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## Metabolix to Highlight Use of Mirel PHA Biopolymers as Performance Modifiers in PLA Applications at Innovation Takes Root 2016

CAMBRIDGE, Mass., March 22, 2016 (GLOBE NEWSWIRE) -- Metabolix, Inc. (NASDAQ:MBLX), an advanced biomaterials company focused on sustainable solutions for the plastics industry, announced today it will highlight the use of its Mirel<sup>®</sup> PHA biopolymers as performance additives for PLA at Innovation Takes Root 2016. Show attendees may visit Metabolix at Booth 108 at ITR 2016 to be held in Orlando, Florida on Wednesday, March 30 through Friday, April 1, 2016. Metabolix will further engage with the Global Ingeo Community as the lunch sponsor on Thursday, March 30, 2016.

"Innovation Takes Root represents a valuable forum to discuss with leaders in the bioplastics industry the unique attributes of our amorphous PHA (a-PHA) biopolymers as performance modifiers for PLA," said Max Senechal, Metabolix's vice president of strategy and commercial development. "When used as a performance additives at low loading levels, our Mirel amorphous PHA biopolymers improve performance and produce a balance of properties across a spectrum of PLA applications. We are encouraged by the feedback we are getting from customers exploring the performance range and market opportunities for amorphous PHA modified PLA as a new option in the landscape of sustainable materials."

"Attendees come to Innovation Takes Root from all over the world to learn, to share, and to connect," said Jim Nangeroni, Ph.D., Program Co-Chair. "Our aim is to gather together all the innovation that's occurring in the industry, and the PHA additive being featured by Metabolix is a good example of exactly what the forum is about. Metabolix's exhibit, sponsorship, and showcasing of their PHA performance additive are valuable additions. We are pleased to have Metabolix associated with Innovation Takes Root in such a positive way."

PLA (polylactic acid) is a biobased, compostable aliphatic polyester that features a high tensile modulus but low toughness. Performance modifiers typically used to improve PLA properties such as toughness often affect compostability and lower biobased carbon content. Metabolix's Mirel amorphous PHA (a-PHA, polyhydroxyalkanoate) acts as a performance modifier for PLA, improving mechanical properties, while maintaining high biobased content and industrial compostability of the material.

At its booth #108, Metabolix will showcase product samples demonstrating the use of a-PHA in PLA applications including packaging film, "clam shell" thermoform packaging containers, nonwovens, 3D printing filament and injection molded articles.

Metabolix has taken its new Mirel amorphous PHA biopolymer materials to market and is working closely with processors and brand owners in a range of applications:

- Clear packaging film: a-PHA modified PLA film is both tough and ductile, creating a clear film that provides an excellent surface for printing and messaging, and is suitable for a broad range of packaging applications.
- Sheet Extrusion and Thermoformed Packaging: Metabolix Mirel<sup>®</sup> a-PHA is a softer and more rubbery version of PHA that offers a fundamentally different performance profile from semi-crystalline forms of PHA and is ideal for thermoform applications. The use of a-PHA for PLA modification allows for creation of biobased, compostable "clam shell" thermoform containers used in food and consumer packaging.
- Fibers and Non-wovens: Mirel<sup>®</sup> a-PHA modifiers bring significant softness to PLA fibers at low loading levels which produce a soft, silky feel in woven applications. Our a-PHA modifiers can also increase the strength of high flow non-woven PLA fibers. This is ideal for developing compostable single-use hygiene and personal care products such as wipes, and in medical products such as gauzes and surgical gowns and drapes.
- 3D printing filament: Improvements to the toughness/modulus balance can be achieved through blends with our Mirel<sup>®</sup> a-PHA biopolymer and PLA for 3D printing. The modified filament prints at the same speed and temperature profile as standard PLA with an improvement in layer to layer adhesion, resulting in good quality and consistent thickness. The resulting parts will be softer and tougher than parts made with pure PLA allowing for prototyping of parts with properties more similar to actual production materials.

Injection molded articles: The addition of a-PHA to PLA enables the strength and toughness of injection molded products to be increased substantially to produce high biocontent parts. The addition of a-PHA to PLA can be applied to various mold geometries and physical properties can be further optimized with the addition of mineral filler.

## **About Metabolix**

Metabolix, Inc. is an innovation-driven specialty materials company focused on delivering high- performance biopolymer solutions to customers in the plastics industry. Metabolix's Mirel<sup>®</sup> biopolymers, which are derived from renewable resources, are a family of biobased performance additives and specialty resins based on PHA (polyhydroxyalkanoates). Metabolix's proprietary biotechnology platform enables the creation of specialty biopolymers for use in a broad range of applications such as construction and packaging materials, as well as industrial, consumer and personal care products.

For more information, please visit www.metabolix.com. (MBLX-G)

## Safe Harbor for Forward-Looking Statements

This press release contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The forward-looking statements in this release do not constitute guarantees of future performance. Investors are cautioned that statements in this press release which are not strictly historical statements, including, without limitation, statements regarding expectations for market demand and Metabolix product development and commercialization, constitute forward-looking statements. Such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated, including the risks and uncertainties detailed in Metabolix's filings with the Securities and Exchange Commission. Metabolix assumes no obligation to update any forward-looking information contained in this press release or with respect to the announcements described herein.

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