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Current State of Coal Fly Ash Utilization: Characterization and Application

Guest Editors:

Dr. Alex Kondratiev

College of Environmentally Sound Technologies & Engineering, National University of Science & Technology (MISIS), Moscow, Russia

Dr. Dmitry Valeev

Vernadsky Institute of Geochemistry and Analytical Chemistry of Russian Academ**y** of Sciences, Moscow 119991, Russia

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Message from the Guest Editors

Coal fly ash (CFA) is the main solid waste from coal-fired power plants. The world's annual growth of this type of waste is about 700-800 million tons. CFA contains oxides of non-ferrous metals (SiO2, Al2O3, Fe2O3, CaO), as well as unburned carbon and rare earth elements. So, CFA can be used as feedstock in metallurgy, chemical and construction industries. The novel science direction is the use of CFA to reduce CO₂ emissions by reacting a part of the carbon dioxide with calcium oxide and obtaining construction materials. An important direction is the zeolite production. This type of materials can be used for the purification of wastewater from heavy metals. It is promising to use CFA for the production of ceramics with high physical properties based on silicon carbide (SiC). We invite you to contribute a paper to this Special Issue. Reviews, communications, or research articles would be very appreciated.









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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Materials Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi