

Editorial

Andreas Thoss*

At odds with Nobel

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One more Nobel prize went to laser scientists – Arthur Ashkin, Donna Strickland and Gérard Mourou [1]. Congratulations! I once worked on a project with one of the awardees, that gives me a personal feeling of delight. Still, there are some points that puzzle me. And those are critical questions to the Nobel Committee.

Why wait?

Alfred Nobel was very clear in his last will what should be awarded: *‘as prizes to those who, during the preceding year, have conferred the greatest benefit to humankind’* [2]. During the preceding year – not years or decades later – he said. The first half of this year’s Nobel Prize was awarded to the 96-year-old Arthur Ashkin for an invention that was made in 1986. The second half of the prize was awarded for an invention made in 1985 by Donna Strickland and Gérard Mourou. Both inventions were made more than 30 years ago.

Donna Strickland received the prize for an invention that she made with her supervisor during her PhD thesis work. What would have happened to her as a Nobel Prize winner 1986? There is an example: Rudolf Mößbauer received the Nobel Prize 1961 for things he started in his thesis work in 1957/1958. Afterwards, he headed some of the most influential research institutions.

Donna Strickland became president of the Optical Society of America – without a Nobel Prize. What would have happened to her WITH that prize?

Is it so difficult to select the right people?

Now, one could discuss the proper topic or the right people to be awarded. That would open the field for many discussions. I will not do that.

*Corresponding author: **Andreas Thoss**, THOSS Media GmbH, Berlin, Germany, e-mail: th@thoss-media.de

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But let us take one example and one metric. A common metric in science is the number of citations that the work of a scientist has received. According to Google Scholar, Donna Strickland has been cited 9.052 times, Gérard Mourou stands at 43.576 and Arthur Ashkin at 37.234 (as of October 24, 2018).

My example is Karl Deisseroth. He is a pioneer in the field of optogenetics and his work has been cited 68.536 times. You may learn more about him in his publications or simply, the respective Wikipedia page [3].

Wikipedia lists 17 awards that Karl Deisseroth has received. Not included in that list is the Berthold Leibinger Zukunftspreis, that he received a few months ago. I had the chance to attend the ceremony and to learn about a fascinating researcher and loving father of four children [4].

The Leibinger award ‘recognizes individuals who have impelled major scientific or technical developments in laser technology’ [5]. Before Deisseroth, the Leibinger Foundation recognized scientists such as Gérard Mourou or Stefan Hell (Nobel Prize 2014). Of course, they were awarded before their recognition in Stockholm.

Why can such a small foundation identify the right champions and the Nobel Committee needs so much more time? Donna Strickland is now 59 years old. She could have been a Nobel Prize winner for 30 years by now. A scientific lifespan.

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Andreas Thoss
THOSS Media GmbH, Berlin, Germany
th@thoss-media.de

Andreas Thoss studied Physics and received his diploma and PhD degrees from the Free University Berlin in 1995 and 2003, respectively. For both degrees, he did research at the Max-Born-Institute Berlin on the field of ultra-short and ultra-intense laser pulses. From 1996 to 1999, he worked as a development engineer for medical laser systems with Aesculap-Meditec (now ZEISS Meditec) in Jena. In 2003 he joined the international publishing house John Wiley & Sons. There, he gathered comprehensive experience as a publisher, editor and commissioning editor in the areas of book, journal and online publishing. Among others, he co-founded the journals *Laser & Photonics Reviews* (2007) and the *Journal of Biophotonics* (2008). Since its foundation in 2010 he has managed THOSS Media, where he co-founded *Advanced Optical Technologies*.