

PAPER • OPEN ACCESS

International Conference on the Sustainable Energy and Environmental Development

To cite this article: 2019 *IOP Conf. Ser.: Earth Environ. Sci.* **214** 011001

View the [article online](#) for updates and enhancements.

2nd International Conference on the Sustainable Energy and Environmental Development (SEED2017)

K Szramowiat^{1,2,*}, K Sornek^{1,3}, M Marczak⁴

¹Institute for Sustainable Energy, Radzikowskiego Str. 100B/43, 31-315 Krakow

²AGH University, Faculty of Energy and Fuels, Department of Coal Chemistry and Environmental Sciences, Mickiewicza Av. 30, 30-059 Krakow

³AGH University, Faculty of Energy and Fuels, Department of Sustainable Energy Development, Mickiewicza Av. 30, 30-059 Krakow

⁴AGH University, Faculty of Energy and Fuels, Department of Fuel Technology, Mickiewicza Av. 30, 30-059 Krakow

E-mail: katarzyna.szramowiat@ize.org.pl

This volume of IOP Conference Series: Earth and Environmental Science contains selected papers from the 2nd International Conference on the Sustainable Energy and Environmental Development (SEED2017) held on November 14–17, 2017, in Krakow Technology Park, Krakow, Poland. This conference concerned such important issues as energy, fuels, and environmental protection.

The SEED2017 conference attracted 180 scientists and engineers from 13 countries, including Finland, Iraq, Austria, Algeria, Portugal, Poland, the United States, Norway, Belgium, Czech Republic, Slovakia, Italy, and Croatia. The participants represented 46 universities and other research and development institutions (14 from abroad and 32 from Poland) as well as companies from energy and energy-related sectors. During the conference, 77 oral presentations and 131 poster presentations were presented. Oral speeches were grouped into 10 thematic sessions: renewable energy, solid fuels, alternative energy, automotive engines, environment, measurements in energy sector, energy policy and planning, cogeneration, nuclear energy, and selected energy aspects. The keynotes addressed for the oral sessions were given by J. C. Colmenares Quintero, W. Gis, P. Bielaczyc, R. Figaj, K. Grzesik, P. Drobnik, T. Orliński, J. Eliaz, J. Gołaś, N. Czuma, K. Zarębska, P. Bogacz, A. Borsukiewicz, P. Gajda, Ł. Uruski, and M. Filipowicz.

The SEED2017 conference was opened by the plenary sessions, during which the invited speakers delivered their presentations: Dr. Evert Bouman, Norwegian Institute for Air Research (*Municipal Climate and Energy Strategy – Experiences in Polish Municipalities*), Prof. Witold Brostow, University of North Texas (*Protection of Thermoelectric Materials against Effects of Thermal Cycling*), Ph.D. Thomas Salkus, Vilnius University (*Impedance Spectroscopy of Ion-Conducting Materials for Applications in Fuel Cells*), and Prof. Laura Vanoli, University of Cassino and Southern Lazio (*Energetic Performance of a Low-Cost Photovoltaic/Thermal (PVT) Collector with and without Thermal Insulation*).

Besides the scientific presentations, during the SEED2017 conference, the following special events were organized: technical visits in selected industrial objects (the thermal waste treatment plant, the water power plant Dąbie, and heat power station in Kraków-Łęg), a gala dinner at Krakow Kazimierz, and escape room competitions.



We thank the Organizing Committee of the SEED'17 conference for their hard work in making the conference a success: Andrzej Raźniak (Chairman), Katarzyna Szramowiat (Secretary), Mariusz Filipowicz, Magdalena Dudek, Tadeusz Olkuski, Tomasz Mirowski, Krzysztof Sornek, Kamila Rzepka, Łukasz Uruski, Marta Marczak, and Katarzyna Nosek.

We give special thanks also to Faustyna Wierońska, Anna Korzeniewska, Barbara Szramowiat, Katarzyna Zubek, Mateusz Karczewski, and Wiktor Pacura.

We are grateful for the financial support from the Voivodeship Fund for Environmental Protection and Water Management in Krakow. Moreover, we are grateful to the patronage and partners of the conference: Ministry of Energy, Ministry of Science and Higher Education, Ministry of the Environment, Energy Regulatory Authority, Małopolska to Lesser Poland, krakow.pl, and Ciepło dla Krakowa. We especially thank the authors whose papers form this volume of IOP Conference Series: Earth and Environmental Science.

The conference was organized by the Institute for Sustainable Energy (www.ize.org.pl) in cooperation with the Faculty of Energy and Fuels, AGH University of Science and Technology in Krakow (www.weip.agh.edu.pl).

The next conference, 3rd International Conference on the Sustainable Energy and Environmental Development, is scheduled to be held in October 2019 in Krakow. Visit us at www.seedconference.pl to find further details.