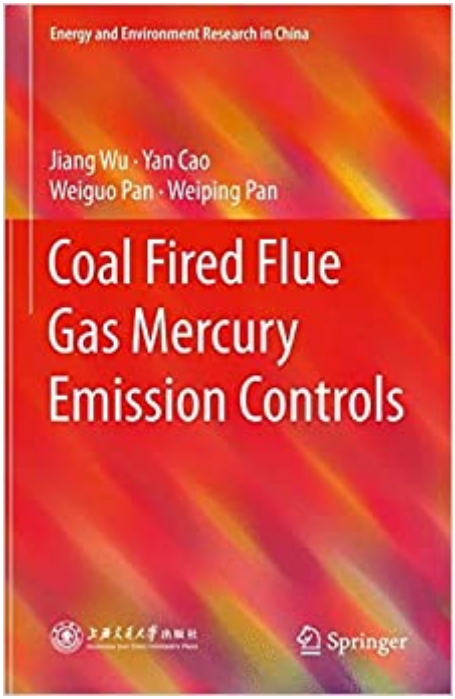
Coal Fired Flue Gas Mercury Emission Controls (Energy And Environment Research In China)



Synopsis

Mercury (Hg) is one of the most toxic heavy metals, harmful to both the environment and human health. Hg is released into the atmosphere from natural and anthropogenic sources and its emission control has caused much concern. This book introduces readers to Hg pollution from natural and anthropogenic sources and systematically describes coal-fired flue gas mercury emission control in industry, especially from coal-fired power stations. Mercury emission control theory and experimental research are demonstrated, including how elemental mercury is oxidized into oxidized mercury and the effect of flue gas contents on the mercury speciation transformation process. Mercury emission control methods, such as existing APCDs (air pollution control devices) at power stations, sorbent injection, additives in coal combustion and photo-catalytic methods are introduced in detail. Lab-scale, pilot-scale and full-scale experimental studies of sorbent injection conducted by the authors are presented systematically, helping researchers and engineers to understand how this approach reduces the mercury emissions in flue gas and to apply the methods in mercury emission control at coal-fired power stations. Readers will arrive at a comprehensive understanding of various mercury emission control methods that are suitable for industrial applications.The book is intended for scientists, researchers, engineers and graduate students in the fields of energy science and technology, environmental science and technology and chemical engineering.

Book Information

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Customer Reviews

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