

Early bird offer - book before
 July 13, 2007 and save 10%!
 see reverse for more details



Thursday, September 13
Friday, September 14
2007

Doubletree Hotel Chicago
 O'Hare Airport - Rosemont
 Chicago, IL, US

Biodegradable Plastics in Packaging Applications

Commercially viable bioplastics for sustainable packaging applications
 Two day IntertechPira conference plus half day pre-conference workshop



**With presentations
 from leading companies:**

- BioBag
- BIOTA/Planet Friendly Products
- Blue Lake Citrus Products
- Ciba Expert Services
- Clarifoil
- Earthcycle
- Environmental Packaging International
- EPI Environmental Products
- Excellent Packaging & Supply
- Gilbreth Packaging
- G.S. Polymer Consultants
- Innovia Films
- Kraft Foods Global
- Metabolix
- Michigan State University
- Microsoft
- MonoSol
- NNZ - The Packaging Network
- Naturally Iowa
- NatureWorks
- Plantic Technologies
- Whole Foods Market
- Wild Oats Natural



Including presentations from:

Media Partner:



Plus!

Don't miss the
 pre-conference workshop on
 Wednesday, September 12,
 2007:

**New Markets
 for Bioplastics**

Biodegradable Plastics

8

reasons to attend

- Understand the pivotal role of **biodegradable plastics in the sustainable packaging movement of the future**
- Hear from the entire packaging supply chain from **polymer suppliers to end users and brand owners**
- Hear exclusive case studies from leading end users such as **Kraft Foods, Microsoft, Whole Foods Market and Blue Lake Citrus Products**
- Discover the core challenges and opportunities emerging as **biodegradable plastics become commercially viable**
- See how 'going green' with **biodegradable materials could maximize your profits** and differentiate your products
- Learn how **growing concerns about the future of the environment** will affect consumer demands, industry standards and regulations for your company
- Understand which **biodegradable solutions** can work for your needs and how to best incorporate them into manufacturing
- Progress your knowledge of **natural polymers, their unique characteristics and their performance** in packaging applications

Developing effective, commercially viable, biodegradable plastics is one of the greatest challenges facing the packaging industry today.

There are growing global concerns about the depletion of non-renewable raw materials and increasing consumer pressures are reaching a fever pitch for more environmentally friendly packaging. Retailers and brand owners need to be seen to be green and biodegradable plastics could be the answer.

Sustainability is becoming a standard for the industry as consumers demand packaging that's as good for the environment as the product it's designed to protect. All the indicators suggest the price gap between traditional plastics and their biodegradable alternatives will continue to narrow, which presents an excellent opportunity for you to differentiate yourself from the fierce competition. The whole packaging supply chain can benefit by adding value to the pack through these novel materials.

Biodegradable Plastics in Packaging Applications will encapsulate the entire life cycle of biodegradable plastics. Through real life case studies and revealing presentations from key industry leaders, you'll appreciate the bigger picture, from production through to the waste stream. This valuable conference will provide you with the tools to evaluate how to capitalize on the future market in biodegradable plastic packaging and make it work for your business.

Building on IntertechPira's successful biodegradable plastics event in 2006, this is your chance in 2007 to discover the latest developments in this evolving market at **Biodegradable Plastics in Packaging Applications!**

NEW from IntertechPira! Industry Insights – original research on emerging fields

II1 – Private Label Packaging

II2 – Bioplastics in Packaging

Get up to date on the hottest new issues and technologies with our new industry insights:



- Original research
- Minimum of 5000 words
- Easy to digest and annotated with figures and diagrams
- Ideal for presentations
- Learn about a hot new industry subject or top-up your knowledge with latest developments

Download direct from www.intertechpira.com or add to your conference booking and we'll email you your Industry Insight upon receipt of payment. £75/€110/\$150 (Industry Insights are only delivered in pdf or Powerpoint format. There are no restrictions on internal corporate usage.)

Who should attend?

From material selection, conversion, technology, performance, functionality, and the design and innovation process, **Biodegradable Plastics in Packaging Applications** will give you essential information and the unique opportunity to meet industry leaders and experts throughout the packaging supply chain.

Packaging technology specialists from brand owners and retailers

- Learn how you can maximize your profits and differentiate your products by 'going green'
- Gain valuable insight into the consumers and markets shaping the future of biodegradable plastic packaging
- Understand how growing concerns about the future of the environment will affect consumer demands, technology advancements and industry standards
- Discover exciting new technologies and meet potential partners and suppliers at the forefront of renewable materials

Senior commercial, technical and development staff from packaging converters

- Profit from an in-depth review of the 'greener plastics' options available to establish what will best suit your needs
- Find out how renewable materials can match the performance of traditional packaging materials
- Discover the latest technological advances enhancing biodegradable films and plastics through improved barrier properties, pack functionality and more
- Share challenges and successes with fellow converters about biodegradable plastics pack functionality and performance

Suppliers of polymer resins, biodegradable polymers and all pack materials

- Hear directly from the end users on how to integrate their needs into your research and development
- Assess market size, potential new applications, key players and future forecasts
- Meet with existing and new customers and partners
- Identify key technological breakthroughs and understand how to leverage them

Last year's **Biodegradable Plastics in Packaging Applications** event drew some of the biggest names in the industry! **Alcoa, Beiersdorf, Boston Scientific, Dow Chemical, Georgia-Pacific Corporation, PepsiCo, Philip Morris USA, PolyCello, Reckitt Benckiser** and **Sealed Air** were among the attendees. Register for this year's event and take advantage of the unparalleled networking opportunities and an exciting and updated program!

in Packaging Applications

Pre-conference workshop

New Markets for Bioplastics

Wednesday, September 12, 2007, 1:00 – 5:00pm

Refreshments 3:00 – 3:30pm

Never before have bioplastics been so high up the political, environmental and consumer agenda. Bioplastics have immense potential, beyond the remit of packaging. This workshop will teach you the principles and concepts of bioplastics, and its drivers. You'll discuss bio feedstocks and technology conversion platforms and how they can be applied to your business functions. You'll also review current and potential new bioresins as well as their performance properties and applications in consumer electronics, engineering, automotive and industrial sectors. **New Markets for Bioplastics** is your unique opportunity to tap into this potential market and understand the bigger picture of bioplastics while learning how to benefit from this development.

On the program:

- Exploring drivers, demand and the potential for bioplastics in durable high value applications:
 - Primer on bioplastics: what they are, how to identify and quantify bio content, how to document and report on the positive environmental profile, the opportunity to obtain carbon credits
- Review the analysis of biofeedstocks in manufacturing bioplastics:
 - Conversion technologies for producing bioplastic resins
 - Processing options for bioplastic resins: molding (injection, compression), extrusion cast film, thermoforming and others
 - Performance properties and comparative analysis with existing fossil carbon based products
- Examining the potential for bioplastics in consumer electronics applications
- Bioplastics in engineering applications: automotive, industrial
- Potential of bioplastics in carpets and home textiles

Your workshop leader

Dr Ramani Narayan, Professor of Chemical and Biochemical Engineering, MICHIGAN STATE UNIVERSITY, US



Dr Narayan is Professor of Chemical and Biochemical Engineering in the Department of Chemical Engineering and Materials Science at Michigan State University and was named a University Distinguished Faculty. He has 115 referenced publications in leading journals to his credit, 18 patents, edited three books and one expert dossier in the area of bio-based polymeric materials. His research encompasses design and engineering of sustainable, biobased products, biodegradable plastics and polymers, reactive extrusion polymerization and processing, studies in polymer biodegradation and composting, Life Cycle Assessment (LCA) protocols for assessing a product's environmental footprint and biofiber: reinforced composites. He has won several awards and is also a successful entrepreneur having been responsible for commercializing several technologies.

Day one – Thursday, September 13, 2007

8:15 Registration and refreshments

Market overview: current trends and challenges for biodegradable plastic packaging

9:00 Opening remarks from the chair
Growth and development in the bioplastics market

- Market developments and policies globally and in North America
- Pinpointing definitions and consumer perceptions
- Drivers and barriers
- Future outlook for commercializing bioplastics for packaging applications
- Key challenges for the biodegradable plastic packaging industry

Catherine Goodall, Project Director, EPI – ENVIRONMENTAL PACKAGING INTERNATIONAL, US

9:35 **Retailer perspective on biodegradable plastics**

- Exploring the benefits for retailer use of bioplastics
- Assessing consumers' wants and retailers' needs
- Progress and challenges to date
- Future expectations

Jim McConnell, Manager Store Supplies and Services, WILD OATS NATURAL, US

10:10 **Microsoft's view on using polylactic acid (PLA) polymers in packaging applications**

- Performance requirements
- Renewability and environmental/other performance
- Development targets and outcomes
- A supply chain case study review

Scott Ballantine, Packaging Engineering Management, MICROSOFT, US and Doug Kunemmann, Commercial Manager North America, NATUREWORKS, US

10:45 Morning refreshments

11:15 **Incorporating bio-based materials into food packaging**

- Biodegradability of plastics: renewability vs environmental performance
- Meeting packaging functional requirements throughout the supply chain
- Opportunities through design
- Main development needs

Jay Edwards, Head of Sustainable Packaging, KRAFT FOODS GLOBAL, US

11:50 **Using biodegradable materials in food packaging: food contact considerations**

- Understanding current food contact legislation globally and locally
- Food contact compliance
- Future developments in EU/US/Asian food contact legislation
- Exploring FDA regulations and differences with EU

Atussa Sarvestani, Product Manager Sustainable Packaging, NNZ – THE PACKAGING NETWORK, Netherlands

12:25 Lunch will be served for speakers and delegates

Bioplastics packaging: consumer perception

1:30 Exploring the environmental impact and market acceptance of PLA bottles

- Understanding consumer acceptance of environmentally friendly packaging
- The impact of PET bottles and the controversy of PLA bottles
- Exploring reclamation options for PLA bottles in the US
- Convergence of health and environmental concerns for consumers and opportunities for brands
- Future outlook

David M Zutler, Founder, BIOTA BRANDS OF AMERICA/PLANET FRIENDLY PRODUCTS, US

2:05 Dairy producer perspective on PLA: we milk the cows and grow the bottles

- Exploring how PLA works with dairy products
- How PLA creates a niche within a niche
- When will consumers begin to ask for packaging made from renewable resources?
- What will the cost comparison be between corn and petroleum based bottles?
- Where does PLA make the most difference to consumers?

Bill Horner, President, NATURALLY IOWA, US

2:40 It isn't easy going green: PLA beverage packaging concept to consumer

- Building the supply chain team
- Operational and financial challenges related to PLA
- Marketing PLA packaging to consumers

Wade J Groetsch, President, BLUE LAKE CITRUS PRODUCTS, US

3:15 Afternoon refreshments

3:35 Practical considerations for using biodegradable packaging in consumer products

- Performance requirements for consumer products
- Consumers' and retailers' perceptions of biodegradable plastics
- Evaluating new pack applications and technology advancements
- Successes and challenges to date

Dr Frank Glatz, Innovation Manager, PLANTIC TECHNOLOGIES, Australia

4:10 Compostable packaging through the retail chain: implementation of renewable cellulose packaging for fresh produce

- Key drivers for compostable packaging: consumer and retailer perception
- Exploring materials and applications employed from around the world
- The use of palm fiber trays used for packaging of fresh produce
- Biodegradable test and certification process: exploring key elements
- Methods of composting:
 - Product certification
 - Principal material families
 - Limitations of biodegradable packaging today
 - Achieving barrier properties without compromising biodegradation

Malcolm Cohn, Market Manager Americas, INNOVIA FILMS, US and Shannon Boase, President and Founder, EARTHCYCLE, Canada

5:10 Closing remarks from the chair

5:20 Drinks reception
All speakers and delegates are invited to a relaxed and informal drinks reception to network and discuss the day's proceedings

8:00 Registration and refreshments

8:30 Opening remarks from the chair
Dr Ramani Narayan, Professor of Chemical and Biochemical Engineering, MICHIGAN STATE UNIVERSITY, US

Materials for biodegradable plastics

8:40 Sourcing sustainable materials and building a supply relationship

- Selecting suppliers for renewable packaging products
- Understanding retailer's needs and requirements
- Choosing between natural polymers and traditional materials
 - view on PLA
- Experience to date: challenges and successes
- Addressing customer expectations

Fabian DeGarbo, Green Mission Specialist, WHOLE FOODS MARKET, US

9:15 Material selection process: searching for the renewable packaging material of choice

- Exploring company objectives and drivers for biodegradable packaging
- Examining the decision making factors when choosing renewable packaging materials
- Can there ever be a sustainable pack? Exploring the way to achieve this

Steven Levine, Founder and Director, EXCELLENT PACKAGING & SUPPLY, US

9:50 Exploring renewable plastics: future outlook for bioplastics

- Anticipating a switch from traditional to natural plastics
- Evaluating what applications are feasible for natural plastics
- Commercial viability and timescale for packaging applications
- Challenges for eco-materials

Debra Darby, Brand Director, METABOLIX, US

10:25 Morning refreshments

10:45 Cellulose acetate films for fresh produce packaging and labeling

- The advantage of a large and inexpensive natural supply base
- Packaging industry benefits from inherent acetate film properties
- Using biodegradable films for label stock
- Lessons learnt from recent implementations

Kevin Parker, Technical Service Executive, CLARIFOIL, UK

11:20 New advances in water soluble films

- Exploring new applications for biobased packaging
- Biodegradable polyvinyl alcohol (PVOH) films
- PVOH blends with starch and other polymers
- Recycling and repulpable applications
- Flushable hygiene applications

Thomas Yogan, Director Innovation Projects, MONOSOL, US

12:05 Lunch will be served for speakers and delegates

1:15 Bioplastics in the label market: utilizing PLA for shrink sleeves and labels

- Producing PLA shrink labels made from biodegradable corn based resin
- Identifying driving forces and benefits of shrink sleeves and pressure sensitive labels
- Understanding challenges, application issues and market acceptance
- Future bioplastics developments for the label market

Theresa Sykes, Product Development Manager, GILBRETH PACKAGING, US

1:50 Oxo-biodegradable: a biodegradable alternative

- Allowing petrochemical based packaging to degrade and ultimately biodegrade
- A first step solution to greener packaging: a pragmatic approach
- Timescale and commercial implementation

Dr Graham Swift, Director, G.S. POLYMER CONSULTANTS, US and Radu Baci, Vice President Manufacturing and R&D, EPI ENVIRONMENTAL PRODUCTS, US

End of life and environmental considerations for biodegradable plastics

2:25 Life cycle analysis (LCA) of bioplastic materials: assessing the environmental impact of carrier bags and food trays

- Assessing drivers and current role of LCA of bioplastic pack materials
- Understanding the differences between life sustainability and LCA
- Lessons learnt from two UK environment funded LCAs:
 - Retail chain carrier bags
 - Food trays
- Comparing biopolymer vs traditional options

Gary Parker, Sustainability Director, CIBA EXPERT SERVICES, UK

3:00 Utilizing compostable bags in the collection of residential food and yard waste

- Certified compostable plastics: what are they?
- Evaluating the max air collection system
- Communities using compostable bags/history

David J Williams, President, BIOBAG, US

3:35 Closing remarks from the chair

3:45 End of conference

Exhibition and sponsorship opportunities

This conference will be the best opportunity in 2007 to showcase your latest plastics and packaging technology, service or knowledge. To position yourself as an industry leader, contact: John Buss on +1 207 781 9610 or john.buss@pira-international.com to discuss a tailored exhibition or sponsorship package to suit your budget and marketing agenda.

Your event organizer

IntertechPira provides events, training, online information and publications across a wide range of zeitgeist issues and disruptive technologies affecting industry. Our 100% independent products are provided globally 24/7 and delivered by teams of independent experts at sites in Portland, US and London, UK through 20 specialized industrial platforms. Our core competencies are information on: research and product development, globalization and new markets; production methods; regulatory and compliance.

Publications in the spotlight

Biodegradability in Plastics Packaging

Retailers and brand owners are under pressure to deliver healthy, safe and environmentally friendly products. Being 'green' is an image worth cultivating, providing potential marketing benefits in the minds of consumers. But users of biodegradable packaging still demand high performance, shelf impact, barrier properties and strength and it is here that vital new technologies are being developed. This study examines the technologies involved in producing biodegradable packaging, analyzing relative merits across the range of polymers. It also considers different applications and cost/legislative drivers to increased environmental acceptability.



\$550/£295/€440

Biopack news

Get all the latest biodegradable packaging industry news sent to you every two weeks. Our team of journalists investigate the latest developments in materials technology, production and company activity to bring you **Biopack news**. Every story is guaranteed to be exclusive – if you read it anywhere else, you get your money back! Keep ahead of your competitors and find out what they're up to by subscribing to this vital publication.



\$1440/£800/€1120 per 12 month subscription (26 issues)

Biopack e-journal

This monthly journal brings you up to date on the issues affecting the biodegradable packaging industry. Each issue consists of three technical articles which focus on key areas of development whether it be materials, regulatory, primary market data and forecasts, or brand owner/supplier profiles. These in-depth consultancy-level insights can be used to help your business develop both strategically and technically.



\$709/£399/€579 per 12 month subscription (12 issues)

SPECIAL OFFER – 10% off

Purchase any of the titles mentioned above and receive an additional **10% off!** To take advantage of the discount, please contact Denise Davidson on T: +44 (0)1372 802080 or denise.davidson@pira-international.com quoting the '**Biodegradable Plastics Packaging Applications'** conference.

Conference information



Venue

Business travelers and convention attendees will appreciate the hotel's full service business center, covered convention center skywalk, 13,500 square feet of flexible meeting space, high-tech presentation and video

conferencing capabilities and superb catering options. When meetings are over, enjoy sporting events, concerts, Broadway shows, special events and world-class entertainers at the nearby Allstate Arena or the Rosemont Theatre, home of the Chicagoland Pops. The Doubletree Hotel's excellent Rosemont location is easily accessible from I-90 and I-294, with all the attractions of downtown Chicago only 15 miles away via interstate or train.

Accommodation

Delegates are responsible for organizing their own travel and accommodation. A limited number of rooms have been reserved for conference delegates wishing to stay at the Doubletree Hotel Chicago O'Hare Airport – Rosemont at a reduced rate of **\$189** per night. To take advantage of this special rate, delegates must reserve their room no later than **August 21**. Wherever possible accommodation should be reserved early as rooms cannot be guaranteed and rates are subject to change after this date. To book your accommodation, please contact the hotel directly on 847-292-9100 (Please state you're attending IntertechPira's **Biodegradable Plastics in Packaging Applications** conference to get the preferential rate.)

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 NOTE:** Credit card details will be necessary if your booking is made less than 10 days prior to the start of the conference, or if your invoice remains unpaid at the start of the event.

Cancellations

Cancellations will be accepted and fees will be refunded (less 20% handling charge) only if made in writing and received ten working days before the event. Bookings cannot be cancelled or fees refunded thereafter. Substitutions may be made at any time, please notify Chandra Leister

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. If you have sent a booking to us but have not received joining instructions at least one week prior to the event, please contact the conference coordinator, Chandra Leister, urgently.

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 embassy themselves. IntertechPira can do nothing further to assist in this process.

For further information on the conference please contact:

Booking Inquiries:	John Buss T: +1 207 781 9610 F: +1 207 781 2150 E: john.buss@pira-international.com
Conference Producer:	Henrietta Bean T: +44 (0)1372 802055 E: henrietta.bean@pira-international.com
Conference Coordinator:	Chandra Leister T: +1 207 781 9602 F: +1 207 781 2150 E: chandra.leister@pira-international.com
Marketing and Press:	Lisa Valentine T: +1 207 781 9627 E: lisa.valentine@pira-international.com



Biodegradable Plastics in Packaging Applications



Thursday, September 13 – Friday, September 14, 2007 Doubletree Hotel Chicago O'Hare Airport – Rosemont, Chicago, IL, US

Our past conferences have given us the reputation for being the first available source for the latest in biodegradable packaging trends and solutions. Read some comments from past delegates:

'Great place to network and learn about local biopackaging, legislations, trends, drivers, and targets.'

Treofan, Biodegradable Plastics in Packaging Applications US, 2006

'Good opportunity to network with major players and stakeholders.'

Innovia Films, Biodegradable Plastics in Packaging Applications US, 2006

'I learned that the concept of sustainability is not a one up solution, but a corporate commitment'

US ProPack, Sustainability in Packaging US, 2006



IntertechPira
19 Northbrook Drive
Portland, ME 04105, US

For further information visit www.intertechpira.com

Conference registration form

Biodegradable Plastics in Packaging Applications Two day IntertechPira conference, Thursday, September 13 – Friday, September 14, 2007
Pre-conference workshop: **New Markets for Bioplastics** Wednesday, September 12, 2007 1:00 – 5:00pm

1 Your details

Prefix:.....First Name:.....Last name:.....Company name:.....Title:.....
Company business:.....Address:.....
.....
.....ZIP code:.....PO No:.....
Telephone:.....Fax:.....Email:.....

2 Event options and fees

Early bird offer!

When you book before **July 13, 2007**, you **save 10%** on the prices below

Choose your payment package:

Conference fee	\$1699	<input type="checkbox"/>
Workshop fee	\$599	<input type="checkbox"/>
Conference + workshop fee	\$1999	<input type="checkbox"/>
Academic rate*	\$349	<input type="checkbox"/>
Industry Insights – Private Label Packaging	\$150	<input type="checkbox"/>
Industry Insights – Bioplastics in Packaging	\$150	<input type="checkbox"/>
Delegate spot and tabletop display**	\$2499	<input type="checkbox"/>

* Academic rate for full-time students and academic teaching staff at universities only
** For more information on our many exhibition opportunities that can meet your business goals, please contact John Buss on +1 207 781 9610 or john.buss@pira-international.com

VAT at the prevailing rate will be charged as applicable.
Pira Reg. No. 3858209 Pira VAT No. 677 3667 81

Office use only: Accounting code: 820-07

Date received:

3 Payment method

Purchase Order No:..... VAT No:.....

Charge my credit card: American Express Visa MasterCard

PLEASE NOTE: Credit card details will be necessary if your booking is made less than 10 days prior to the start of the conference, or if your invoice remains unpaid at the start of the event.

Card no:.....Expires:

Cardholder name & address:

Email address for credit card receipt:

Check/banker's draft (made payable to Intertech-Pira) Please invoice my company

Invoices cannot be issued without receipt of a purchase order number at the time of booking.

Banker's information for credit transfer payments

US Dollar A/C: Key Bank
Swift Code (BIC): KeyB_US_33

Account No: 191424005327
ABA No: 011200608

Signature:.....Date:.....

4 How to book

US: **IntertechPira, 19 Northbrook Drive, Portland, ME 04105, US**

Europe: **IntertechPira, Cleeve Road, Leatherhead, Surrey KT22 7RU, UK**

Fax: +1 207 781 2150 / Tel: +1 207 781 9610 / www.intertechpira.com

Fax: +44 (0)1372 802243 / Tel: +44 (0)1372 802262 / www.intertechpira.com