During the past few years the jury has seen a continuous improvement in the quality of the theses submitted as candidates for the TU/e Design Project Award. Despite the high quality of the work, the jury also has observed a trend towards a stronger focus on research in the Design projects.

The project that best met the design criteria is of:

Iok-cheong Wan MSc PDEng
from the Designer Program Design and Technology of Instrumentation.

His Design project is entitled
‘Feasibility Study on Improved Acetylation Plant Designs’

The main topic of this project was the design of a new plant for the acetylation of wood. The project covered two phases:
- Phase 1 involved the investigation of various new concepts for solving bottlenecks in the current process operation
- Phase 2 involved the actual process design of the concept selected in phase 1

A detailed feasibility study has been done including experiments to determine the characteristics of the most critical processes to validate the design. The results obtained enabled the overall process design to be completed.

The new process design meets the design objectives formulated by the client. A thorough analyses of the problem has been made with solid validation of the critical aspects of the design by means of validation experiments. The strategy applied to create the new design is clearly described and well motivated. The design involves the application of knowledge and techniques covering various disciplines including physics, chemistry, safety, economics, equipment design and selection of potential suppliers. The design is well documented and the design process is well described. The end result meets the objectives and has a positive impact on the overall process operation.

The jury congratulates all selected candidates for the Design Project Award 2016 and especially the winner Mr. Iok-Cheong Wan.

Eindhoven, 3 June 2016

Prof.Dr. P.A.J. Hilbers (chair)
Prof.Dr. H.J.P. Timmermans
Prof.Dr.ir. A.C.P.M. Backx