

# Smart applications of design principles rewarded

*During the 2009 Precision Fair in Veldhoven, two awards were presented that are named after two legends of precision engineering in the Netherlands. The biennial Ir. A. Davidson Award went to Krijn Bustraan of Philips Applied Technologies, and the annual Wim van der Hoek Constructors Award went to Raimondo Cau for his graduate work at Eindhoven University of Technology.*

The Ir. A. Davidson Award was presented on the first day of the Fair, Wednesday 2 December. This prize is aimed at encouraging young talent and is intended for a young precision engineer who has worked for several years for a company or institute and has delivered demonstrable performances that are recognised both internally and externally. Their enthusiasm for the field must also have a positive effect on younger colleagues. The award is named after A. Davidson, the authority in the field of high-precision mechanical engineering at Philips in the 1950s and 60s. Davidson was the author of a handbook of high-precision technology that formed the basis for the engineering community at Philips.

The 2009 Ir. A. Davidson Award – a miniature row of books, rendered in metal, representing Davidson’s handbook of high-precision technology – was made by students at the Leidse Instrumentmakerschool.





Krijn Bustraan, winner of the 2009 Ir. A. Davidson Award, with certificate and award.

### Creative solutions

The Ir. A. Davidson Award is awarded biennially by DSPE. The winner of 2009 – the third time the award has been presented – was Krijn Bustraan of Philips Applied Technologies. According to the jury, which was led by Herman Soemers, professor of Mechatronic Design at the University of Twente, Krijn Bustraan demonstrated considerable aptitude for fathoming design problems and coming up with creative solutions to achieve innovations for customers as quickly as possible. This concerns a wide range of products, from modules for wafer scanners and patient tables for hospitals to consumer products such as electric razors.

In addition, Krijn Bustraan is active in the promotion and development of competences in the field of (mechanical) design principles, particularly their relevance to the design process and for the rapid achievement of practical solutions for the customer. He is now also teaching these competences and propagating the field widely within Philips Applied Technologies.

### Reflecting telescope

One day later, on Thursday 3 December, the Wim van der Hoek Constructors Award was presented for the fourth time. This prize – created on the occasion of the 80th birthday of the grand old man of design principles, Wim van der Hoek – is awarded annually for the best graduation project in the field of construction in mechanical engineering at the three Dutch universities of technology.

The 2009 award was won by Raimondo Cau, whose graduation project at Eindhoven University of Technology

concerned the construction of a portable 300 mm reflecting telescope intended for advanced amateur astronomers. According to the jury, chaired by Jos Gunging, lecturer in Mechatronics at Avans Hogeschool, Cau won the award on account of his original choice of subject, his thinking about how to define the degrees of freedom and the associated choice in favour of overconstraints, and the detailed elaboration of the optomechanical design.



Winner of the Wim van der Hoek Constructors Award, Raimondo Cau, with (left to right) jury member Piet van Rens, eponymous Wim van der Hoek and jury chair Jos Gunging.