About the conference

This cyclical Conference, organised for 54 years in the 4-year cycle, is considered by specialists one of the most important boiler conferences worldwide. The standard period of four years has passed since the last, 12th ICBT Poland ’2014 and during that time the issues related to the need to implement new device design solutions, inventions, materials and results of experimental studies have accrued. Hence, the time has come to assemble again to discuss the issues, evaluate and implement current accomplishments of science and technology as well as boiler materials and auxiliary devices, exchange operational experiences and choose the optimal directions for new construction and modernisation projects.

The geographic, economic and logistic situation of Poland is the major reason for use of fossil fuels – bituminous coal and lignite – for power and heat generation. According to various sources, global coal resources will suffice for 80–100 more years while forecasts for crude oil and natural gas are much worse. Coal use, however, is not easy, nowadays, in the realities of the global power sector given the necessity of limiting the gaseous and PM emission, the greenhouse effect and protecting the natural environment in general. Thus, we must burn those fuels with maximum efficiency at minimum emissions of arduous substances into the environment. This brings increasingly difficult technical and logistic challenges.

Polish conventional coal-based power generation is currently among the most modern in the world. Commissioning for operation of large coal units with the capacity of 1×1000 MW, 2×900 MW, 1×910 MW, the largest in Europe lignite-fired power plant and units with fluidised bed boilers place Polish power sectors among the leaders of the coal boiler users.

Furthermore, older units of 200 MW class will fulfil an important role in our power system for at least 10-20 years. Nevertheless, their modernisation and adjustment to the power market challenges and cooperation with the RES are necessary. This results in numerous issues worth discussing at the Conference forum.

The International Conference on Boiler Technology traditionally assembles a wide group of specialists from many companies and countries. This edition was attended by 400 participants representing 110 entities. In total 83 scientific-technical papers and presentations were delivered. All the papers were subjected to peer review.
**Editors of the Proceedings**

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