Launch of materials research centre to assist Australian manufacturing

Launch and embargo: 10.30 am Tuesday 26 March at Integrated Packaging, 83-85 Banbury Road, Reservoir Vic

Media contacts:
Ian Dagley,
CEO, Polymer CRC
dagley@crcp.com.au,
0418360495;
AJ Epstein
AJ@scienceinpublic.com.au
0433 339-141
More information at
http://www.crcp.com.au/

Australia's $9 billion polymers industry will be boosted by a national cooperative research initiative launched today.

The launch will feature a novel degradable plastic film that Greening Australia and the Birchip Cropping Group have shown can dramatically improve the re-establishment of native woodlands.

The initiative will bring science and industry together to develop products that meet emerging global needs in three areas - health therapies and delivery, water and food security, and low-cost solar energy - using enabling advanced polymer technology.

The Head of Division for AusIndustry, Ms Chris Butler, today formally launched a five year extension of the Cooperative Research Centre for Polymers (CRC-P) supported by funding of $14.5 million from the CRC program. With further resources provided by its participants, the CRC will conduct over $60 million of research to assist Australian manufacturing.

Polymers include plastics, and more than $9 billion worth of polymers and polymer-based products are used annually in almost all sectors of the Australian economy. The CRC-P has a strong track record of developing technologies for the plastics industry, including ceramifying polymer technology, first used in 2003 by Australia's Olex Cables in new range of fire performance cables.

In this new period of funding the CRC will help Australian manufacturers develop new products through clever chemistry and strong industry collaboration. The CRC gives companies access to researchers like the Prime Minister's Prize for Science winners – chemists Ezio Rizzardo and David Solomon – who know how to control the structure and composition of polymers so their properties are tailored to provide new and improved process and products. The products the CRC is targeting will provide Australians with products better suited to their needs. Some examples are:

- A new single injection vaccine for cattle tick that relies on a biopolymer-based delivery system. A single injection treatment is required to meet the industry standard of an annual muster of beef cattle in northern Australia.
- Polymers that will help farmers increase crop yields, including polymer-based sprays for improving water penetration in water-repellent soils. Up to thirty percent of Australia's cropping land is water-repellent and this land produces only ten percent of the nation's broad acre crops.
- Better polymer encapsulants for thin film solar cells. These are required to protect solar cells from the ingress of water and oxygen, so that they can continue to operate efficiently for at least 20 years in the harsh Australian climate.

The Polymer CRC includes five companies - Virbac Australia, BASF, BlueScope Steel, Mesoblast and Integrated Packaging - 11 universities, CSIRO and ANSTO among its 23 participants.

"The CRC will build resilience into Australian manufacturing by improving sustainability and product innovation, increasing its international competitiveness," says Ian Dagley, CEO of the Polymer CRC. "The benefits will include productivity gains, increased sales of Australian made products, high-skill high-value manufacturing jobs, reduced carbon dioxide emissions and 40 broadly trained polymer researchers," he says.

The launch was held at a Melbourne production site of Integrated Packaging, an Australian company and the largest local manufacturer of plastic stretch films. Integrated Packaging's previous research with the CRC has resulted in improved technology to control the degradation of plastic films in the environment. One application of this technology being evaluated by this company in collaboration with Greening Australia and the Birchip Cropping Group is the mechanical application of degradable film over the seeds of native trees at the time of planting. The film provides a temporary greenhouse that allows earlier planting, assists germination, improves water use efficiency and reduces pest damage. As the trees begin to grow the film breaks down. Continuing trials being conducted to evaluate the potential of this technology and refine it use have shown very encouraging results. This low cost, high value technology has the potential to allow the re-establishment of wildlife rich woodlands in challenging semi-arid and degraded lands.

Media contacts: Ian Dagley, CEO, Polymer CRC, dagley@crcp.com.au, 0418360495; AJ Epstein, AJ@scienceinpublic.com.au, 0433 339-141. More information at http://www.crcp.com.au/