

Preface

The conference “Fischer–Tropsch on the Eve of XXI Century” was held in the scenic settings of the Kruger National Park (South Africa) on November 2000. This conference was organised by the Catalysis Society of South Africa (CATSA) in honour of Prof. Mark Dry for his outstanding contributions in understanding and development in the Fischer–Tropsch synthesis.

Over 100 delegates attended the conference, representing industry and academia. The mix of researchers from industry and academia proved to be fruitful. Those presently involved in developing commercial facilities, which attended included Sasol, Exxon, Shell, Conoco and Rentech and all but Shell presented papers giving an insight on the commercial development of the Fischer–Tropsch process. Rocco Fiato (Exxon) pointed out that the Fischer–Tropsch synthesis is only one of the several possible routes to make use of remote natural gas fields in the world. Other possibilities include methanol synthesis, MTG, liquefaction, pipeline transport. He cautioned the audience not to stare blindly at only the Fischer–Tropsch synthesis. Doug Jack (Conoco) pointed out that the route to commercialisation of the Fischer–Tropsch synthesis remains fraught with large risks.

The conference aimed to provide a platform for researchers to exchange ideas on the future of Fischer–Tropsch technology. Therefore, the upstream and down stream processes were included in the scope of the conference as well. Although a specific call was made for papers regarding these processes only a few were presented during the conference. The

developments in synthesis gas production, which remains the most expensive part in the whole Fischer–Tropsch process, were highlighted by Rostrop-Nielsen (Haldor Topsøe). Although synthesis gas has to be purified before passing it through the Fischer–Tropsch reactor(s), the purification steps were hardly discussed, as if this area is mature and well developed. The presentations on down stream processing were mainly focussed on the conversion of propane. Lower paraffins are produced in the Fischer–Tropsch process, but wax cracking is much more important for the utilisation of remote natural gas fields using Fischer–Tropsch technology. The majority of the papers presented here dealt with technology and catalysts for Fischer–Tropsch synthesis, and some regarding the mechanism of the Fischer–Tropsch synthesis.

This volume of Catalysis Today gives some idea of the papers presented at the conference, although relative few manuscripts from the industrial participants were received. Nevertheless it gives a good overview of the present activities in the area of Fischer–Tropsch synthesis, together with reviews on the technologies available.

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