ACTIVATED CARBON FROM PALM SHELL, AN AGRICULTURAL WASTE, USING K₂CO₃: INFLUENCE OF ACTIVATION TIME ON PORE DEVELOPMENT

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ABSTRACT
The main objective in this work is study the influence of activation times in the preparation of activated carbon by the method of potassium carbonate (K₂CO₃)-chemical activation. The characteristics and pore development of the prepared activated carbon were investigated. The experiments were carried out with activation time varied from 0.5 to 4.0 h. The results show that in all cases, increasing the activation time the yield decreases, while the adsorption of CO₂ will increase, progressively. It was found that the specific surface area of activated was at a maximum value (about 1170 m²/g) at an activation time of 2.0 h with carbonization temperature of 800°C and at an impregnation ratio of 1.0.


REFERENCES