

There's a chemical link between Ben Feringa's nanomotor and a puncture glue that was developed many years ago in the Folklingestraat. The link between these two Groningen inventions is **Hans Wijnberg**, grandson of Jehuda Levi Wijnberg who invented the in the Netherlands famous 'Simson solution'. But Wijnberg was also a world-renowned professor of organic chemistry at the University of Groningen, and mentor and inspiration to a host of PhD students. Twelve of them – including Feringa, Bert Meijer and Kees Hummelen, who still like to talk about him – went on to become professors themselves.

## Mentor

# Not afraid of anyone

**T**he life of Hans Wijnberg (1922-2011) seems to have been a series of spectacular events. It is worthy of a book, a view shared by History alumnus Luuk Hajema: 'I knew Wijnberg back in 1984-1989, when I was editor and then editor-in-chief of the university newspaper. At that time he wrote a column 'A different view', in which he regularly ruffled the feathers of the left-wing student population. As a right-minded liberal in the American sense of the word, he was strongly opposed to the communist ideas that some students were so passionate about at that time. I hardly knew anything about him, but he fascinated me even then. A chance meeting in 2012 with one of his sons, lawyer Anthony Wijnberg, gave me the idea of a biography.' One of the things that Wijnberg campaigned against strongly was the idea that students should have a voice within universities. And initially, he wasn't very enthusiastic about women's emancipation on campus either. It didn't seem to bother him that the slogan 'Kill Wijnberg' was daubed in many places around the city in the early 1980s. Hajema: 'Wijnberg wasn't afraid of anyone and he remained just as perverse as ever. Things didn't always go smoothly with the university newspaper either, but when I was on the editorial team we gave him the affectionate nickname "our right-wing conscience".'

### Spy behind the German lines

It was not until 2007 that Hajema read in the *Dagblad van het Noorden* how Wijnberg and his twin brother Louis (later Luke) had ended up in the US. The Jewish brothers were put on the boat to New York in 1939 by their parents, who feared the impending Nazi brutality. The boys finished school there and then signed up for US military service. After training as a parachutist and secret agent with the Office of Strategic Services (OSS), Hans was dropped onto a snowy mountain top in Austria in February 1945, together with Austrian deserter Frans Weber and the originally German Jew Frederick Mayer. The espionage activities that the trio subsequently carried out under the codename Operation Greenup contributed among other things to the liberation



from left to right: Franz Weber, Hans Wijnberg and Fred Mayer

of Innsbruck. These events so captured the imagination that director Quentin Tarantino loosely based his film *Inglourious Basterds* on them.

After the liberation, Hans and Louis learned that their parents and younger brother hadn't survived the war. The family firm, known for its invention of the Simson puncture repair kit (see inset), was sold and the young men decided to return to the US. Louis – now 94 and living in North Carolina – became a physicist, while Hans opted for chemistry. He completed his PhD in 1952 and eventually became an associate professor at Tulane University in New Orleans. In 1960 Hans returned to the Netherlands with his wife and four children, and was appointed professor at Groningen.

### Captivated by molecules

After the war Wijnberg devoted himself to his work. The approach he adopted, together with his important findings (he is regarded as

the founder of asymmetric organocatalysis), placed the UG Organic Chemistry Laboratory on the international map. Bert Meijer (now a professor at Eindhoven) and Kees Hummelen (a professor at Groningen) studied chemistry at the UG several years after Feringa. They were also PhD students under Wijnberg. Hummelen looks back: 'It wasn't until my third year, when I went to work with Bert in Wijnberg's lab, that I really started to enjoy my studies.' Meijer adds: 'Wijnberg exerted a magical attraction for some students. If you were just as captivated by molecules as he was and you let this shine through in your experiments, you ended up feeling the same passion for organic chemistry as everyone else in the Wijnberg team. In his unique way Wijnberg was a highly inspiring mentor for his students and PhD candidates.'

### The 1970s

Hummelen paints a picture of his student days: 'The 1970s were great. I was a real hippie – long hair, dope smoking. Wijnberg didn't have a problem with that. In fact, he and his wife would sometimes light up a joint too. He struck just the right chord with me. And then



from left to right: Kees Hummelen, Hans Wijnberg and Bert Meijer

one day he said: “I have an idea about what you could work on. If it works, it would be great, because I know that pharmacists are crying out for it.” By pointing out how important it was, he prompted me to think: let’s have a go.’

Meijer: ‘When we came to Wijnberg, he already had an international reputation, as well as being a prominent professor at the UG. By then, he was less preoccupied with his own career and all the more concerned with that of his students.

### Valhalla

We came to a kind of Valhalla of scientific curiosity. His desire to constantly work on something new was an essential part of our training. We met his foreign visitors, and there were some very famous names among them. At conferences he asked us newbies to present the latest findings ourselves – we were given a place of honour. That trust, but also the privileges and the freedom we were given, had an enormous motivating effect.’

‘But they were different times,’ says Hummelen, downplaying what happened. ‘My PhD research, for example, happened so easily. These days there’s an entire process that precedes it, but Wijnberg simply said:



### Simson and Syncom

Hans Wijnberg is the grandson of Jehuda Levi Wijnberg, who had a pharmacy in the Folkingestraat in Groningen, and who invented the glue and puncture repair kits that are still sold in the familiar red tins to this day. This ‘Louis’ opened the Simson solution factory on the Coehoornsingel in 1894 before moving his company and his family to Amsterdam. When Hans retired with great reluctance in 1987, it was obvious that an understanding of chemistry and an entrepreneurial spirit ran in his veins too: he founded the chemical company Syncom, and was awarded the Wubbo Ockels Award for innovative enterprise in 1996.

“that light-giving molecule that we’ve developed, stick that onto something”. And it worked.’

### A second father

Although many people had difficulties with the professor’s whims (he was ‘impatient, demanding, provocative’), in his own lab he was well-loved. Meijer puts it like this: ‘For me personally, Wijnberg was like a second father, someone who I could always go to. He was also incredibly important for our academic careers, including for Ben’s. It’s a shame that he wasn’t around for this, but I know for certain that Wijnberg would have been tremendously proud of this Nobel Prize, which in reality belongs in part to him!’