Pd Supported on Activated Carbon: Effect of Support Texture on the Dispersion of Pd

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Abstract : Carbon supported palladium catalysts have been used in many industrial reactions, especially for hydrogenation in the fine chemical industry. Porous carbons had been widely used as catalyst supports due to its higher surface area and larger pore volume. The specific surface area, pore structure and surface chemical functional groups of porous carbon affects metal dispersion and particle size. In this paper, we confirm the effect of support texture on the dispersion of Pd. Pd catalyst supported on activated carbon having various specific surface area were characterized by BET, XRD and FE-TEM. Catalyst activity and dispersion of prepared catalyst were evaluated on the basis of the CO adsorption capacity by CO-chemisorption. As concluding remark to this part of our study, let us note that specific area of carbon play important role on the synthesis of Pd/C catalyst/.

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