

## DCS thesis award 2017

Ladies and gentlemen,

On behalf of the Dutch Catalysis Society, it is my pleasure to be here and present the 2017 DCS thesis award. Working in R&D at Albemarle Catalysts in Amsterdam, I have been a board member of the DCS for 6 years now and in this role I was glad to serve as the chairman of the jury tasked with selecting the winner of this year's DCS thesis award.

This prize has been awarded every two years since 1989 to reward the best PhD thesis in the field of catalysis that was defended at universities in The Netherlands and Flanders in the preceding two years (2015 and 2016).

This time around, no less than 18 theses were submitted.

To be able to review this high number of theses, we required a formidable jury. The jury consisted of catalysis experts with a range of different backgrounds and fields of expertise, being:

- Prof. Isabel Arends, Delft University of Technology
- Prof. Harry Bitter, Wageningen University & Research
- Ronald Hage, Catexel
- Prof. Leon Lefferts, University of Twente
- Xander Nijhuis, Sabic

The submitted theses were judged based on four criteria:

1. their scientific quality
2. the relevance of the research that was presented
3. the clarity and structure of the thesis
4. their contribution to the field of catalysis.

The jury finds it important to stress that using these criteria in the review process the publication list of the author was definitely not found to be all-important for the quality of a thesis.

The jury was in general very impressed with the quality of the candidates. Many of the theses were deemed worthy of a prize.

The jury found it surprising to note that all 18 theses that were submitted for this year's prize were written by men.

After a first selection in which each jury member reviewed a sub-set of the theses, a shortlist of 4 was obtained.

In a second round of reviews, these four theses were reviewed by all jury members and listed in order of preference. As a result of the high number of candidate theses (and jury members), the chance of a unanimous decision was always going to be very small, but with four jury members judging the winning thesis as their favorite and the other two members placing this thesis in second place, it is with great conviction that the jury proposes to award the 2017 DCS thesis award to **Lennart van Haandel** for his thesis titled "**Alumina Supported MoS<sub>2</sub>-based Hydrodesulfurization Catalysts, Structure and Performance in Relation to Catalyst Preparation and Activation** "

The thesis by **Lennart** deals with the effect of preparation and activation on the structure and performance of MoS<sub>2</sub> based hydroprocessing catalysts. In a field that is well-established and has received the attention of many researchers throughout the years, the author has managed to provide truly new insights and challenge the existing theories regarding the structure of the active phase and its genesis.

These insights were obtained using state-of-the-art techniques to characterize these notoriously obscure systems under relevant conditions.

Like the research itself, the lay-out of the thesis has clearly been made with great attention to detail resulting in a visually appealing booklet.

Besides the outstanding quality of the research, the jury was particularly impressed with the mastery of the many different aspects of catalysis that Lennart displays in his thesis. Above all, it was this feature that convinced the jury to declare this thesis as the winner of the 2017 DCS thesis award.

Lennart, please come forward to receive our congratulations, a cheque for 1250 Euros and of course a warm applause from all of us.