

I first met Peter Toennies in 1999, and where else could it have been but at his institute on Bunsenstrasse. The situation was asymmetrical: he was the outgoing, highly successful director of the institute, and I was one of about ten candidates who were being considered for his successor at the MPI für Strömungsforschung during a two-day symposium.

As head of a junior research group at the Göttinger MPI für biophysikalische Chemie, the prospect of succeeding Peter Toennies felt like a task far beyond my capabilities. Just a few years earlier, I had almost been kicked out of science. So I considered it impossible that the illustrious circle of around 20 Max Planck directors and Göttingen physics professors would choose me to succeed Toennies. But I couldn't pass up the opportunity to present my work to these people. I prepared accordingly and presented the latest results from the laboratory, which I had never shown before: the first experimental proof that the diffraction limit in fluorescence microscopy can be broken and that STED microscopy works. At the bottom of my slides was written "submitted to Nature." As I had suspected, it was not enough to succeed Peter Toennies. Nature and Science also refused to publish the results. However, an American colleague who had also been a candidate whom I had met at this occasion and liked the data, as did the Swedish Academy later on. He supported publication in PNAS.

On this occasion, I was also given a tour of Peter Toennies' laboratory, like all the other candidates, and got to know his field of work. There was no need to understand the details, because it was crystal clear that he had shaped molecular and cluster physics like few others.

Basically, according to the Max Planck Society, they were looking for Peter Toennies' successor – Peter Toennies himself, only twenty years younger. The years that followed confirmed that this assessment was correct, as he continued to publish consistently high-quality work.

Manfred Eigen was also a great fan of Peter Toennies and always championed him for the highest recognition.



However, most of my encounters with Peter Toennies had virtually nothing to do with science. We often bumped into each other – more or less by chance – in the Göttingen city forest on the Hainberg. Since the coronavirus pandemic began, I have been going on long walks in the forest with our (at that time) underage sons. Peter Toennies and his wife did the same. We usually talked about our families and our children's stay in the USA. The selfie on the right is proof that we really do meet frequently in the city forest. I took it on May 2, 2025, the evening before his 95th birthday, when he was out with his wife and grandchildren. I wish him and all of us many more encounters in good health.

Congratulations and many more active years, Peter Toennies!

Stefan Hell