A modest and affable farmer's son from Barger-Compascuum who remained loyal to his local university – **Ben Feringa** doesn't seem your typical Nobel Prize winner. Who is this man? People close to him describe a scientist in heart and soul, a man with a mission.

BERT PLATZER

ELMER SPAARGAREN (L) AND JEROEN VAN KOOTEN

OTHERS ON FERINGA

Kindled by chemistry

hortly before the official announcement, assistant professor and UMCG researcher Wiktor Szymański was in a meeting with Feringa and a PhD student when the Nobel committee rang. 'Ben asked us to leave the room, which was an unusual thing for him to do. He had to keep the news to himself until the official announcement and when he called us back about ten minutes later, he went on with the meeting as though nothing had happened. He made some helpful suggestions about the research. Ben is happiest when discussing chemistry with his students, so I think the meeting offered some distraction for what would follow that day.'

It comes as no surprise that Feringa's wife Betty described him in the Dutch newspaper *de Volkskrant* as 'a scientist in heart and soul. Ben lives for his research'. When she married him she knew it would be no 'ordinary marriage'. Ria Broer, a former fellow student and fellow professor (in Theoretical Chemistry at the UG: 'He works really hard. Lots of academics do that, but I think Ben works especially hard. Why? Because he enjoys it!' Broer talks about a PhD student who had submitted a manuscript to Feringa shortly before the Nobel Prize was awarded. 'It was a really hectic time - he had to travel throughout the country to give television interviews. But four days later she got the manuscript back again.'





'Feringa besefte dat hij een revolutie teweeg kon brengen en is doorgegaan' chemistry teacher at the Roman Catholic high school. Gerard Stout, one year above him and inspired by the same teacher, also went on to study chemistry at the UG. He explains: "There was a whole group of teachers at our school in Emmen who had a progressive approach to teaching – no hierarchy or aloofness. They believed they should be there for their students. Ben probably already had an enquiring mind, but that particular teacher, Gerard op de Weegh, kindled it at the right time.'

'Feringa knew that he could bring about a revolution and so he kept going'

Zambia

Stout didn't get to know Feringa until he had completed his studies and went to teach for two years in Zambia. Feringa and a fellow student from his village, Ben Nusse, visited Stout for a five-week holiday over summer. 'My cook, who ran the household, lived two hours away on foot from my house. One evening Feringa and Nusse walked home with him and stayed the night. That was out of sheer curiosity - Feringa wanted to imbibe the local culture and see how the man lived with his family in a mud hut.' At the end of the visit, the three of them journeyed by canoe and public transport to Victoria Falls on the border with present-day Zimbabwe. Stout remembers Feringa as 'adventurous,

completely unafraid and someone who could relate easily to the local people.'

Kindled

Ben Feringa's story starts in Barger-Compascuum, a Catholic enclave founded by German immigrants who moved to southeast Drenthe as peat workers in the nineteenth century. He was born there, the second of ten children, into a farming family in 1951 – not the kind of environment where you would expect someone to go on to university. But intellectual development was encouraged in Feringa's home. Feringa says that he was inspired to study chemistry by his

Mission

Broer also remembers him as being 'an easy-going lad'. 'I got to know him just before we started our degree. The prospective chemistry student with the highest exam marks would be awarded a prize by Ben's later mentor, Professor Hans Wijnberg. That year, Ben, another student and myself all scored the same mark. For the rest, I didn't spend much time with him, but he was someone who stood out. He



asked questions during lectures, he was curious, and he worked hard.' These are the qualities listed by everyone who knows Feringa: easy to get on with, friendly, open, jovial, no-nonsense, affable. Former UG spokesperson and communications officer Jos Speekman also sees him as a man with a mission: 'The remarkable thing about Feringa is that he's a top-level researcher, but he also has a teacher's passion to explain things simply and well, to a wide audience. As well as that, he is on the boards of the Netherlands Organisation for Scientific Research (NWO) and the Royal Netherlands Academy of Arts and Sciences (KNAW). He travels all over the world giving lectures. He truly is a man with a mission – he sees the importance of that kind of work for research, such as creating more research funds.'

Revolution

This conviction also seems to be reflected in the way he deals with publicity. Speekman: 'As a communications officer, I have noticed how people who are in the news a lot often get sick of it after a while and can't stand the sight of yet another journalist. That's not the case with Ben. He continues to be enthusiastic and accessible. At one point he really was constantly on the road, giving lectures or accepting awards.'

As well as a mission, he has a vision: after developing the nanomotor in 1999, Feringa was quick to foresee the practical possibilities of his invention. Bert Weckhuysen, Professor of Inorganic Chemistry and Catalysis at Utrecht University, told the Dutch newspaper *AD*: 'Many scientists would stop after a discovery like that and throw themselves into something new. But Feringa knew that he could bring about a revolution and so he kept going.' Speekman: 'It is fundamental research, without applications as yet, but in his mind Ben has always worked towards applications for his invention, such as delivering drugs to particular parts of the body. His first nanomotor ran on light, but now he has also developed a motor that is powered by chemical fuel, which brings an application in the human body a step closer.'

True to his origins

The fact that Feringa hasn't succumbed to fame is partly because he has remained true to his origins. 'When we're with other people from Drenthe, he speaks the Drents dialect', says Stout. 'Ben still regularly comes to Barger-Compascuum. He's also still regarded as one of the locals. People there are not known because of what they've done, but whether they're good company. The culture here still tends to be one in which you shouldn't stand out from the crowd, wear your emotions or ambitions on your sleeve, or boast about your talents. But Ben has developed his talents to the utmost and shown that it can be done. He's a great role model for the people from south-east Drenthe.'

⁶ THERE ARE MANY THINGS IMPORTANT IN LIFE, THE SUCCESSFULNESS OF YOUR PHD IS NOT ONE OF THEM.⁹ THESIS ANNE SCHOONEN MATHEMATICAL AND NATURAL SCIENCES