



SMART Biochar Technology - A Shifting Paradigm Towards Advanced Materials and Energy & Environmental Research

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ABSTRACT

Biochar, produced through pyrolysis of biomass under low or no oxygen conditions, has found a wide range of applications from soil fertility improvement to removal of contaminants. Initial interest in biochar is to use it as a means to capture carbon dioxide from the atmosphere; however, recent developments are seeing biochar being applied in engineering, and health care and life sciences, some of those applications have large potentials for rapid commercialization. We expect a paradigm shift towards the development of the next generation of biochar with applications in a range of new fields.

SPEAKER'S BIOGRAPHY

Prof. Yong Sik Ok is Full Professor in the Division of Environmental Science and Ecological Engineering, Korea University, Seoul, Korea, where he also serves as Director of the Korea Biochar Research Center. He also served a number of positions worldwide including Adjunct Professor at the University of Wuppertal, Germany, Honorary Professor at the University of Queensland, Australia, Guest Professor at China Jiliang University, China and Guest Professor at Ghent University Global Campus, Ghent University, Belgium. Prof. Ok's academic background covers waste management, bioavailability of emerging contaminants, and bioenergy and value-added products such as biochar. Prof. Ok also has experience in fundamental soil science and remediation of various contaminants in soils and sediments. **Together with graduate students and colleagues, Prof. Ok has published over 500 research papers, 28 of which were ranked as ESI top papers (24 nominated as "Highly Cited Papers" and 4 nominated as "Hot Papers").**

Prof. Ok maintains a worldwide professional network through his service as an Associate Editor for Environmental Pollution and Critical Reviews in Environmental Science and Technology, and as a Member of the Editorial Boards of *Chemosphere*, *Journal of Analytical and Applied Pyrolysis* and several other international scientific journals.

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