

Contents



Report Indian Ocean in eighty days...8

Interview Between the daisies...10 Pioneer in biomaterials...12





Work in progress Beer on the rocks...14

Colofon

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A new sound

The coming year is going to be a special one for our university, since we have so very much to look forward to. As you may have read in the Alumni Magazine and the Alumni News Letters, there has been a robust debate during the past year about the profile of the University of Twente, the course we are taking, and our ambitions for the next five years. This has resulted in an ambitious, broad-based strategic vision. The text of the strategic vision document can be found at http://route14.utwente.nl and I sincerely hope that you will have the opportunity to take a look at it.

In the new year we will vigorously work on implementing the new strategy and we will do so together with our new Rector Magnificus. As of 1 January 2009 Ed Brinksma will succeed Henk Zijm. I am pleased that we were able to find a worthy successor to Henk Zijm from among our own corps of professors. He will immediately be able to contribute to the realization of the Route'14 project. It will not escape your notice in the new year that the new UT profile will be accompanied by a new house style and a new way of communicating. In short, reason enough to keep an eye on your university in the new year.

What will not change is the value we place on our relationship with our alumni and our desire to make excellent alumni of our current students. Excellent alumni who distinguish themselves in the labour market and think back on their student days in Twente with fondness. Or as we have worded it in our strategy document: 'Those who study or work at the University of Twente will have a special experience which will be evidenced in the next phase of their career by a special attitude, knowledge and skills: entrepreneurial, international and interdisciplinary.' This Alumni Magazine contains a great number of stories about and by 'typical Twente' alumni. I warmly recommend their stories to you and hope you find the time around the holidays in December to relax and enjoy these and other inspirational stories. I wish you very Happy Holidays and all the best for the New Year!

Dr Anne Flierman Executive Board Chair





Moving away

The three-day comedy festival Laughing Matters (March) will no longer take place at the UT. The festival is moving to another location in the country. The producer, Night of Comedy, explains the festival's departure: "[we] do not have the impression that there is room for the festival to grow in Enschede". Furthermore, the festival never sold out. Tonnie Buitink, the UT events manager, is disappointed by the decision, but he is already occupied with booking other spectacular activities.

Dance festival

In June the UT campus was the backdrop for the City Moves dance festival. Armin van Buuren, the world's number-one DJ was flown in by helicopter for a two-hour set. Executive Board Chair Anne Flierman and Rector Henk Zijm also stopped by. The campus event grounds underwent some major upgrading in November. A mat has been laid under the grass, making the field far more resilient so that dancers can swing the night away.

Different names

A number of programme directors were informed in June that the names of their programmes were to be changed immediately. This decision was based on findings of the Ministry of Education that showed that universities use both the officially registered programme names and their own nomenclature with a marked lack of consistency. The UT's Executive Board decided stop using a number of programme names at the university. Notable changes: the Dutch name for applied mathematics and chemical technology have been altered, and applied communication science is now called simply communication science.

Glamour

It was an evening of 'glitz and glamour', but more than anything it was the evening of the Dean of Behavioural Sciences, Hubert Coonen, the bon vivant among UT deans. He and 200 Behavioural Sciences staff members got together for a June celebration of the faculty's fifth anniversary. They enjoyed a lavish hot and cold buffet, some cabaret and dancing. Fifteen faculty lovelies in evening dresses arrived in style in two white limousines.



Photo: Arjan Reef

Entrepreneurship

On Thursday 12 June Sander Nijenhuis, the 36-year-old founder and managing director of the software company Fortes Solutions received the Van den Kroonenberg Award 2008 for young entrepreneurship. Nijenhuis received a degree in mechanical engineering in 1996. The Marina van Damme Award was presented to 33-year-old triathlete Helen bij de Vaate (photo) that same afternoon. She received a degree in chemical technology in 1999.

Bij de Vaate became a professional triathlete in 2007. Her current employer, SABIC, gave her a sponsorship contract and guaranteed her a job for after her sporting career.

Procurement

The UT's academic procurement figures are the strongest of all Dutch universities and we also rank high in social procurement. These findings were reported in the Rathenau Institute's 'Facts and Figures' report, published in September. Rector Magnificus Henk Zijm says that the UT may be 'justifiably proud'. The institute's procurement indicator shows the extent to which universities are successful in securing funding from indirect sources and through contract funding.



Breathless

Dave Blank, Scientific Director of Mesa+, was invited by the youth organization Coolpolitics to give a lecture on nanotechnology as part of the Lowlands University programme. Hundreds, perhaps thousands of festival-goers listened breathlessly for three quarters of an hour to Blank's story about atoms and nanotubes as Lego bricks.

Klink impressed

Technical physicians, technical healthcare providers with a degree, are to be covered by the Individual Healthcare Professions Act (Wet-BIG). Health Minister Ab Klink promised as much during his speech at the opening of the academic year. Klink's speech reflected the fact that he is impressed by everything that is going on in the field of health care at the UT.

Campus more vibrant than ever

Berenschot Consultancy was asked this spring by the Executive Board to write a campus vision. In Living Campus the consultancy called the UT's campus a unique selling point for the university. The campus forms one of the university's



themes that are part of the Route'14 project (to develop a new strategic plan for the University of Twente). The range of activities is high and there is plenty of opportunity for all kinds of leisure pursuits, though this is not immediately apparent to the outside world. The campus must become more 'vibrant', even at night. What the campus needs is an attractive landmark.





Segway

It was a comical sight: eleven professors zipping around campus on Segways, their ceremonial gowns flapping in the breeze. The professors of the department of electrical engineering wanted to promote their programme in a unique way during the opening of the academic year last August. They pulled off their stunt with panache and grace. The group enjoyed a ride around the UT campus by way of a final rehearsal.



Bats

The resident bats that delayed the demolition of the Ravelijn building have been gently removed to another location: two specially designed bat hotels. Once all the creatures were gone from the building, demolition resumed and has since been completed. The

School of Management and Governance will be housed in a new building at the Ravelijn location. M&G is currently housed in the Capitool building, off campus.

New Dean

Gerard van der Steenhoven was appointed the new Dean of the Faculty of Science and Technology on 1 September. The physics professor previously worked at the National Institute for Nuclear and High Energy



Physics (NIKHEF) in Amsterdam as the particle physics programme leader. He is also a part-time professor of experimental physics at the Nuclear Physics Accelerator Institute of the University of Groningen.



Science Salon

A big crowd showed up for the first meeting of the Enschede Science Salon. The foundation that organized the event hoped to attract at least 25 visitors, but in the end almost two hundred interested persons came for an evening of science talk at the Media Art Cafe Berlin near Enschede's railway station. The goal of the Science Salon is to provide an informal setting for promoting science and to foster debate.

Course

ICT, biotechnology and nanotechnology are the technological disciplines in which the UT intends to distinguish itself on the international stage in the years to come. That will be done in combination with human, management and social sciences within the university. This is in the draft of Route'14, which was presented by the UT Management Team (Executive Board, deans and institute directors) in early October. The UT is moving towards the Anglo-Saxon model, in which Master's education is organized in a graduate school (for PhD candidates and students taking a Research Master's) and schools for engineering and social sciences. The tenure-track will become an important HRM instrument for scientists. Furthermore, the university will enhance its international policies. The University Council should approve the document by the end of 2008 so that concrete plans can be drafted in early 2009. The University of Twente will also get a new logo. Marketing Specialists are currently studying the best way of promoting the university.



LioniX, a UT spin-off, is in the race to join the ESA European Mars mission in 2013. The company, based in the UT's Hogekamp building, is developing the Life Marker Chip, which can detect molecules that could indicate the presence of life on Mars. The instrument is as big as a match box.







Maintenance

This autumn 'The Thing' was removed from its usual spot on the lawn near the main entrance for maintenance. The rotting bars have been replaced by new ones. The steel cables have been reused. A crane was used to return the work of art to its spot. No easy task indeed. An attentive student reported that the artwork is now upside down, or possibly backwards.

De Geus café closed

De Geus student café, an institution with a history of a quarter century, closed its doors for good in October. The infamous Dutch restaurateur Sjoerd Kooistra has taken over the popular pub. He will renovate it and incorporate it with the adjacent Café Le Monde. The new establishment

will be called De Drie Gezusters. It will be a mix of a typical Dutch 'brown' cafe, a hall for party rentals and an Irish pub. This metamorphosis means the end of a long tradition for the many debating societies that met in De Geus weekly for drinks and conversation.

VentureLab

The Netherlands Institute for Knowledge-Intensive Entrepreneurship (NIKOS) of the UT and Saxion University of Applied Sciences have established the VentureLab Twente. The objective of this training facility is to scout young entrepreneurs at an early stage and bring them together so that a team is formed consisting of a general, technical, financial and marketing manager. Major investor and part-time professor Roel Pieper (photo) was closely involved in these activities.



FC Twente, our neighbour

Jan van Halst, Commercial Director of FC Twente, is a fervent supporter of increased cooperation with the UT in the area of sports. In an interview with the UT, the former professional footballer hinted that the club was in favour of advanced IT use in football. "The UT would make a good and professional choice. So why not?"

The football analyst spoke in early November about leadership and communication in top-level football during the anniversary symposium of the Business & IT programme.

Psychological complaints

A psychotherapy centre will be established on campus where students can go for help with psychological problems. The centre may open as early as January 2009. Around ten percent of the 600 students who come to the student psychologist for help annually are referred for treatment to the mental health clinic (GGZ) where they are often placed on a lengthy waiting list. They can now be helped quicker.



Lectures on DVD

Hans Zwart, Associate Professor of Applied Mathematics, gives lecture in front of UTV and ICTS cameras, but he never sees a single student in the lecture hall. A studio has been specially set up to record Zwart's lectures and those of his colleague from electrical engineering, Stefano Stramigioli. The lectures will be offered to students in the 3TU programmes, which take place in conjunction with the universities in Delft and Eindhoven. Thanks to the DVDs, they can take the courses when it best suits them and ask the teachers questions by e-mail.

Farewell

Scientific Director of the Institute for Governance Studies and Professor of Innovation Management Wouter van Rossum left the university this autumn after a decade of service. He has gone to Breda where he has been appointed Dean of the Faculty of Military Sciences of the Netherlands Defence Academy.

TCW programme director Egbert Woudstra retired in September. Woudstra joined the university over thirty years ago as a lecturer in applied linguistics. Starting in 1994 he was involved in (applied) communication science.

The great man who put biomedical technology on the map both at the UT and further afield said farewell to the university in November after 38 years of service. Jan Feijen, **Professor of Polymer Chemistry** and Biomaterials and scientific







director of the Biomedical Technology Institute (BMTI) for the last sixteen years, is retiring but will remain in the service of the UT on a part-time

New Rector

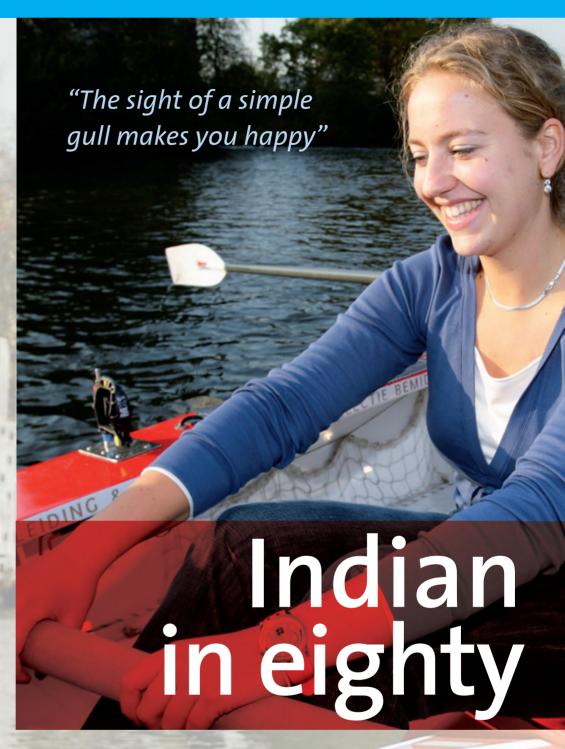
Ed Brinksma will succeed Henk Zijm on 1 January as the Rector of the university. The Supervisory Board of the university appointed him in mid-October this year. Brinksma is a part-time professor at the Faculty of EEMCS as well as the scientific director at the Embedded Systems Institute in Eindhoven. His appointment with the UT means that he will leave this position. Brinksma was chosen from five candidates. The new Rector is a true exact scientist with extensive management experience.

Just two rowers in a little rowboat crossing the Indian Ocean in eighty days: from Western Australia to Mauritius, a distance of over 5,750 kilometres. It sounds like a Jules Verne adventure, but this is non-fiction. Mark de Vries, 27 years old and an alumnus of industrial engineering and management, and Michelle de Groot, 22 years old, rower for the Euros team and a student in Enschede, are going to take on this challenge next year. "Just seeing an ordinary gull out in the open ocean can really help pep you up."

The Twente canal is quiet as Mark and Michelle row in their Woodvale Pairs through Enschede's harbour. Hardly a breath of wind, not a ripple in sight. How different things might soon be on the Indian Ocean! "High waves can sometimes mean falling six meters and then climbing four meters back up. You see no horizon, you row between the waves," says Mark. "But the ocean can also lap calmly at the side of the boat. In any case, we will be rowing outside the hurricane season."

Mark graduated in 2007 and now works

for the Heijmans construction company in Rosmalen. As a rower for Euros he participated in tournaments of hundreds of kilometres. After reading a book about two ocean rowers he decided to attempt a truly large crossing. He decided on the Indian Ocean Race, a race of over 3,100 nautical miles which will be held for the first time in April 2009. De Vries was the coach of the women's quadruple, a boat that Michelle rowed in. She had been a competition rower for four years and was nearly finished with nursing school when she heard of Mark's plans. She spontaneously offered to come along. Not long thereafter, they established the Rowing for Water Foundation. Mark: "The sporting challenge is paramount, but we don't want to do it just for the sake of the sport. So we're trying to raise money through sponsoring and donations. The money will go to a project for clean drinking water. We want to draw attention to global water issues: 1.2 billion people have no access to safe and clean drinking water. We have both seen the kind of misery that can lead to. Michelle experienced it during her work placement in Namibia and I did in South Africa. Anyway, we will soon be depending on our pump for



clean drinking water."

On board Mark and Michelle point out the two desalination pumps that they will use to make drinking water. In addition, they will take three hundred litres of drinking water along with them. "But those tanks are sealed and we may only use them in case of emergency. The water is meant purely as ballast. If we drink it, race officials will give us time penalties," says Mark. The boat is also equipped with radar, a parachute anchor, solar cells, an autopilot, satellite communications and an electronic radar reflector that will make the rowboat appear to be a large tanker on other

vessels' radar screens. "Hopefully they will sail wide of us."

Although the boat has space for two rowing benches, Mark and Michelle will not row in tandem. Two hours rowing, two hours sleeping. Day and night, seventy to eighty days in a row. It is not true rowing. "It's more like surfing on the waves, dancing with the sea," Mark explains. "You should not try to use force, because you'll only end up a physical wreck," Michelle tells us. She quietly continues: "that's why we don't rotate the oars, because then you're sure to end up with a wrist injury. And blisters. But we'll get those anyway."



Once they have left the Twente canal, they tell about their adventure in the Thyro Rowing Association clubhouse in Enschede. An old friend of Mark's comes in halfway through their tale. "I happen to know a doctor who can sew up those holes in your heads. Should I send him round?" the friend asks when he's heard Mark and Michelle's plans. "A relatively standard response, we hear things like this all the time," says Michelle. The two rowers have until the end of January to get themselves fully ready for the race. Mark and Michelle do not have to be concerned about their boat

surviving such a long journey. They bought it from a Dutch duo who had already completed the crossing from the Canary Islands to the Caribbean in the craft. But they do need to row quite a few more kilometres and get to know the boat through and through. "The race organizers have given us a whole list of requirements. Before we even start we need to have rowed at least 48 hours non-stop, and the boat has to have capsized completely with everything in it. We're going to head out to sea for a week at Christmas," says Michelle. Mark: "In November we're off to England for a week of four compulsory courses.

These range from very basic to a course on sea survival. Of course we will learn to navigate and we will have to get to know every nook and cranny of our vessel. We'll also learn how to filet a fish. We will take one hundred days' worth of ready-to-eat foodstuffs. But these skills might come in handy if we suddenly need to start rationing. Or if we want something other than pasta and rice." If the two rowers succeed in their mission, they will break several records. So far just three rowers have managed the Indian Ocean crossing. "It is the biggest rowing challenge in the world," Mark says resolutely. Michelle and he could become the first Dutch duo to cross the finish, they can also be the first mixed-gender team and Michelle may be the first woman to reach Mauritius from Australia in a rowboat. This really says something about the difficulty of the race, in which 22 other boats will take part. "Fortunately it's a relatively quiet ocean and the sharks are of the friendly sort," says Mark reassuringly. Mark and Michelle are not at all afraid that they will become fed up with each other after two months on the vast ocean. They say their friendship is strong enough. "Storms cause me the greatest concern. There is a certain amount of risk to what we're doing," says Michelle. Mark looks at the wind with a practical attitude. "We'll be rowing with the current, but it would be very frustrating if we were blown back after days of rowing, not making any real progress." "I'm not really concerned at all about our rowing," continues the former student of industrial engineering and management. "And I really don't think we'll go crazy. The crossing will undoubtedly be monotonous, but then you start to appreciate simple things. You start to live for your weekly contact with the Netherlands via satellite phone. I've heard from other ocean rowers how happy you can be to see a bird. Imagine: you see nothing but water for weeks on end and then suddenly a bird flies over. An ordinary gull. That can really pep you

Visit Mark and Michelle's website at www.roeienvoorwater.nl

Between

Lianca Ruiter was born and raised among the flowers. Her parents and her two youngest brothers run a tulip nursery and greenhouse. Even as a little girl she helped in the bulb fields. A pair of soiled knees and dirty fingernails were simply part of the fun. Lianca went on to study applied communication sciences and is now back in the world of flowers. She is a product manager for four lines of cut flowers at FloraHolland in Aalsmeer.

And the auctioneer starts the clock again, a process that he repeats twenty times per minute on average, depending on the product, of course. That means that a sale is generally completed every three seconds. Sales like these take place some fifty thousand times a day at the FloraHolland flower auction in Aalsmeer. The Aalsmeer location (one of five FloraHolland locations) is the largest in the Netherlands, and not only in terms of transactions, but also in size. "It's about as

big as Monaco," says Lianca.

After a merger last January, the flower company now consists of three regional auction houses and three locations where flowers are auctioned specifically for export. "Initially we were competitors," says Lianca, who is 36 years old. "Today we are colleagues. That has had an enormous impact on the way we do business. I used to work exclusively in Aalsmeer and I was responsible for three hundred products. Now I cover four cut flower groups and I work company-wide. That means I visit all our locations quite often, which makes my work dynamic." She concentrates on four main categories of cut flowers in her work: Zantedeschia, Freesia, Anthurium and Cymbidium. Lianca calls the merger a welcome change. "I am now much more in touch with my products. My contacts with the growers and traders have also benefited. I am someone they can really talk to. I discuss the needs of buyers, negotiate with the growers and vice versa. Within the company I call and chair company-wide meetings where all the locations are represented. The merger has left quite a bit in its wake that still needs to be dealt with. It's a fascinating challenge!" The flower trade is an international business. Ninety percent of the flowers auctioned in Aalsmeer are shipped abroad the same day. And tropical species arrive from overseas. "Going on business trips is also part of my job. I sometimes fly to countries such as Israel or Brazil where I visit growers to see if there are any other beautiful flowers that can be added to our

Lianca's tour starts in the auction hall where up to 250 traders bid on lots. The auction hall is known as 'afmijnzaal'. "The word afmijn is from bygone days," Lianca explains. "Buyers cried out 'mijn' (mine!) if they wanted to buy a product." These days things are becoming more and more computerized. Stationed at their laptops, buyers keep an eye on one or more digital clocks. They press a button to buy one or more lots of flowers. And as a trader you of course want to buy lots at the lowest possible price. You've got to stay sharp! While it is

admittedly the most traditional auction method, the clocks do run fast and carts full of flowers pass in front of them at a

"This set-up will change within two or three years," the product manager thinks. "Supply and logistics will eventually become separate entities. You can see it happening already: more and more traders buy from an off-site location. They bid at the auction without being physically present in the hall."

the daisies

The flower auction is a world of traders: tough and masculine. The traders wolf down their first hamburgers of the day by eight in the morning. Not surprisingly, some buyers arrive at four in the morning. The auction clock starts running every morning at six. "Traders like to take time before the auction begins to walk the supply carts and have a look at the flowers. These are fresh products, after all, and they need to be shipped out as soon as possible after the auction." On peak days - like the day before Valentine's Day or Mother's Day – the auction lasts until 11:30. "The supply of flowers on days like these is so great that the auction process simply takes longer." Today, Friday, Lianca notes that it is remarkably quiet. "Our busiest day recently was the day before All Saints, one of our top-turnover days." To the uninitiated, the auction floor still looks awfully busy. It is packed with flower-filled carts all snaking their way to the customer. "Our workforce consists of some 65 different nationalities. Most work part time. Their workday is over by noon, the end of the auction." Not for Lianca. She works cheerily during the early morning hours and keeps going for a while longer still. She even occasionally works evenings. "That is when the growers have time to sit down for meetings." She has been working for the auction for nearly nine years, and it really shows on the auction floor where people regularly

stop her for a chat. "Networking is definitely one of the most important facets of my work," she later explains. "Chats around the water cooler are usually the most productive."

And that is important for later consultations and to keep everyone marching to the beat of the same drummer." Elsewhere in the complex, in FloraHolland's Product Quality Knowledge Centre, Lianca's cut flowers are in a vase. "This is where we monitor the progress of the flowers' bloom cycle. We use the results to devise improvements."

Lianca grew up among the flowers in the town of Andijk. "My parents grow tulips and tulip bulbs. Even at a young age I helped in the fields peeling bulbs. My love for the flower business is actually more of a obsession," she chuckles. "I won't ever be able to kick it. My two youngest brothers are taking over the business. It was my twin brother who was responsible for my choice of Twente. He was studying Electrical Engineering there and I sometimes went to visit him." She made her choice quickly after finishing high school, where she studied economics and administration. When she completed her degree in 2000 she went to work as a market analyst at the Aalsmeer Flower Auction, as it was then known. "I worked in the strategic market analysis department for three years watching trends in the flower trade." But after a while she began to tire of her desk job. "So I changed jobs and became a product manager, which put me in much closer contact with the auction floor. It is a very dynamic business. And yes, it's a man's world, it sure is. I learned to be assertive when I was little, working with my parents in the fields. That is useful around here, because you certainly don't want to blush too easily."



AInterview

The great man who put biomedical technology on the map both at the UT and further afield said farewell to the university after 38 years of service during a symposium in November. Jan Feijen, Professor of Polymer Chemistry and Biomaterials and scientific director of the Biomedical Technology Institute (BMTI) for the last sixteen years, has retired. Just as many emeriti, however, he will remain in the service of the UT on a part-time basis.

Smoking is not allowed in the buildings these days, but the occasional cigar still manages to find its way indoors. "Oh, an innocent little thing like this, you wouldn't even notice it," whispers Feijen. In his office in the Zuidhorst complex, which was built on the foundations of the time-honoured halls of the former mechanical engineering building, he tells about his academic career. He began by studying organic chemistry, followed by a doctorate, both in Groningen. He started working as a researcher in Enschede in 1970, in Professor Aat Bantjes's research group. Three years later he left the UT for a while to work at the University of Utah in Salt Lake City, where he had an appointed as a visiting professor. And he nearly decided to continue his career there. "I seriously considered staying in the USA. I really felt at home there. But the Dean of the Faculty of Chemical Technology, Jan Schuijer, soon offered me a position as a lector in biomedical materials engineering. That was a personal appointment, which was quickly converted into a professorship. Then I could start setting up my own department: polymer chemistry and biomaterials. That was exactly what I wanted."

After his return from the States he began an exchange programme between Twente and Salt Lake City and Tokyo,

where he had also established scientific contacts. "That was a difficult process, because the concept of internationalization didn't really exist yet. There was no funding for projects like this. We were at least creative enough to set up a foundation for funding

things like travel and accommodation expenses. We were engaged in international activities thirty years ago, in the same way as the UT is now increasingly doing with China, Singapore, Indonesia and other countries. On another scale, of course, with modest means and without tools like the Internet. But we had fifty PhD candidates in the exchange programme through the years. A good many of them later became professors," Feijen says with pride.

Professor Feijen knew what needed to be done to put biomedical research on the map. He was one of the founders of CCMBT, the Coordination Centre for Biomedical Technology, which was later transformed into BMTI, one of the UT's three technical research institutes. Feijen: "CCBMT was the first multi-disciplinary partnership in the field of research and education within the university. Prior to its emergence, research groups in the various programmes were all engaged in biomedical technology on a purely individual basis and there was no mixing. The aim of the new institute was to promote interaction between those groups. I had to bring chemists, physicists, electrical engineers, mechanical engineers and physicians together and try to



convince them of the benefits of cooperation. It was tough to get everyone on the same page. I sometimes thought: 'Jan, why don't you just stick to your own field?'"

BMTI, established about 16 years ago, was able to grow spectacularly thanks to its priority status. The establishment of the research department of the biotech company IsoTis Orthobiologics in Bilthoven about eight years later turned BMTI into an important national and international player in the field of tissue engineering overnight. That was a real coup. "This meant that the institute was joined by a research group with a great deal of expertise in cell biology. That was exactly what we needed to keep the ball rolling. Moreover, it also meant a tidy injection of capital. That step strengthened the institute as a whole," believes Feijen, who, even before the 'merger' with IsoTis, had collaborated with one its driving forces, fellow professor Clemens van Blitterswijk.

Research in the field of biomedical technology has developed very rapidly in the past thirty years, he notes. "We and a small group of people worldwide have fought hard to achieve this. And we've done it. About 150 people attended the first World



"What do I think of myself as a leader?" Feijen pauses. He then modestly says: "Well, I've always followed my own course and managed to get others to come on board. I have always sought to give assistant and associate professors maximum responsibility. I gave them room to do what they needed to do. That's my leadership style in a nutshell, I think." Feijen is also positive about facets of the UT's plans for the future that are of particular interest to him, such as the establishment of a Graduate School for research Master's programmes and PhD candidates. "I am in favour of an accelerated PhD programme. The point is that PhD candidates are currently staff members, and they are involved in all kinds of teaching activities, lab work and seminars. I fear that this system will become far too expensive over time. You can come up with all kinds of pros and cons, but I see PhD candidates primarily as students. If we really want to reflect international trends, then they will once again have to have that status in the Graduate School. Tenure tracks? Great." Feijen is also a supporter of scouting young talent for the benefit of the UT research, though he realizes that this also has its price. "Money will always be an issue."

Feijen is not planning on retiring completely. He will remain in the service of the UT as a part-time professor. "I will be working one day a week for the next couple of years to supervise PhD candidates. I also have a number of appointments at universities abroad and I have been approached by colleagues in Korea and China. I now need to make up my mind about what I want to do. For one thing I would love to take a long holiday with my wife – three or four weeks or so. We never had time for that kind of luxury.

Conference on Biomaterials in Vienna. At the recent conference held in Amsterdam in May there were three thousand attendees. "More and more people are getting involved in this field. There is considerably more diversity in research these days. We started off with medical devices such as artificial joints, implants, catheters, artificial kidneys and hearts. Later we developed systems for controlled medication release." Feijen is also very positive about the bundling of the research programmes in technical medicine and those of BMTI. He has been a witness to the closure of the gap between theoretical research and practical application.

The outgoing scientific director of the highly successful institute is very pleased with the level of his staff and the synergy that exists between the different groups. Some of them were 'adopted' because they had lost funding elsewhere at the UT. "All in all, we have evolved into a very large unit with a great many PhD candidates. Being both a scientist and the scientific director of a large institution is no easy task. I've travelled a lot, but I always managed to maintain contact with the workplace. That is very important."

Awards

Jan Feijen received many international awards for his scientific achievements during his career. These include the George Winter Award of the European Society for Biomaterials, the Clemson Award from the American Society for Biomaterials, the Founders Award from the Controlled Release Society and the Award for Distinguished Service in Advancement of Biomaterials Science of the Japanese Society for Biomaterials. He was also instrumental in seeing to it that the work of his international colleagues was recognized. He granted an honorary doctorate to the venerable Willem Kolff, the inventor of the artificial kidney. He did the same for Sung Wan Kim, his colleague in Salt Lake City, in 2006.

A Work in progress











Intimidation, corruption, manipulation. These are concepts that are inextricably linked with Cambodia. Joost Donkers knows all about it. The former Chemical Engineering student, who is now 37, worked until recently for Heineken in the Cambodian capital of Phnom Penh. He was the brewery manager there for three years. Joost tells enthusiastically about the country and its history, and gives us a glimpse into the unusual Cambodian beer culture. We interviewed him just before his transfer to the Heineken brewery in Serbia.

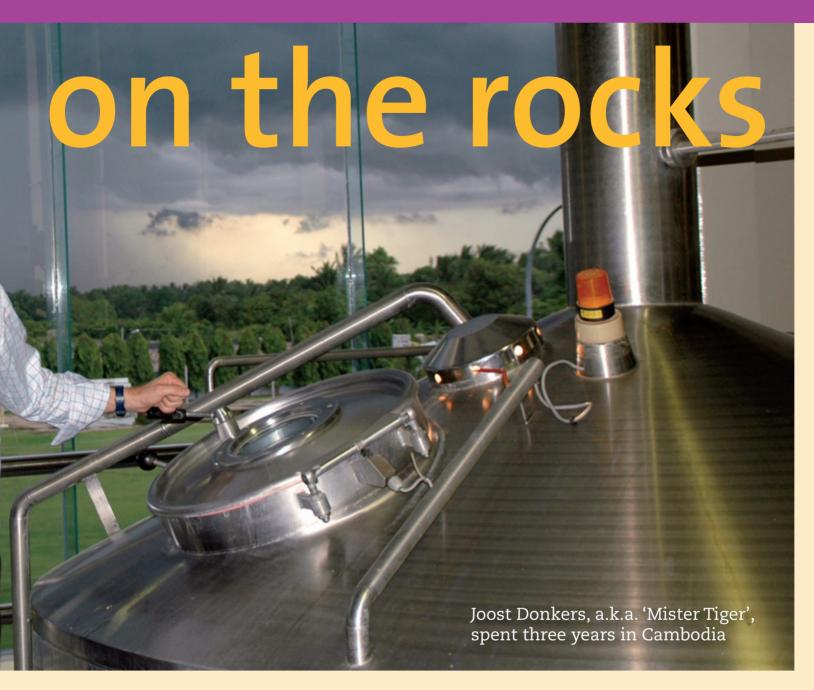
Joost's personal chauffeur skilfully manoeuvres the black Honda through the dusty streets of the capital. Traffic is a hodgepodge of noisy scooters and colourful motorized rickshaws. They dart and dash between the cars, honking noisily. We hear a policeman's shrill whistle. The man waves his arms wildly about in a desperate attempt to control traffic at least a little. His gesticulations are in vain. The traffic chaos seems unstoppable. It is not surprising that in Phnom Penh alone around sixteen thousand people die in traffic each year. Traffic laws, as far as they exist at all, are simply ignored. The only rule seems to be: the little guys yield to the big boys. The roads are especially dangerous at night. Nighttime drivers have more than likely been drinking. Driving under the influence is an accepted practice here. The chauffeur remains unfazed by the traffic. He avoids potholes and deep ruts in the road with precision. It takes him less than half an hour to shuttle us safely to the brewery. Security guards are on watch there 24 hours a day. Outside, a large brew-kettle bears the dark blue label of Tiger Beer, one of the major regional brands in Southeast Asia. Joost's office is decorated to western standards. The brewery manager quickly dashes off one last e-mail. "We are at the brink of war with Thailand," he reports, conveying the day's major news story. "Well, I don't want to stir things up, but things could get messy up North. The Cambodian army has taken up threatening positions across from Thai soldiers."

The conflict revolves around the historic Preah Vihear temple. The temple is located directly on the border. It was assigned to Cambodia in 1962 – to the dissatisfaction of Thailand – by the International Court of Justice. Donkers: "Recently, UNESCO added the ancient complex to the World Heritage List and now the dispute is flaming up again."

These are turbulent times in Cambodia anyway, he says. The elections are around the corner and that leads to tensions. It is still impossible to hold free and fair elections for the ruling Lower House, which has 123 seats. The largest party, the Cambodian People's Party (CPP), controls the media and regularly threatens opposition members.



Intimidation and manipulation are commonplace. They form the basis for the dominance of the Cambodian People's Party. Things can get pretty extreme in villages, where CPP leader Hun Sen shuts off electricity and water until each and every voter has signed the party's membership form. The villagers must then solemnly promise in front of an image of the Buddha to vote for his party. Only then are the services reconnected. Leader Hun Sen then gives away a sack of rice that he got for free from the World Food Programme. Then he leaves. That is how things go. Joost: "Those guys are rolling in it, man! They have houses all over the world, drive top-of-the-line luxury cars, their children don't have to lift a finger and they are always surrounded by bodyguards. Inviolable." These practices began in the time of the Khmer Rouge, the military wing of the former communistic party of Kampuchea, which was led by Pol Pot. During his reign of terror, which began



in 1974, approximately two million Cambodians - mainly the intelligentsia were systematically murdered. Farmers and labourers were spared. But they were forced to work under the most harsh conditions in labour camps, in rice fields or in factories. Hun Sen was a Khmer Rouge commander at the time. The brutal regime of the Khmer Rouge lasted until 1979. Donkers: "Hun Sen had fled to Vietnam. That country invaded Cambodia in 1979. The former Khmer commander was therefore fighting against his own former Khmer comrades. The Vietnamese trampled the country for seven years as compensation for the war on their own soil. Once they had the loot, they withdrew. And they had helped to bring Hun Sen to power." The first elections were held in 1993.

"Tanks rolled through the streets. Hun Sen was strong, but so was his opposing candidate, Prince Norodom Ranariddh." There was no winner called, and both were made deputy prime minister until the elections in 1995. "The result was the same in 1995, but Hun Sen won because he had more troops behind him." And the same applies today. He and his friends form an increasingly rich and powerful elite. They carry on unashamedly, with no respect at all for the poor masses. No fewer than seventy percent of the population lives on less than two dollars per day.

"These are rice farmers. They barter a portion of their harvest for vegetables or meat. They live in flimsy huts." He chuckles: "But with an antenna on the roof, because they all have a television

set. Just no electricity. The farmers use a battery for energy. They can watch TV for about two hours. By eight in the evening things get quiet and everyone goes to sleep."

Cambodia is without a doubt a developing country, Joost contends. "When I accepted this position three years ago, I had to pull out a world map to see where I was headed. I knew roughly where it was and that it had something to do with Pol Pot and the Khmer Rouge. But the more I read, the more I was struck by the country and its history." He turned to foreign history books for information. "There are no trustworthy Cambodian history books. All history books stop at 1974 and begin again in 1979. There is no mention of what happened in between in any







Cambodian book. So young people learn nothing about the Khmer period and the Vietnamese occupation. They also do not believe that any of it happened. And that's just the way people want it.

Understandable, because almost the entire current leadership of the country was in the Khmer Rouge in the 1980s." Interestingly enough, the Cambodians themselves would also prefer that the terrible truth be kept under wraps. "Let bygones be bygones," says Joost. "My managers, eight men all of around forty, were boys of just ten at the time. They were all in labour camps, they all went hungry and they all lost one or more members of their families. It is especially moving when they talk about it. They open up sometimes, especially if they've had a beer or two. But they do not make an impression of being traumatized. What's done is done and they all want to move ahead."

An attitude that befits the Cambodian lifestyle. "They live day to day and everything revolves around money. We initially paid out salaries in U.S. dollars - cash money. The dollar and the riel are the currencies of choice. The base salary for someone who has just finished school is 280 dollars per month (220 euros). A manager's salary is 1,500 dollars (1,200 euros). Banks started opening here about a year and a half ago. We opened a bank account for each employee, but ninety percent of our employees withdraw their wages from their account in full on the day they get paid. They simply do not trust the banks. They want to feel the money in their billfold."

Heineken decided to build a brewery in Phnom Penh under the name of Cambodia Brewery in 1994. The brewery recruited capable staff in Cambodia and sent them abroad for two years of training. Joost: "They are still the managers of the brewery today." The Cambodia Brewery produces four different beers and can claim seventy percent of the market. Angor – the local competitor – has twenty percent of the market. The rest is imported. Two hundred million cans are produced annually. These include the brands Tiger, ABC Stout Beer – the most

Career

Joost Donkers studied Chemical Engineering at the University of Twente from 1990 to 1996. He then worked as an international industrial engineer at DSM in Zwolle, made the move to recruitment and did the same one year later for Heineken. Then he returned to production at the brewery in Den Bosch. In August 2005 he signed on for three years in Phnom Penh, Cambodia. He spent three years living in the Cambodian capital together with his girlfriend Margje Benningen and their dogs Pub and Max. Donkers departed at the end of August for Serbia where he works as a supply chain director for Heineken in Belgrade.

expensive beer at eight percent alcohol – Anchor and Gold Crown, a slightly cheaper beer. "The cultural difference on the work floor is enormous. As the manager I am the big boss. It's not exactly a fun situation, but you have to respect it. That's the way the culture is and you do not want to go against the grain. If I do then I will lose my authority and my employees will get into a panic because they will think that there is no more boss. The boss decides on everything. Sometimes it's easy. When I say we go left, we all go left without any discussion. If I'm away on holiday then we explicitly appoint an acting manager director."

Finding new, capable staff is the hardest thing there is, says Joost. "There are universities, but most of them do not produce the right kind of graduates. Fifteen young people graduate annually from the old French technical university, one of the better ones. Some graduates go abroad on a scholarship, some have to return to the countryside and the remaining graduates become the subject of a bidding war by the big companies." Once hired, they are not really capable of doing very much at all, according to Joost. "They have a more analytical way of thinking, but The flip side is that they start caring for more people at home. Not only for their own family, but also for a sister or brother. They share everything with each other, you see."

During a tour of the brewery Joost reminds us that water is essential to the beer brewing process. "We are located here between two waterways: the Mekong and the Bassac. So there is always plenty of water around, which we purify ourselves, incidentally." Heineken has to import everything, since nothing is available in Cambodia itself, except for rice. "And that's when you really have to know how to deal with the system. You need to pay an extra deposit here, a little more money needs to find its way there. Things like this happen at every layer of society. It's just a normal way of doing business. They are accustomed to paying for everything or buying off officials. Traffic accidents, for example, are settled via a cash transaction, not prosecution. That's the way it goes."

We see the kettles in the brew house, the laboratory and the control room. Now a grey cat near the generators draws our attention. The cat has fled inside to shelter from a heavy tropical downpour. "If my men had seen 'm they'd have caught him and eaten him," Joost laughs. He points out that a brewery with only 150 permanent employees is actually too small for the amount of beer sold in Cambodia. "We work under tremendous pressure and import extra beer. We recently started 24-hour operations, seven days a week. Including holidays. That was new for them. But as long as you pay, there is no problem."

Three operators who are pushing fifty are now starting to have some difficulties with the late shifts, says Joost. "Total understandable, especially here. At home, in their single-room

Killing Fields

The Khmer Rouge executed over two million Cambodians from 1975 to 1979 under the leadership of Pol Pot. This happened a few kilometres outside the capital Phnom Penh in an area that later became known as the Killing Fields. The victims were buried in mass graves. Many remains were later dug up and collected in a memorial of skulls (photo). In the capital itself, Pol Pot transformed a school building into one of the most horrific centres for the mistreatment and torture of 'traitors' of his reign. The building was used by the special security service as a prison (S-21) and torture chamber. After his reign the prison survived as the Tuol Sleng Museum. Photographs, paintings and torture instruments remind us of the atrocities of the past.



house, the children are noisy or there are other disturbances. My men hardly get any sleep and that makes life heavy for them. We are now looking into how best to deal with this situation." Joost discusses pensions with his colleagues. "Our official retirement age is 55, but our staff is not that old yet. Yet we have been putting funds aside for them. The employees are not contributing to their pensions themselves for the time being. During the first five years of retirement they receive a pension equal to their full salary. And then half for five years after that. But average life expectancy is around fifty, so what do we do with the money if an employee dies? We are currently putting a lot of thought into these issues." It is time for a bite to eat. But we swing by home first. Joost lives with his girlfriend in a posh, gated expat community. Guards are on duty day and night. "Every expat has security people. If you don't, you're just tempting fate." A Dutch bicycle is parked next to the pool. Two exuberant dogs, Max and Pub, give Joost a warm welcome. They eagerly chow down when Joost fills their food bowls. Joost pulls on a pair of jeans. Ready for dinner that we will enjoy in a typical Khmer house, built on pilings with the restaurant upstairs. National dishes are served such as lok lak, spicy sliced beef and amok, pieces of white fish with red curry. And of course beer from Joost's own brewery. Cambodians can handle their beer pretty well, according to Joost. "A popular way of drinking is to down your glass in one go. All evening long." As a result, an evening's drinking never lasts long. Usually until around ten or so, then the lights are switched off. "You'll see," says Joost, while he guides the reporter into the Happy Beer Garden, a large, open shed with a metal roof and plastic tables and chairs. Beer hostesses bring the brews around. "Cambodian beer drinkers, primarily men, do not exhibit brand loyalty," Joost explains.

turnover." A couple of dozen women climb the stage in the Happy Beer Garden. One picks up the microphone and sings a karaoke song, the biggest fad in Southeast Asia. Joost explains that this is the way the ladies present themselves to the patrons. "They are mainly divorced women with children. Often they live with a group of women together in one house. Every evening, a group of them hit the road to make money, while the others stay home to care for the children." The Cambodia Brewery, Heineken in other words, purposefully takes a different marketing approach. "The women who promote our brands all wear a uniform. A neat Polo shirt with Tiger on it and a skirt that comes down to just above the knees. No short, tight and revealing clothes like the others. They are also assured of a fixed monthly income so they do not need to earn money in other ways. We hope that the other brands will follow our good example." After the singing, a cheerful local man pats his boss on the shoulder. "One of my managers," Joost explains. "It's important for him to show that he knows me. That earns him more respect." He chuckles: "Around here they call me here Dong Tiger, or Mister Tiger. And the funny thing is that everyone here in Phnom Penh knows me. In all the streets, pubs and cafes they just know that I'm Dong Tiger. It's really something."

A little while later a Tiger lady asks whether we would like ice cubes. Beer with ice? Most Dutch beer drinkers would be filled with horror and indignation. "Well," explains Joost, "Electricity is very expensive in Cambodia. There are huge shortages. Cooling beer simply costs too much money and that's why they drink beer on the rocks. Cheers!"

