1/2010

ACHEMA WORLDWIDE News

A new era in new surroundings

ACHEMASIA 2010

Beijing, PR China, 1–4 June 2010

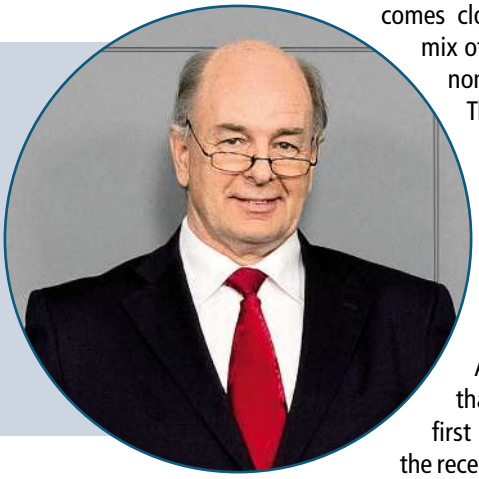
A special edition from
PROCESS

Go where the **action** *is...*

...that once was the slogan to draw visitors to Las Vegas. In this editorial – my first one as newly elected chairman of the ACHEMA Committee – I am of course not talking about tourism or gambling. But let us talk about chemical engineering.

The above message, as stereotyped as it may be, has a lot of truth when it comes to our discipline. We indeed have to go where the demand of our customers is. This holds true for the company I am representing, and it also holds true for ACHEMA as the largest and most influential communication platform for our industries.

It therefore met with unanimous approval when DECHEMA took the initiative, already twenty years ago, to organize the first AchemAsia in China. Today there is no other region in the world which comes close to China's unique mix of innovative spirit, economical power and pace. This holds true even in the context of the current worldwide economic downturn where the country still records growth rates almost in the two digit range.



And there is evidence that China will be the first country to overcome the recession, with its economy being nowadays not only export-driven but also backed-up by solid domestic demand. The recent investment package of 500 bn RMB for the petrochemical and chemical sector, our main industrial target groups, should furthermore contribute to the success of this year's, already eighth AchemAsia in Beijing.

All of us who share some more personal contacts with our Chinese counterparts are aware of their particular appreciation when staying in touch in somewhat challenging times. I guess it probably has never been wiser to attend AchemAsia than particularly this AchemAsia 2010.

Yours sincerely,

Dr.-Ing. Michael Thiemann
Chairman, ACHEMA Exhibitors' Committee
and CEO Uhde GmbH

ACHEMA WORLDWIDE News

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Cover: DECHEMA; [M]-Deppe

Maintaining *growth without* overheating

The State of the Chinese economy

China's economy appears to have weathered the crisis without serious effect. According to figures released by the Chinese government, the economy expanded by 8.7% during 2009, which was significantly better than predicted. After 14 consecutive months of decline, exports increased by 18% in December. However, domestic demand was the real factor which stimulated growth. The Chinese economy expanded by 7.7% during the first three quarters of 2009, with an increase in domestic consumption providing a boost of 4 percentage points. Investment also contributed 7.3 percentage points, but this rise was offset to some extent by a negative impact of 3.6 percentage points caused by the decline in exports.

Import levels are another indication that domestic demand is now playing a more significant role than in the past. Imports rose by 56% in December 2009. Instead of being a mere extension of the world's manufacturing base, China is now becoming an increasingly attractive sales market. The Chinese economy is having a stabilizing effect on the European and worldwide economy. In the second quarter of 2009, German exports to China were 3.4% higher than in the previous quarter. Exports to China compensate to some extent for a sharp fall in German exports to other Asian countries.

Economic stimulus from the government on a large scale in recent months is the reason behind the apparent immunity of the Chinese economy to the financial crisis. The 4 trillion RMB (€428 billion) which the government has decided to pump into the economy is one of the largest stimulus packages worldwide during the current crisis. However, increasing concern has been raised in recent months. Back at the end of September 2009, the International Monetary Fund (IMF) urged the Chinese government to stimulate domestic demand and reduce the reliance on exports in order to avoid the risk of overcapacity, inflation and a decline in the quality of bank credit.

A look at the chemical industry...

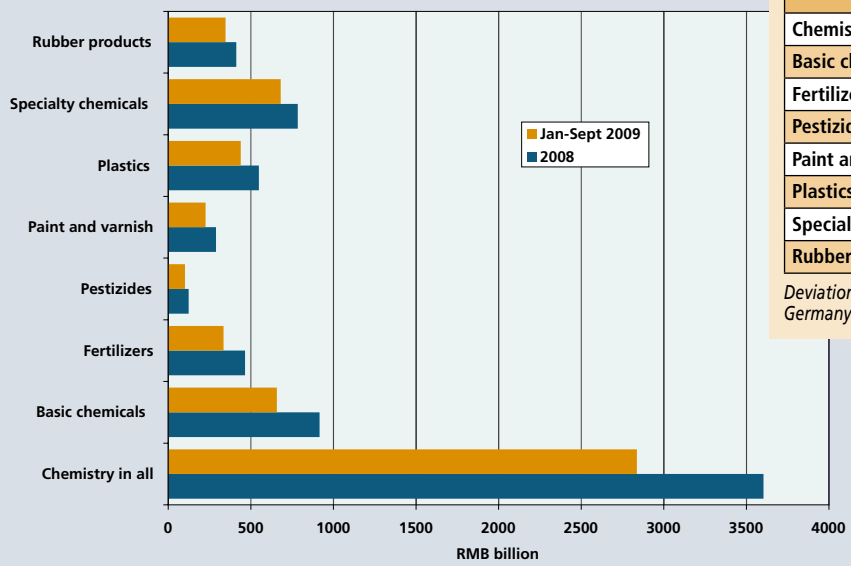
The chemical industry has also begun to react to recent events. Worldwide demand for chemicals fell sharply in 2008, and this had a significant effect on Chinese chemical exports. Average capacity utilization fell from 85% to 55%. Production and export volumes decreased sharply between the fourth quarter of 2008 and the first quarter of 2009. Production rose only 2.5% year-on-year during the first nine months of 2009, ranging between -6.9% in basic chemicals to +11.4% in the special chemicals sector. Chemical production is expected to increase by 8% to $600 billion for the full year.

Still the situation remains critical in some sectors. The fall in oil prices means that many projects that had

Chinese chemical production (in RMB billion)

Sector	2008	Jan–Sept 2009	Change Jan–Sept 2009/ Jan–Sept 2008
Chemistry in all	3603	2836	2.5 %
Basic chemicals	915	657	–6.9 %
Fertilizers	464	334	–1.8 %
Pestizides	123	100	2.1 %
Paint and varnish	288	225	5.6 %
Plastics	548	438	–0.3 %
Specialty chemicals	783	680	11.4 %
Rubber products	411	346	11.5 %

Deviation due to rounding. Source: China Chemical Industry News (CCIN), Germany Trade and Invest



appeared attractive are no longer economically viable. The coal-to-liquid (CTL) sector has been particularly hard hit. With only a few exceptions, CTL projects that were in the planning phase have been terminated. Cutbacks are also planned in chlorine-alkali electrolysis, fertilizer production and some other sectors to stabilize prices.

The general level of investment in the chemical industry remains high however. Investment during the first three quarters of 2009 rose 21% to 825 million RMB, which is an indication of confidence in the Chinese market.

... and the mechanical engineering industry

The mechanical engineering industry is also benefitting from the stimulus programs. According to a report published by German Trade and Invest (gtai) in July 2009, it appears that the Chinese machinery manufacturing industry was already starting to recover from the world economic crisis at the time the report was released. This is not the case in all segments of the industry however; the effects of the crisis were most drastic in the textile machinery sector and other consumer-related sectors. In contrast, there was significant growth in the following sectors during the first 11 months of 2008: construction and mining machinery, brazing, welding and foundry machinery, drive systems, pumps, valves and compressors. The market for machinery and systems used in the chemical industry expanded by 8% during the first four months.

Investors, producers and purchasers are seeing quite a diverse situation in the country. Over the past few years, the momentum provided by exports, which was one of the major forces driving the Chinese economy, has been lost to some extent. However so far, the Chinese government has been largely able to compensate for the loss. All of this is having very divergent effects on different industries, and it is important to take a close look at each sector.

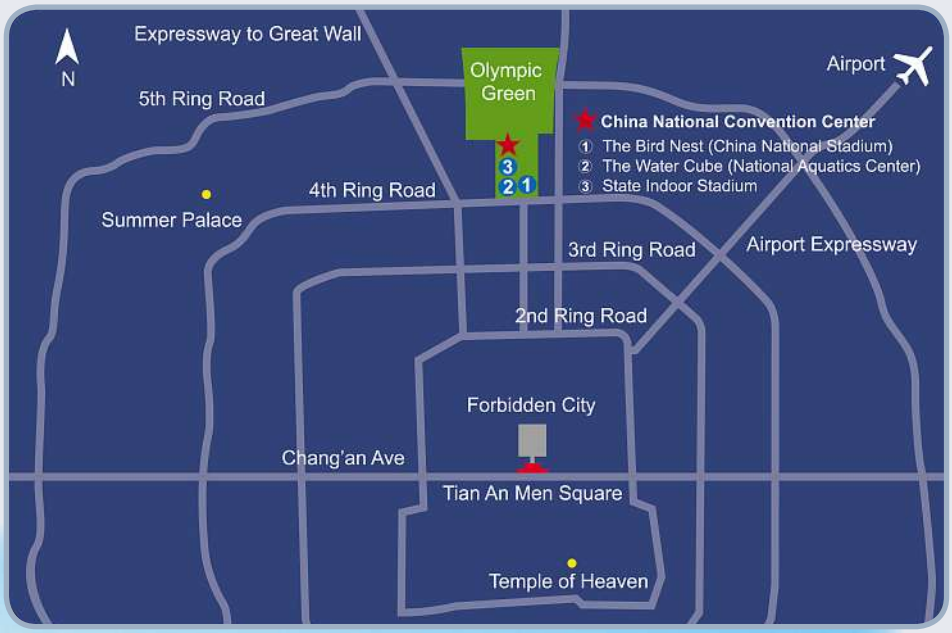
According to German Trade and Invest (gtai), German companies are still taking advantage of brisk investment activity. According to the summary report on economic trends in China which was published in the middle of 2009, companies saw a significant level of interest at the China International Machinery Exhibition in April 2009. German companies submitted successful bids for railway contracts during the initial phase of the economic stimulus program. Chinese customers are interested in core components and leading-edge technology which cannot be produced locally. This proves that there are still very significant opportunities. With already more than 300 registered exhibitors by the first week of February, AchemAsia 2010 in Beijing will provide an exellent platform to explore them. ■

Preliminary list *of exhibitors at* AchemAsia 2010 (as of March 1st)

Exhibitor	Country	Stand
3M Pumps, Corbola	I	12S
A		
AAAS/Science, Cambridge	GB	31V
Adam Equipment, Shanghai	PRC	1S
AIG Industrial, Nanjing	PRC	28S
Airmotec, Saint Antoine	F	18O
ALLGAIER, Uhingen	D	11P
Allied Supreme, Shanghai	PRC	34J
Altenburger Maschinen Jäckering, Hamm	D	9G
AMETEK Fluoropolymer Products, Newark	USA	15H
AMG PESCH, Nanjing	PRC	30X
API Heat Transfer, Suzhou	PRC	15T
ARCA Regler, Tönisvorst	D	12H
Argal Chemical Pumps, Dalian	PRC	34K
ARI Armaturen, SH-Stukenbrock	D	13E
Artkim Fuarcilik, Istanbul	TR	36Q
Asahi AV Valve, Shanghai	PRC	20E
Ashcroft Instrument, Wujiang	PRC	30W
atea Environmental, Shanghai	PRC	10F
AUMA Riester, Müllheim	D	11B
Autodesk, San Rafael	USA	3B
B		
Badger Meter, Neuffen	D	5M
Baelz, Heilbronn	D	9X
BAMO Mesures, Argenteuil	F	18S
Barat Ceramics, Auma	D	5J
BASF, Ludwigshafen	D	23L
Bayer Technology Engineering, Shanghai	PRC	27B
BEGEROW, Langenlonsheim	D	10G
Beijing Bomex Huake, Beijing	PRC	34P
Beijing Gentlehill, Beijing	PRC	14S
Beijing HaoLi Times, Beijing	PRC	21S
Beijing Kenod Liquid Equipm., Beijing	PRC	21O
Beijing OLXY Technology, Beijing	PRC	28V
Beijing Vogel Consult./Process, Beijing	PRC	21H
Beijing Zhongxing, Beijing	PRC	31O
Bekaert Advanced Filtration, Sprimont	B	21T
Beot Inorganic Membrane Sep., Hebei	PRC	30M
Berstscheiben Schlesinger, Schalksmühle	D	5E
Bertrams Chemical Plants, Muttenz	CH	30E
Bertrams Heatec, Pratteln	CH	30E
BGH Edelstahlwerke, Freital	D	5T
BHS, Sonthofen	D	13D
BKG, Münster	D	11D
Boccard, Villeurbanne	F	17S
Boerger Pumps, Singapore	SGP	5O
Boppard, Hong Kong	HK	28Q
Bopp & Reuther Armaturen, Mannheim	D	10D

Exhibitor	Country	Stand
Braunschweiger Flammenfilter	D	5H
Bright Sheland, Shanghai	PRC	33J
BSI, La Riche	F	17M
Bühler Technologies, Ratingen	D	10E
Busch Vacuum, Shanghai	PRC	20H
BWS Technologie, Grevenbroich	D	13L
C		
Carbone Lorraine, Pagny	F	20J
Casals Cardona – Tecnium, Manresa	E	34M
Cathay Chemical, Dalian	PRC	31W
Cathay Mechanical Seals, Kunshan	PRC	28O
Centravis Production, Nikopol	UA	12Q

Exhibitor	Country	Stand
CERA SYSTEM Verschleißschutz, Hermsdorf	D	9E
CFIe, Rennes	F	18L
Changzhou Fanqun Drying Equip., Changzhou	PRC	1G
Chematur Ecoplanning, Pori	FIN	33Q
Chematur Engineering, Karlskoga	S	33Q
Chemical Engineering, Frankfurt	D	3H
CIMBRIA SKET, Magdeburg	D	12C
Cixi Hengli Packing&Sealing, Cixi	PRC	33L
Clestra Cleanroom, Strasbourg	F	18R
COG Gehrckens, Pinneberg	D	31Q
Compass Bulk, Beijing	PRC	4U
Control Valve/Pump Engineer, Shanghai	PRC	1RA
CORDOUAN Technologies, Pessac	F	18M
Corrosion Materials, Baker	USA	15S
Crambeth Allen Publ., Craven Arms	GB	14G
CRANE ChemPharma, Beijing	PRC	24H
D		
Dalian Hermetic Pump, Dalian	PRC	14B
Dalian Hualong Filter Cloth, Dalian	PRC	20Q
Dandong Colossus, Shanghai	PRC	21B
Danfoss Socla, Virey-le-Grand	F	17J
De Dietrich, Wuxi	PRC	
Diesel & Gas Turbine Publ., HongKong	HK	3D
DIGMESA, Ipsach	CH	33P
Düker, Laufach	D	6S
DUMAG Brenner-Technologie, Wien	A	23H
Dürr Paintshop Systems, Shanghai	PRC	28T
E		
Eaton Filtration, Shanghai	PRC	20D
EBRO Armaturen, Beijing	PRC	31T
EDUR Pumpenfabrik, Kiel	D	12D
EKATO, Schopfheim	D	10S
ELMESS Thermosystemtechnik, Uelzen	D	11Q
ElringKlinger, Qingdao	PRC	11F
eltherm Elektrowärmetechnik, Burbach	D	10J
Emme Technology, Sesto San Giovanni	I	21G
ESK Ceramics, Kempten	D	8E
F		
FELUWA Pumpen, Mürlenbach	D	12H
Ferolite, Ghaziabad	IND	3O
Ferrum, Rupperswil	CH	23B



Exhibitor	Country	Stand
Festo, Shanghai	PRC	3Q
FH Lübeck, Lübeck	D	12P
Filtrox, Shanghai	PRC	4S
Findeva, Oerlingen	CH	15L
Fine Automation, Shanghai	PRC	30V
Flottweg, Vilsbiburg	D	13H
Fluko Equipment, Shanghai	PRC	15C
FLUX GERÄTE, Maulbronn	D	10B
Frenzelit, Bad Berneck	D	6X
FRISTAM Pumpen Stamp, Hamburg	D	10P
Fritsch, Idar-Oberstein	D	10U
Fujian Wolong Pipe, Fuzhou	PRC	30G
Funke Heat Exchanger, Changzhou	PRC	23O
Fuyang Mey Well, Hangzhou	PRC	14L
Gardner Denver Nash Machinery, Shandong	PRC	28P
G		
Garlock, Shanghai	PRC	15E
GEA Ecoflex, Shanghai	PRC	8Q
GEA Messo, Duisburg	D	8U
GEA NIRO, Søborg	DK	8Q
GEA Process Engineering, Shanghai	PRC	8Q
GEA Process Engineering, St. Quentin	F	8Q
GEA Wiegand, Ettlingen	D	8Q
Gefa, Shenzhen	PRC	30S
GekaKonus, Eggenstein	D	8J
Gemeinschaftsstand Verlage, Frankfurt	D	31V
General Machinery Magazine, Beijing	PRC	36P
Georg Fischer Piping Systems, Shanghai	PRC	28M
Georgin, Chatillon	F	17R
GERB Vibration Control, Qingdao	PRC	5K
German Engineering Federation, Frankfurt	D	8B
German Federal Ministry of Economics, Bonn	D	8B
GKN Sinter Metals Filters, Radevormwald	D	6F
Golden Mountain, Kaohsiung	TW	30Q
Graco, Shanghai	PRC	27T
Greif Velox, Lübeck	D	13B
GSKET, Chieve	I	24V
Guangzhou AK Filter, Guangzhou	PRC	27V
Guangzhou Taisun, Guangzhou	PRC	1B
Guarniflon, Castelli	I	14P
H		
Haiyan New Century, Zhejiang	PRC	1A
Halifax Fan, Brighouse	GB	31J
Hamilton Sundstrand Industrial, Shanghai	PRC	20B
Hammelmann, Oelde	D	10Q
Haver & Boecker Maschinenfabrik, Oelde	D	12M
Hebei Sinter Filter, Hebei	PRC	31M
helsatech, Gefrees	D	6U
Hempel Special Metals, Kowloon	HK	4J
Hengshui Haijiang Filter, Hengshui	PRC	20R
Hisina Industrial, Pingxiang	PRC	1U
HTRI Heat Transfer, College Station	USA	4H
Hydac Technology, Shanghai	PRC	24M
I		
i Fischer, Waldbüttelbrunn	D	8V
IBL, Hamburg	D	12L
IDT Kupferring, Annaberg-Buchholz	D	5Q
ifu, Hamburg	D	5X
IMM Inst. Mikrotechnik, Mainz	D	6J
Inkon Foshan, Foshan	PRC	30F
INTERTEC HESS, Neustadt	D	5B
J		
JET Bio Filtration, Guangzhou	PRC	24O
Jianda Driers, Changzhou	PRC	15M
Jiangsu Jiuwu Hitech, Jiangsu	PRC	3J
Jiangsu Saideli, Jingjiang	PRC	14M
Jiashan East Fluorine, Jiashan	PRC	27W
Jinan SECESPOL Heat, Jinan	PRC	3L
Jing Jin Filter Press, Dezhou	PRC	17B
Jingjiang DKD Filter, Jingjiang	PRC	1H
JULABO Labortechnik, Seelbach	D	9J
K		
KCI, Shanghai	PRC	24S
Kempchen Dichtungstechnik, Oberhausen	D	10H

Exhibitor	Country	Stand
KHOSLA Profil, Mumbai	IND	4M
Kind, Gummersbach	D	8X
Klaus Union, Bochum	D	12J
Klinkau, Marktoberdorf	D	9F
Klöpper Therm, Dortmund	D	11Q
KMPT, Vierkirchen	D	6B
KNF Neuberger, Freiburg	D	11H
Körting, Hannover	D	8H
KOSMOS NEFT GAS, Voronezh	RUS	3T
Koy Scientific, Kaohsiung	TW	24R
Kreyenborg, Münster	D	11D
KSB China, Shanghai	PRC	20X
Kunshan Kinglai, Jiangsu	PRC	21Q
L		
Labom, Hude	D	6W
Land Instruments, Dronfield	GB	4O
LAR Process Analysers, Berlin	D	5W
Larox, Lappeenranta	FIN	14F
LBT, Shanghai	PRC	20T
Lechler, Metzingen	D	6K
LESER, Hamburg	D	6H
LEWA, Leonberg	D	5F
Liaoning Bolian, Tielingshi	PRC	36M
Liaoyang Youxin Pharmaceut., Liaoyang	PRC	28J
Liuzhou Dingsheng, Liuzhou	PRC	4R
Lödige, Gebr., Paderborn	D	11J
Lonza Engineering, Basel	CH	23H
LOT Vacuum, Gyeonggi-do	ROK	21R
Luma Sealing Material, Beijing	PRC	14T
Lurgi, Frankfurt	D	5P
M		
Maag Pump Systems, Oberglatt	CH	31S
MAHLE Industriefilter, Öhringen	D	5V
Manifattura Tubi Gomma, Grisignano	I	23C
Mankenberg, Lübeck	D	6Q
Marver Publicity, Strood	GB	31V
MECA INOX, Argenteuil	F	17L
Meccanotecnica Umbra, Campello	I	34Q
Mettler Toledo Instrument, Shanghai	PRC	15Q
Mettler Toledo International, Shanghai	PRC	14Q
Modentic Valve, Nanjing	PRC	24L
Möllers, Beckum	D	13B
MTS Environmental, Maintal	D	8G
Mubea Automotive, Taicang	PRC	13Q
M+W, Singapore	SGP	14J
MWL Apparatebau, Grimma	D	10V
N		
Nantong Sunshine Graphite Equipm.	PRC	28K
NEUMO, Knittlingen	D	6C
Nico Valves, Shanghai	PRC	4W
Ningbo Industry Seals, Ningbo	PRC	21P
Ningbo Lehui Food Machinery, Zhejiang	PRC	30T
O		
Oerlikon Barmag, Remscheid	D	12B
Orientec Industrial Developm., Beijing	PRC	23L
Osaka Stainless, Osaka	J	3M
Oschatz, Essen	D	8K
P		
PACO Paul, Steinau	D	10X
Pallmann Maschinenfabrik, Zweibrücken	D	9P
PanGlobal Lab Int./BioTech, Bruxelles	B	14C
Pekos Valves, Barcelona	E	31X
Penghan Machinery, Suzhou	PRC	4B
Perrin, Nidderau	D	9U
Phönix Armaturen Bregel, Volkmarsen	D	9W
Pingxiang Fxsino Petrochem.Packing	PRC	21QA
Plasticon, Oldenzaal	NL	4E
Plinke, Bad Homburg	D	6D
Polytota , Beijing	PRC	4T
Prosim, Labege	F	17P
Pumps India, Indore	IND	31V
Püschner, Schwanewede	D	10W
Q		
Quko Int., Kowloon	HK	23P
R		
Reimelt Henschel, Kassel	D	24T
Renggli Laboratory, Shanghai	PRC	23Q
Rettenmaier, Rosenberg	D	13F
Richter EP, Nanjing	PRC	27O
Rigaku, Beijing	PRC	29P
Ringier Trade Media, Shanghai	PRC	4C
Ritag, Osterholz-Scharmbeck	D	5G
Rolled Alloys, Düsseldorf	D	27Q
Rösberg Engineering, Karlsruhe	D	8P
Royal Society of Chemistry, Cambridge	GB	14D
RPA Process Technologies, Nanterre	F	18Q
RVT Process Equipment, Steinwiesen	D	21OA
S		
SalvisLab, Rotkreuz	CH	23Q
SAMSON, Frankfurt	D	10M
Samtech, Mannersdorf	A	33M
Sandmeyer Steel, Guangzhou	PRC	12O
Sarstedt, Nümbrecht	D	8O
Seliger Armaturen, Norderstedt	D	12D
Shandong Borun Process, Shandong	PRC	4F
Shandong Tianli Drying Equipm., Jinan	PRC	13O
Shanghai Bluepard, Shanghai	PRC	14O
Shanghai BRT Equipment, Shanghai	PRC	1D
Shanghai Champion Controls, Shanghai	PRC	31L
Shanghai Flow Valve&Fitting, Shanghai	PRC	36L
Shanghai Fritsch Instruments, Shanghai	PRC	4P
Shanghai Haihao Mechanical Parts	PRC	36J
Shanghai RoPo Automation, Shanghai	PRC	31P
Shanghai San Chuan, Shanghai	PRC	14H
Shanghai Sower, Shanghai	PRC	20V
Shanghai Sunfilter, Shanghai	PRC	28X
Shanghai Vantage, Shanghai	PRC	15P
Shanghai Weser Machinery, Shanghai	PRC	15B
Shanghai Xichuang Powder, Shanghai	PRC	1F
Shanghai YiAi Trading, Shanghai	PRC	36R
Shanghai YiGang Seal Material, Shanghai	PRC	13S
Shengkai Tianjin Ceramic, Tianjin	PRC	3P
Shenyang Henyi Enterprise, Shenyang	PRC	24Q
Shenzhen Cheng Hui Tong, Shenzhen	PRC	30DA
Silkroad24 Trade, Shanghai	PRC	1R
Sodimate, Sartrouville	F	17Q
Spectron Messer Cutting & Welding, Frankfurt	D	10O
St. Michael, Hangzhou	PRC	30D
Steuler Korrosionsschutz, Höhr-Grenzh.	D	9V
Swissfluid, Shanghai	PRC	36S
T		
Taicang AGRU, Taicang	PRC	24PA
Taiwan Grace Int., Taipei	TW	27S
Taiwan Sheng Shyan, Chiayi	TW	28W
TAMI Industries, Nyons	F	18J
Tantec, Hanau	D	11U
Taylor&Francis, Philadelphia	USA	3U
TEADIT, Kufstein	A	9O
TEMA Siebtechnik, Tianjin	PRC	23J
Tethys Instruments, Meylan	F	18P
ThyssenKrupp VDM, Guangzhou	PRC	30J
Tianjin Sci Create, Tianjin	PRC	3C
Tiantai SouthWest Filter Cloth, Taizhoue	PRC	34O
Todo, Töreboda	S	33O
Tokyo Rikakikai, Beijing	PRC	21PA
Topper, Shanghai	PRC	30B
Trespa, Shanghai	PRC	21E
Trimble, Westminster	USA	30O
TUBE TEC Rohrverformung, Nistertal	D	23T
TÜV SÜD, Shanghai	PRC	28OA
U		
UBIFRANCE, Paris	F	17O
Uhde, Dortmund	D	27J
Uhde High Pressure Technologies, Hagen	D	27J
Uhde Inventa Fischer, Berlin	D	27J
V		
Vanwyk Systems, Oldenzaal	NL	4Q
Verdelet, Neuville-les-Dieppe	F	4V
Verder Retsch, Shanghai	PRC	27M
VIBRA MASCHINEN SCHULTHEIS, Offenbach	D	4TA
Vogelsang Maschinenbau, Essen	D	5D
W		
Weatherly, Atlanta	USA	33Q
WEKA, Bäretswil	CH	12H
Welantech, Wien	A	36O
Wenzhou Futian, Wenzhou	PRC	27P
Wenzhou Huahai Sealing, Wenzhou	PRC	4L
WEPUKO Hydraulik, Metzingen	D	9H
Wilk Graphite, Lörrach	D	28K
Witte Pumps, Uetersen	D	12D
Wuxi Shenco, Wuxi	PRC	30H
X		
Xiamen Xlong Seal, Xiamen	PRC	1T
Y		
Yayatech, Hsin Chu City	TW	36K
Z		
Zeppelin Solid Technology, Beijing	PRC	24T
Zhangjiagang Titan, Zhangjiagang	PRC	30C
Zhejiang Cathay Packing & Sealing, Hangzhou	PRC	20O
Zhejiang Dongya, Wenzhou	PRC	24P
Zhejiang Fangdun, Wenzhou	PRC	21U
Zhejiang Feiyun Technology, Ruian	PRC	15O
Zhejiang Linuo Valve, Wenzhou	PRC	13P
Zhengzhou Great Wall Scient.Industrial	PRC	34S
Zhuhai Longtec, Zhuhai	PRC	20P
Zhuzhou Seed Cemented Carbide, Zhuzhou	PRC	15F
Z & J Technologies, Düren	D	6V

AchemAsia 2010 *Congress*

Preliminary programme (as of February 26)

Tuesday, 01 June 2010						
12:00	Press Conference					
14:00	Opening					
15:30	Plenary lecture I: **Thoughts on the countermeasures to realize sustainable development of refining and petrochemical industry in China** X. Cao, China Petroleum & Chemical Corporation, Beijing/PRC					
16:15	Plenary lecture II: **Diversity needs for sustainable supply of energy and chemical feedstocks** H. J. Wernicke, Süd-Chemie AG, München/D					
Wednesday, 02 June 2010						
09:30	Ionic Liquids	Biotechnology	Clean Energy and Sustainable Production	New Products and Services	Workshop	
	↓	↓	↓	↓	Advanced Nickel and Titanium Alloys for the Process Industry	
11:45	Plenary lecture III: **Ionic liquids and clean energy** S. Zhang, Institute of Process Engineering, Beijing/PRC					
12:30	Lunch break					
13:30	Plenary lecture IV: **Recent development of biorefinery in China** T. Tan, Beijing University of Chemical Engineering, PRC					
14.30	Ionic Liquids	Biotechnology	Clean Energy and Sustainable Production	New Products and Services	Workshop	
	↓	↓	↓	↓	Advanced Nickel and Titanium Alloys for the Process Industry	
16.30	**End of Conference Day**					
Thursday, 03 June 2010						
09:30	Catalytic Processes	Laboratory Automation	Industrial Water Treatment	New Products and Services	Workshop	Course
	↓	↓	↓	↓	Advanced Heat Exchanger Technology for Process Industry	Product Design
11:45	Plenary lecture V: **Industrial water recycling – challenges and limitations** S. Geissen, Technical University of Berlin/D					
12:30	Lunch break					
13:30	Plenary lecture VI: **A chemical engineering view on climate and its protection** G. Kreysa, DECHEMA e.V., Frankfurt/D					
14.30	Catalytic Processes	Laboratory Automation	Industrial Water Treatment	New Products and Services	Workshop	Course
	↓	↓	↓	↓	Advanced Heat Exchanger Technology for Process Industry	Product Design
16.30	**End of Conference Day**					
Friday, 04 June 2010						
10:00	Advanced Materials	Process Control	Recover, Recycle, Reuse			
	↓	↓	↓			
12:00	**End of Conference**					

Picture: Siemens

Siemens Water Technologies recently has commissioned a wastewater treatment system for the Wuxi Xincheng Plant in China´s Jiangsu Province. An upgrade to the existing wastewater treatment plant, the system includes a Siemens advanced Membrane Biological Reactor (MBR) system.

Still a *serious* problem

The water pollution situation in China

According to the 2009 Report on the State of the Environment in China, surface water pollution in the People's Republic is still a serious issue. While the quality of surface water improved slightly in Southern China fom 2000 to 2008, the quality in Northern China worsened over the same period of time. Of the 409 sections being monitored in the seven key river systems, 20.8% were below grade V, the lowest grade in the Chinese National Standard for Water Quality. This water cannot be used, not even for irrigation purposes.

According to the statistics, the total wastewater discharge in 2008 was 57.2 billion tons, a 2.7% increase compared to 2007. Industrial wastewater discharge accounted for 24.2 billion tons or 42.3% of the total with a 2.0% decrease compared to 2007. On the other hand, domestic sewage discharge increased by 6,4% to 33.0 billion tons (57.7%).

The 11th Five-Year Plan includes water pollution prevention and control planning for the most important river systems in China. 2712 pollution treatment projects are scheduled with an investment volume of RMB 160 billion, and a urban sewage treatment capacity of 12 million tons/day will be added.

New wastewater pollution treatment technologies

Compared to developed Western countries, wastewater treatment in China has only recently become an issue. By adapting advanced foreign technology and experience, Chinese companies have introduced and developed many new wastewater treatment technologies. Some have even entered the international markets. The commissioning and operation of these technologies play an important role in relieving the serious water pollution situation in China and improving the water environment.

Problems for the Chinese sewage industry and the solutions

Currently, the sewage treatment industry of China faces a range of problems and challenges. The system of relevant policies and regulations system is not complete. The development of the sewage treatment industry is slow and the city and town sewage treatment is undergoing a transition phase of the administrative system, which hasn't met the requirements. The responsibilities for the operation and supervision of some urban sew-

age treatment plants are unclear. The charge system is not well implemented, and the investment and financing system needs improving. The construction of the supporting sewage collection pipelines is sometimes postponed, resulting in a low sewage collection rate, and the water quality of many city and town sewage treatment plants is far behind the design requirement. The supervision system of enterprise pollution discharge is incomplete and there is unqualified discharge and even illicit discharge in some enterprises, which affects the quality of the feed water for urban sewage treatment plants and has a negative impact on their operation. Local authorities are in general mostly judged by the economic performance of their region and are thus reluctant to support measures that might have a slowing effect on the local industry.

But there are also some blue skies on the horizon: Since 2000 (especially since the aniline device explosion at a bi-benzene plant of the Jilin Petrochemical Company in 2005), the Chinese government has paid more attention to and made more investment in water pollution treatment. The construction of domestic sewage treatment facilities of large and medium-sized cities and towns has been sped up, and the urban sewage treatment rate reached 70.2% in 2008. Discharge reduction is officially promoted especially for highly water-polluting industries such as paper mills, brewing and dyeing and printing. Rural sewage treatment is also actively promoted along with concepts to recycle and reuse water; these are included for example in the planning of rural construction projects and the development of modern agriculture. These measures have the potential to achieve a turn-around in the deterioration of water in spite of the booming economic development and they evidently improve the water environment.

If the right measures are taken, China will not only benefit from the advancement of sewage treatment technologies by being able to supply its population with clean water and reducing the negative consequences of water pollution within the country. Advanced water treatment technologies also meet the needs of a considerable international market, thus creating a potential win-win situation of a cleaner environment and sustainable economic growth. ■

A new hot spot
for pharma companies

Pictures: archives

The pharmaceutical industry is one of the fastest growing industries in China. In spite of the global financial crisis and parallel to the development and implementation of a major medical system reform, the size of the Chinese pharmaceutical market has been increasing steadily. Gross production value of China's pharmaceutical industry in 2009 is estimated at RMB 1 trillion with a growth rate of about 30%. The statistics of China's Industry and Information Ministry (CNII) gives the production value of the pharmaceutical industry in 2008 at 866.7 billion RMB with an increase of 25.7% compared to the previous year, higher than the Chinese industry average of 12.9%. Since 2000, the compound annual growth rate of China's pharmaceutical industry production value has been over 18%. In 2008, 6913 companies produced pharmaceuticals, including 4682 western drugs' manufacturers.

Currently, 1,500 types of active pharmaceutical ingredients (API) with a gross production volume of more than 2 million tons (excluding chemical intermediates and pre-drugs) are produced in China, making China the biggest API producer and exporter in the world.

Not sitting back and relaxing despite competitive advantages

The competitive advantages of Chinese pharmaceutical companies lie in low production costs and huge production capacities. Most manufacturers produce relatively mature generic drugs with simple production technology, staying away from more complex new drugs and technological innovation. The situation is made more difficult by a fierce competition: Most generic drugs are manufactured by a large number of companies. Antiobiotics with high market prices are a striking example: More than 300 companies produce Amoxillin. Both Ceftazidime and Ceftriaxone are offered by more than a 100 producers. More than 2,000 applications for the approval of generic drugs are filed each year, yet only about 40 newly approved drugs are classified as category 1.1, meaning they have never been launched before in China or overseas and their API or preparations are produced by synthetic or semi-synthetic methods. Therefore, experts see the necessity for China's pharmaceutical industry to strengthen its R&D investment and move from "imitation only" to "imitation and innovation".

Progress of project and engineering technology

In recent years, Chinese pharmaceutical companies have recognized the importance of sciencific and technological innovation, and have gradually increased

their investment in these fields. As a consequence, the processes for the development and production of innovative chemical drugs as well as for new traditional Chinese medicines and new biopharmaceutical drugs have become more industrialized.

Exemplary chemical drugs are the anti-hepatitis medication Bicyclol that received approval in China in 2004 or the stroke treatment drug Butylphtalide; both the ingredient and the soft capsule are today produced on an industrial scale.

This development is driven both by national and international competition and by government incentives: In May 2007, with the support of the Biotechnology Center at the Ministry of Science, the pharmaceutical groups ShiJiaZhuang, HuaBei, HaYao and LuKang set up an antibiotic technology innovation strategy alliance. Their co-sponsored project "Innovation in key technologies of antibiotic mass production" has entered the "National Science and Technology Support Program" of the Chinese Science Ministry.

Increasing M&A activity in the pharmaceutical landscape

While the financial crisis impacts the global pharmaceutical market and R&D of new drugs requires ever more effort, global pharmaceutical companies face the challenge of how to maintain stable growth. This in turn causes an increasing M&A activity in the worldwide market.

Compared with the global pharmaceutical landscape, the Chinese pharmaceutical industry has a large number of manufacturers, but most of them are small enterprises. The combined sales of the top 3 Chinese manufacturers account for only 5.19% of the whole Chinese pharmaceutical market. In contrast, the top 3 pharmaceutical companies worldwide occupy 16.8% of the global market. M&A thus seems an inevitable route for the sustainable development of Chinese companies. The reasoning behind M&A transactions is no longer simply to establish a larger-scale company, but rather to combine core competencies along the value chain, create synergies and become the leader in a certain field.

There were 43 acquisitions in the Chinese pharmaceutical industry in 2007, resulting in a total transaction volume of RMB 3.4 billion. Experts believe that there will be even more frequent M&A transactions in the future. Analysis based on acquisition data from 2004 to 2006 shows that 86% of the funds for acquisitions derive from Chinese domestic pharmaceutical companies, among which private enterprises have become the main M&A party. Before entering an M&A project, private enterprises often carry out a lot of preliminary research, identify a clear M&A target, and are also quite cautious on the bid. Typical examples for this were TaiTai's acquisition of the LiZhu group and Fosun Group's acquisition of several pharmaceutical companies.

Multi-national enterprises account for only 14% of the funds involved in all M&A cases in China, but this proportion is showing a growing momentum. The aims of these M&As include the integration of operation in China, access to the Chinese market, implementation of a global strategy, making use of low-cost manpower and lower environmental investment. An additional motivation for acquisitions in China was the Chinese policy that up to the year 2000 required foreign companies who wanted to enter the Chinese market to set up joint ventures with a domestic partner. With the gradual maturation of the Chinese pharmaceutical market, and based on its great potential, M&A activities of multi-national companies and Chinese domestic companies are expected to increase significantly. ■

The political discussions at Copenhagen have shown once more that there are no easy answers to reducing global carbon dioxide (CO_2) emissions and allowing at the same time for the economic growth many countries are striving for.

Storing hope *on storing carbon?*

The Fourth ICPP Report that was published in 2007 presented various emission scenarios, projecting the corresponding trend of atmospheric CO_2 concentration. Within these scenarios, however, it was clearly demonstrated that CO_2 mitigation strategies alone will not suffice to stop climate change. This is the overall context of the ongoing debate concerning measures for CO_2 storage, which is now the priority on the political agenda.

In order to employ CO_2 capture and storage (CCS), CO_2 is separated from exhaust gas streams via post combustion absorption processes or precombustion processes. The dominantly discussed concept is to press the CO_2 into feasible geological layers where it can be stored and is thus removed from the atmosphere for a considerable period of time.

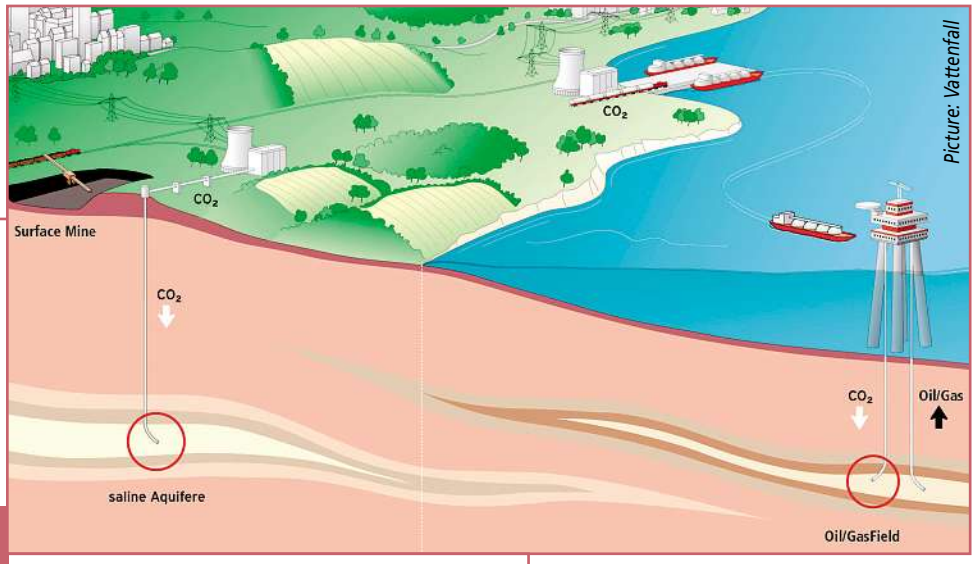
Sobering results

The German Association of the Chemical Industry and DECHEMA Society for Chemical Engineering and Biotechnology have examined the currently discussed concepts for CO_2 management and have published their conclusions in a position paper in 2009. To CCS enthusiasts in industry and politics, their results appear somewhat sobering: According to the study, of all options available to avoid further CO_2 emissions, mitigation is by far the cheapest and most efficient method. The rationale is that all storage and utilisation options for CO_2 require additional energy input, which in turn produces additional CO_2 if fossile fuels are used for energy generation. For this reason energy saving, also by reducing existing energy needs, takes precedence. Possible measures include enhancing the efficiency of energy production in power plants and increasing the use of renewable energy sources. The second highest priority after mitigation of CO_2 emissions should be a consolidated strategy for value-adding processes in preference to dumping.

The storage of CO_2 using CCS strategies is extremely expensive. All measures for the storage or utilisation of CO_2 require additional energy, thus generally producing additional CO_2. A state-of-the-art coal fired power plant has an electrical efficiency of around 40%. Current CCS methods assume an energy demand that corresponds to an overall reduction to around 30% efficiency. Therefore, for a given energy demand one new power plant for a given three in existence would have to be built.

Open questions

It is meaningful to draw up criteria for the assessment of CO_2 storage options (storage capacities, state of technology, safety and public acceptance, follow-up costs). In principle, CO_2 storage must remove more CO_2 from the atmosphere than is released by the additional energy required for its capture and storage. In a straight comparison with an efficient, conventional power plant, a



CCS technology: schematic of CO_2 storage facilities

CCS power plant is not competitive. Moreover, legal issues and public acceptance of CCS technology still have to be clarified. Long-term risk studies and insurance concepts regarding the impermeability of storage facilities and potential leaks are currently under discussion. It is doubtful whether the critical mass required to implement these complex, expensive technologies can be achieved globally, and particularly, whether emerging countries with soaring energy demands and rapid economic growth are prepared to pay the extra price. If, however, only certain regions create the framework for CCS technology by taking measures to combat climate change, the resulting rise in energy prices will jeopardise the competitiveness of their own domestic, energy-intensive industries. Furthermore, the predictable increase in consumption of primary energy will further limit the availability of fossil fuels, rendering them even more expensive.

Only a second-choice

For the chemical industry, CO_2 storage merely represents a second-choice. Wherever possible, CO_2 should not be stored as "waste" but used as a chemical building block for the production of high-quality products, e.g. polymers. Chemical utilisation creates value. Admittedly, the chemical industry can only make a minor direct contribution towards reducing the overall amount of CO_2 emissions: according to current estimates, it could convert at most 1% of global CO_2 emissions into chemical products and around 10% into fuel. Furthermore, chemical utilisation of CO_2 as a building block for chemical synthesis has to stand the test of criteria like energy and CO_2 balances of the process, generated added value, process alternatives and product properties. If these criteria are met, the production of high-value products can make a process economically self-supporting (in contrast to all pure storage strategies). Thus, chemical utilisation can contribute to the cost effectiveness of an overall strategy for CO_2 management.

As a result of the debatte on CO_2 utilisation versus storage the Ministry of Education and Research has recently launched a funding programme entiteled "Technologies for Sustainability and Climate Protection – Chemical Processes and Use of CO_2". This €100 million funding initiative fosters the use of CO_2 as a carbon component for chemical products. In the framework of a dedicated coordination project (CO2NET), DECHEMA took over the scientific coordination of the funding programme to enable synergies between the different projects. More information will soon be available under www.ChemieundCO2.de. ■

The position paper "Utilisation and Storage of CO_2" is available for download on:
http://www.dechema.de/dechema_media/Downloads/Positionspapiere/Positionspapier_co2_englisch.pdf

Late last year NAMUR hosted its first Conference in China.

NAMUR *comes to* China

NAMUR – the international user association of automation technology in process industries – was founded in 1949 in Leverkusen, Germany. Since then, NAMUR has fostered the experience exchange among users of automation technology in the process industries and has promoted the interest of its member companies. In the past 60 years, all NAMUR activities have been mainly focused on Germany and neighboring countries, although the association had also significant international influence.

End of 2008, NAMUR decided to actively extend its activities to the Asian region. Many NAMUR member companies have established production facilities in this increasingly important region or are offering their engineering services there.

As a start for the activities in Asia, NAMUR hosted its first Conference in China on the 19 and 20 November 2009 in Shanghai. The motto of this Conference was "NAMUR comes to China". It was meant as the starting point for an exchange of experiences between the users of automation technologies familiar with the specific overall conditions in the Chinese economic area.

The Conference was sponsored by Endress+Hauser which operates its own production and distribution in China and also made valuable contributions to the contents of the Conference.

"NAMUR comes to China" turned out to be a very successful event. With 88 participants, a lucky number in China, it exceeded all expectations of the organizing committee. Not only the number of participants was impressive: The Conference was also distinguished by extremely interesting contributions and open discussions that demonstrated the substantial interest of participants in an exchange of experience with colleagues. Both the presentations by employees of user companies and the discussions showed a high degree of application orientation.

One purpose of the conference was the identification of topics out of the "NAMUR-portfolio" with great potential for regular activities in working groups. The results of this survey formed the basis for the decision to establish several NAMUR-workgroups in China and thus lend structure to the exchange of experience. The main areas of interest in China and therefore the subject for the first workgroups are:

- Project Planning and Construction
- Maintenance
- DCS-Engineering
- Plant Safety
- Energy Saving
- Computer Aided Engineering (CAE)
- Explosion Protection

The activities will initially be hosted by subsidiaries of NAMUR member companies. However, the ultimate objective is to get the Chinese business community involved in this exchange of experience. This involvement is considered to be a crucial factor for the success of all NAMUR activities in China.

Following the enormous success of "NAMUR comes to China", a NAMUR conference will also be held in China in November 2010. ■

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NAMUR Core Team China
Bayer Technology Services Asia / Director of Technology Solutions

Dr. Wolfgang Morr
NAMUR General Manager
Bayer Technology Services

The „3rd International Advanced Materials (Chengdu) Summit" from May 6–7, 2010 in Chengdu, PR China, brings together researchers and users of advanced materials from Europe, China and many other regions of the world.

3rd International Advanced Materials (Chengdu) Summit

Over the past decade, China's advanced materials industry has developed rapidly. The industry has grown both in terms of scale and diversification. Today China's materials market is the second largest in the world after the United States. The question that comes up now is where the next steps should lead, especially in the context of the Chinese Twelfth Five-Year Plan?

The goals of the forum are the infomation on and promotion of Chinese advanced materials, new technologies and their application in the process industries, the exchange of ideas and experiences in this field and the opportunity to build partnerships between China and other countries. The organizers are China National Chemical Corporation – ChemChina, Chengdu Municipal People's Government, Deutsche Bank and DECHEMA.

Conference topics include the Chinese Twelfth Five-Year Plan, New Energy Materials, Biological Advanced Materials and Frontier Advanced Materials in R&D and application. Invited speakers include Gu Xiulian and Cheng Siwei who are both members of the Standing Committee of the People's Congress of China, renowned scientists from the Chinese Academy of Science and the most important universities of the People's Republic, government officials, representatives of Chinese manufacturers and of multinational companies. The conference starts on May 6th with the plenary reports. On May 7th, three parallel sessions are held covering Energy Materials, Biological Materials and Frontier Materials. Additionally, on May 8th there is the opportunity for an on-site visit at Chengdu Industrial Park.

The 2010 summit is the third event in a successful series that is supported by the National Development and Reform Commission, the Ministry of Science and Technology P.R.C., China Petroleum and the Chemical Industry Association and other ministries and industry organizations.

For further information and registration:
http://iams.chemevent.com.cn/english

Speaking up early on

New DECHEMA Chief Executive Dr. Kurt Wagemann intends to take a more interdisciplinary approach to the huge issues currently facing us and to get DECHEMA involved in the public debate at a far earlier stage in order to ensure that objectivity and a balanced view are maintained.

Dr. Wagemann, you took over as CEO of DECHEMA at the beginning of the year. What will be the emphasis during the initial phase: continuity or rapid change?

DR. WAGEMANN

We started the year 2010 with a new corporate design, and this may have created the impression that everything is about to change. That will not be the case. After all, DECHEMA has been extremely successful in recent years. However several trends have emerged over the past years which I would like to reinforce. In my previous role at DECHEMA, I always attempted to prevent the creation of barriers between the different organizations. We will only continue to be successful if we work more closely with other organizations, including those outside of DECHEMA and VDI, the two supporting organizations of ProcessNet. The interaction between the Biotechnology Section and the ProcessNet organization is a good example.

Does this imply greater integration with other associations?

DR. WAGEMANN

No. The integration of DECHEMA and VDI-GVC in the joint initiative ProcessNet was long overdue. We took the decisive step, which was admittedly very far-reaching, three years ago. That does not, however, have to be the model for all forms of future cooperation. We will undoubtedly work together with other associations on an interdisciplinary basis because, on many issues, especially the mega issues of energy supply, raw material supply and climate protection, there is no realistic alternative to an interdisciplinary approach.

Will these issues be the main focus of DECHEMA's activities in the future?

DR. WAGEMANN

Yes, absolutely. In recent years, we have begun to broaden our horizon and address these core issues at a very early stage, and we have also made our presence felt in the political arena. For a long time, the energy debate was dominated by the companies that supply energy and power. Once we entered the debate, public perception began to change, particularly regarding the immense importance of the chemical industry in this area. There are a lot of activities that DECHEMA and its partners do to help make the public debate more objective and more visible to the public eye.

If you are referring to policy papers issued by DECHEMA and its partner organizations, are you genuinely satisfied with the influence that these papers have on public policy?

DR. WAGEMANN

You should never really be fully satisfied. In terms of our influence on research policy, I am very satisfied at the moment. Our voice is heard, and we have an opportunity to explain our position at discussions and talks on energy-efficient systems technology, the role of carbon dioxide in the materials cycle and the use of new solvents to reduce emissions that play a

role in climate change. Sometimes we express our skepticism. Algae biotechnology is a good example. We make a clear distinction between utilization in the materials cycle, which has immense potential, and the worldwide hype about producing biodiesel from algae which we believe is not viable from an economic or an energy standpoint.

Process technology continues to expand into other areas. Is the same true for DECHEMA?

DR. WAGEMANN

That assessment is correct, and in the years to come one of our challenges will undoubtedly be to increase the level of cooperation across technical and industrial boundaries.

In what areas will DECHEMA have to change or adapt?

DR. WAGEMANN

Besides the megatrends I have already mentioned, other issues are coming to the forefront which we cannot afford to ignore. On the contrary, it is important to position ourselves early on, even if our first impression is that something has no sound basis and will lead us nowhere.

How will you achieve faster positioning?

DR. WAGEMANN

Seminars play a major role at DECHEMA, and that is something which is often not fully appreciated. They are a source of information to our own community. They also give us an opportunity to inject current issues into the public debate right away. In addition to the seminars, there is a series of expert discussions that are not open to the public, where a number of different viewpoints are shared. This is a distinctive feature of DECHEMA.

The mega issues we have been talking about are relevant worldwide. Will they be major themes at AchemAsia in Beijing this June?

DR. WAGEMANN

The themes will be largely the same as at ACHEMA 2009. The topics have been named by our Chinese partners, and there is a large coincidence with the topics discussed at ACHEMA. The same applies to our partners' contribution to the program. The overriding issues are energy efficiency, climate protection and sustainable production. At the technological level, we are talking about catalytic processes, biotechnology, pharma engineering, industrial water treatment, etc.

The economic situation in China is quite good. How many visitors are you expecting at the show?

DR. WAGEMANN

It is yet to early to make any predicition on visitors' numbers. In terms of exhibitor numbers, 2007 was a record year for AchemAsia. We had 500 exhibitors at the show. About 400 were at the event three years prior to that. We currently have 320 registrations, which leads us to believe that we will have more exhibitors than in 2004 but not quite as many as in 2007. That is a great result, given the current economic climate.

AchemAsia 2010 will be held at the National Convention Center, not at the old exhibition grounds. Is there any special reason for this?

DR. WAGEMANN

We had been at the old exhibitions grounds since the first AchemAsia in 1989, but there has been a lack of further development there. In the run-up to 2010, we had two alternatives: the new exhibition grounds near the airport and the former Olympic Games press center which has been converted into a Convention Center complex. We looked at the facilities several times, and from today's vantage point we are happy that we decided to stage the event at the National Convention Center. The site has excellent transportation links and it is virtually in the center of Beijing. The halls are well equipped and they are very close to the lecture rooms. The exhibition facilities are absolutely world-class, and our exhibitors will have an excellent environment to work in.

Dr. Wagemann, thank you for taking the time to speak with us.

DECHEMA: New look reflects dynamic thrust and openness.

Big changes

At the beginning of 2010, big changes have taken place at DECHEMA (Society for Chemical Engineering and Biotechnology), who organizes ACHEMA and AchemAsia: Dr. Hans Jürgen Wernicke took over as Chairman of the scientific society. Dr. Wernicke is Deputy Chairman of the Süd-Chemie AG in Munich and has been a member of DECHEMA's board since 2006. Dr. Kurt Wagemann succeeded Prof. Dr. Gerhard Kreysa as Executive Director. He has been a member of the scientific staff of DECHEMA since 1989 and Deputy Executive Officer since 2007.

Other changes are even more visible at first glance: A new corporate design has been introduced. With its new look the unequivocal commitment of DECHEMA to dynamic thrust and openness is, quite literally, writ large. "Flexibility, future-oriented planning and openness towards other disciplines have become increasingly important over the past few years, and this is clearly reflected in our new corporate image," commented Dr. Hans Jürgen Wernicke, Chairman of DECHEMA.

The Society's new look does not stop short at the new logo, but includes a new publication format and a revamped website. "DECHEMA is involved in such diverse fields as energy supply, water technology, instrumentation, control and automation technology, industrial safety, cell culture, microalgae and materials research, which address completely different target groups. That is why it is all the more important to have a consistent corporate image that is recognizable at a glance", said Dr. Kurt Wagemann, the Executive Director of DECHEMA.

Picture: DECHEMA

Dr. Hans Jürgen Wernicke (left), the new Chairman of DECHEMA, and Dr. Kurt Wagemann, the new Executive Director

DECHEMA

The reason behind the corporate design project was the wish for a consistent visual appearance, whether in print or electronic media and over all fields in which DECHEMA is involved. Besides organizing the world's leading exhibition congresses for the process industries, the scientific non-profit society offers a wide range of activities in the field of research promotion and brings together researchers and engineers from science and industry in over 100 subject-oriented panels. More than 60 congresses, workshops and colloquia per year are organized by DECHEMA, many of them uniting the international expert community on topics in chemical engineering and biotechnology.

The Society's new logo retains the combination of flask and cogwheel, however they now open into the third dimension. The flask and cogwheel traditionally symbolize cooperation between engineers, chemists and biotechnologists and have been the distinctive mark of DECHEMA since its founding in 1926. ■

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