Towards An Environmentally Clean Charcoal Production

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Abstract

In the industrialized countries, a large number of research groups are leading research and development in energy efficient and environmentally benign processes for charcoal production. Along these lines, this research will focus towards the development of an efficient process that can achieve high charcoal yield with minimum energy usage and negligible environmental emissions. The incorporation of system design, heat integration, control and automation will be applied to optimize process design towards minimizing heat losses, and maximizing wood conversion to charcoal under low/zero emissions. It is expected that this approach will contribute in reducing deforestation and environmental pollution caused by charcoal production.