBAL WARMING, CLIMATE CHANGE, CO<sub>2</sub> REDUCTION, BIODIVERSITY, AND GREEN TECHNOLOGIES FOR A SUSTAINABLE FUTURE.**

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## FOREWORD

**The International Multidisciplinary Scientific GeoConference SGEM is focused on GLOBAL WARMING, CLIMATE CHANGE, CO<sub>2</sub> REDUCTION, BIODIVERSITY, AND GREEN TECHNOLOGIES FOR A SUSTAINABLE FUTURE.**

**The world is wild and hard to predict, and no matter how good we are as scientists we can't arrange it according to the precise boundaries of our academic disciplines.** Many examples could be given, but one of them is an urgent problem in one of the most discussed topics of the conference: **Global Warming and Decarbonization**. To manage them successfully, we need a deep understanding of the climate process. Furthermore, we also need to work in areas close to the problem, such as exploration and extraction of minerals, water resources, forest, marine and ocean ecosystems, energy, waste management, environmental and air pollution, and energy sources, to know more and develop green technologies etc.

*The planet must be protected from degradation through sustainable consumption and production, sustainable management of its natural resources and taking urgent action against climate change to meet the needs of present and future generations. But each problem here is megatrend-sized and multifaceted, and no single discipline will solve any of them alone. This is why we need collaboration and partnership to bridge the gaps between significant fields in the magical world of geosciences.*

Only by bringing together scientists, researchers and specialists from different sections in geosciences to solve real-life problems and achieve the goals of AGENDA 2030, will we be able to get a much more complete picture of the world around us and to solve the problems and complex challenges that time puts before us. This is the way to find expert solutions not only for **GLOBAL WARMING, but also for CLIMATE CHANGE, CO<sub>2</sub> REDUCTION, BIODIVERSITY, AND GREEN TECHNOLOGIES FOR A SUSTAINABLE FUTURE for our planet.**

This forum brings together scientists, researchers and specialists from two or more scientific disciplines, putting them side by side to work together on issues of concern to society. **By developing their interdisciplinary objectives, they firmly build the foundation of a common conceptual framework that underpins the sustainable development goals of AGENDA 2030.**

*Thus we confirm the multidisciplinary approach of modern geosciences, which is the essence of our GeoConferences.*

### **Acknowledgements**

The Conference Committee and the Editorial Board are open to comments and recommendations for developing future conference proceedings and the organization of the next SGEM GeoConferences. We would like to thank all the authors, reviewers, members of the Programme and Scientific Committee and the Editorial Board as well as supporting staff for their contribution to organizing the 22<sup>nd</sup> edition of the conference.

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