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Biochar – A chemical view on formation and properties

Andrea Kruse, Catalina Rodriguez Correa, Gero C. Becker, and Domink Wüst

Chair of Conversion Technology and LCA of Renewable Resources. Institute of Agricultural Engineering, University Hohenheim, 70599 StuttgartGermany (Andrea_Kruse@uni-hohenheim.de)

In a lot of studies concerning the use of biochar, the carboneous material is not clearly specified. Often, this leads to not comparable results. In this presentation the different processes to produce carbonizates are introduced, the chemical processes to form the product and the consequences for the properties of the char/coke are discussed. The focus is on coke from gasification, char from fast and slow pyrolysis and hydrochar form hydrothermal carbonization. Aspects like the surface properties, stability and contamination e.g. by PAK are illustrated by the chemical processes occurring during the production processes.