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*Roots and highlights of the Dutch School of Catalysis. Fifty years of academic-industrial synergisme.*

Noordwijkerhout, The Netherlands,
Netherlands Catalysis and Chemistry Conference
NCCCIV, plenary lecture.

* In Delta, het magazine van de Technische Universiteit Delft, verscheen op 14 oktober 2013 een interview met Herman van Bekkum door Jos Wassink. Lees meer>>

**Roots and Highlights of the Dutch School of Catalysis. Fifty years of academic-industrial synergism.**

H. van Bekkum (TU Delft) and J.W. Geus (Utrecht University)

In the Netherlands we are enjoying a fine and productive climate for catalysis research. A number of great scientists and the attitude of the Dutch Chemical Industry contributed to that.

The lecture will mention some early achievements:

- dehydration of alcohol over alumina (1795)
- glucose/fructose isomerization (1895)
- the two Prins-reactions (1912, 1919),

and then move on to the founding fathers of the Dutch School of Catalysis, J.H. de Boer and G.C.A. Schuit.

Both scientists started their career in industry: de Boer (via Philips) at the Staatsmijnen (nowadays DSM) laboratory at Geleen, Schuit at the Shell laboratory at Amsterdam. Both companies had decided to perform part of their catalysis research in an open way. Later Unilever Vlaardingen (J.W.E. Coenen) and Akzo Amsterdam joined this view point.

De Boer and Schuit took professorships, at Delft and Eindhoven, respectively and jointly organized the 3rd International Conference on Catalysis (Amsterdam 1964). In the early years also H.I. Waterman played an important role in applied catalysis, as professor at Delft and consultant of Shell.

As some other industrial scientists also moved full or part time to the academic world, the excellent relationships between academic and industrial groups in the Netherlands can be understood. Also advantage was taken of the influx of scientists from abroad (Sachtler, Ponec, Ross, Urcher). Some family trees of present-day Dutch catalysis people will be shown.

In the second part of the lecture the light will be on some Dutch inventions in the field of catalysis. Processes will be selected from petro, bulk and polymer chemistry, as well as from fine chemical synthesis and will also include some biocatalytic examples. It will be shown that academic-industrial cooperation and synergy led to excellent industrial and scientific achievements and still makes catalysis research in the Netherlands unique in the world.

References:

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