

DOING BUSINESS IN THE EUREGIO MEUSE-RHINE
The newsletter of the Chambers of Commerce of the Euregio Meuse-Rhine

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CHAMBERS OF COMMERCE

PURCHASERS' DAY

[COM: Maastricht, December 23]

Meuse-Rhine Chambers of Commerce are organizing a purchasers' day in Hasselt on Wednesday April 20, from 10.00 – 18.00 hrs. The objective is to develop contacts among purchasers from the following sectors: chemicals; rubber and plastics; metalworking; electrical and electronics (equipment and instruments) and engineering (production equipment) and tools.

The Chamber arranges targeted matchmaking on the basis of incoming requests. Participation is free for purchasers and 20-minute meetings are scheduled - ideal for first contacts with new suppliers.

Each purchaser will fill a registration form in English where he can indicate what he is looking for in terms of: products, services, with an option for further specifications and requirements.

The applications will be sent to potential suppliers in Meuse-Rhine. After six weeks at the latest before the event, each purchaser will receive a list of companies that would like to meet him, with a description of their activities, and he can indicate on the list the companies which of them he would like to meet.

On the basis of these forms, appointments will be scheduled, giving him the opportunity to meet as many potential partners as possible in the shortest possible time.

If you are interested, please call Bernard Piette on +31.43.350.6613 or by e-mail :

bpiette@maastricht.kvk.nl

<http://www.maastricht.kvk.nl>

PACKAGING LUNCH

[COM: Maastricht, December 23]

There will be a business lunch with a packaging focus, organized by the Meuse-Rhine Chambers on Friday, February 18 at ANL Plastics in Wellen (B). This is in connection with the new EU directive on packaging and packaging waste. During this meeting you will receive practical information about changes in the European directive; and, at the same time, ANL Plastics will explain its export strategy and give a tour of its business.

During the closing lunch, there will be networking opportunities with companies from the whole of Meuse-Rhine, active in the packaging industry like you. There will also be a catalogue, with the names of all participating companies.

Contact Bernard Piette on +31.43.350.6613 or by e-mail : bpiette@maastricht.kvk.nl

<http://www.maastricht.kvk.nl>

CHINA MISSION

[COM: Maastricht, December 17]

Writing in South Limburg's weekly Chamber News, Jos Cortenraad covers the Chambers recent mission to China led by Ardy Assink, of the Maastricht Chamber, in cooperation with the Meuse-Rhine Chambers.

The twenty-five flight reservations and hotel rooms were easily filled and a number of candidates for the trip had to be turned down. The idea is to run the trip again in 2005 (end May), on a somewhat larger scale. Interest from business in Aachen, Hasselt, Liège and Maastricht led to a European subsidy, which brought the price down to EUR 1300. -. A bargain, when you think that it included the trip, hotel and breakfast, local transport, matchmaking and a series of cocktails and dinners.

Among those who went along, were Luc Dohmen from Onderbanken – a member of the board of the South Limburg Chamber - and Mark Beeldsnijders from Rubber Resources in Maastricht. They emphasized the importance of the hands-on experience; the chance to look at the infrastructure; to get information about finance and funding options and of course about legal issues. Dohmen said 'this is clearly the best way to prepare for business with China'.

The scale of things is overwhelming. Ardy Assink notes that in a city like Canton three million people come in to work from the countryside, at an average remuneration of EUR 145. - per month, 20 times cheaper than the Netherlands. Of course, changes can be expected on the social security front there, but clearly this type of fact-finding mission is essential. Mr Beeldsnijders was particularly interested in the automotive sector, as his company, a part of Vredestein, deals in recycled rubber tires, among other things. The openings would appear to be many and varied.

<http://www.kvkkraant.nl/>

CeBIT 2005

[COM: Maastricht, November, 25]

On March 14 there will be a one day visit to the CeBIT IT fair in Hanover. CeBIT is the biggest IT fair and runs from March 10-16. The areas covered are IT equipment, telecommunications and networking, software and services, IT engineering, data capture, security and banking technology. Last year 700,000 people visited the fair. They were welcomed by 6,600 companies from 60 countries in a 350,000 m². exhibition facility. The trip by the Meuse-Rhine Chambers will leave Maastricht Aachen Airport at March 14 at 07.30 hrs in an Airbus A320 charter flight which will arrive in Hanover one and a half hours later. The visit ends at 20.00 hrs when the charter will return to Maastricht which allows for seven hours at the CeBIT. This enables a rapid and comfortable knowledge investment. The price is EUR 175. - per person, including flight, airport tax, and local transport and a guide. The entry ticket and catalogue are not included. Contact

aassink@maastricht.kvk.nl.

<http://www.maastricht.kvk.nl/>

OK ON GARBAGE EXPORTS

[COM: Aachen, November 16]

Since August, 25,000 tons of refuse has been delivered to the MVA incinerator in Weisweiler from the Sittard depot in South Limburg. The garbage can be delivered through June 2005 which allows the AWA GmbH to meet its requirements and, on the Dutch side, there has been a reduction in the transport costs. The Dutch Minister of Planning and Environment delayed this development for some time, but over a period of five years, the general managers of the Maastricht and Aachen Chambers, Peter Haane and Jürgen Drewes, were able to demonstrate that this position was not compatible with European law.

<http://www.ihk.aachen.de>

CHAMBER MERGERS

[COM: Heerlen, November 1]

A report in 'Dagblad de Limburger' dated October 16, by Marcel de Veen, states that it should be possible for institutions like the Aachen Chamber of Commerce to merge with a cross-border partner within the near future. In the Dutch Second Chamber, a majority has approved an easing of the regulations in respect of Meuse-Rhine in particular areas. Authority that now resides with national government will in part be transferred to the region and simplified.

During a working visit to South Limburg, the committee responsible, including representation of the Ministry of Housing and Planning and Economic Affairs, showed their interest. The committee came to South Limburg to prepare for the paper on planning for December 6 next. The paper will indicate how the Netherlands is to proceed with planning questions in the coming 25 years. Members of the Hague-based committee met at the Glaspaleis in Heerlen.

In the discussion, attention was paid to the many obstacles that are caused in the Euregio by the national borders. Thijs Wöltgens, chairman of the South Limburg Chamber and chairman of the board of the Open University, illustrated this with a story of a trip made to The Hague some years ago. The then Minister of Housing and Planning presented the map of Limburg, with left and right, empty spaces which made it appear as if the province was surrounded by a desert.

This is illustrative of how the government looks at the borders. Issues such as business, the environment and public transport and planning could be much better organized on a Euroregional basis. Why would the intercity stop in Heerlen, when there is a TGV station in Aachen ? House member Bas Jan van Bochove of the CDA and his PvdA (Labor) colleague Co Verdaas are supporters of the proposal to give the border regions in the Netherlands increased powers. Fifty applications had been received by the committee from all over the country. The committee decided to visit five. South Limburg was the last.

<http://www.limburger.nl>

BUSINESS AND INDUSTRY

EUR 104M MAASTRICHT CAMPUS

[BIZ: Maastricht, November 30]

The City of Maastricht, the University and the Provincial Government have given the go-ahead to the new Servatius campus plan for the University of Maastricht. Servatius, the Meuse-Rhine housing association will complete the plan which will represent an investment of EUR 104m. The design by the Spanish architect, Santiago Calatrava includes student accommodation, studios, apartments, offices, some shops, restaurants, a major sport center and a parking garage.

<http://www.servatius.nl>

WALLOON ENERGY MARKET DELAY

[BIZ/INFRA: Namur, November 26]

The Walloon Region does not anticipate being able to open up the energy market for consumers as soon as had been recommended by the Walloon Energy Commission. The Commission proposed a deadline of July 1, 2005 for domestic customers. The regional government has decided not to follow this recommendation; the minister has put forward various arguments, recalling in particular that Flanders, having anticipated the opening since July 2003, had also experienced major problems. The minister, André Antoine, will propose another date for liberalization before the end of the year. The deadline set by the European Directive is 2007.

<http://www.lecho.be/>

FLAT SCREENS FROM EUPEN

[BIZ: Eupen, November 23]

The Eupen company SPB (Société de Production Belge) has received a major contract from the People's Republic of China. SPB will be assembling LCD flat screen TV's for the Chinese Amoi Electronics Company Limited next year in Langesthal. It will also be marketing the products in Germany for its Chinese partners. The contract was signed November 24 on a trade mission to Shanghai. AMOI is a market leader in mobile phones in China and also produces a number of consumer electronics' products, including a DVD and MP3 player. Its registered capital is RMB 429,800,000 (approx. USD 52m) and its total assets are RMB 4,347,000,000 (approx. USD 525m).

<http://www.ihk-eupen.be>

ESSERS MAJORITY IN CENTRUM

[BIZ/LOG: Genk, November 19]

The H. Essers Group has become the majority shareholder of the Dutch company, Centrum Transport BV. The operation was achieved by increasing the capital, of which Essers has now 51%. Following the decision not to take over Eutraco a few months ago, Essers has now decided to move on Centrum, established in Valkenswaard (NL) and Overpelt (B), and also in Central Europe since 1972.

Centrum has one subsidiary in Poland and a 60,000m² logistical platform in Oradea, Romania. Two other buildings are approaching completion; 15,000m² in Bucharest and Pietra Neamt near the Moldavian border. The Essers Group has announced the development of a complete distribution network in Romania for next year. Between its Romanian base and its current locations, the company has laid the foundations for a complete European groupage network. Essers works with 62 partners for groupage, including Cretschmar, Hellmann, Zufall, Sifte Berti, Heppner, Gebr. Weiss... On the logistical front, the new group will have a total surface area of 465,000m² and is the driving force in the Eurologistics network with its eleven partners. An agreement has not been reached between both companies; subject, however, to the approval of the competition authorities. (Source: Truck & Business)

<http://www.essers.com>

SAGE TAKES OVER BOB

[BIZ: Liège, November 18]

Bob Software, the Liège publisher of accounting/business management software for SME's, has been taken over by the Sage Group. The Sage Group LC includes market-leaders throughout Europe, North America, South Africa and Australia, supplying business management software and related products and services to SME's. Sage has a development strategy for Belgium and Luxembourg and will commercialize the Sage and Bob software range under the Sage Bob Software brand. Sage's worldwide customer base is 4.3m; pre-tax profits were up by 17% to GBP 86.7m for the half year ended March 31, 2004.

<http://www.sage.com>

LIEGE'S SAVING FLUSH

[BIZ: Liège, November 17]

The Liège inventor and former Greco-Roman wrestler, Tony Cavaleri, will soon be marketing his domestic wastewater recycling, lavatory cistern systems, known as Tank Cava (i.e.: the Cava tank). Starting in Spring 2005, the systems will be installed in a number of houses in Liège. The city of Liège is interested in the project, which saves water; is environment-friendly and reduces the water bill. The first Cava tank system will be installed on March 22. (Source: BRF)

<http://users.swing.be/tony.cavaleri/tankcava.html>

GERMAN DEBT DEADLINE 31.12.04

[COM: Cleves, November 17]

Pursuant to changes in the German Civil Code, as of January 1, 2002, the regular term for the statute of limitations was shortened for claims in § 195 from 30 years to three years. This will take effect on 31 December 2004, meaning that debts outstanding for more than 3 years can no longer be claimed unless special arrangements have been made. Strick's German law newsletter lists a number of examples of claims due to elapse by application of this statute of limitations on New Year's Eve this year.

<http://www.strick.de>

DOCMORRIS AOK

[BIZ: Heerlen, November 16]

Those insured by the largest North-Rhine Westphalian health insurance company AOK can now order their medications via the Dutch online pharmacy DocMorris, following the judgment of the Court in Ham in Germany, at well below the regular price. AOK Rheinland has signed an agreement to this effect with DocMorris.

<http://www.ihk.aachen.de>

NEW SALT PIPELINE

[BIZ/INFRA: Tessenderlo, November 16]

The Tessenderlo group is starting construction on a 6 km underground pipeline, scheduled for completion in 2006, to transport a salt solution from Tessenderlo's chlorine plant in Genebos-Ham to the loading dock on the Albert Canal. The objective is to reduce the number of trucks on the road. The pipeline trajectory, including six pumping stations, runs parallel to the railway line from Genebos-Ham to Tessenderlo.

(Source: <http://www.zi-biz.be>)

<http://www.tessenderlogroup.com>

ENTREPRENEUR OF THE YEAR

[BIZ: Aachen, November 16]

The Ernst & Young 'Entrepreneur of the year 2004' award for Germany in the trade category has gone to Dieter Junghans, founder and managing partner of Pro-Idee GmbH & Co. KG in Aachen. The company is a middle-sized order house with a range of exclusive quality products from all over the world. Products are chosen on the base of quality, function, originality or exclusivity. Price is not the first issue. It introduced Mag-Lite, the compact pocket flashlight for outdoor use; an American popcorn machine from the '20s and radios for the divers. The company produces three special catalogues five times per year and revenues grew last year by 10% to EUR 130m. It has been serving customers in Germany, Austria, France, Switzerland and the Netherlands since 1985 and it employs 600.

<http://www.proidee.de>

LIEGE BIZ REALTY STATUS

[BIZ: Liège, November 13]

Liège has become a logistical hub because of its airport and the infrastructures that lead to and from it. The current rail platform and the proposed TGV cargo platform and its relationship with Aéroports de Paris make the location a key European center. Another asset is the presence of the Autonomous port (PAL) and the waterborne options for second biggest inland port in Europe in terms of tonnage handled.

Liège has 2.1 million m² of semi-industrial zoning with an annual take up of +/- 150,000 m², which makes its stocks extremely important. There is an absence of very large sites and in fact only 17% of the sites have more than one hectare available.

Major moves on the industrial property front over the last two years have been the sale of the SEMA and Minolta buildings in the Alleur industrial park. The resale of the Continental site (40,000 m²) to one of the carriers in the Hauts Sarts industrial park; transactions between Keulders and Jost for 30,000 m²; the location of Sketchers (22,500 m²) at Prologis - where new construction has also taken place; the refrigerated warehouses belonging to Weerts, covering 11,000 m², for King Transport, the Galiker (11,000 m²), TNT Express (3,000 m²) and ABX (4,000 m²) buildings.

Ongoing the Location projects are for 48,000 m² at Bierset and TTS with Meusinvest have decided to develop 30,000 m² in two 15,000 m² phases at the airport site too. Prologis is starting the second phase of its development at Milmort and will be able to offer 22,500 m² to allow Sketchers to continue its EDC expansion. Lyreco is developing its EDC on a 15,000 m² neighboring site.

<http://www.lalibre.be>

ACOUSTIC DOOR TRIM

[IND/SCI-TECH: Kerpen/Saline, Mich., November 11]

Visteon, with its new European Corporate Office in Kerpen in the Aachen Region, has won the Society of Plastics Engineers' (SPE) highest honor, the Grand Award, for plastics innovation in automotive applications. The award went to Visteon Corporation's Interior Door Trim with Integrated Acoustic Chamber and Subwoofer. This innovation was developed and implemented for the 2005 Ford Mustang.

Visteon's Interior Door Trim with Integrated Acoustic Chamber and Subwoofer also was recognized as the outstanding innovation in the body interior category. This patented solution is a one-piece door panel with an integrated acoustic chamber resulting in improved audio performance and reduced door content and weight, while meeting side impact protection standards. This panel has an 8-inch subwoofer enclosed within a 12-liter hermetically sealed integral acoustic chamber that can protect speakers from door slam damage. This integrated solution also delivers significantly more trunk space, due to removal of the package tray subwoofer chamber, and a weight savings of 18 pounds per vehicle.

Visteon's Simultaneous Shot Injection Molded Instrument Panel also received recognition as the outstanding innovation in the process-enabling technologies category. Visteon produces that product at its Saline, Mich., plant. Using this process, two colors are simultaneously injected into the mold from two different injection units on the molding machine. The flow fronts are controlled by opening and closing valve gates based on the screw position from each injection unit, and all knit lines are placed in areas covered by finish panels on the final product. This process enables reduction in squeaks and rattles between instrument panel and finish panels, improves the dimensional integrity of substrate by eliminating the need for paint ovens and improves scratch resistance, as the substrate is a solid color throughout. In addition, this enabling process controls cost by reducing tooling costs, cycle time and scrap. Ford Motor Co.'s Barb Samardzich, executive director of Small Front Wheel Drive and Rear Wheel Drive vehicles, accepted the award.

<http://www.visteon.com>

GET UP

[BIZ: Aachen, November 9]

The heading for this piece does not refer to a talking alarm clock, but to a project, thus designated, by the Aachen development company AGIT - started this summer - in which 17 companies from Aachen, Düren and Heinsberg are participating. The project is to upgrade women's qualifications in the technology business sector.

20 women are taking courses for periods of six to eight weeks for one day per week. This is subsidized by their own companies and one of their own free days. The project started with a seminar on personal development at the Technology Center. There are also modules on the Fundamentals of Business Economy; time and personnel management; organizational development and intercultural training; communication, marketing and sales promotion. The participating companies are :

- AGROISOLAB GmbH (Jülich)
- CAE Elektronik GmbH (Stolberg)
- CemeCon AG (Würselen)
- Dürr Ecoclean GmbH (Monschau)
- Elino Industrie-Ofenbau GmbH&Co. KG (Düren)
- GIF Gesellschaft für Industrieforschung mbH (Alsdorf)
- GKD - Gebr. Kufferath AG (Düren)
- Hemoteq GmbH (Würselen)
- IMATEC GmbH (Düren)
- IBC Electronic GmbH (Würselen)
- KIMA Echtzeitsysteme (Jülich)
- KM Europa Metal AG (Stolberg)
- Macherey-Nagel GmbH & Co. KG (Düren)
- PROLAS Produktionslaser GmbH (Würselen)
- SUN Hydraulik GmbH (Erkelenz)
- SURFACE (Hückelhoven)
- Weyergans High Care AG (Düren).

<http://www.agit.de>

TWENTY4HELP PORTRAIT

[BIZ: Maastricht, November 7]

This year, 'twenty4help' received US COPC-2000® quality standard certification. Founded in Germany in 1992, in 1998 it opened in Maastricht, which was rapidly becoming a top location for service centers at that time. The company is a market leader in the outsourcing of professional IT support. Applications dealt with range from digital cameras and office software through to operating systems and mainframe computers.

Across Europe more than 2,500 experienced Knowledge Engineers provide assistance to customers in 18 languages, helping with software, hardware and Internet applications. Through the Corporate Services Division clients outsource User Help Desks, benefiting from a comprehensive range of services. The Vendor Services Division offers a complete customer relationship management package for clients, including telemarketing, product advice, technical support, together with the coordination of repairs and warranty claims, by phone, via e-mail or via the Internet.

Over the years, two key fields have emerged. The first, Corporate Services, provides User Help Desk support for business customers. The second, Vendor Services, offers a complete range of Customer Relations Management activities, focusing in the main on support to private end-users. Services provided are available 24 hours a day, every day of the year.

"Thinking global, but acting local" has meant that, rather than working through pan-European call centres, twenty4help has established a network of centrally coordinated, but independent regional operations. This approach allows the company to cater for cultural and national differences, resulting in a truly international mix, enabling the ten European facilities to provide services in 18 different languages.

<http://www.twenty4help.com/nl/>

CRUTCHED FRIARS TOP OUT

[BIZ: Maastricht, November 5]

The new KruisherenkloosterComplex hotel in the heart of Maastricht held its topping out ceremony on November 5. The ceremony was preceded by speeches and the presentation by the agricultural testing laboratories, the last group to occupy the premises. They presented a wooded card statue of a crutched friar and made a contribution of EUR 700 to one of the memorial windows and they were reminded by former Mayor and Trust President, Philip Houben, that they would be able to make up their contribution to the full price next time they came around. Work seems to be progressing satisfactorily for the opening next year.

<http://www.chateauhotels.nl>

BEST WHITE 'PUD' FROM LIEGE

[BIZ: Liège, November]

At a competition held in Paris recently, the best white pudding, 'boudins blancs' and 'boudins aux petits legumes' came from the master butcher Jacques Delaval from Ransart in Grivegnée. The company is now in its fourth generation and all its recipes date from the good old days.

<http://www.brf.be>

BACKERBOSCH OPENS

[BIZ/LEI: Maastricht/Cadier en Keer, November]

The new Backerbosch golf club between Maastricht and Cadier en Keer opened on November 19. The club is less than 5 kilometers from the heart of Maastricht and has an 18-hole competition course and a par 3, 9-hole pitch & put course. There is also a driving range and a golf and country club with business-to-business options will start construction in 2005. This will have catering facilities, meeting rooms, changing rooms with a sauna and gym, a business lounge and a crèche for children. The site also includes the Africa and Wine museums. The course maintains the characteristics of the Maastricht hill country with its high-trunk trees and hawthorns around the 50-acres site.

Construction is by the Mourik-SBA company from Echt, who have built and maintained about 50 golf courses around Europe. The design was in hands of Janssen-Grondverzet from Maastricht. More information is available at the website:

<http://www.backerbosch.nl>

LOGISTICS AND INFRASTRUCTURE

COLOGNE BONN LINK

[LOG: Aachen, November 24]

There is to be an early daily rail connection to Cologne-Bonn airport from mid-December. The S-Bahn will leave Aachen's main station and travel to Cologne-Bonn with services starting at 03:40 hrs from Aachen. The trip takes 1 hour and 15 minutes with stops in Langerwehe, Düren and Merzenich.

<http://www.wdr.de>

LANAKEN-MAASTRICHT LINE

[LOG: Lanaken, November 22]

The line between Lanaken and Maastricht is to be taken back into service; and, in 2007, the first freight trains will be rolling along the track. Work on the line will start this year and business and industrial sites bordering the line will also be involved. The Flemish government is to invest more than EUR 30m in the cross-border cargo link. A locally based company will run the line. The operating permit has already been granted.

<http://www.brf.be>

RAIL LOGISTICS PERMITS

[LOG: Liège, November 18]

Liege has granted a 20-year permit to the Belgian railways (SNCB) to run a logistical infrastructure center in Angleur.

<http://www.liege.be>

MAASTRICHT AND RIEMST

[INFRA: Hasselt, November 5]

The Albert Canal Association has proposed a countryside plan for the area between Lanaken, Riemst and Maastricht with the accent on the countryside and archeology. The underlying intention of the cross-border educational network is to make the area between the three municipalities better known, by developing a nature park and recreational area for 100,000 visitors to visit each year by bike or on foot. The Albert Canal Border Association is made up of local residents, representatives of local councils, associations and civil servants from Maastricht, Riemst and Lanaken who have formed a group to make an inventory of the qualities of the area. The inventory is the starting point for a cross-border development plan. There will be information points in the three municipalities to inform people about the developments and provide information. The projected cost is EUR 800,000. Riemst, Lanaken and Maastricht will each pay EUR 55,000 and the rest will be funded by European and provincial sources.

<http://www.hbvl.be>

CRAMIGNON FERRY A SUCCESS

[LOG: Eijsden, November 1]

After some teething troubles, in its first five months of service, the passenger ferry 'Le Cramignon', which crosses the Meuse, linking Eijsden (NL) with Lanaye (B), has carried 32,000 passengers. The original estimate was for 15,000. The ferry made its last trip for the season on October 31 and starts again next Spring.

<http://www.eijsden.nl>

NEW OPTIONS FOR ESTROGEN

[LIFE-SCI: Maastricht, November 25]

Dr Fawzi Babiker of Maastricht's Faculty of Medicine (Cardiology/Molecular Genetics) has just completed a PhD in which he looks again at estrogen as a remedy in cardiovascular disease and osteoporosis in the light of the recent negative findings in two major epidemiological studies in the US.

Much attention has recently been given to the understanding of the effects of estrogen on the vasculature, but to date, little is known about direct effects of estrogen on the heart. However, epidemiologic studies show clear gender-based differences in left ventricular hypertrophy and cardiac remodeling. For example, left ventricular mass is less in women than men (even after indexing for body size) and women with hypertension show a lower level of left ventricular mass increase compared to men.

Since these gender based differences are only observed in pre-menopausal women these effects are likely to be caused by the cardioprotective action of estrogen. Preliminary data from our group using a rat model demonstrate:

- a) estrogen-dependent differences of the structural changes in hypertensive heart disease of spontaneously hypertensive rats (SHR),
- b) gender-based differences in cardiac function in normotensive rats and structural differences in post-MI remodeling and
- c) estrogen receptor-dependent effects of estrogen on the expression physiologically relevant cardiac genes in vitro and in vivo.

Taken together, these data support the central hypothesis: estrogen reduces left ventricular hypertrophy in hypertensive heart disease and regulates ventricular remodeling after myocardial infarction.

To allow us to unravel the mechanisms of the development of left ventricular hypertrophy in hypertensive heart disease and cardiac remodeling following myocardial infarction, we have recently reported a mouse model of MI, and developed the techniques necessary to perform hemodynamic studies in mice. We propose to test this hypothesis by pursuing the following specific aims.

- Specific aim 1: To determine the role of estrogen receptor ERalpha and ERbeta on left ventricular hypertrophy following transverse aortic constriction (TAC), using wild-type and estrogen receptor (alpha/beta) knockout mice.
- Specific aim 2: To analyse the role of ERalpha and ERbeta on left ventricular remodeling following myocardial infarction, in wild-type and estrogen receptor (alpha/beta) knockout mice.
- Specific aim 3: To study the effect of selective estrogen receptor modifiers (SERMs) on ventricular remodeling after myocardial infarction and left ventricular hypertrophy following TAC.

[Relevance for cardiovascular diseases]: Epidemiologic studies have shown that there are gender based differences in cardiac disease.

The cardioprotective effect of estrogens is in part due to the improvement of the risk factor profile. Several studies have implicated that estrogen also has a direct effect on vascular cells and can for example prevent restenosis in a murine model of carotid artery stenosis and can reverse the endothelial dysfunction seen in postmenopausal women. Although the main interest has focused on the vasculature recent studies have shown that cardiac myocytes contain functional active estrogen receptors and that therefore selective estrogen receptor modifiers may directly influence the heart. However, the signaling pathways involved in the cardioprotective action are still poorly understood. In conclusion the proposed experiments will help to unravel the mechanisms of the actions of estrogen on the heart and will provide a tool to identify drugs that host the cardioprotective effects of estrogen, but lack the side-effects on the reproductive tract like the increased incidence of endometrial and the slightly increased risk of breast cancer in women taking unopposed estrogen.

<http://www.niwi.knaw.nl/en/oi/nod/onderzoek/OND1289198/>

2,000M AACHEN BOREHOLE

[SCI-TECH: Aachen, November 23]

Aachen researchers have drilled a 2,500-meter borehole to provide geothermal heating for the university. This depth was reached within four months after the start of the drilling. This is the first time that major buildings will be heated using geothermal resources in Germany. The geothermal heat will cover 80% of the heating energy requirement and reduce the emissions by 300 kilograms.

<http://www.brf.be>

BIONALE RESULTS

[LIFE-SCI: Maastricht, November 21]

Bionale's first conference led to the issue of 1,850 day passes during its three-day session and the organization is now looking forward to the next session in 2006. The satellite conference program was appreciated and will be a major feature the next time round. 70 Companies took part in the Bionale market place and their presentations will be on a forthcoming DVD. The Bionale manifesto, a summary of recommendations made in the previous session, will be finalized and presented to the Dutch Minister of Economic Affairs, Laurens Jan Brinkhorst, and be used in recommendations to the European Council. This will be sent to those registered by e-mail and we shall report on it.

<http://www.bionale.org>

BIBLIOMETRICS AT JUELICH

[SCI-TECH: Jülich, November 5]

The Jülich Research Center's main library provides its institutes and external customers with the opportunity of having their publications analyzed statistically, to show them how their work is being received by the scientific community. Bibliometric analysis is an instrument for the documentation of the public performance of all sorts of institutions, as well as the reception of their work, measured by the number of citations. It provides information about the reception of publications by research groups.

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LIEGE LUNAR PROBE

[SCI-TECH: Liège, November 16]

ESA, the European Space Agency's SMART-1 mini-satellite has successfully made its first orbit of the Moon, using control software developed by the Liège company SPACEBEL which pilots the vessel from a terrestrial trajectory to lunar orbit. This is a significant milestone for the first of Europe's Small Missions for Advanced Research in Technology (SMART) spacecraft.

The main purpose of the first part of the SMART-1 mission, concluding with the arrival at the Moon, was to demonstrate new spacecraft technologies. In particular, the solar-electric propulsion system was tested over a long spiralling trip to the Moon of more than 84 million kilometres. This is a distance comparable to an interplanetary cruise.

For the first time ever, gravity-assist manoeuvres, which use the gravitational pull of the approaching Moon, were performed by an electrically propelled spacecraft. The success of this test is important to the prospects for future interplanetary missions using ion engines.

SMART-1 has demonstrated new techniques for eventually achieving autonomous spacecraft navigation. The OBAN experiment tested navigation software on ground computers to determine the exact position and velocity of the spacecraft using images of celestial objects taken by the AMIE camera on SMART-1 as references. Once used on board future spacecraft, the technique demonstrated by OBAN will allow spacecraft to know where they are in space and how fast they are moving, limiting the need for intervention by ground control teams.

SMART-1 also carried out deep-space communication tests, with the KaTE and RSIS experiments, consisting of testing radio transmissions at very high frequencies compared to traditional radio frequencies. Such transmissions will allow the transfer of ever-increasing volumes of scientific data from future spacecraft. With the Laser Link experiment, SMART-1 tested the feasibility of pointing a laser beam from Earth at a spacecraft moving at deep-space distances for future communication purposes.

During the cruise, to prepare for the lunar science phase, SMART-1 made preliminary tests on four miniaturized instruments, which are being used for the first time in space: the AMIE camera, which has already imaged Earth, the Moon and two total lunar eclipses from space, the D-CIXS and XSM X-ray instruments, and the SIR infrared spectrometer.

In all, SMART-1 clocked up 332 orbits around Earth. It fired its engine 289 times during the cruise phase, operating for a total of about 3700 hours. Only 59 kilograms of xenon propellant were used (out of 82 kilograms). Overall, the engine performed extremely well, enabling the spacecraft to reach the Moon two months earlier than expected.

The extra fuel available also allowed the mission designers to significantly reduce the altitude of the final orbit around the Moon. This closer approach to the surface will be even more favourable for the science observations that start in January. The extra fuel will also be used to boost the spacecraft back into a stable orbit, after six months of operations around the Moon, in June, if the scientific mission is extended.

(Source: <http://www.esa.int/SPECIALS/SMART-1/index.html>)
<http://www.spacebel.com>

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