Preparation of activated carbon from barley husk and their pore properties

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The carbonaceous adsorbents were prepared from barley husk of beer production process residue. The barley husk was heat treated at 700~800℃ in inert atmosphere for carbonization and activated by further activation at 700~900℃ in steam atmosphere. The specific surface area of prepared carbonaceous adsorbents were ranged between 600~1000m^2/g. The barley husk have low ash content of about 3wt.%, and have advantage in preparing adsorbent with high specific surface area of rice husk with high ash content. The pore properties of prepared adsorbents were evaluated with isothermal nitrogen adsorption and relationship between preparation conditions and pore properties was also considered.