

Book review

Contact Catalysis, edited by Z.G. Szabó; Elsevier Scientific Publishing Company, Amsterdam and New York; Vol. I, 540 pages, Vol. II, 480 pages; 1976, \$ 96.25 or Dfl. 250.- for the two volumes.

A number of authors belonging to the Catalysis Club of the Hungarian Academy of Sciences have put together a remarkable variety of contributions to a discussion of the theory and practice of heterogeneous catalysis. Volume I must have the higher content interest to the average chemist: there is a very worthwhile, if somewhat dated, discussion of the electronic structures of metals and semiconductors; it is perhaps inevitable that the quite rapid developments in the theory of surface states and the chemisorption bond, which have occurred over the past five years, are not adequately represented. The physical chemistry of adsorption is nicely summarised, and Kalló and Nagy give useful background reviews of the structure and activity of catalysts and the kinetics of heterogeneous catalytic reactions.

Volume 2 is full of "nitty gritty": preparation and characterisation of catalysts and the design of catalytic reactors. I could not get up a lot of enthusiasm for this, but one can imagine some chemical engineers wanting to have it to hand.

One's overall reaction to the two volumes is that a brave attempt has failed to give a measured appraisal of the present status of fundamental catalytic studies and that, by present industrial standards, a delightful innocence is evident in the discussions of the more applied side of the subject.

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