

# HIGH-VALUE UTILIZATION OF THERMOCHEMICAL FOR ORGANIC SOLID WASTE

## Speaker

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(Oral Presentation in Mandarin)



## Abstract

The clean and high-value utilization of combustible solid waste is a major way to improve the level of waste reuse and to build a waste recycling system. A systematic study on the thermal deconstruction and reconstruction of combustible solid waste for high-value utilization has been conducted. A multivariate and broad-spectrum thermal deconstruction reaction theory of combustible solid waste has been constructed. A series of distributed multivariate thermal conversion engineering equipment has been invented. A new mechanism of synergistic reaction enhancement and regulation has been proposed. A multivariate enhancement of internal and external sources of thermal treatment equipment has been developed. A new method of target reconstruction of pyrolysis products has been established. A series of modification and enhancement technologies and equipment for pyrolysis products have been developed. Based on these, the study on the method of high-value utilization of waste organic and inorganic hybrid materials is developing.

## Biography

Professor Yong Chen is an Academician of Chinese Academy of Engineering, a current member of the Standing Committee of the Chinese Association for Science and Technology, and Chairman of the Guangdong Provincial Association for Science and Technology. Prof. Chen obtained his Ph.D. from Nagoya University in 1993. He has been working in the development of energy and resource utilization of organic solid waste for a long time. A series of technologies and integrated methods including thermochemical conversion, physical conversion, chemical conversion, and biochemical conversion have been utilized to achieve high-value energy and resource utilization of household waste, animal manure, and agricultural and forestry waste. He has been in charge of more than 50 major national and provincial-level projects. He has published over 300 papers in English and Chinese and published 9 monographs in Chinese. He has been awarded 2 Second-class National Science and Technology Progress Awards, 7 provincial-level Science and Technology Progress Awards, and Ho Leung Ho Lee Science and Technology Progress Awards.



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