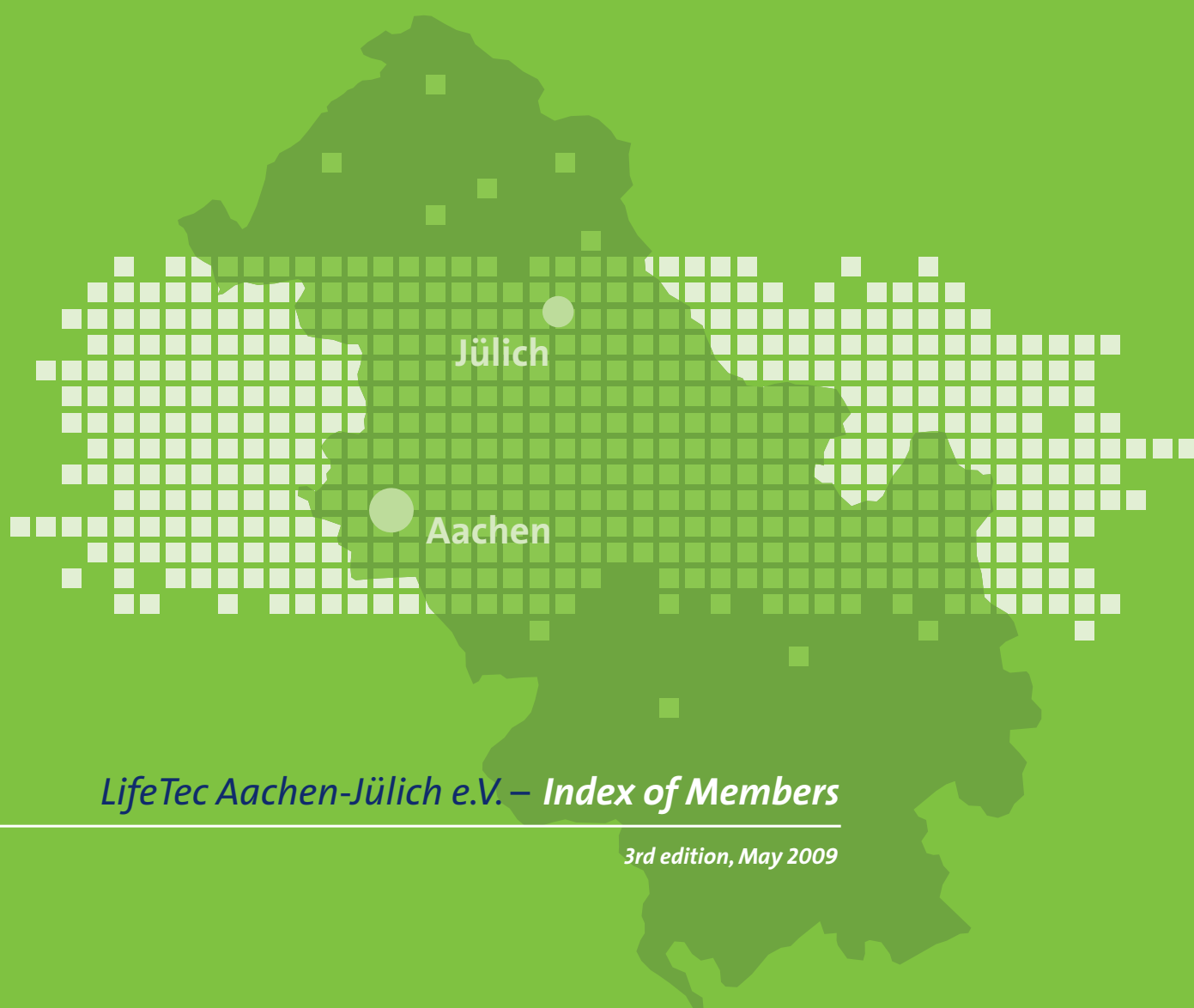


*Aachen-Jülich*

# Life Sciences Excellence



*LifeTec Aachen-Jülich e.V. – Index of Members*

*3rd edition, May 2009*



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# *LifeTec Aachen-Jülich e.V. – Index of Members*

3rd edition, May 2009



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# Introduction

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Dear reader,

Nearly 10 years now, LifeTecAachen-Jülich has been developed into a vivid network of companies and academic institutions within our region. Comprising more than 70 members, the association encompasses more life sciences players than most other regions in Germany and in Europe. In the field of medical technology, the region is a greenhouse for young and innovative spin-offs that regularly succeed in business plan contests like the Startbahn Medicon Ruhr one. These spin-offs are the solid economic outcome from academic institutions performing applied research, for example the Helmholtz Institute for Biomedical Engineering, the Fraunhofer Institute for Laser Technology or the University Hospital in Aachen. Next to them, international companies have settled in the region to make profit from co-operation with these R&D institutions. Other reasons may be the intensive service that is offered to foreign investors by local administrative partners. Not to be underestimated, investors are also attracted by an international climate in this tri-national region, which I will address later on. In addition, big players like Philips Research Laboratories bear the power to run comprehensive model projects and to develop medtech innovations up to a successful market entrance.

SME, large companies and R&D institutions face different needs. In the run of nearly a decade, LifeTecAachen-Jülich has understood to cope with them, offering a central office for information broking and pro-active activities. Regularly, events are organized to encourage open exchange on different levels. Informal networking is enabled in parallel to official presentations and talks. Next to medical technology, there is a strong focus on biotechnology within LifeTecAachen-Jülich. The region houses the famous Research Center Juelich within the Helmholtz community. The Institute of Biotechnology has been the top soil for spin-offs like Celonic, DASGIP or Julich Chiral Solutions, nowadays a Codexis company. The fact that the US based Codexis was highly interested to acquire a small enterprise in a city hardly to pronounce for American people shows the significant technology and innovation level that has been achieved. Furthermore, DASGIP and Celonic are long-term profitable companies that do not fit to the typical picture of venture capital dependent drug development enterprises worldwide. Both business models face advantages as well as disadvantages, but the profitable service or tool providers are often underestimated in terms of long-term employment and reliability. The region is also proud to accommodate innovative companies listed at the stock exchange like PAION or mid-sized long-established pharma companies like Grünenthal. Being informed by a LifeTec funding update, a group within Fraunhofer

Institute for Molecular Biotechnology and Advanced Ecology received a grant from the German Ministry for Education and Research (BMBF) totaling up to 3 million Euro pre-seed capital to prepare a company foundation.

As we are not located in an internationally well-known industrial hub, co-operation and information flow are essential elements of development, economically as well as scientifically. Thus, LifeTecAachen-Jülich is highly active to create transparency about its members, their profiles, activities and services. I do not want to emphasize the exclusive value of co-operating regionally. But if there are different opportunities and one of them comprises two players close-by, then I am sure that it saves time and money to co-operate “across the street”. This brochure is only one effort to achieve transparency, regionally as well as super-regionally. It is a guide for everybody being interested in life sciences in our region. As we are working together closely with our partner clusters in Wallonia (B), Flanders (B) and South Limburg (NL), we are also the entrance gate to the Euregio Meuse-Rhine. Cross-border activities are our daily business. As a visible element, we have established Biomedica, a yearly event rotating between Aachen, Liège and Maastricht.

I strongly encourage you to make use from this brochure. The members of LifeTecAachen-Jülich will be delighted to close new contacts via the association`s activities. The members themselves may be invited to update our central office located in the Aachen technology center about current needs and wishes. An association can only provide an added value if members make clear what they expect from it. A hidden star is nice, but a public lighthouse can send out rays throughout the whole region. Let us make profit from one another!

Yours faithfully



Dr. Andreas Herrmann

Chairman, LifeTec Aachen-Jülich e.V.

# Life Sciences Excellence





Recovering hearts. Saving lives.™

<b>Name of company</b>	Abiomed Europe GmbH
<b>Address</b>	Neuenhofer Weg 3   52074 Aachen   Germany
<b>Contact Person</b>	Gabriele Servé
<b>Phone / Fax</b>	+ 49- (0) 241-8860-100   + 49- (0) 241-8860-222
<b>e-mail</b>	gserve@abiomed.com
<b>Website</b>	www.abiomed.com
<b>Year founded</b>	2002
<b>Business Mission</b>	At Abiomed, we are dedicated to advancing circulatory support technology for recovery of the native heart. We believe heart failure patients should live the life they were meant to live.
<b>Life Sciences Classification</b>	Cardiovascular Therapies, Medical Devices, Minimal invasive Therapies
<b>Products in Development</b>	several
<b>Products on the Market</b>	<p>Impella® LP2.5          Impella® LP5.0          Impella® LD          Impella® RD          Impella® Mobile Console          iPulse Console          AB5000 Console          AB5000 Ventricle          BVS 5000 Blood Pump          iPulse IAB</p>
<b>Technologies used</b>	Micro Blood Pump, Integrated Sensor Technology in medical Systems, Heart Valve Technology, Intra Aortic Counter Pulsation
<b>Services offered</b>	Custom-designed clinical Support, Technical Service
<b>Company Profile</b>	<p>Abiomed develops, manufactures and markets circulatory support systems for numerous indications in the fields of cardiology and cardiac surgery. Abiomed Europe manufactures the world's smallest minimally invasive, high performance pump system with integrated motor and sensors (Impella). In addition, Abiomed Europe is responsible for marketing and sales activities of the entire Abiomed product line (Abiomed and Impella) in Europe, the Middle East and Africa. Our products provide a temporary solution while the patient is waiting for further treatment (cardiological or cardiosurgical intervention) and/or help the heart in recovering its own capabilities (bridge to recovery).</p>

# AGIT

Gründen. Ansiedeln. Fördern.

<b>Name of company</b>	AGIT-Aachener Gesellschaft für Innovation und Technologietransfer mbH
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<b>Phone / Fax</b>	+ 49- (0) 241-963-1065   + 49- (0) 241-963-1033
<b>e-mail</b>	u.schelhaas@agit.de
<b>Website</b>	www.agit.de www.technologieregion-aachen.de
<b>Year founded</b>	1983

**Business Mission** Regional development agency for the technology region Aachen.

**Company Profile**

AGIT is a co-founder of the SIGNO network (formerly INSTI) to protect ideas for commercial use and acts as an innovation partner for the Aachen region in the national SIGNO network of the Federal Ministry of Economics and Technology.

The ELAT cooperation aims at making a name for the Aachen business region as part of the excellence region Eindhoven, Leuven, Aachen in European competition. Measures have been implemented to strengthen Aachen's great innovation and growth potential together with euregional partners.

An important element in AGIT's support for the regional cluster developments is its assistance for the clusters and their member companies and institutions in the development and implementation of technology and innovation-oriented business-promotion projects within the scope of the Target 2 Programme and the INTERREG program.

Health care economy is a major subject in the Aachen region and is therefore supported by the North Rhine-Westphalian ministries. Two action fields out of five are managed by AGIT: Medical Technologie/Life Sciences and Health care tourism.

The agency is partner in a new labour market platform for the life sciences sector; SKILLS<sup>3</sup>, a new labour market platform for the life sciences sector will be offered in future with the help of modern marketing instruments on which the enterprises can offer their jobs directly to students in the Euregio Meuse-Rhine. At the same time, students are given the opportunity to present their background and specialisations to the enterprises.



<b>Name of company</b>	Analytical Services
<b>Address</b>	Pauwelsstr. 19   52074 Aachen   Germany
<b>Contact Person</b>	Dr. Ralph Nussbaum
<b>Phone / Fax</b>	+ 49- (0) 241-963-2150   + 49- (0) 241-963-2154
<b>e-mail</b>	info@analytical-services.com
<b>Website</b>	www.analytical-services.com
<b>Year founded</b>	2003
<b>Business Mission</b>	We provide GMP-release analytics, special analytics and CMC-documentation support for the Pharmaceutical Industry.
<b>Life Sciences Classification</b>	Consulting, Specialty Chemicals, Testing/Analytical Services
<b>Services offered</b>	Technical Writing (SOPs, INDs, IMPDs), Release of Drug Products and Drug Substances, ICH Stability Studies, Syntheses and Storage of Reference Standards, Method Development & Validation
<b>Life Sciences Clients</b>	Small and mid-sized pharmaceutical industry
<b>Company Profile</b>	<p>Analytical Services was founded in 2003 as a service-based partner for the Pharmaceutical Industry.</p> <p>Analytical Services manages an established and qualified network of GXP-certified contract laboratories and university laboratories. Until now, more than 30 partner companies and universities in Europe join the network of Analytical Services. This allows our customers to get instantly access to special analytical techniques and the expertise of well-known scientists, managed by Analytical Service's seamless project management.</p>



# AplaGen

BIOPHARMACEUTICALS

**Name of company**

AplaGen GmbH

**Address**

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**Contact Person**

Prof. Dr. Hans-Georg Frank

**Phone / Fax**

+ 49- (0) 2401-80-5570 | + 49- (0) 2401-80-5574

**e-mail**

info@aplagen.com

**Website**

www.aplagen.com

**Year founded**

2001

**Business Mission**

Development of peptide APIs in several indications on a strong, patented technology platform.

**Life Sciences Classification**

Drug Design, Peptide Synthesis, EPO mimetics, Therapeutics

**Products in Development**

EPO-mimetic peptides for human and veterinary use, TPO-mimetic peptide

**Technologies used**

Supramylation (Conjugation to HES), Microwave Aided Peptide Synthesis, Correctly Folded Peptide Synthesis, Peptide Cyclisation with AGOX

**Services offered**

Peptide Optimisation, Molecular Modelling, Innovation Partnership

**Life Sciences Clients**

AplaGen has closed an Evaluation and Option Agreement on EPO-mimetic peptides for veterinary use with a top pharmaceutical player in the animal health field.

**Company Profile**

AplaGen is focussing on design, synthesis, and development of peptides irrespective of medical fields or indications. AplaGen has extensive experience in the fields of lead discovery, lead optimisation, and preclinical development. The main project, the development of an EPO-mimetic peptide for human use, is in preclinical stage. Lead optimisation for an EPO-Mimetic Peptide for veterinary use is running. A further project is the development of a thrombopoietic mimetic peptide for the use in haematology.



## Bayer Innovation

**Name of company**

Bayer Innovation GmbH

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Merowingerplatz 1 | 40225 Düsseldorf | Germany

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burkhard.fugmann@bayerinnovation.de

**Website**

www.bayer-innovation.de

**Year founded**
**Company Profile**

Bayer Innovation GmbH, headquartered in Düsseldorf, Germany, is a fully owned subsidiary of Bayer AG.

Bayer Innovation GmbH evaluates and develops new fields of businesses for the Bayer Group which are in line with Bayer's core competencies of health care, nutrition and high-tech materials to complement its current key areas of innovation and business.



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## Biosteel Medical

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<b>Name of company</b>	Biosteel Medical Han/Sellin GbR
<b>Address</b>	Pauwelsstr. 19   52074 Aachen   Germany
<b>Contact Person</b>	Lothar Sellin
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<b>e-mail</b>	medicalbiosteel@aol.com
<b>Website</b>	www.Biosteel-net.de
<b>Year founded</b>	1990
<b>Business Mission</b>	Lifetime Biocompatibility „the permanent solution“.
<b>Life Sciences Classification</b>	Bioinformatics, Biomaterials, Biosensors, Bioseparations, Cardiovascular Therapies, CE Certification, Consulting, Drug Delivery Systems, Drug Design, Drug Development, Equipment, General Cell Culture, Genetics, Genomics, Inflammation, Medical Devices, Minimal Invasive Therapies
<b>Products in Development</b>	Degradable and non-degradable bio-hemocompatible coating
<b>Products on the Market</b>	Drug Eluting Stent, Stent, Carbon Stent
<b>Technologies used</b>	Tailor-made coating service for wide range
<b>Services offered</b>	Tailor-made Multi-Layer drug-eluting coating platform
<b>Company Profile</b>	Biosteel Medical is poised to become an intelligent market player in providing biocompatible and drug-eluting solutions for a wide range of implantable devices, such as coronary, micro, and peripheral stents, grafts, guide-wires, heart-valves, bio-plates and orthopaedic implants, making them compatible with specific physiological requirements of tissues and organs and simultaneously providing a delivery platform for pharmacological agents.



## Labor für medizinische Materialprüfung GmbH

<b>Name of company</b>	BMP Labor für medizinische Materialprüfung GmbH
<b>Address</b>	Pauwelsstr. 19   52074 Aachen   Germany
<b>Contact Person</b>	Dr.-Ing. Ute Müller (CEO)
<b>Phone / Fax</b>	+ 49- (0) 241-963-2390   + 49- (0) 241-963-2391
<b>e-mail</b>	info@bmp-aachen.de
<b>Website</b>	www.bmp-aachen.de
<b>Year founded</b>	1999
<b>Business Mission</b>	Protecting patients and manufactures is our expertise.
<b>Life Sciences Classification</b>	Testing/Analytical Services, CE-Certification, Consulting, Risk Management, Biomaterials, Implants, Medical Devices, Tissue Engineering
<b>Products on the Market</b>	Test methods for biocompatibility of biomaterials and medical devices
<b>Technologies used</b>	Accreditation according ISO 17025 and ISO 10993 (biocompatibility testing)
<b>Company Profile</b>	<p>The BMP GmbH is one of the few accredited testing laboratories for the evaluation of the biological compatibility of medical devices and biomaterials in Germany and Europe for the achievement of the CE mark according to European guidelines 93/42 and 90/385. Furthermore, BMP gives support for several documents of the quality management system (project plan, CE-list, technical documentation, risk management and risk analysis) as well as required test strategy.</p> <p>The tests of biological compatibility comprise tests of cytotoxicity, hemocompatibility, irritation, sensitisation, cancerogenity, genotoxicity, acute systemic and chronic toxicity as well as implantation tests.</p> <p>Furthermore BMP will consult enterprises on the way of the development to applied strategies for investigations going for CE labelling as well as risk analysis for medical devices (single use and reuse).</p> <p>Since 2004 BMP is the first accredited laboratory for pathohistological and immunohistological examinations of explants and implants failure according ISO 10993-6.</p>



## CARPUS+PARTNER

**Name of company**

Carpus+Partner AG

**Address**

Weststr. 54 | 52074 Aachen | Germany

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Wolfgang Fränzel

**Phone / Fax**

+ 49 (0) 241-8875-257 | + 49 (0) 241-8875-191

**e-mail**

wolfgang.fraenzel@carpus.de

**Website**

www.carpus.de

**Year founded**

1982

**Business Mission**

We consider it a challenge to identify the demands of a changing environment at an early stage and develop forward-thinking solutions. We have the courage to take on the responsibility for the success of our solutions – as a consultant, primary contractor and beyond.

**Life Sciences Classification**

Consulting, Equipment, Industrial Biotechnology, Medical Devices, Plant Biotechnology, Production/Fermentation, Tissue Engineering, Vaccines. GMP BSL

**Services offered**

Designing and realising individually tailored productional and laboratory buildings, Hygiene Planning, Pharmaceutical Engineering, Qualification and Validation, Feasibility Studies.

**Life Sciences Experience**

Planning and construction of a production buildings and technology centres with cleanrooms, laboratories, research and production, and offices.

**Life Sciences Clients**

Abbott Laboratories, ALTANA, Bayer Schering Pharma, Biocampus Cologne, BCC Cuxhaven, Boehringer Ingelheim, Brahms Biotech, Lohman&Rauscher, Madaus, Merck KGaA, Merckle/ratiopharm, Rentschler Biotech, SCHWARZ Pharma, Solvay, STADA

**Company Profile**

Carpus+Partner is the industry's partner for development, manufacturing plants and life science corporations for their advisory, planning and executive needs. We offer the whole range of services from consultancy to conceptualization and detailed planning, all the way to the implementation of pharmaceutical production factories, R&D and QC laboratories, logistics and offices. With a customer-oriented focus on individual and economic solutions, our specialized interdisciplinary project teams accompany our clients from the early stages of production strategy advice to the specification of detailed individual solutions up to the supervision of the execution of the work. We give advice when creating industry and product-specific hygiene concepts and make sure that the requirements of the relevant regulations and guidelines are put into practice. Furthermore, we offer to attend to all steps in the qualification process of all GMP relevant equipment, rooms and media. Finally, we support and manage the validation process.



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**Caspar & Co.**

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<b>Name of company</b>	Caspar & Co. LABORA GmbH
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<b>Phone / Fax</b>	+ 49- (0) 241-94649-30   + 49- (0) 241-94649-13
<b>e-mail</b>	info@caspar-labora.de
<b>Website</b>	www.caspar-labora.de
<b>Year founded</b>	1965
<b>Life Sciences Classification</b>	Laboratory Equipment, Laboratory Furnitures, Fume Hoods and Workstations, Laboratory Refrigerators and Freezers, Ultra-low Freezers, Refrigeration Accessories, Medical Devices, HAWS-Emergency Equipment
<b>Services offered</b>	Custom-Design Technology
<b>Company Profile</b>	<p>The company Caspar &amp; Co. LABORA was established in the year 1965. Caspar &amp; Co. LABORA makes use of exceptional production procedures, i.e. complete mechanical production facilities.</p> <p>Caspar &amp; Co. LABORA produces and assembles laboratory installation systems with a high quality prefabrication degree to meet customer standards for industries / research and universities paying regard to maintain product specific norms and standards.</p> <p>Caspar &amp; Co. LABORA is a competent partner for all laboratory installation systems.</p>



*making biopharmaceuticals tangible*

**Name of company**

Celonic GmbH

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**Contact Person**

Ute Steinbusch

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**e-mail**

ute.steinbusch@celonic.de

**Website**

www.celonic.de

**Year founded**

1998

**Business Mission**

Contract Development and GMP-Production of Biopharmaceuticals

**Life Sciences Classification**

Production/Fermentation, Proteomics, Research, Testing/Analytical Services, Therapeutics, Vaccines

**Technologies used**

Proprietary Mammalian Cell Culture Technologies

**Services offered**

- GMP Production of Biopharmaceutical Proteins
- GLP Analytics
- Process Development (USP/DSP)
- Cell Line Development
- Quality Control / Assay Development

**Company Profile**

Celonic GmbH is a contract services and manufacturing company offering comprehensive support in the development and GMP-compliant production of Biopharmaceuticals. These services cover the establishment of regulatory conform, high-yield production cell-lines (e.g. CHO), the development and optimization of analytical, down-stream and upstream-processes as well as the GMP-production of APIs up to market demands. The GMP-production is done in our Basel facility certified by SwissMedic.

Celonic's proprietary technology reduces the protein development period from 12 to 3 months.

In our Jülich facility, certified for GLP compliance, we offer analytical methods needed during preclinical and clinical development of biopharmaceutical compounds. That comprises bioassays, quantification of APIs and neutralizing or agonistic antibodies in serum of different species. Our analytical data and reports are accepted by regulatory authorities worldwide.

# CEVEC

<b>Name of company</b>	CEVEC Pharmaceuticals GmbH
<b>Address</b>	Gottfried-Hagen-Str. 62   51105 Köln   Germany
<b>Contact Person</b>	Dr. Rainer Lichtenberger
<b>Phone / Fax</b>	+ 49- (0) 221-46020-800   + 49- (0) 221-46020-801
<b>e-mail</b>	info@cevec-pharmaceuticals.com
<b>Website</b>	www.cevec-pharmaceuticals.com
<b>Year founded</b>	2001
<b>Business Mission</b>	Human cell-based expression technology. The future for production of biopharmaceuticals.
<b>Life Sciences Classification</b>	Production / Fermentation
<b>Products in Development</b>	CAP-Cells (Human Amniocytes)
<b>Products on the Market</b>	CAP-Cells (Human Amniocytes)
<b>Technologies used</b>	Adenovirus transformed human Cell Line
<b>Services offered</b>	Licensing / Cell Line Development
<b>Company Profile</b>	<p>CEVECs business is the development of an innovative platform technology for the production of biopharmaceuticals in human cell lines.</p> <p>With its proprietary process technology CEVEC has world wide USP for the production of amnion cell lines (CAP-Cells). CAP-cells provide new opportunities for the production of antibodies, enzymes and growth factors and combine high product quality with easy handling.</p> <p>The cells were optimized for industrial use and might contribute in reducing undesired properties of biopharmaceuticals, like antigenicity, low stability or low activity. Based on the CAP- technology CEVEC develops production cell lines in cooperation with clients and its own therapeutic approaches.</p> <p>The company has started to commercialize the technology and has developed a flexible license model which serves the client's individual project.</p>

<b>Name of company</b>	chemagen Biopolymer-Technologie AG
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<b>Contact Person</b>	Dr. Stephan Jacobs
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<b>e-mail</b>	info@chemagen.com
<b>Website</b>	www.chemagen.com
<b>Year founded</b>	1997
<b>Business Mission</b>	Providing the Life Science industry with worldwide leading systems for bio-separation as well as manual and automated sample preparation e.g. prior to nucleic acid testing (NAT).
<b>Life Sciences Classification</b>	Bioseparation, Genetics, Genomics, Proteomics, Sample Preparation for nucleic acid Testing, Laboratory Automation
<b>Products in Development</b>	Low/medium throughput automation for the isolation of nucleic acids, proteins and other bio-molecules.
<b>Products on the Market</b>	More than 100 products for manual and automated nucleic acid isolation from all common sample materials and applicable for every sample volume. High variety of functionalized and activated M-PVA Magnetic Beads. Automated systems for low to high throughput applications from every sample volume.
<b>Technologies used</b>	Proprietary M-PVA Magnetic Bead technology, chemagic Kits and patented automated solutions e.g. the chemagic Magnetic Separation Module I
<b>Services offered</b>	Developing and customizing user-specific applications for manual and automated nucleic acid isolation. Functionalization of magnetic particles (e.g. oligonucleotide-, protein/ antibody coupling)
<b>Life Sciences Clients</b>	Clients in different medical routine laboratories and Public Health Institutes.
<b>Company Profile</b>	<p>chemagen's chemagic Kits for nucleic acid isolation facilitate the time consuming and cost-intensive sample preparation step prior to downstream applications significantly. Based on the company's patented Magnetic Bead technology and together with its proprietary automation they represent worldwide leading systems suitable for an unlimited variety of different sample materials and applicable for every sample volume. Diagnostic applications like virus identification or SNP genotyping now have become faster and more reliable.</p> <p>chemagen Biopolymer-Technologie AG is located at the International Technology &amp; Service (ITS) center in Baesweiler, ca. 25 min. northeast of Aachen. The company's scientific foundations were laid at the RWTH Aachen, where the concept of the separation of target molecules from complex mixtures with novel magnetic polymer carriers was developed into an applicable product, today well-known as M-PVA Magnetic Beads.</p>



Julich Chiral Solutions GmbH, a Codexis Company

<b>Name of company</b>	Julich Chiral Solutions GmbH
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<b>e-mail</b>	s.dannen@julich.com
<b>Website</b>	www.julich.com
<b>Year founded</b>	1999
<b>Business Mission</b>	Application of enzymes for the production of chiral intermediates.
<b>Life Sciences Classification</b>	White Biotechnology, Specialty Chemicals
<b>Technologies used</b>	Biocatalytic Methods: Isolated Enzymes and Whole Cell Biotransformation
<b>Services offered</b>	Custom synthesis of chiral intermediates, R&D services in biocatalysis
<b>Company Profile</b>	<p>Julich Chiral Solutions GmbH, a Codexis company, is focused on the production of chiral fine chemicals using biological systems such as isolated enzymes and microorganisms.</p> <p>Founded in 1999 as a spin-off from the Research Centre Jülich in Germany, we offer specialty enzymes for organic chemistry, chiral intermediates and R&amp;D services in biocatalysis. Specialty enzymes, including oxidoreductases, transferases, hydrolases (lipases, esterases, nitrilases) and lyases (oxynitrilases) are available for sale via our catalog. We also apply these enzymes to the production of chiral intermediates, including optically active alcohols, diols, hydroxy esters and amines.</p> <p>Our in-house production capabilities range from a few grams to the 100-kg scale, while quantities at the multi-ton scale are available through our established manufacturing partners.</p>

<b>Name of company</b>	DASGIP AG
<b>Address</b>	Rudolf-Schulten-Str. 5   52428 Jülich   Germany
<b>Contact Person</b>	Dr. Matthias Arnold
<b>Phone / Fax</b>	+ 49- (0) 2461-980-0   + 49- (0) 2461-980-100
<b>e-mail</b>	m.arnold@dasgip.de
<b>Website</b>	www.dasgip.com
<b>Year founded</b>	1991
<b>Business Mission</b>	DASGIP is a leading supplier of Parallel Bioreactor Systems for the biotech and pharmaceutical industries. We provide highly engineered equipment and sophisticated software enabling scientists to achieve superior results in research and development. Excellent products and outstanding service are our commitment to support the success of each customer.
<b>Life Sciences Classification</b>	Equipment, General Cell Culture and Microbiology Equipment, Bioprocess Development and Optimization Equipment, Industrial Biotechnology Equipment, Protein Production, Expression, Fermentation; Equipment, Cell Line/Strain Development and Characterization
<b>Products in Development</b>	Automated Sampling System, Optical Density Monitoring, Relaunch of MX4/4, High Throughput Bioprocess Development for cell culture and microbial applications
<b>Products on the Market</b>	Parallel Cultivation Systems for microbiology (fedbatch-pro) and cell culture (cellferm-pro) as well as single modules for monitoring of pH, dissolved oxygen etc. and for controlled gassing, feeding, temperature and agitation.
<b>Services offered</b>	Parallel Cultivation Systems for microbiology and cell culture
<b>Life Sciences Experience</b>	For more than 10 years the DASGIP team use their Life Science background and hands on experiences to provide their customers with the best, fitting and innovative solution as well as with excellent support when working with the DASGIP system.
<b>Life Sciences Clients</b>	Process engineers as well as scientists and product developers in biotechnological, pharmaceutical and chemical research and industry
<b>Company Profile</b>	DASGIP develops and manufactures technological leading parallel Bioreactor Systems for the small-scale cultivation of microbial, animal and human cells. Process engineers as well as scientists and product developers in biotechnological, pharmaceutical and chemical research and industry use DASGIP's Parallel Bioreactor Systems to advance their projects. They benefit from rising productivity of their cells and other resources, from reproducible and scalable results as well as from accelerated innovation cycles. The company is located in Juelich (Germany), its subsidiary DASGIP Biotools in Shrewsbury MA (USA).

# ≡≡≡ DIA-Nielsen ≡≡≡

<b>Name of Institute</b>	DIA-Nielsen GmbH & Co. KG
<b>Address</b>	Industriestraße 8   52355 Düren (Lendersdorf)   Germany
<b>Contact Person</b>	Stefan Kölzer (Productmanagement   Sales Life Science   Filtration)
<b>Phone / Fax</b>	+ 49- (0) 2421-5901 41   + 49- (0) 2421-5901 23
<b>e-mail</b>	stefan_koelzer@dia-nielsen.de   sales@dia-nielsen.de
<b>Website</b>	www.dia-nielsen.de
<b>Year founded</b>	1955
<b>Products in Development</b>	Membrane Filter - Plastic Composite Units   Microbiological Filter Units
<b>Products on the Market</b>	Syringe Filter   Microbiological Filter
<b>Technologies used</b>	Ultrasonic Welding, Injection Die Moulding, Tool Design and Construction, Cleanroom Assembling
<b>Services offered</b>	Construction and Development Service, Cleanroom Assembling and Packaging, Tool Design
<b>Life Sciences Experience</b>	Long Term Experience(about 10 years) in Producing and Development of Filtration Units   Custom Built Filter
<b>Life Sciences Clients</b>	Schleicher & Schuell
<b>Company Profile</b>	<p>„Maximum Competence in Planning, Development and Production</p> <p>DIA-Nielsen's main office and production facilities are located in Düren, North-Rhine Westphalia /Germany. We also have subsidiaries in France, Italy and the USA.</p> <p>DIA-Nielsen is one of the leading manufacturers of precision accessories for measuring technology. We have guaranteed the quality and innovativeness of our product solutions for nearly 50 years, since about 10 years DIA-Nielsen acts on the filtration- and laboratory sector with increasing success and Know-how. Beyond that, DIA-Nielsen also offers technical- and support services. Our corporate customers profit from our consulting skills and expert advisor team, with its knowledge of production technology, planning and development for the placement of modular project orders. Examples of these successful activities are: product manufacturing, tool manufacturing and maintenance, repairs, injection molding and packaging under clean-room conditions. The majority of our customers are based within the following industries: life science, bio technology, medical technology, filtration technology, laboratory technology, printing technology, casing construction, measuring and control technology, metal processing, merchandising, office supplies, paper, automotive, packaging technology and transportation.“</p>

**Name of Institute**

Fachhochschule Aachen - Aachen University of Applied Sciences  
Center of Competence in Bioengineering

**Address**

Ginsterweg 1 | 52428 Jülich | Germany

**Contact Person**

Dipl.-Ing. Peter Kayser

**Phone**

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**Website**

www.biomedtech.de

**Life Sciences Classification**

Bioinformatics, Biomaterials, Biosensors, Bioorganic Chemistry, Cell Biophysics and Bioengineering, Diabetes Research, Drug Delivery Systems, Red Blood Cell Research, Cell Culture Technology, Genetics, Microbiology, Structural Transition of Hemoglobins, Molecular Imaging, Production/Fermentation, Sepsis Research, Molecular Phase Transitions, Cell Activation, Cellular Interaction and Surface Adhesion, Bio Compatibility- and Biomaterials- Instrument Development, Magnetic Field Effects, Education

**Products in Development**

Biosensors, High Throughput System for Cell Force Analysing, Monoclonal Antibodies, Magnetic Nanoparticles, Analytical Devices, Clinical Studies, Determination of Mechanical Properties of Amniotic sacs, Polyelectrolyte Microcapsules

**Technologies used**

Fermentation, Drug Screening, Sensorics, Micro-/Nanotechnology, Silicon and Thin Film Techniques, Cell Force Measurement (CellDrum), Permeability Analyser, (RT) PCR, Micro-pipette Aspiration Technique, Light Scattering, ELISA, Ultracentrifuge

**Services offered**

Basic and Application-Oriented Research Studies, Education (Seminars, Workshops, Training), Cell Based Drug Screening Assays, Development of Biotechnical Devices, Development of Analysing- and Controlling Hard- Software, Consulting

**Life Sciences Clients / Cooperations**

National/International Collaborations with >30 Universities and Scientific Institutions, >25 Bilateral Industrial Cooperations (mainly small and mid-sized companies)

**Profile**

Within the framework of the Center of Competence in Bioengineering ten scientists have teamed up to establish centralised, high-profile, long-term research activity at the Universities of Applied Sciences of Aachen, Aachen Division Juelich and Bonn-Rhein-Sieg.

The aim of all ten cooperation partners is to strengthen bioengineering in NRW and in Germany. They intend to reach a centralisation of knowledge, an enhancement of the competitiveness of the scientists both on national and international level and an improvement of the infrastructure by the mutual sharing of resources. The Center of Competence has become an attractive and strong scientific partner for both industry and surrounding universities. It is not only thought to increase the quality of research and development, but also to integrate the newest technological advances into university education.

The educational programme of both universities consists of tailored courses, constantly adapted to include the latest cutting-edge insights in bioengineering.



<b>Name of Institution</b>	Forschungszentrum Jülich
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<b>Website</b>	www.fz-juelich.de
<b>Life Sciences Classification</b>	Applied Microbiology, Bioinformatics, Biophysics, Brain Imaging, Clinical Diagnostics, <sup>13</sup> C Metabolic Flux Analysis, Computational and Systems Neuroscience, DNA Microarrays, Genomics, Industrial Biotechnology, Metabolomics, Microbial Biotechnology, Microbial Genetics, Microbial Production/Fermentation, Proteomics, Radiotracer Development and Production, Specialty and Fine Chemicals, Structural Analysis of Biomolecules, Systems Biology, Testing/Analytical Services,
<b>Products in Development</b>	Primary Metabolites, Proteins, Deep Brain Pace Maker
<b>Technologies used</b>	Microbial processes and process technology for production of proteins, primary metabolites and basic compounds for pharmaceutical industry; Pilot plant fermenters; State-of-the-art analytical tools for quantification of metabolites, proteins, biomolecules (GC; GC-MS, HPLC, LC-MS-MS, LA-ICP-MS, FT-ICR-MS/MS, MALDI-TOF/TOF-MS, 2D-PAGE, NMR spectroscopy; confocal laser scanning microscopy, fluorescence correlation spectroscopy); microarray scanner, X-ray crystallography; high-throughput platform; brain imaging techniques, i.e. PET, SPECT, MRI/fMRI, MEG; MR-PET Hybrid-Systems; electron microscopy
<b>Services offered</b>	Analytical tools for the quantification of metabolites; development of microbial and enzymatic processes for the production of primary metabolites, proteins, basic compounds for pharmaceutical industry; investigation of protein transport in porous systems; radiotracer service for PET applications runs according to the regulations of GMP (Good Manufacturing Practise)
<b>Life Sciences Clients / Cooperations</b>	National and international cooperations with approx. 80 universities and research institutions and, more than 30 industrial partners
<b>Profile</b>	It is the aim of the brain research to assemble competence in basic research, in physics/technology of neuroimaging and in clinical research to understand the structure and function of the normal and pathologically impaired human brain. The function and dysfunction of the nervous system is analysed from the level of single molecules to that of complex neural systems. The goal of these efforts is to provide rational designs for the development of innovative diagnostics, prevention and therapy of major neurodegenerative as well as neuropsychiatric diseases.

## Institut für Biotechnologie 1

<b>Name of Institute</b>	Forschungszentrum Jülich, Institut für Biotechnologie 1
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<b>Contact Person</b>	Prof. Dr. M. Bott
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<b>Website</b>	www.fz-juelich.de/ibt/ibt-1
<b>Life Sciences Classification</b>	Applied Microbiology, Microbial Genetics, Microbial Biotechnology, Microbial Production/ Fermentation, Systems Biology, Genomics, Proteomics, DNA Microarrays, Research
<b>Products in Development</b>	Primary Metabolites (Amino Acids, Vitamins), Proteins
<b>Technologies used</b>	Microbial based Applications, Microbial Processes for the Production of primary Metabolites, Proteins and basic Compounds for pharmaceutical Industry, Development and Optimisation of Microbial Strains, MALDI-TOF Mass Spectrometer GC, HPLC
<b>Services offered</b>	Development of microbial and enzymatic Processes for the Production of primary Metabolites, Proteins, Basic Compounds for pharmaceutical Industry, Analytical Tools (e.g. GC, HPLC, Analytical Devices for Amino Acid and Sugar Analyses) for the Quantification of Metabolites
<b>Life Sciences Clients / Cooperations</b>	BMBF, DBU, DFG, Amino, BASF, Degussa, DSM Basel, Innosweet
<b>Profile</b>	<p>The major emphasis of investigations at the Institute of Biotechnology 1 (IBT-1) is placed on the microbial production of amino acids (L-lysine, L-threonine, L-serine), vitamins (ascorbate), enzymes and pharmaproteins. For this purpose, both the key enzymes of the biosynthetic pathways involved, the transport systems for the uptake of substrates into the cells as well as the excretion of the products into the nutrient medium are characterized genetically and biochemically. The availability of the complete genome sequences for some of the bacteria studied means that the regulation of all genes can be investigated on both the RNA level (by means of DNA chip technology) as well as on the protein level (by two-dimensional gel electrophoresis combined with MALDI-TOF-MS). On the basis of the results obtained with these methods, the metabolism is selectively modified (metabolic design) in order to obtain more efficient production strains.</p> <p>Moreover, whole cell biotransformations with recombinant bacteria are used as a new approach in the field of applied biocatalysis. Thus, stereo- and regioselective reduction and oxidation reactions for the production of e.g. chiral alcohols are developed.</p> <p>With respect to the biotechnological production of proteins with Gram-positive bacteria, work is furthermore being implemented on establishing secretion systems for heterologous proteins from pro- and eukaryotes, as well as studies on the characterization and optimization of the cellular protein transport apparatus.</p>

## Institut für Biotechnologie 2

<b>Name of Institute</b>	Forschungszentrum Jülich, Institut für Biotechnologie 2
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<b>e-mail</b>	w.wiechert@fz-juelich.de
<b>Website</b>	www.fz-juelich.de/ibt/ibt-2
<b>Life Sciences Classification</b>	Bioanalytics, Bioinformatics, Biocatalysis, Bioreactors, Biosensors, Bioseparations, Bioprocess Development, Fluxomics, Industrial Biotechnology, Lab Robotics, Mass Spectrometry, Metabolomics, Microfluidics, Modeling & Simulation, Production/Fermentation, Proteomics, Quantitative Biology, Synthetic Biology, Bulk/Speciality Chemicals, Systems Biology, Testing/Analytical Services, Single Cell Analysis
<b>Products in Development</b>	Primary/secondary Metabolites, Proteins, Pharmaceuticals
<b>Technologies used</b>	Process Technology for the Microbial Production of Primary Metabolites, Parallel Mini Bioreactors for Parameter Studies, Process Technology for Production and Use of Proteins, Separation and Isolation of Proteins and Nucleic Acids, Pilot Plant Fermenters, GC, GC-MS, HPLC, LC-MS-MS, High-Throughput Platform, Rapid Sampling and Quenching, Confocal Laser Scanning Microscope, Biochemical Network Modeling & Simulation, Process Modeling, Simulation and Optimization
<b>Services offered</b>	Development of Microbial and Enzymatic Processes for the Production of Primary/Secondary Metabolites, Proteins, and Basic Compounds for Pharmaceutical Industry, Quantitative Analysis of Intracellular Substance Concentrations, Metabolic Fluxes and Proteins, Assay Development
<b>Life Sciences Clients / Cooperations</b>	BMBF, BMELV, DBU, DFG, EU, Chalmers University Göteborg, ETH Zürich, TU Delft, Atoll, Bayer, Codexis, DASGIP, Evonik, Henkel, Merck, Qiagen, Roche, JFC, ScheBo, AC-Biotech, DSM, Sandoz, Wacker
<b>Profile</b>	<p>The precise and reliable measurement of intracellular processes, i.e. quantitative biology, has become an important tool in modern knowledge based bioprocess development. Research at the Institute of Biotechnology 2 aims at the development of quantitative methods for a detailed characterization of the complex biochemical networks inside a production cell.</p> <p>Tools for metabolome, fluxome, enzyme and proteome measurements are established. In a systems biology context, these data are used for building predictive mathematical models for process improvement. Generally, a cycle of experimentation, data evaluation, modelling, and experimental design is the driving force of knowledge generation in IBT-2.</p> <p>To reach these goals, high performance measurement equipment (e.g. LC-MS/MS) is combined with automated laboratory procedures and lab robotics. Extensive fermentation facilities ranging from mini reactors over lab scale up to pilot plant reactors are available. Rapid sampling devices enable intracellular processes to be studied at the subsecond scale. In the modelling &amp; simulation group the generated raw data are preprocessed by specially developed algorithms and incorporated into mathematical models using the local supercomputers. In close cooperation with IBT-1 these research fields will be complemented by single cell investigations aiming at the quantitative characterization of genetic processes.</p> <p>On the molecular scale the studies are supported by the design, characterization, and application of biocatalysts and molecular biosensors. Enzymes are technically applied in isolation and in whole cell biotransformations. At the long run these developments will lead to a systematic expression of whole biosyntheses pathways for new products in platform organisms, so called „designer bugs“. This, in turn, represents an important building block of Synthetic Biology.</p>



<b>Name of Parent Organisation</b>	Fraunhofer Gesellschaft
<b>Name of Institute</b>	Fraunhofer-Institut für Lasertechnik ILT
<b>Address</b>	Steinbachstr. 15   52074 Aachen   Germany
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<b>Website</b>	www.ilt.fraunhofer.de
<b>Life Sciences Classification</b>	Implants, Minimal Invasive Therapies, Single Cell Manipulation, Micro- and Nanostructured Scaffolds, Spatially Selective Modification of Polymers.
<b>Technologies used</b>	Lasers, Optical Technologies
<b>Services offered</b>	Contract Research and Development, Consulting, Training
<b>Life Sciences Clients / Cooperations</b>	RWTH Aachen, AKM Aachener Kompetenzzentrum Medizintechnik, Universitätsklinikum Aachen, bwa Kompetenzzentrum für Biowerkstoffe Aachen, BiOMAT, BioRiver, MEUSE RHINE TRIANGLE Heartbeat of Life Sciences in Europe, ALSA Applied Life Science Aachen, Forum Life Sciences + companies/institutes in the field of medicine/biology
<b>Profile</b>	<p>The ILT is working on the development of new laser beam sources and components, the use of modern laser measurement technology and production innovations utilizing lasers. This includes for example laser cutting, caving, drilling, welding and soldering as well as surface treatment, micro-processing and rapid-prototyping. A key area of research at the ILT is micro technology which is currently focusing on life sciences as a new field for research. In the Department of Micro Technology laser processes for packaging and interconnection, microstructuring and thin film technology are being developed. The applications are traditionally in the fields of electronics, precision mechanics and optics, communication and information technology. Recently the application spectra has been broadened to medical technology, biotechnology and chemistry. In cooperation with medical experts and manufacturers of medical systems processes and products for surgery and analytics are being developed. Core activities are micro structuring of disposable polymer products like catheters, stents and micro implants and joining of micro mechanical devices. In the strongly expanding market of micro chemistry and bioanalytics the department develops micro reactors and bio-chip systems e.g. for protein analysis. In this field lasers are used as production tools as well as for analytic and synthetic purposes.</p> <p>Since different interdisciplinary teams within the ILT have been working in the field of life science applications for the last 5 years these activities have led to the foundation of the Life Science Group. Current research covers the development of medical micro systems, processes and products for surgery and diagnosis, the tailoring of surfaces for contact with cells as well as the measurement of protein-protein interactions (protein-chips). The ILT was one of the initiators of the Aachen Centre of Competence (AKM) and within this activity feasibility studies for new laser therapies e.g.laser anastomosis have been carried out. In cooperation with medical experts from the University Hospital Aachen and with chemists and biologists from the RWTH Aachen new approaches for the application of laser technologies in Medicine and Tissue Engineering are under investigation.</p>



**Fraunhofer** Institut  
Molekularbiologie und  
Angewandte Oekologie

<b>Name of Parent Organisation</b>	Fraunhofer Gesellschaft
<b>Name of Institute</b>	Fraunhofer-Institut für Molekularbiologie und Angewandte Oekologie IME
<b>Address</b>	Forckenbeckstr. 6   52074 Aachen   Germany Auf dem Aberg 1   57392 Schmallenberg   Germany
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<b>Website</b>	www.ime.fraunhofer.de
<b>Life Sciences Classification</b>	Applied Microbiology and Biosafety, Bioinformatics, Biomaterials, Biosensors, Cellomics (High Throughput Live Cell Imaging), Systems Biotechnology, Protein Based Drug Discovery and Development, Ecology and Environmental Technology, Environmental Compatibility of Products and Procedures: Risk Analysis, Environmental and Consumer Protection, Environmental Observation and Analysis, Food and Feed Safety, Cell Culture, Genetics, Genomics, High Content Screening, Proteomics, Immunological Products (Antibodies), Molecular Diagnostics and Imaging, Industrial Biotechnology, Molecular Farming, Pharmacology, Plant Biotechnology, Plant Genetics and Biotechnology, Production/ Fermentation, Protein Structure Resolution QA and QC, Quality of Soil and Waters, Regenerative Medicine, Notification and Registration Studies (for Chemicals, Pesticides, Pharmaceuticals, Consumer Products), Research, Sustainable Soil Use and Waste Disposal, Strain and Process Development, Testing/Analytical Services, Therapeutics, Tissue Engineering, Vaccines, X-Ray Crystallography.
<b>Products on the Market</b>	Several Diagnostic and Therapeutic Antibodies, Technical Enzymes
<b>Technologies used</b>	Antibody Libraries, Chip Technologies, Combinatorial Libraries and Protein Evolution, Protein Crystallization, High Throughput Imaging, Proteomics, X-ray Crystallography
<b>Services offered</b>	Antibody Development, Protein Engineering, Recombinant Protein Production and DSP, Strain and Process Development
<b>Life Sciences Clients / Cooperations</b>	More than 100 partner from global industries, UBA, BMBF, EU, RWTH
<b>Profile</b>	The Fraunhofer Institute for Molecular Biology and Applied Ecology IME conducts research in the field of applied life sciences from a molecular level to entire ecosystems. We offer research and development services for medicine, agriculture and environmental protection with main emphasis on: <ul style="list-style-type: none"> <li>• diagnosis and therapy of human, animal and plant diseases</li> <li>• protection and improvement of food and feed stocks</li> <li>• identification and assessment of risks in synthetic and biogenous substances for consumer and environment</li> <li>• development of strategies for minimization of risks.</li> </ul>



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Grünenthal GmbH

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**Website**

www.gruenenthal.de  
www.gruenenthal.com

**Year founded**

1946

**Company Profile**

Grünenthal is an expert in pain therapy. The company discovers, develops, produces and markets high therapeutic value pharmaceuticals that contribute to patients' ability to control their own lives. Grünenthal is an independent, family-owned German company with companies in 29 countries all over the world. Founded in 1946, the company employs 1,900 people in Germany and 5,300 worldwide. In 2007, Grünenthal achieved revenues of 864 million Euros.

More information: [www.gruenenthal.com](http://www.gruenenthal.com)



# hemoteq

## nanocoating design

<b>Name of company</b>	HEMOTEQ AG
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<b>e-mail</b>	hemoteq@hemoteq.com
<b>Website</b>	www.hemoteq.com
<b>Year founded</b>	1999
<b>Business Mission</b>	Hemoteq is the leading designer and manufacturer of ultra-thin coatings for medical devices. A unique repertoire of platform technologies allows to create innovative, market oriented surface solutions.
<b>Products on the Market</b>	6 CE marked Drug Eluting Stent coatings, 2 CE marked Hemocompatible coatings, CE marked and FDA approved hydrophilic coatings and Stent coverings.
<b>Services offered</b>	Contract R&D, Approval Support, Pilot- and Large Scale Production of Coatings.
<b>Company Profile</b>	<p>HEMOTEQ AG, Wuerselen, Germany, specialized on coating technology for medical devices is supplying state-of-the art drug releasing coatings to device manufacturers. Hemoteq has at its disposal a class 10.000 clean room production facility.</p> <p>Products developed and manufactured for various clients has reached market in 2004. Preliminary results from a series of clinical trials and granted CE marks for DES coating indicate that Hemoteq´s drug delivery systems are safe and efficient. Hemoteq´s range of highly adaptable, biocompatible polymer coatings can be adjusted to release a drug of choice according to a preset elution profile. Several biodegradable and biostable coating platforms (Ouverture, Repulsion, ProTeqtor) and a polymer free coating (PacliTeq) have been developed to fit a range of applications, e.g. drug-eluting stents for patients with coronary artery disease. Drugs locally released from the surface of an implanted metal stent prevent reocclusion of dilated and scaffolded arteries, a problem frequently seen with uncoated stents.</p> <p>Hemoteq´s composed coating solutions employing a biomimetic nanocoating (Camouflage), a nanothin synthetic basecoat resembling the outermost layer of living cells permanently masks the drug eluting device from the body's defense mechanisms and bears the potential to further boost clinical benefit. The company strives to apply its expertise in biomimetic and drug releasing coatings to additional medical fields.</p>



**Name of company**

IASON consulting

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**Website**

www.IASONconsulting.com

**Year founded**

2004

**Business Mission**

Understanding your needs is just the first step.  
The second is make them our own.

**Life Sciences Classification**

Consulting, Therapeutics, Research, Drug Development, Medical Device,  
CE Certification

**Products on the Market**

Preclinical Consultancy and Coaching

**Services offered**

Tailor-Made Preclinical Development Plans, Dossiers, Expert Reports,  
Presentation, Scientific Due Diligence and more....

**Life Sciences Clients**

confidential

**Company Profile**

IASON consulting is a privately owned, independent consultancy and provides high quality strategic and operational input into preclinical drug development as well as one-on-one coaching. With many years of experience, we can bring wealth of knowledge on non-human, pharmacological, toxicological, or kinetic problems in the real world.

With extensive expertise in reviewing and critically evaluating pharmacological, toxicological, and pathological data on a wide range of small molecules and proteinacious drugs, combined with an understanding of metabolism and kinetics, we can provide an opinion on preclinical acceptability by authorities. In addition, IASON consulting offers consulting services with respect to the biological evaluation of medical devices.

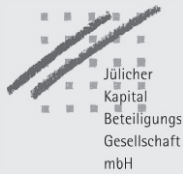
Industrie- und Handelskammer  
Aachen

<b>Name of company</b>	Industrie- und Handelskammer Aachen
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<b>Website</b>	www.aachen.ihk.de
<b>Year founded</b>	1884
<b>Business Mission</b>	IHK Aachen represents the overall economic interests of nearly 60,000 business enterprises
<b>Services offered</b>	Start-up Consulting, Seed Financing, Business Development, Regional Network Opportunities
<b>Life Sciences Experience</b>	LifeTecAachen-Jülich e.V., BioRiver e.V.
<b>Life Sciences Clients</b>	Management board, Member
<b>Company Profile</b>	<p>The Chamber of Industry and Commerce Aachen is the service provider of all its member companies and the partner of politics and economy. Its main task is to support the business location Aachen. Besides exercising sovereign tasks such as taking exams, the appointment of official experts or issuing foreign trade documents the chamber offers its members a multitude of benefits for their companies, e.g. consulting service for setting up new businesses, innovation and technology transfer, foreign trade information, vocational training and ad-vanced vocational training, hosting of lectures and conferences, etc.</p> <p>For further information about the variety of tasks and activities offered by the IHK simply visit our homepage: <a href="http://www.ihk.aachen.de">www.ihk.aachen.de</a></p>

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<b>Website</b>	www.ivc.de
<b>Year founded</b>	1999
<b>Business Mission</b>	The Intelligent Venture Capital Funds are dedicated Funds organized to provide investors an opportunity to benefit from high value creation and superior returns from early stage investments in high technology and life science companies.
<b>Services offered</b>	Seed, StartUp and Growth Financing. Active equity investors and advisors for the companies management team. Accredited partner and coinvestor for the federal seed initiative: High-Tech Gründerfonds
<b>Life Sciences Experience</b>	High caliber investment manager expertise and experience in the life science industry
<b>Life Sciences Clients</b>	AplaGen, chemagen, NonWo Tecc and FluIT in equity participation. Two further investments immediately before final closing and various undisclosed clients in valuation and consulting work
<b>Company Profile</b>	<p>The requirement to actively assist young entrepreneurs from the outset and from the point of view of an entrepreneur has its foundation in the profound knowledge and the diverse experiences of the shareholders and management team of Intelligent Venture Capital.</p> <p>Being a bank- and insurance- independent VC-company, it is mostly private people, such as entrepreneurs and leading managers with long-lasting work-experience, who are involved in our funds. Besides their capital these shareholders support the portfolio companies with their personal expertise.</p> <p>Currently two investment-pools and the recently founded Rheinland Venture Capital Fund are being advised by the Intelligent Venture Capital Management GmbH. Rheinland Venture Capital is a Seed Fund located in Cologne with an investment volume of 10 million EUR. The Fund will invest in early stage technology and lifescience companies. Over the next five years a maximum of 0.5 million EUR per investment round can be invested in promising and innovative high growth companies located in the Rhineland area. Investors in this Fund are NRW.Bank, Sparkasse KölnBonn, Kreissparkasse Köln, Georgieff Capital as well as private investors.</p>



<b>Name of company</b>	Internationales Technologie- und Service-Center Baesweiler GmbH (its) its-Center Baesweiler
<b>Address</b>	Arnold-Sommerfeld-Ring 2   52499 Baesweiler   Germany
<b>Contact Person</b>	Dirk Pfeifferling
<b>Phone / Fax</b>	+ 49- (0) 2401-805-0   + 49- (0) 2401-805-199
<b>e-mail</b>	info@its-center.de
<b>Website</b>	www.its-center.de
<b>Year founded</b>	1989
<b>Business Mission</b>	Serving the needs of BioTec-spin-offs and young BioTec-companies.
<b>Services offered</b>	Leasing Arrangements for Offices, Laboratories and Hall Units, Technology Transfer, Establishing Contacts, International Contact and Cooperation Network
<b>Life Sciences Experience</b>	BioTec-Meeting (organized once every year)
<b>Life Sciences Clients</b>	AplaGen GmbH, BBT Biotech GmbH, BSV BioScience GmbH, Cardinal Health Germany GmbH (ALARIS® Products), chemagen AG, NanoCompound GmbH, RaphaTec GmbH, SDT GbR u. Technomed GmbH
<b>Company Profile</b>	its Baesweiler is a technology and business park for technology-orientated companies, in particular for start-ups from the BioTec/LifeScience sector.  its offers consulting and support to foreign companies.



**Name of company**

Jülicher Kapitalbeteiligungsgesellschaft GmbH

**Address**

Karl-Heinz-Beckurts-Str. 13 | 52428 Jülich | Germany

**Contact Person**

Dipl.-Kfm. Carlo Aretz

**Phone / Fax**

+ 49- (0) 2461-690-0 | + 49- (0) 2461-690-100

**Year founded**

1995

**Services offered**

Venture Capital

**Life Sciences Clients**

LifeTecAachen-Jülich.e.V., BioRiver

**Company Profile**

A forward-looking national economy needs the process of industrial innovation for its constant revitalisation as well as bold entrepreneurs who are prepared to take the risk of setting up a business to seize the opportunities offered by a market economy.

Nevertheless, the establishment of a young technology company is a process that lasts several years and assumes a variety of material and immaterial resources. The Jülicher Kapitalbeteiligungsgesellschaft GmbH (JKBG) (a venture capital company) was founded in 1995 with just this in mind and against the background of the structural change in the economic region Düren / Jülich and in the Aachen Region. This “technology-enterprise co-ordinator” has far-reaching decision-making powers and supports appropriate research funding, technology assistance or financing of a market launch with a budget provided by the Land North Rhine-Westphalia.

This company accordingly focuses on two goals. Firstly, the development of an enterprise from emerging fields should be facilitated in the region, and secondly, JKBG should provide additional capital for business start-ups in the difficult second phase of market penetration.

The JKBG thus invests primarily in enterprises from two industries in which it has been successfully involved since its foundation and which have an outstanding significance in the Aachen Region.



<b>Name of company</b>	LCL-Biokey GmbH
<b>Address</b>	Pauwelstr. 19   52074 Aachen   Germany
<b>Contact Person</b>	Dr. Andrea Hoffmann
<b>Phone / Fax</b>	+ 49- (0) 241-96321-40   + 49- (0) 241-96321-49
<b>e-mail</b>	info@lcl-biokey.de
<b>Website</b>	www.lcl-biokey.de
<b>Year founded</b>	1998
<b>Business Mission</b>	Put science into practice.
<b>Life Sciences Classification</b>	Clinical Diagnostics, Genomics, Microarrays, Consulting, Research Studies, Dentistry, Microbiology
<b>Products in Development</b>	Oral probiotics
<b>Products on the Market</b>	LCL® Parodontitis, LCL® Karies, LCL® Probes & Chips, LCL® Halitosis
<b>Technologies used</b>	DNA probes & microarrays for routine diagnosis, in addition RTQ-PCR for studies
<b>Services offered</b>	Routine diagnosis: oral infections and disorders; Research studies: new technology or new antimicrobial strategies to treat or to prevent caries, halitosis, periodontitis or other oral disorders
<b>Company Profile</b>	The business of LCL biokey GmbH is gene diagnostics using DNA probes and microarray technology. Methods are established to detect gene sequences in organic, especially clinical, specimens. The results support the diagnosis of (infectious-) diseases. In addition, consultation in scientific studies is offered.



<b>Name of company</b>	m2p-labs GmbH
<b>Address</b>	Forckenbeckstr. 6   52074 Aachen   Germany
<b>Contact Person</b>	Frank Kensy, Carsten Müller
<b>Phone</b>	+ 49- (0) 241-6085-13120
<b>e-mail</b>	info@m2p-labs.com
<b>Website</b>	www.m2p-labs.com
<b>Year founded</b>	2005
<b>Business Mission</b>	The m2p-labs company offers an innovative high-throughput micro bioreactor (BioLector), empowering our customers to screen online, fast and cost-effective for media components, strains or culture conditions.
<b>Life Sciences Classification</b>	Biotechnology, Microfermentation, Lab Automation, Biochemical Engineering
<b>Products in Development</b>	BioLector Pro (fed-batch), Special Media
<b>Products on the Market</b>	BioLector (Microfermentation System), Flowerplate (High Mass Transfer Plates), Special Microplate Sealings
<b>Technologies used</b>	Bioprocess Engineering, Microfluidics and Automatic Liquid Handling
<b>Services offered</b>	Contract Research in Clone Screening, Media Optimisation and Process Development
<b>Life Sciences Experience</b>	Clone Screening, Media Optimisation, Bioprocess Development and Lab Automation
<b>Life Sciences Clients</b>	International Pharmaceutical Companies
<b>Company Profile</b>	<p>The m2p-labs company offers an innovative high-throughput micro bioreactor (BioLector), empowering our customers to screen online, fast and cost-effective for media components, strains or culture conditions. Our customers are based in the pharmaceutical as well as chemical industry. Many renowned companies and research facilities have already chosen our technology.</p> <p>Based on our technology we run a fully automated in-house screening platform for contract research and high throughput protein expression. We advise you in cellular screenings, small scale fermentation and the design of automated screening processes based on standard or customised liquid handling platforms.</p>



ALL IT TAKES TO REGENERATE

<b>Name of company</b>	Matricel GmbH
<b>Address</b>	Kaiserstr. 100   52134 Herzogenrath   Germany
<b>Contact Person</b>	Dr. Ingo Heschel (Managing Director)
<b>Phone / Fax</b>	+ 49- (0) 2407-5644-0   + 49- (0) 2407-5644-10
<b>e-mail</b>	heschel@matricel.de
<b>Website</b>	www.matricel.com
<b>Year founded</b>	2001
<b>Business Mission</b>	Sustainable growth through innovative product developments for medicine and biotechnology.
<b>Life Sciences Classification</b>	Biomaterials, Cardiovascular Therapies, CE Certification, Implants, Medical Devices, Regenerative Medicine, Research, Testing/Analytical Services, Therapeutics, Tissue Engineering
<b>Products in Development</b>	PeriMaix - Nerve Guide for Peripheral Nerve Generation ParaMaix - Intervention Strategy for Spinal Cord Injuries NovoMaix - Treatment of Deep Dermal Wounds
<b>Products on the Market</b>	ACI-Maix – Collagen Scaffold for Articular Cartilage Regeneration OptiMaix 2D and OptiMaix 3D - Scaffolds for Cell Cultivation Studies
<b>Company Profile</b>	<p>Matricel GmbH is a life sciences company with the mission to develop and produce innovative biomatrices, cell carrier, and cell cultivation systems for applications in medicine and biotechnology. In addition, Matricel serves the medical community as a collagen supplying partner and cooperates in the development of collagen containing medical products with its proven development, manufacturing and regulatory expertise. Matricel's proprietary technologies in the area of collagen processing (purity, cell compatibility and safety), matrix production (control over pore structure and pore size), and cross-linking (control of the resorption time and degradation process) are the essential keys to successfully produce collagen-based, biocompatible and biodegradable matrices in a wide range of modifications suitable for the cultivation with human cells in tissue engineering and for further clinical applications as cell-free medical devices. Matricel's CE-approved collagen scaffold ACI-Maix(TM) is one of the first products in Europe that was used clinically for the tissue engineering of articular cartilage. So far almost 10,000 patients have been treated successfully with this product according to the so-called Collagen-covered Autologous Chondrocyte Implantation (CACI) or Matrix-induced Autologous Chondrocyte Implantation (MACI). Matricel is active in research and has a promising pipeline of product developments in different medical fields. Matricel's quality assurance system is certified according to DIN EN ISO 13485 / DIN EN ISO 9001 for the development, production, and distribution of biomaterials for applications in medicine, pharmaceuticals and biotechnology.</p>



**Name of company**

PAION AG

**Address**

Martinstr. 10-12 | 52062 Aachen | Germany

**Contact Person**

Dr. Peer Nils Schröder

**Phone / Fax**

+ 49- (0) 241-4453-0 | + 49- (0) 241-4453-100

**e-mail**

info@paion.de

**Website**

www.paion.de

**Year founded**

2000

**Life Sciences Classification**

Cardiovascular & CNS Therapies, Clinical Studies, Drug Development, Therapeutics

**Products in Development**

CNS 7056 (IV sedative/anaesthetic for procedural sedation), Solulin (IV anti-coagulant for cardiovascular indications), M6G (IV opioid for post-operative pain), Desmoteplase (IV plasminogen activator for acute ischemic stroke – fully out-licensed to H. Lundbeck A/S), CNS 5161 (IV NMDA receptor antagonist for neuropathic/cancer pain), Flovagatran (IV direct thrombin inhibitor for thrombotic diseases)

**Company Profile**

PAION is a biopharmaceutical company headquartered in Aachen, Germany. Since the acquisition of CeNeS Pharmaceuticals, which was completed in June 2008, the company has a second site in Cambridge, UK. The company is specializing in developing and commercializing innovative drugs for the hospital-based treatment of central nervous system (CNS) disorders and thrombotic/cardiovascular diseases, indications for which there is a substantial unmet medical need. PAION intends further expand its portfolio of drugs by exploiting its core expertise in identifying high-potential compounds, licensing or otherwise acquiring them and advancing them through the clinical development and regulatory approval process. PAION is listed at the Frankfurt Stock Exchange (Prime Standard Regulated Market, Stock Symbol PA8, ISIN DE000A0B65S3) and at the London Stock Exchange (AIM, Stock Symbol PAI).

# PHILIPS

<b>Name of company</b>	Philips Research Europe - Aachen
<b>Address</b>	Weißhausstr. 2   52066 Aachen   Germany
<b>Contact Person</b>	Dr. Ralf Raue
<b>Phone / Fax</b>	+ 49- (0) 241-6003-364   + 49- (0) 241-6003-493
<b>e-mail</b>	ralf.raue@philips.com
<b>Website</b>	www.research.philips.com
<b>Year founded</b>	1955
<b>Life Sciences Classification</b>	Biosensors, Medical Devices, Molecular Imaging, Personal Healthcare, Research
<b>Company Profile</b>	<p>Founded in Eindhoven (the Netherlands) in 1914, Philips Research as part of Royal Philips Electronics is one of the world's major private research organizations. Our common vision in healthcare is to create technologies that will lead to products that improve people's lives. People care about their health. We therefore aim to assist medical professionals in providing better care earlier and to help people be more involved in managing their health themselves.</p> <p>The Philips Research Laboratories in Aachen are part of the international Philips Research organisation with laboratories in Europe, USA and Asia. Research topics in Aachen are medical technology and light generation.</p>

<b>Name of company</b>	phi-med Gesellschaft für Medizintechnik mbH
<b>Address</b>	Eleonorenstraße 1   52445 Jülich   Germany
<b>Contact Person</b>	Stefan Immel
<b>Phone</b>	+ 49- (0) 2461-99544-30
<b>e-mail</b>	stefan.immel@phi-med.de
<b>Website</b>	www.phi-med.de
<b>Year founded</b>	1996
<b>Business Mission</b>	We care about your laboratory devices – individually, quick and near by.
<b>Life Sciences Classification</b>	Service
<b>Services offered</b>	Inspection, maintenance, repair and overhaul of medical and laboratory technical devices. phi-med is your regional partner in North Rhine-Westphalia. Our company has the certification on DIN/ISO 9001:2000 and is subcontractor of several well-known companies within this branch.
<b>Life Sciences Clients</b>	RWTH Aachen University, University hospital of Cologne, Memmert GmbH & Co. KG, Thermo Fisher Scientific

# RWTH AACHEN UNIVERSITY

<p><b>Name of Institution</b></p> <p><b>Address</b></p> <p><b>Contact Person</b></p> <p><b>Phone / Fax</b></p> <p><b>e-mail</b></p> <p><b>Website</b></p>	<p>RWTH Aachen University</p> <p>c/o Dezernat 4.0 Technologietransfer und Forschungsförderung Templergraben 55   52062 Aachen   Germany</p> <p>Dr. Christian Salzmann Manager Forum Life Sciences</p> <p>Geschäftsstelle des FORUM LIFE SCIENCES + 49- (0) 241-80-94030   + 49- (0) 241-80-92122</p> <p>fls@zhv.rwth-aachen.de</p> <p>www.foren.rwth-aachen.de</p>
<p><b>Profile</b></p>	<p>As one of the few technical universities in Germany the RWTH Aachen University possesses with its traditionally strong Engineering Faculties and their connection with the Faculties of Medicine and Natural Sciences, the optimum structural requirements for establishing in the field of Life Sciences, a bridge between fundamental research in the Natural Sciences and engineering application.</p> <p>In so doing, a tremendous potential for innovation emerges, which lies beyond the boundaries of either of the classical disciplines. In this interdisciplinary inter-connection innovative approaches can be accommodated in the Life Sciences from the idea up to the clinical application. Compared to other universities at the national level this aspect is a particularly unique characteristic of the RWTH Aachen University.</p>

<b>Name of Parent Organisation</b>	RWTH Aachen University
<b>Name of Institute</b>	Aachener Verfahrenstechnik - Biochemical Engineering
<b>Address</b>	Worringer Weg 1   Sammelbau Biologie   52056 Aachen   Germany
<b>Contact Person</b>	Prof. Dr.-Ing. Jochen Büchs
<b>Phone / Fax</b>	+ 49- (0) 241-80-24633   + 49- (0) 241-80-22265
<b>e-mail</b>	jochen.buechs@avt.rwth-aachen.de
<b>Website</b>	www.avt.rwth-aachen.de
<b>Life Sciences Classification</b>	Research
<b>Products in Development</b>	Quantitative Microreactor Cultivation (QMRC), Online-Monitoring of OTR, CTR, RQ, OD, pH, DO <sub>2</sub> , NADH and Product (if fused to a fluorescent Protein) in Shake Flasks and shaken Microplates, Slow Release Techniques in shaken Bioreactors, Parallel Shaken Continuous Bioreactors
<b>Technologies used</b>	Respiration Activity Monitoring System (RAMOS), Online-Monitoring in Microplates of OD, pH, DO <sub>2</sub> , NADH and Product (if fused to a fluorescent Protein) (Biolector), Continuously Shaken Bioreactor System (CosBios), Screening under Fed-Batch Conditions (Feed Disks and Feed Plates)
<b>Services offered</b>	We are always open to offer our expertise (see below) to interested industrial partners and research groups
<b>Life Sciences Clients / Cooperations</b>	BASF AG, Ludwigshafen, Germany   Degussa AG, Halle (Westfalen), Germany   Henkel KGaA, Düsseldorf, Germany   AC Biotec GmbH, Jülich, Germany   Rhein Biotech GmbH, Düsseldorf, Germany   HiTec Zang GmbH, Herzogenrath, Germany   A. Kühner AG, Birsfelden, Switzerland   Heinrich Frings GmbH & Co KG, Bonn, Germany   Julich Chiral Solutions GmbH, Jülich, Germany and others
<b>Profile</b>	<p>We are primarily concerned with the development of new methods and devices for biotechnological processes. The field of our main research interest is represented by three research groups:</p> <p><b>Shaken Bioreactor Technology:</b> Our research in this field is focused on the characterization of the culture conditions in small scale culture systems (mL- and µL-scale) and the development of new measuring devices.</p> <p><b>Fermentation Technology:</b> This research area is primarily concerned with the investigation of mass transfer phenomena in bioreactors. Additional aspects are fluid dynamics as well as mass and energy balancing and control and modelling of biological processes.</p> <p><b>Enzyme Technology:</b> The research activities in this area are focused on the development of aqueous-organic and gas-phase enzyme reactors. The modelling of mass transfer and kinetic phenomena of the biocatalyst in its reaction environment are used to obtain optimized reaction systems. We are chairing the DFG Graduate School: „Biocatalysis in non-conventional media (BioNoCo)“.</p>

<b>Name of Parent Organisation</b>	RWTH Aachen University
<b>Name of Institute</b>	DWI an der RWTH Aachen e.V.
<b>Address</b>	Pauwelsstr. 8   52056 Aachen   Germany
<b>Contact Person</b>	Prof. Dr. M. Möller
<b>Phone / Fax</b>	+ 49- (0) 241 80-233-00   + 49- (0) 241 80-233-01
<b>e-mail</b>	contact@dwi.rwth-aachen.de
<b>Website</b>	www.dwi.rwth-aachen.de
<b>Life Sciences Classification</b>	Research and Development of Biomaterials, Drug Delivery Systems, Implants, Medical Devices, Absorbable and non-absorbable Textile Scaffolds for Tissue Engineering; Surface Modification of Biomaterials; Bioactive, Intelligent Hydrogels
<b>Technologies used</b>	Polymer Synthesis, Electrospinning, Nanostructuring of Surfaces, Chemical and physical Surface Modification Technologies (Plasma Technologies, Chemical Vapour Deposition Polymerisation for Coating of Metals)
<b>Services offered</b>	Development of biocompatible Polymers, Applied Surface Modification, Analytical Services, Consulting
<b>Life Sciences Clients / Cooperations</b>	University Clinic Aachen, Institut für Textiltechnik der RWTH Aachen, Helmholtz Institut Aachen, Degussa GmbH, Bayer MaterialScience AG, SusTech GmbH & Co. KG, AplaGen GmbH
<b>Profile</b>	<p>DWI is a modern research facility with a strong focus on state-of-the-art materials. DWI is linked to the Aachen University via the Chair of Textile Chemistry and Macromolecular Chemistry (TexMC) as part of the Institute of Technical and Macromolecular Chemistry (ITMC) of the Aachen University. Main areas of research are functional polymers, biomaterials and chemical surface modification.</p> <p>Current areas of research are:</p> <ul style="list-style-type: none"> <li>• Multifunctional / Multireactive Oligomers and Polymers</li> <li>• Polymers for Self Assembly and Surface Modification</li> <li>• Micro-/Nanoparticles and Hybrid Systems</li> <li>• Surface Activation and Functionalization</li> <li>• Biomimetic, Biohybride Antimicrobial Systems</li> <li>• Biomaterials, Nano- and Mikrostructures at Biointerfaces</li> <li>• Analysis, especially Surface Analysis</li> </ul>

<p><b>Name of Parent Organisation</b></p> <p><b>Name of Institute</b></p> <p><b>Address</b></p> <p><b>Contact Person</b></p> <p><b>Phone / Fax</b></p> <p><b>e-mail</b></p> <p><b>Website</b></p>	<p>RWTH Aachen University</p> <p>Helmholtz-Institute for Biomedical Engineering</p> <p>Pauwelsstr. 20   52074 Aachen   Germany</p> <p>Prof. Dr. Thomas Schmitz-Rode</p> <p>+ 49- (0) 241-80-87111   + 49- (0) 241-80-82026</p> <p>secretary@hia.rwth-aachen.de</p> <p>www.hia.rwth-aachen.de</p>
<p><b>Life Sciences Classification</b></p> <p><b>Products in Development</b></p> <p><b>Technologies used and services offered</b></p> <p><b>Profile</b></p>	<p>Biomaterials, Biosensors, Bio-Signal Processing, Cardiovascular Therapies, Clinical Diagnostics, Drug Delivery Systems, Equipment, General Cell Culture, Genomics, Implants, Medical Devices, Minimal Invasive Therapies, Molecular Imaging, Movement Analysis, Personal Healthcare, Proteomics, Regenerative Medicine, Research, Testing/Analytical Services, Therapeutics, Tissue Engineering</p> <p>Ventricular Assist Devices, Oxigenators, Heart-Lung Machines, Heart Valves, Intelligent Implants, Bio-Signal Detection and Processing Systems, Miniaturized Instruments, Mechatronic and Robotic Systems, OR-Simulation and Planning Tools, Biohybrid Devices</p> <p>Flow Visualisation, Movement Analysis, Simulation Tools, Surface EMG, Image Processing, 3D Reconstruction, Modeling, FEM, CAD, Rapid Prototyping, FMEA, Gene Expression, Enzyme-Expression, Enzyme Purification, Enzyme Characterization, Synthesis of Glycoconjugates, Genetically Modified Mouse Models, Stem Cell Isolation and Differentiation, Cellular Engineering, Gene transfer, Epigenetic Manipulation, Automation Concepts, Mechatronic Components, Modelling of Circulation, Automated Anaesthesia, Mechatronic Implants, Textile Integration of Sensors/Electronics, Energy Supply, Bioimpedance Techniques, Cellular Engineering of Stem Cells, Cell Tracking and Tracing, Biosensors/Bioactors, Biomaterials, Molecular Biology, Genetic Engineerings, Gene transfer, Transgenic/Knockout Mouse Models</p> <p>Contributions from 4 faculties: Medicine, Electrical Engineering, Mechanical Engineering, Natural Sciences. 7 professors: Biomaterials (Nat. Sc.), Medical Technology (Mech. Eng.), Medical Information Technology (Electr. Eng.), Applied Medical Engineering (Med.), Cell Biology (Med.), Biointerfaces (Med.), Molecular Imaging (Med.).</p> <p>R&amp;D goals: miniaturized and biohybrid systems for organ support or replacement, instruments and imaging for minimally invasive therapy, telemetric monitoring systems for hospital and home.</p> <p>Research Topics: Diagnostics: Molecular &amp; Functional Imaging (Cell Tracking, Drug Delivery, Molecular Probes), Personal Health Care (Textile Integrated Sensors, Intelligent Implants, Clinical Sensor Technology)</p> <p>Therapy: Interventional Therapy Engineering (cardiovascular, musculoskeletal, Image Guidance, miniaturized instruments, navigation, robotics), Life Support Systems (VADs, P-VAD, Oxigenators, Mini HLM, Heart Valves, P-Implant, P-Valve)</p> <p>Applied Life Sciences: Cellular/Biohybrid Engineering: Biohybrid Systems, Intelligent Scaffolds, Biosensors/Activators, Biofunctionalised Surfaces, Bioreactors, Transgeneous/ Knockout Animal Models.</p>

<b>Name of Parent Organisation</b>	RWTH Aachen University
<b>Name of Institute</b>	Institut für Organische Chemie, Lehrstuhl I für Organische Chemie
<b>Address</b>	Landoltweg 1   52074 Aachen   Germany
<b>Contact Person</b>	Prof. Dr. D. Enders   Dr. Wolfgang Bettray
<b>Phone / Fax</b>	+ 49- (0) 241-80- 94676   + 49- (0) 241-80-92127
<b>e-mail</b>	Enders@RWTH-Aachen.de   Bettray@RWTH-Aachen.de
<b>Website</b>	www.oc.rwth-aachen.de
<b>Life Sciences Classification</b>	Organic Synthesis, Metal and Organocatalysis, Asymmetric Synthesis, Organometallic Synthesis Research
<b>Technologies used</b>	Method development for organic synthesis and catalysis, Asymmetric Synthesis, Combinatorial Chemistry, Analytical Methods (GC, HPLC, NMR, IR, MS)
<b>Life Sciences Clients / Cooperations</b>	University of Sevilla, University of Lille, University of Lyon, Indian Institut of Science, Bangalore
<b>Profile</b>	<p>The current research interests of our group are focused on the general area of organic synthesis. Main objectives include the development of highly stereo-selective bond construction methods and their application in the synthesis of natural products and bioactive compounds in general. Furthermore modern aspects of catalysis employing metal-mediated or organocatalytic methods are investigated. The central theme of all these research activities is asymmetric synthesis. Combinatorial chemistry via solid phase parallel synthesis using a modern robot as well as the synthesis of modern linker systems is also part of our programme. Throughout these synthetic exercises a deep understanding of the reaction mechanisms and structural aspects is required and part of the investigation.</p>

<b>Name of Parent Organisation</b>	RWTH Aachen University
<b>Name of Institute</b>	Institut für Textiltechnik
<b>Address</b>	Eilfschornsteinstr. 18   52062 Aachen   Germany
<b>Contact Person</b>	Prof. Thomas Gries
<b>Phone / Fax</b>	+ 49- (0) 241-80-95621   + 49- (0) 241-80-92149
<b>e-mail</b>	ita@ita.rwth-aachen.de
<b>Website</b>	www.ita.rwth-aachen.de
<b>Life Sciences Classification</b>	Research and Development of Biological Medical Textiles, Drug Delivery Systems, Minimal Invasive Therapies, Absorbable and Non-Absorbable Textile Scaffolds for Regenerative Medicine and Tissue Engineering, Mechanical Testing of Implants and Explants
<b>Products in Development</b>	Shape Memory Polymer Stents, Nitinol Stents and Micro Stents, Absorbable Textile Scaffolds for Tissue Engineering, Tissue Engineered Vascular Grafts and Heart Valves, Drug Delivery Textile Containment, Textile Scaffolds for Bone Regeneration and Artificial Cornea
<b>Technologies used</b>	Spinning of Biocompatible Materials (e.g. PDA, PLA and PVDF), Nonwovens Technologies, Braiding, Warp Knitting, Weaving
<b>Services offered</b>	Development of textile structures for implants and tissue engineering, development of production processes and mechanical testing processes for medical products, production of small series
<b>Life Sciences Clients / Cooperations</b>	University Hospital Aachen, Institut für Technische und Makromolekulare Chemie der RWTH-Aachen, Helmholtz Institute for Biomedical Engineering
<b>Profile</b>	Since several years the Institute für Textiltechnik of RWTH Aachen University (ITA) develops, in close interdisciplinary cooperation with engineers, chemists, biologists and medical partners, production processes, products and testing methods in the field of medical textiles and biomaterials. Currently the research group „Medical Textiles/Biomaterials“ at the ITA focuses mainly on the optimisation of textile vascular grafts, textile scaffolds for tissue replacement and tissue support (Tissue Engineering) and the development of new textile structures (yarn, woven fabrics and composites) and implants made of resorbable and non-resorbable materials, shape memory polymers as well as alloys.



<b>Name of Parent Organisation</b>	RWTH Aachen University
<b>Name of Institute</b>	Institut für Biologie II
<b>Address</b>	Kopernikusstr. 16   52062 Aachen   Germany
<b>Contact Person</b>	Prof. Dr. Hermann Wagner
<b>Phone / Fax</b>	+ 49- (0) 241-80-24835   + 49- (0) 241-80-22133
<b>e-mail</b>	wagner@bio2.rwth-aachen.de
<b>Website</b>	www.bio2.rwth-aachen.de/
<b>Life Sciences Classification</b>	Biosensors, General Cell Culture, Neuroscience
<b>Technologies used</b>	Virtual Reality, Electrophysiology, Cell Culture, Molecular Biology
<b>Services offered</b>	Virtual Reality, Electrophysiology Set Ups, Sound Proof Chambers, Cell Culture Laboratories, Confocal Microscopy, Immunohistochemistry, Digital Imaging and Processing, Protein Biochemistry, Methods to Quantify Gene Expression
<b>Life Sciences Clients / Cooperations</b>	Hebrew University (Jerusalem), Israel Institute of Technology (Haifa), Humboldt University Berlin, Technical University Munich, University of Maryland, Washington, University St. Louis, Shriver Institute Boston, Queens University Kingston, Canada
<b>Profile</b>	<p>Research in the Institute of Biology II concentrates on biological information processing.</p> <p>We are interested in understanding the neuroethological mechanisms underlying complex and cognitive behavior as well as developmental processes. Birds, and especially the barn owl are well suited for such research. The barn owl has special adaptations (facial disc, asymmetrical ears, frontally positioned eyes) that imply that evolution has created effective neural algorithms. Understanding complex behavior traits requires research at different levels of analysis. Therefore, our research combines investigations at the behavioral, the neurobiological (molecular, cellular, systems level), the theoretical levels and the applied level (bionics).</p>

**University Hospital - Department Diagnostic Radiology**

<b>Name of Parent Organisation</b>	RWTH Aachen - University Hospital
<b>Name of Institute</b>	Department Diagnostic Radiology
<b>Address</b>	Pauwelsstr. 30   52074 Aachen   Germany
<b>Contact Person</b>	Prof. Dr. R. Günther
<b>Phone / Fax</b>	+ 49- (0) 241-80-88521   +49-(0) 241-80-82411
<b>e-mail</b>	secretary@rad.rwth-aachen.de
<b>Website</b>	www.rad.rwth-aachen.de
<b>Life Sciences Classification</b>	Biomaterials, Biosensors, Cardiovascular Therapies, CE Certification, Clinical Diagnostics, Clinical Studies, Consulting, Drug Delivery Systems, Drug-Design, Drug Development, Implants, Medical Devices, Minimal Invasive Therapies, Molecular Imaging, Tissue Engineering
<b>Products in Development</b>	Fibrin-specific Contrast Medium, Caval Filters, Blood Pump, MR-Compatible Devices
<b>Services offered</b>	Custom-Design Interventional Technology, Clinical Trials Management
<b>Life Sciences Clients / Cooperations</b>	Industrial cooperation with Philips, Siemens, Cook Europe, BayerHealthcare, Fraunhofer Institut für Produktionstechnologie (IPT) Aachen



# Sparkasse Aachen

**Name of company**

Sparkasse Aachen

**Address**

Postfach 1000 | 52059 Aachen | Germany

**Contact Person**

Hubert Herpers, stellv. Vorstandsvorsitzender

**Phone / Fax**

+ 49- (0) 241-444-2206 | + 49- (0) 241-444-3023

**e-mail**

hubert.herpers@sparkasse-aachen.de

**Website**

[www.sparkasse-aachen.de](http://www.sparkasse-aachen.de)

**Company Profile**

Die Sparkasse Aachen bietet als Universalinstitut umfassende Finanzdienstleistungen für Privat- und Firmenkunden.

As an all-round institute Sparkasse Aachen offers comprehensive services for private and corporate clients.

<b>Name of Parent Organisation</b>	Spintec Engineering GmbH
<b>Address</b>	Kurbrunnenstr. 22   52066 Aachen   Germany
<b>Contact Person</b>	Dr. Michael Rheinnecker
<b>Phone / Fax</b>	+ 49- (0) 241-9631750   +49-(0) 241-9631759 (number will change as of August 1st 2009!)
<b>e-mail</b>	info@spintec-engineering.de
<b>Website</b>	www.spintec-engineering.de
<b>Year founded</b>	2004
<b>Life Sciences Classification</b>	Medtech, Biotech
<b>Company Profile</b>	Silk Engineering for Medical and Industrial Applications

<b>Name</b>	Stadt Jülich
<b>Address</b>	Große Kurstr. 17   52428 Jülich   Germany
<b>Contact Person</b>	Frank Rutte-Merkel
<b>Phone / Fax</b>	+ 49- (0) 2461-63387   + 49- (0) 2461-63434
<b>e-mail</b>	buergermeister@juelich.de
<b>Website</b>	www.juelich.de

<b>Profile</b>	<p>Schon vor 2000 Jahren schätzten die Römer die Bedeutung des Handelsplatzes Jülich – Juliacum – als wichtigen Siedlungs- und Verkehrsknotenpunkt. Heute ist Jülich – eingebunden in die Technologieregion Aachen – eine Region mit einem Forschungs- und Entwicklungspotential, wie man es weltweit nur an wenigen anderen Standorten findet. Dazu zählt insbesondere das Forschungszentrum Jülich, die größte der 16 bundesdeutschen Großforschungseinrichtungen. Umwelt- und Biotechnologie bilden neben Materialforschung und Stoffeigenschaften, Grundlagenforschung zur Informationstechnik und Energieforschung die Schwerpunkte. Ergänzend setzt die FH Aachen in ihrer Jülicher Abteilung maßgebliche Akzente in den zukunftsorientierten Bereichen Biotechnologie, Biomedizinische Technik, Automatisierungs-, Energie- und Umwelttechnologie. Das Technologiezentrum Jülich steht einen richtungweisenden Know-how-Transfer aus den Hochschulen und Forschungseinrichtungen der Region in die konkrete Anwendung vor Ort.</p>
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<b>Name of company</b>	S-VC GmbH
<b>Address</b>	Markt 45-47   52062 Aachen   Germany
<b>Contact Person</b>	Markus Krückemeier
<b>Phone / Fax</b>	+ 49- (0) 241-47056-0   + 49- (0) 241-47056-20
<b>e-mail</b>	krueckemeier@s-ubg.de
<b>Website</b>	www.s-ubg.de
<b>Year founded</b>	1997
<b>Business Mission</b>	The S-VC is part of the S-UBG-Group that offers private equity for different funding stages. The S-VC focusses on early-stage investments but no seed financing.
<b>Services offered</b>	Start-Up-Consulting, Human Ressource-Consulting, Public Funding, Co-Financing
<b>Life Sciences Experience</b>	Paion AG (pharmaceutical product company; public noticed); LemnaTec GmbH (image processing in biology); mnemoScience GmbH (new materials, especially shape memory polymers for medtech advices)
<b>Life Sciences Clients</b>	Paion AG, Aachen   LemnaTec GmbH, Wuerselen   mnemoScience GmbH, Aachen
<b>Company Profile</b>	<p>S-UBG-Group is one of the oldest and largest private-equity companies in Germany that is only financed by savings banks. The main investment region is the area between Cologne, Duesseldorf and Aachen where the company is located. We are invested in almost 50 young technology focussed start-up companies and traditional growing mid caps.</p> <p>S-UBG-Group offers an exceptionally comprehensive range of venture capital and private equity solutions. We are expert across all funding stages, from start-ups, through growth capital to buyouts. We partner with a broad range of businesses, and our scale provides us with the experience and expertise needed to invest across all funding stages and across a broad range of sectors but geographical focussed to our investment region.</p>



<b>Name of company</b>	Technologiezentrum Jülich
<b>Address</b>	Karl-Heinz-Beckurts-Str.13   52428 Jülich   Germany
<b>Contact Person</b>	Dipl.-Kfm. Carlo Aretz
<b>Phone / Fax</b>	+ 49- (0) 2461-690-0   + 49- (0) 2461-690-100
<b>e-mail</b>	info@tz-juelich.de
<b>Website</b>	www.tz-juelich.de
<b>Year founded</b>	1989
<b>Business Mission</b>	Multifunctional Technology Centre
<b>Services offered</b>	Office and Laboratory Space, Conference Rooms for 8 to 34 Persons, Multifunctional Meeting Room up to 120 Guests
<b>Life Sciences Experience</b>	Advice and assistance during the founding phase; mediators in negotiations and discussions between providers of ideas and capital, authorities and other public agencies; assistance on issues in the field of technology als well as in business matters.
<b>Life Sciences Clients</b>	LifeTecAachen-Jülich.e.V., BioRiver
<b>Company Profile</b>	<p>The Technologiezentrum Jülich GmbH (TZJ) in the direct vicinity of the largest German large-scale research centre, the Forschungszentrum Jülich GmbH (FZJ), providing access to the broad spectrum of scientific and technical infrastructure of the FZJ, the RWTH Aachen and Aachen/Jülich Politechnic. Highly qualified personnel from the region is available for innovative work.</p> <p>The Jülich Technology Centre, founded in 1989, has become a centre of economic exploitation of the technical know-how of the region. With an area of 12,000 sq.m. the TZJ offers flexible and individual space for new innovative companies, development and technologically orientated companies and joint-venture and licensing partners between industry and science. Particular innovative companies require high standards of work places and functional surroundings to ensure high-quality output, and the TZJ fulfils these conditions. The TZJ has a modern communication infrastructure: ISDN, intranet and internet, WLAN and offers secretarial services, photocopying and telephone service, postal service – and last but not least a bistro under palm trees.</p>



<b>Name of company</b>	Vygon GmbH & Co KG
<b>Address</b>	Prager Ring 100   52070 Aachen   Germany
<b>Contact Person</b>	Dr. Raymund Heiliger
<b>Phone / Fax</b>	+ 49- (0) 241-9130301   + 49- (0) 241-9130529
<b>e-mail</b>	raymund.heiliger@vygon.de
<b>Website</b>	www.vygon.de
<b>Year founded</b>	1968
<b>Business Mission</b>	Production and Sales of Medical Disposables
<b>Life Sciences Classification</b>	Medical Devices, Drug Delivery Systems, Implants
<b>Products on the Market</b>	Antimicrobial Catheters for Seldinger Technology
<b>Technologies used</b>	Drug Incorporation, Clean Room Production
<b>Company Profile</b>	Vygon GmbH & Co. KG is a manufacturer of disposable medical devices. The product range covers catheters and canulas for veins and arteries, neonatal and pediatric catheters, products for pain therapy, respiration, plexus anesthesia, and gastroenterology.

<b>Name</b>	Zweckverband StädteRegion Aachen
<b>Address</b>	Zollernstr.10   52070 Aachen   Germany
<b>Contact Person</b>	Detlef Funken
<b>Phone / Fax</b>	+ 49- (0) 241-5198-2131   + 49- (0) 241-5198-2139
<b>e-mail</b>	detlef-funken@staedteregion-aachen.de
<b>Website</b>	www.staedteregion-aachen.de
<b>Year founded</b>	2004

**Short Profile**

The City of Aachen and the District of Aachen established together with 9 communes, which belongs to the district, the Zweckverband StädteRegion Aachen. The StädteRegion, in cooperation with its regional and „eu-regional“ partners, has the unique chance of becoming a model for a future „Europe of Regions“.

The main focus of the Zweckverband is to promote the economy, euregional initiatives and projects as well as culture and tourism. All participants are committed to create the conditions for a new and democratically legitimated institution by 2009. This will help to utilize the significant economic potential and rich cultural possibilities of the Aachen region even more effectively.

# *Further Members and Sponsors*

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Bauwens Assekuranz Versicherungsmakler GmbH

Osthus GmbH

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Univ.-Prof. Dr. rer. nat. Margrit Frentzen – RWTH Aachen, Lehr- und Forschungsgebiet Spezielle Botanik

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Dr. Klaus Langner - GRÜNENTHAL GmbH

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Dirk Reckert

Dr. Franz A. Wirtz - GRÜNENTHAL GmbH

Dr. Martin Zimmermann - RWTH Aachen, Institut für Biologie IV - Mikrobiologie



**LifeTecAachen-Jülich e.V.**

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