

# EuropaBio's 2<sup>nd</sup> annual European Forum for Industrial Biotechnology 2009

★ Europe's leading industrial biotechnology event

Final Programme

[www.efibforum.com](http://www.efibforum.com)

**BOOK BY 30 JUNE 2009  
AND RECEIVE 10% OFF!**

Tuesday 20 – Thursday 22 October 2009  
SANA Lisboa Hotel, Lisbon, Portugal

Sponsors & Exhibitors



Supporting associations & media partners



Speakers



# about the forum

Dear Colleague,

Join us at Europe's leading industrial biotechnology event!

We are delighted to present the EFIB 2009 programme to you. Organised jointly by EuropaBio and IntertechPira, the event features **50 leading speakers** who will assess the prospects for industrial biotechnology and biobased products in Europe. Taking place in **Lisbon, Portugal, from 20-22 October 2009**, the **European Forum for Industrial Biotechnology 2009** will be an insightful 3 day event, with workshops, an exhibition, focused plenary sessions and three new dedicated programme tracks.

The first pre-conference seminar "**Fundamentals of Industrial Biotechnology**" will explain the basics of industrial biotechnology, including the applications of industrial biotechnology and the environmental and socio-economic benefits. This workshop is for non-specialists in industrial biotechnology. Like last year, we expect representatives from ministries, local authorities, policy makers, journalists and other stakeholders to attend. The second workshop "**Business development for industrial biotechnology**" will bring together SMEs, large businesses involved in industrial biotechnology as well as investment companies.

The conference itself will be made up of two plenary sessions. The first keynote plenary will focus on policies and end-users, and the second will discuss how sustainability can be translated into economic value. Based on recommendations from participants in EFIB 2008, 3 programme tracks will be dedicated to following key issues:

- o **Feedstock for the Biobased Economy**
- o **Policies and Regulations**
- o **Innovation** (the Innovation session will include talks on commercial and business development opportunities on day one and technical breakthroughs on the second day)

Social events at EFIB 2009 feature welcome cocktails, coffee breaks, lunches, drinks receptions, a networking dinner and a supporting exhibition (nearly sold out!) providing valuable meet-and-greet opportunities.

The programme will continue 2008's theme of bringing together all stakeholders from government, industry, academia and the financing world to work towards the successful development of a biobased economy in Europe.

We look forward to welcoming you to Lisbon in October 2009.

Yours sincerely,



Dr Dirk Carrez  
Public Policy & Industrial Biotechnology Director  
EuropaBio



Ciaran Little  
Head of Events  
IntertechPira

	Monday 19	Tuesday 20	Wednesday 21	Thursday 22	Friday 23
am	APBio's 4th Annual Biomeet	Ad-hoc Advisory Group for the Lead Market Initiative for Biobased Products	Plenary session	Feedstock track Policy track Innovative Biobased Products track	Site Visit
pm		Fundamentals seminar Business Development seminar	Feedstock track Policy track Innovation track	Plenary session	

Partner event
  Private meeting
  Included in conference fee
  Separately bookable



# what's on at the forum?

Industrial or "white" biotechnology (IB) is a new and emerging technology area entering its rapid growth stage. It is increasingly impacting the chemical sector, enabling both the conversion of renewable resources such as bacteria, moulds, sugars or vegetable oils, as well as the more efficient conversion of conventional raw materials using biotechnological processes (including biocatalysis) into a wide variety of chemical substances, many of which cannot be made directly via synthetic routes. These include fine and bulk chemicals, pharmaceuticals, bio-colorants, solvents, bio-plastics, vitamins, food additives, bio-pesticides and liquid bio-fuels such as bio-ethanol and bio-diesel. This unique conference provides an opportunity to view IB's best practices of today as well as the research, development and regulation which will shape tomorrow's greener world.

## who should attend

The European Forum for Industrial Biotechnology 2009 is designed for the entire IB supply chain and is a must attend event for:

- Strategy, Business Development, Marketing and Sales Directors from biochemicals companies and feedstocks suppliers
- Academics, Research Institutes, R&D professionals and working groups
- Policymakers, Government Officials, Regulators and Compliance Officers
- Directors of Biotechnology, Sustainability, VP's and CEO's from start-ups and SME's
- Analysts, Investors and Consultants with an interest in IB
- Buyers interested in finding new IB applications for industrial use

## reasons to attend

- ◆ Select only presentations directly relevant to you in our multi-track programme which enables you as a delegate to freely switch between talks and streams
- ◆ Network with the entire IB supply chain – established industry leaders, new entrants, SME's, academics and cutting-edge researchers, policymakers and investors
- ◆ Visit our exhibition area during conference breaks to see what's new, see some real applications and discover what's on the horizon
- ◆ Participate in two optional pre-conference workshops which are ideal forums in which to bring your questions and discuss them in an interactive learning environment
- ◆ Hear R&D updates from leading academics and research groups operating in IB – this unique forum provides a magnifying glass on global research findings
- ◆ Learn from regulators and government officials around the world how IB policy changes are shaping the industry landscape
- ◆ Understand the amazing array of feedstocks being used to create bio-based feedstocks and the commercial potential for new applications
- ◆ Hear how influential and innovative end users like Toyota plan to capitalise on IB

## Keynote highlights:

*"Industrial biotech is a field that moves very fast, with new products and technologies being created every week. The meeting in Lisbon will provide an excellent opportunity to catch up with new developments"*

**Fernando Reinach, Executive Director, VOTORANTIM NOVOS NEGOCIOS, Brazil**

*"Novozymes is the world leader in bio-innovations. Together with customers across a broad array of industries, we create tomorrow's industrial bio-solutions, which both improves our customers' business and the use of the planet's resources. During my presentation I will give you an insight to "more with less" zooming in on biofuels and share my views on the sustainable biobased society."*

**Steen Riisgaard, CEO, NOVOZYMES, Denmark**

*"I am looking forward to reviewing the latest IB market developments for the programme. Current big issues for industrial players and investors are the identification and development of key technologies for the conversion of biomass for bioenergy and biomaterial applications (e.g. conversation technologies like yeast fermentation as well as key molecules like butanol)."*

**Dr Gunter Festel, FESTEL CAPITAL, Switzerland**

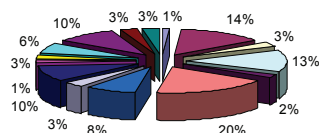
## EFIB 2008 at glance

Over 260 delegates from 23 countries from industry, research, policy making and investment fields attended the inaugural European Forum of Industrial Biotechnology, held in Brussels from 15 -17 September 2008. The event featured 50 leading speakers who assessed the prospects for industrial biotechnology in Europe.

Log onto [www.efibforum.com](http://www.efibforum.com) to see the complete list of attending companies and other statistics!

## EFIB 2008: Delegate Profile

*'This was an excellent forum - high quality speakers and participants and attendees - very timely subject matter. Thank you'*  
**Ag-West Bio Inc**



# advisory board members



Ian Hudson, President EMEA,  
*DuPont de Nemours International*,  
Switzerland



Dr Alfred Hackenberger, President Specialty  
Chemicals Research,  
*BASF*,  
Germany



Philippe Lavielle, Executive VP Business  
Development,  
*Genencor*,  
US



Dr John T Sime, Director, Bioscience for  
Business KTN,  
*University of York*,  
UK



Dr Manfred Kircher, President,  
*CLIB2021 (Evonik Industries)*,  
Germany



Anindya Mukherjee,  
Germany



Prof JH de Winde, Head of Department,  
Kluyver Centre and Department of  
Biotechnology,  
*Delft University of Technology*,  
Netherlands



Nicolas Denis, Partner,  
*McKinsey & Company*,  
Belgium



Dr Dirk Carrez, Public Policy and Industrial  
Biotechnology Director,  
*EuropaBio*,  
Belgium



Dr Ricardo Gent, Executive Director,  
*German Association of Biotechnology  
Industries*,  
Germany



Steen Riisgaard, CEO,  
*Novozymes*,  
Denmark



Dr Niklas von Weymarn, Chief Research  
Scientist,  
*VTT Technical Research Centre*,  
Finland



Dr Marcel Wubbolts, Programme Director  
White Biotechnology,  
*DSM*,  
Netherlands



Prof Joaquim Cabral, Director,  
*Institute for Biotechnology and  
Bioengineering*,  
Portugal



Dr Christophe Rupp-Dahlem, Marketing  
Development Manager,  
*Roquette Frères*,  
France



*Bruno Sommer Ferreira*, CEO  
*BioTrend SA*,  
Portugal

# Tuesday 20 October – Pre-Conference Seminars

Pre-conference seminar 1

## *Fundamentals of Industrial Biotechnology*

12.30 – 17.00



*Led by:*

Niklas von Weymar, Programme Manager – Biorefinery Theme, VTT TECHNICAL RESEARCH CENTRE OF FINLAND, Finland, and Bruno Sommer Ferreira, CEO, BioTrend, Portugal

12.30 *Registration and refreshments*

### **Part One: Industrial Biotechnology Today**

#### *What is industrial biotechnology?*

- Definition and history of industrial biotech
- Fermentation processes and use of purified enzymes
- Environmental impact of industrial biotech
- Providing alternatives to chemical processes

#### *The industrial biotechnology marketplace*

- Biotechnology as part of an industrial value chain
- Overview of current applications
- Key players and companies to watch

#### *Application areas of industrial biotechnology*

- Pulp and paper
- Energy
- Textiles
- Food and food ingredients
- Chemicals
- Biorefinery

15.00 *Afternoon refreshments*

### **Part Two: Future Potential for Industrial Biotechnology**

#### *Examining the potential of renewable materials/biomass*

- Understanding the raw materials available: starch, cellulose, vegetable oils, agricultural waste
- Current industrial uses of renewable raw materials
- New value chains from renewable raw materials and the role of biotech in them

#### *Environmental benefits and impact of renewable materials*

- Sustainable benefits of biomass usage
- Reduction of pollution and waste
- Decreasing the use of energy, raw materials and water
- How can better quality food products be produced?
- Creating new materials and biofuels from waste

17.00 *Close of workshop*

Pre-conference seminar 2

## *Business Development for Industrial Biotechnology*

12.30 – 17.00



*Led by:*

Larry Drumm, President, BIOTECHNOLOGY INTERNATIONAL CORPORATION, USA, and Martin Austin, Managing Director, TRANSFORMRX, Partner, MARRAM ADVISORS, Chairman, RSA AG, Switzerland

12.30 *Registration and refreshments*

### **Part One:**

#### *Overview: Assessing the opportunity*

- Positioning
- Identifying business potential in technology
- Choosing your strategy
- Strategic options: licensing, partnering and selling

#### *Techniques for valuing and financing your business*

- Finding targets
- Turning technology into numbers
- Key valuation tools such as net present value calculations
- Sources of capital and choosing between them

15.00 *Afternoon refreshments*

### **Part Two:**

#### *Planning for the future: exit strategies*

- Preparing for a trade sale
- Preparing for a commercial venture
- Strategy evolution
- Achieving critical mass

17.00 *Close of workshop*



## Networking drinks reception

17:30

Pre-registration drinks reception

After workshops on Tuesday, 20 October 2009

Sponsored by



# Wednesday 21 October – day 1, Plenary

## Plenary session

**08:30** *Registration and refreshments*

**08:50** Opening remarks from the Chair  
**Ian Hudson, President EMEA, DUPONT DE NEMOURS INTERNATIONAL, Switzerland**



**09:10 Industrial Biotechnology - a Brazilian perspective**  
• Current landscape for industrial biotechnology in Brazil  
• Policy and economic developments  
• Key market players  
• International collaboration opportunities  
• Future opportunities  
**Fernando Reinach, Executive Director, VOTORANTIM NOVOS NEGOCIOS, Brazil**



**09:30 The future of industrial biotechnology from an industry perspective**  
• Objectives for the industry  
• Strategies for growth  
• Challenges to address  
• Future opportunities  
**Steen Riisgaard, CEO, NOVOZYMES, Denmark**



**10:00 Bio-based products lead market - the European Commission's initiative to promote demand for products based on renewable raw material**  
• Current European policy objectives and role of the stakeholders  
• Results of the first implementation assessment and challenges for the next year  
• Future plans  
**Giulia Del Brenna, DG Enterprise, EUROPEAN COMMISSION, Belgium**



**10:30 Market forecasts and investment opportunities for industrial biotechnology**  
• Importance of industrial biotech as a key technology  
• Development of industrial biotech markets  
• Applications by industrial sector and region  
• Attractiveness for investors and investment opportunities  
• Success factors and hurdles for investments  
**Dr Gunter Festel, FESTEL CAPITAL, Switzerland**



**11:00** *Refreshment and networking break*

**11:30 Expectation for bio-based polymers**  
• Overview of opportunities and drivers in the automotive sector  
• Current and future use of IB  
• Challenges and technical requirements  
• Industry wish list  
**Mr Yusuke Umetani, General Manager – Material Engineering Division, TOYOTA MOTOR EUROPE, Belgium, and Mr Kaoru Inoue, Project Manager, TOYOTA MOTOR CORPORATION, Japan**



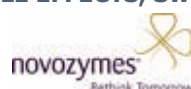
**12:00 IB applications in the pulp and paper industry**  
• Overview of opportunities and drivers in the pulp and paper sector  
• Current and future use of IB  
• Challenges and technical requirements  
**Dr Markku Karlsson, Senior Vice President – Technology, UPM KYMMENE, Finland, and Marco Mensink, Energy and Environment Director, CEPI (Confederation of European Paper Industries), Belgium**



**12:30 IB applications in the textiles industry**  
• Overview of opportunities and drivers in the textiles sector  
• Current and future use of IB  
• Challenges and technical requirements  
• Industry wish list  
**Lode Vermeersch, Head Project Management Group Pretreatment and FWA, HUNTSMAN TEXTILE EFFECTS, Switzerland**



**13:00** *Lunch sponsored by*



*will be served for all speakers and delegates*

## Feedstock Track

Renewable raw material for biobased products and the future CAP

Introduction from the Chair

**Willy De Greef, Secretary General, EUROPABIO, Belgium**

**14:40**

### ***Biomass – the EU policy perspective***

- Potential of supply from agriculture and forests
- Supply-side and demand-oriented policy elements:
  - Common Agricultural Policy
  - Forest Action Plan
  - Energy Policy
  - Challenges and chances

**Andreas Pilzecker, Policy Officer, Directorate-General for Agriculture and Rural Development, EUROPEAN COMMISSION, Belgium**

**15:00**

### ***Bringing plant potential to life***

- How agronomy can positively contribute to specific applications like biofuels
- How biotech can be applied in order to improve sustainability of crops applied for bio-energy purposes
- What does the future of biofuels look like?

**Dimitri Pauwels, Global Head of Biofuels, SYNGENTA, Switzerland**

**15:20**

### ***Bioindustry feedstock evolution: from a fermentation feedstock supply point-of-view***

- Supply and demand evolution: major changes to raw material supply and demand
- An analysis of regulatory challenges, substitute products and industry competitiveness
- A geographical perspective of feedstock: Europe versus Rest of the World
- Topics for discussion

**Akin Ozkutan, BioIndustrial Segment Leader, CARGILL, Belgium AAF (European Starch Industry Association) Green Chemistry Working Group  
On behalf of AAF Member of European Union Bio-based Products Lead Market Initiative Advisory Group**

**15:40 Refreshment and networking break**

**16:00**

### ***The importance of forest-biomass for the future biorefinery industry and the importance of biorefineries for the future forest-based industries***

- Forest-based biomass availability
- Forest-based biomass particularities
- Key drivers for the forest-based sector
- Collaborative initiatives in biorefineries
- Future outlook

**Mr Johan Elnert, FTP Management Group Member, FOREST-BASED SECTOR TECHNOLOGY PLATFORM, Belgium**

**16:20**

### ***Discussing uncertainties in the sustainability assessment of biomass production***

- Causes of uncertainties related to the environmental assessment of biofuels for transport
- The different results of studies on feedstock availability and the demand of biomass for chemicals for Europe
- The gap between research experience and implementation results for some energy crops
- Recommendations in the field of research and sustainability certification

**Jean-Francois Dallemand, Joint Research Centre - European Commission, INSTITUTE FOR ENERGY RENEWABLE ENERGY UNIT, Italy, and Elbersen Wolter WAGENINGEN UR, UK**

**16:40 Panel Debate**

**17.30**

**Drinks reception**

All speakers and delegates are invited to a relaxed and informal

## Policy Track

Giving a boost to biobased products

Introduction from the Chair

**Tomas Jonsson, Biotechnology Policy Desk Officer, HM GOVERNMENT, UK**

**14:40**

### ***UK industrial biotechnology policy***

- The importance of IB to UK government
- Working with stakeholders to identify barriers to growth
- Driving change: Industrial Biotechnology Lead
- Delivering change: de-risking access to new products
- Accelerating innovation and knowledge transfer
- Enabling change
- Building the skills base
- Creating a supportive public and business environment

**Liz Surkovic, Director Bioscience Unit, Department for Business, Innovation and Skills, HM GOVERNMENT, UK**

**15:00**

### ***Industrial biotechnology policy in North Rhine-Westphalia***

- Biotech features of the largest German federal state
- Aspects of its governmental and private sector
- Industrial biotech pre-requisites and highlights
- Significance of the industrial environment, in particular

**Dr Bernward Garthoff, Clustermanager, BIOWESTPHALIA, Rhine-Westphalia), Germany**

**15:20**

### ***Governmental policy and support of industrial biotechnology***

- Key policies:
- IB in the national sci-tech development plan
  - IB in the bio-industry development plan
  - IB in the renewable energy development plan
- Governmental support:

- IB in the national demonstration projects of high-tech
- IB in the national high-tech R&D Programme (Hightech 2020)
- IB in the national basic research Programme (DFG)

Regulations related to investment in IB

- Regulations on feedstocks for IB
- Environmental regulations
- Entry barriers/regulations for foreign investors

**Wu Zhonghui, Managing Director, CCM LIAISON, China**

**15:40 Refreshment and networking break**

**16:00**

### ***Industrial biotechnology in Australia and Malaysia***

- Attitudes and achievements to IB within Australia and Malaysia etc
- Industrial biotechnology as an opportunity for growth
- Innovation in IB: a dynamic research environment
- The key role of government and corporate partners in the commercial sector

**Dr Dianne Glenn, Principal, CORELLI CONSULTANTS, Australia**

**16:20**

### ***Building the Canadian bioeconomy: Alberta's perspective***

- Canada has remarkable amounts of biological resources
- Traditional Canadian industries are need to use biomass
- Biomass can be used to produce the molecules of the future
- Canada has made significant investments in bioeconomy
- Alberta has led the way by investing in: biocorruption, biology, metagenomics, bioconversion (example: ethanol)

**Stanford Blade, Executive Director, ALBERTA BIOECONOMY INSTITUTE, Canada**

**16:40 Panel Debate**

# Day 1, Conference Streams

	<b>Innovation Track</b> <b>Business development opportunities in IB</b>
Director, EUROPEAN COMMISSION, Belgium	Introduction from the Chair <b>Mr Anindya Mukherjee, Germany</b>
	<b>14:40</b>
and opportunities - the Industrial B-IGT) Partnership Forum products and processes er	<b><i>Innovation in industrial biotechnology: role of public-private partnerships</i></b> The contribution will discuss ten years' experience in: <ul style="list-style-type: none"><li>• Effective R&amp;D programming in public-private partnerships</li><li>• Technology transfer and IP-policies</li><li>• Bringing in VC and the financial sector</li><li>• Reach-out and international collaborations</li></ul> <b>Prof Luuk van der Wielen, Director, B-BASIC (Bio-Based Sustainable Industrial Chemistry), and Prof Han de Winde, Business Director, KLUYVER CENTRE FOR GENOMICS OF INDUSTRIAL FERMENTATION, The Netherlands</b>
Environment Department for Business Enterprise and	
	<b>15:00</b>
<b>rhine Westfalia</b> l state support activities s regard to industrial biotech <b>IO.NRW (cluster biotechnology North</b>	<b><i>Ingeo(TM) bioplastics: accelerating an industrial reality</i></b> <ul style="list-style-type: none"><li>• A robust platform of biobased polymers</li><li>• The key values of Ingeo(TM) biobased polymers</li><li>• How to accelerate marketing adoption?</li><li>• Eliminating structural barriers</li></ul> <b>Marc Verbruggen, President and CEO, NATUREWORKS, US</b>
	<b>15:20</b>
<b>ustrial biotechnology in China</b> and renewable energy law gh-tech industrialisation (863) (973)	<b><i>CLIB<sup>2021</sup>: providing technology platforms in universities accelerated by industry is the key to success in generating value in IB</i></b> <ul style="list-style-type: none"><li>• R&amp;D collaboration of three universities with partners from industry outline four technology platforms in the fields polyOmic's, genetic engineering, biocatalysis and DSP</li><li>• The CLIB<sup>2021</sup> graduate cluster: a new tool to present highly skilled junior employees</li><li>• Industry partners provide key knowledge about marked demands to help scientific experts to innovate R&amp;D</li><li>• R&amp;D projects deal with issues that cover the whole biotechnology value chain</li></ul> <b>Dr Jens Klabunde, Scientific Officer, PhD Molecular biologist, CLUSTER INDUSTRIAL BIOTECHNOLOGY CLIB<sup>2021</sup>, Germany</b>
MITED, China	
<b>working break</b>	<b>15:40 Refreshment and networking break</b>
	<b>16:00</b>
<b>the Asian region</b> alia and its neighbours in South Korea, Japan, economic growth ment rtners to deploy these innovations within the	<b><i>The development of a new and gypsum-free lactic acid process for the PLA industry</i></b> <ul style="list-style-type: none"><li>• Uhde's motivation to enter industrial biotechnology</li><li>• The landscape of lactic acid (LA) and polylactic acid (PLA)</li><li>• The set up of Uhde biotechnology</li><li>• The new LA process and Uhde's approach to the market</li></ul> <b>Dr Joachim Schulze, Head of Biotechnology Division, UHDE, Germany</b>
<b>CONSULTING, Australia</b>	
	<b>16:20</b>
<b>ia invests for the next generation</b> capital e technology to remain competitive s needed by industry and consumers economy innovation in partnership with industry nversion networks, synthetic biology, synthetic les will be provided) <b>TA AGRICULTURAL RESEARCH</b>	<b><i>The applications of biobased chemicals: opportunities in the market and how to capture them</i></b> <ul style="list-style-type: none"><li>• A general segmentation of market opportunities for biobased chemicals and the premium that can be generated in these segments</li><li>• The role of PURAC in bio-based chemicals: opportunities in the market from drop-in (1-on-1 replacements) to new processes using unique features of new chemistries</li><li>• Market, technological and time-frame issues relating to product and market development</li></ul> <b>Paul M. Cordfunke MSc, Market Manager - Chemical Industry, PURAC /CSM BIOCHEMICALS, The Netherlands</b>
	<b>16:40 Panel Debate</b>

l drinks reception to network and discuss the day's proceedings

## Feedstock Track

Renewable raw material for biobased products and the future CAP

8:45 Registration and refreshments

9:00

### Introduction from the Chair

Dr Henk J.P. Joos, Managing Director, D1 OILS PLANT SCIENCE, UK  
Superior Técnico (IST), TECHNICAL UNIVERSITY OF LISBON, Portugal

9:10

### From sugarcane to energy cane: the green revolution of the Brazilian sugarcane industry

- Brief overview of the Brazilian sugarcane industry
- Bio-products produced out of sugarcane: ethanol, bioelectricity, bioplastics, etc
- Sustainability standards for the production of sugarcane in Brazil
- The sugarcane industry and climate change mitigation

Géraldine Kutas, International Advisor, BRAZILIAN SUGARCANE INDUSTRY ASSOCIATION – UNICA, Brazil

9:30

### Roundtable on Sustainable Biofuels: developing a generic standard for sustainable biofuel production

- The contextual need for an international standard for biofuel production
- Multi-stakeholder discussions and consensus: the way to legitimacy, credibility and efficiency
- Presentation of the RSB principles and criteria, guidance, indicators and implementation
- Way forward and outlooks: certification and benchmarking

Sebastien Haye, Environmental Co-ordinator, ROUNDTABLE ON SUSTAINABLE BIOFUELS, Switzerland

9:50

### Biomass use for raw material and energy for Germany

- Current and future availability for raw materials
- Current and future demand for raw materials
- Using land and resource efficiently for future needs

Michael Carus, Managing Director, NOVA INSTITUT, Germany

10:10 Refreshment and networking break

10:30

### Micro algae and algae growing systems

- End product markets: innovation and high value applications for nutraceuticals, food and fuel
- Growing systems technology breakthroughs; design characteristics and economics

Dr Peter van den Dorpel, Chief Executive Officer, ALGAELINK, The Netherlands

10:50

### Straw availability for energy purpose at the regional level: a model at the supply area including spatial variability, environmental factors and logistics

- Mapping of raw material potential
- Modelling competition in straw use including existing uses and carbon soil sequestration
- Economic and environmental optimisation of logistics and industrial plants locations
- Extrapolation to lignocellulosic energy crops

Ghislain Gosse, Directeur de Recherches, INRA (Institut National de la Recherche Agronomique), Chairman, AGRO-TRANSFERT RESSOURCES ET TERRITOIRE, France

11:10

### Panel Debate: What will feedstock production and applications look like in five year's time?

- ◇ Dr Henk J.P. Joos, Managing Director, D1 OILS PLANT SCIENCE, UK
- ◇ Géraldine Kutas, International Advisor, BRAZILIAN SUGARCANE INDUSTRY ASSOCIATION, Brazil
- ◇ Sebastien Haye, Environmental Co-ordinator, ROUNDTABLE ON SUSTAINABLE BIOFUELS, Switzerland
- ◇ Dr Peter van den Dorpel, Chief Executive Officer, ALGAELINK, The Netherlands
- ◇ Ghislain Gosse, Directeur de Recherches, INRA, France
- ◇ Dimitri Pauwels, Global Head of Biofuels, SYNGENTA, Switzerland

## Innovation Track

Business development opportunities

8:45 Registration and refreshments

9:00

### Introduction from the Chair

Prof Joaquim Cabral, Director of the Institute for Biotechnology, Superior Técnico (IST), TECHNICAL UNIVERSITY OF LISBON, Portugal

9:10

### Integrated process, pathway and enzyme engineering of chiral amino-diols

- Construction of a de novo enzyme pathway
- A focussed enzyme engineering approach for all
- Automated process and enzyme screening
- Process scale up of chiral amino-diol production

Dr Paul A. Dalby, Senior Lecturer, UNIVERSITY OF SHEFFIELD, UK  
Evonik 2008 European Science-to-Business Award

9:30

### Innovative concepts in biorefineries

- Cellulosic bioethanol
- Biocatalysis
- Enzyme development and optimisation
- Chemicals based on renewable resources

Dr Andre Koltermann, Group Vice President, SÜD-CHEMIE, Germany

9:50

### From lignocellulose to fermentable sugars

- Which pre-treatment/hydrolysis technologies
- Advantages and drawbacks of different pre-treatment technologies
- Suitability of microorganisms to utilize biomass

Dr Johan van Groenestijn, Theme Leader, LIFE, The Netherlands

10:10 Refreshment and networking break

10:30

### Innovative refining technologies for bio-based chemicals: analysis to process design

- High value substances in the context of bio-refining
- Added value chain - the role of thermo-chemical processes in development and optimisation
- Overcoming the limits of single processing technologies
- Case study: chamomile market oriented process

Prof Dr-Ing Christian Stollberg, BRANDENBURGISCHE TECHNISCHE HOCHSCHULE COTTBUS, Germany

10:50

### Adaptable and economical bioprocess technologies for biopharmaceutical manufacture

- The opportunities for biocatalysis in fine chemicals
- Process economics and robustness is paramount
- The importance of enabling technologies
- Biocatalysis can be very adaptable to new applications
- Flexible business model accelerates commercialisation

Dr Ian Fotheringham, President, INGENZA, UK

11:10

### The integration of bio-based processes as an established fossil-based chemical and oil refinery

- Efficient and effective conversion processes for bio-based feedstocks
- Integration of processes along the value chain
- Novel process development and scale-up facilities
- Biorefinery concepts in a chemical park

Dr Markus Wolperdinger, Industrial Biotechnology, INFRALEUNA GROUP, Germany

# Day 2, Conference Streams

...s in IB  
...ments

...otechnology and Bioengineering, Instituto  
...OF LISBON, Portugal

...engineering for chiral keto- and  
...ered substrate and enantio-selectivity

...n  
...SITY COLLEGE LONDON, UK (recipient of the

...t, Corporate Research and Development,

...are under development?  
...reatment methods  
...s hydrolysates  
...Feedstock Engineering, TNO QUALITY OF

...orking break

...ne chemicals - from plant  
...finery  
...ical analysis within process selection,

...hнологies  
...ss design  
...BURG UNIVERSITY OF TECHNOLOGY

...nology for chemical and  
...ical manufacture  
...int, even over "green-ness"

...lications and new fields  
...al success in new technology  
...UK

...d renewable resources into an  
...refinery site: a "Biorefinery" case study  
...r renewable resources  
...ties for industrial biotech

...ch Activities - Leuna site,

## Innovative Biobased Products

### 8:45 Registration and refreshments

9:00 Introduction from the Chair  
Jim Stoppert, CEO, SEGETIS, US

9:10 *New market entry strategies for bio-products into chemicals & polymer markets*  
Bernard Hasson, Chief Operating Officer, SPECIALCHEM, France

9:30 *New generation of bioplastics*  
Dirk Den Ouden, Director New Business Development, AVANTIUM, The Netherlands

9:50 *The evolving ecosystem of biomaterial innovators: from conventional chemicals to synthetic biology*  
Mark Bunger, Director of Marketing, LUX RESEARCH, US

10:00 *Morning refreshments*

10:30 *Bio-succinic acid-a cornerstone for bio-based building blocks and materials*  
James Iademarco, Vice President of Bio-Based Chemicals and Fuels, DSM WHITE BIOTECHNOLOGY, The Netherlands

10:50 *TBC*  
Elspeth MacRae, Group Manager BioProduct Development, SCION, New Zealand

11:10 *Innovations from the Sea – the Next Wave*  
Meredith Lloyd Evans, Managing Director, BIOBRIDGE, UK

11:30 *Transforming the chemical industry with novel renewable materials*  
Jim Stoppert, CEO, SEGETIS, US

11:50 Panel discussion

### 11:30

#### **Providing customised enzymes for industrial applications**

- Identification of new enzymes in biodiversity
- Development of new enzyme properties by artificial evolution
- Provision of efficient enzyme production processes

**Dr Marc Struhalla, Managing Director, C-LECTA, Germany**

### 11:50

**TBC**



**12:10** Lunch sponsored by **Unlimited. DSM** will be served for all speakers and delegates

# Thursday 22 October – day 2, Plenary

## Plenary Session: Translating sustainability into economic value

**13:25** Introduction from the Chair  
**Dr Jens Riese, Principal, MCKINSEY & COMPANY, Leader, MCKINSEY'S GLOBAL BIOSYSTEMS GROUP, Germany**

**13:30 IB's role in the future of the chemicals industry**

- IB penetrating into pharma and cosmetic
- Only renewable is not enough
- Significant reduction of production costs
- Novel product performance

**Dr Thomas Haas, Head of Science-to-Business Center Biotechnology, EVONIK DEGUSSA, Germany**

**13:50 The enabling role of SME's in industrial biotechnology**

- Positioning of SME's in industrial R&D
- Lessons from the pharmaceutical industry
- How industrial biotechnology transforms a key industry
- En route to the knowledge based bio-economy

**Dr Wolfgang Aehle, Corporate Development, B.R.A.I.N., Germany**

**14:10 TBC**

**Igor Jelinski, Policy Officer - Environmental Technologies Action Plan, DG Environment, EUROPEAN COMMISSION, Belgium**

**14:30 Panel discussion: Delivering on the promise of industrial biotechnology**

**James Iademarco, Vice President of Bio-Based Chemicals and Fuels, DSM WHITE BIOTECHNOLOGY, The Netherlands**

**Marc Verbruggen, President and CEO, NATUREWORKS, US**

**Prof Lene Lange, Vice Dean of Research - Sustainable Biotechnology, Aalborg UNIVERSITY, Denmark**

**Dr Jens Riese, Principal, MCKINSEY & COMPANY, Leader, MCKINSEY'S GLOBAL BIOSYSTEMS GROUP, Germany**

**Dr Thomas Haas, Head of Science-to-Business Center Biotechnology, EVONIK DEGUSSA, Germany**

**Dr Wolfgang Aehle, Corporate Development, B.R.A.I.N., Germany**

**Representative from DG Environment, EUROPEAN COMMISSION, Belgium**

**15:20** Presentation based on the WWF biotechnology report published in September 2009

**John Kornerup Bang, Head of Globalisation Programme, WWF, Denmark**

**15:50** Closing summary from Europabio

**Dirk Carrez, Policy Director, EUROPABIO, Belgium**

**16:00** End of the conference and afternoon refreshments



### Partner event

APBio's 4th Annual BioMeet is set for Monday, 19 October 2009 at SANA Lisboa, Lisbon, Portugal.

For more information, log onto [www.apbio.pt](http://www.apbio.pt)

For programme updates and more information, log onto

[www.efibforum.com](http://www.efibforum.com)



### Site Visit

A field visit is planned on Friday 23 October 2009 to the Bio-Incubator at the Biocant Park in Cantanhede, near Coimbra. Interested delegates are encouraged to confirm their attendance with the organisers at the time of booking or during registration if they are interested in participating. Places are complimentary but limited and will be offered on a first come first serve basis. More details of this trip will follow.

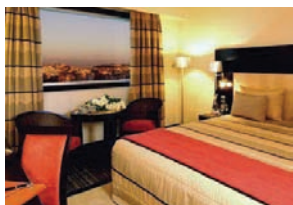


### Reception & Conference Dinner

A social event is planned for Wednesday 21 October. This will be an opportunity for delegates to network whilst enjoying some Portuguese specialities

in historical surroundings. Further details will follow.

# Venue Information



SANA Lisboa is an elegant and comfortable 4 star hotel situated in the centre of Lisbon, a few steps from Marquês de Pombal square and Avenida da Libertade avenue. The hotel is ideally located 10 minute drive from the airport, and it is easily accessible by public transportation, with good metro links nearby the hotel to take you around the City. The hotel boasts 287 rooms including 281 standard rooms, 5 suites and 1 presidential suite have been created to offer you a comfortable and quiet atmosphere.

A restaurant and a lounge bar are also available, as well a fitness room and wellness centre equipped with jacuzzi, sauna, and Turkish bath and on the first floor of the hotel, and a massage service.

## Contact details

Avenida Fontes Pereira de Melo, 8, 1069-310 Lisboa

Tel: + 351 210 064 300 Fax: + 351 210 064 301

E-mail: sanalisboa@sanahotels.com

## To book your hotel accommodation:

Delegates are responsible for organising their own travel and accommodation. A limited number of rooms have been reserved for conference delegates wishing to stay at the SANA Lisboa Hotel at a special rate of **€155** for single room or **€165** for double rooms (both including breakfast). To take advantage of this special rate, delegates must reserve their room no later than **11 September 2009**. Wherever possible, accommodation should be reserved early as rooms cannot be guaranteed and rates are subject to change after this date.

Please contact our agent Origin Events on:

Tel: +44 (0)845 301 9002

Intl tel: +44 (0) 131 445 2933

E: info@originevents.co.uk

Please quote '**IntertechPira EFIB 2009 conference**' when booking

## Things to do in Lisbon

Lisbon is a city to wander in. With its compact centre, its fresh Atlantic air, its tumbling cobbled streets and metre-wide alleys, its unhurried pace and its cafes and bars, it offers a host of incidental pleasures to anyone able to spend a few days walking around it. Built on seven hills, the capital of Portugal has plenty of vantage points from which to contemplate the distant horizons that called the Portuguese explorers. In the country's golden age, during the 16th century, it became the hub of commerce with the Far East and gold poured into Lisbon's coffers from the new west. From a city tour of Lisbon to the easily reachable Estoril coast, there is plenty of choice from shopping and sailing tours to fine wine/food and a bustling nightlife.





## EFIB 2009 exhibition

This year's exhibition will be larger than ever and will offer companies far more extensive networking opportunities to a greater audience in a larger venue.

The most innovative developers, R&D experts and senior policy makers in white biotechnology - those who work at the cutting edge of the industry, who make investments, develop technology, form alliances and take decisions that alter the international landscape of this industry, will all meet at this unparalleled event.

This expert audience is coming together in one place expressly for the benefit of meeting their colleagues from around the world, debate issues facing the industry and to view and review the products, services and solutions presented by our conference sponsors and exhibitors. The global reach and outstanding reputation of EuropaBio means the delegates will comprise a broad range of top-level industry professionals and business contacts.

**Exhibiting at the European Forum for Industrial Biotechnology 2009 will provide you with high quality leads that may translate into a direct return on investment.**

There are a number of opportunities available to sponsor and there are limited exhibition opportunities that will enable you to gain exposure to this audience. For information regarding the availability of exhibition and sponsorship opportunities please contact Caroline Potapa on +44 (0) 1372 802101 or at [caroline.potapa@pira-international.com](mailto:caroline.potapa@pira-international.com)

## EFIB 2009 Poster Exhibition

The poster area will be part of the exhibition, but will be highlighted and profiled separately. It will present late-breaking and innovative research results by research groups from around the world.

For more information on the poster exhibition or the application process, please contact Caroline Potapa on +44 (0) 1372 802101 or at [caroline.potapa@pira-international.com](mailto:caroline.potapa@pira-international.com)

## Your event organisers

**EuropaBio** is the European Association for Bioindustries. Its mission is to promote an innovative and dynamic biotechnology-based industry in Europe. For more information, please visit [www.europabio.org](http://www.europabio.org).

**IntertechPira** provides events, training, online information and publications across a wide range of topical issues affecting varied industries. Our 100% independent products are provided globally 24/7 and delivered by teams of independent experts at sites in London, UK and Portland, Maine, US across 14 key industry sectors. We specialise in providing expert quality information on: disruptive technologies and their application, research and product development, globalisation and new markets; production methods; regulatory and compliance.

**IntertechPira is becoming Pira International. For more information, log onto [www.intertechpira.com](http://www.intertechpira.com)**

## Conference information

### Conference fees

The conference fee includes entry to the conference sessions and the exhibition, full documentation, lunch and refreshments. However, fees do not include delegate travel and accommodation. All credit card orders are processed at that day's £/\$/€ exchange rate at the time the transaction goes through. Please see note in Step 3 for further details.

### Cancellations

Cancellations will be accepted and fees refunded (less 20% handling charge) only if made in writing and received ten working days before the event. Bookings cannot be cancelled nor fees refunded thereafter. If an invoice has been issued but funds have not been received, the above cancellation policy still applies. Substitutions may be made at any time, please notify the operations manager, Jo Stone on +44 (0) 1372 802044 or at [jo.stone@pira-international.com](mailto:jo.stone@pira-international.com)

### Note

IntertechPira does not accept liability for any loss of or damage to the personal effects of delegates attending the conference. IntertechPira reserves the right to cancel, defer or modify the event proceedings without prior notice.

### Visas

Delegates requiring visas should request a visa invitation letter from IntertechPira at the time of registering for the event, ensuring sufficient time is left for applications to be completed. Delegates are then responsible for contacting the relevant/appropriate embassy themselves. IntertechPira can do nothing further to assist in this process.



