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ITRI

TODAY



International Recognition for ITRI's Green Technologies

Spray-IT™ and i2R e-Paper™ Win 2011 Technology Innovation Awards

Two of ITRI's breakthrough technologies, Spray-IT and i2R e-Paper, have won the 2011 Wall Street Journal Technology Innovation Award (TIA), marking the first time Taiwan has won this award three years in a row.

ITRI's Spray-IT, the first eco-friendly, thermal spray coating for use on glass and building material to lower energy costs, and i2R e-Paper, the first electronic paper technology to provide a re-writable, re-usable and environmentally friendly print medium, received first-place prizes in the Environment and Materials and Basic Science and Technology categories over more than 600 first-class competitors worldwide.

ITRI has applied for more than 14 patents for the Spray-IT, and has applied for 17 patents for i2R e-Paper, eight of which have been granted. ITRI is in the process of licensing both technologies in Taiwan.

The 2011 award winners were honored at a ceremony and dinner in November in Redwood City, California, USA. The event was held in conjunction with the Dow Jones VentureWire FASTech Conference. [i](#)

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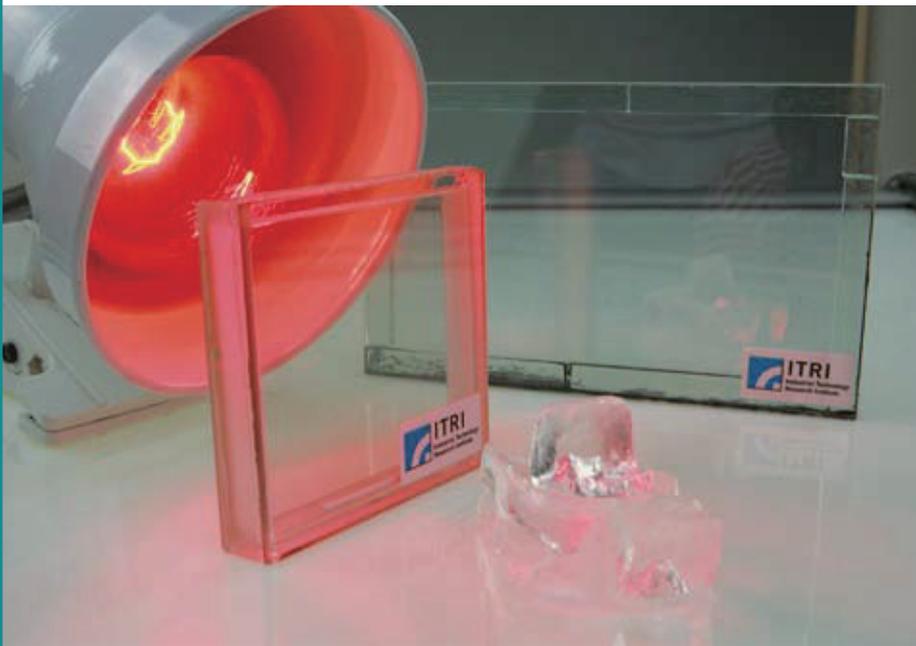
Spray-coating Thermal Insulation Technology

Spray-IT is a heat-reflecting technology for windows and other building surfaces that lets in light without straining air conditioning. Spray-IT is a clear liquid insulation spray coating that can be applied to glass windows

cannot be applied without specialized equipment in a highly controlled environment. Spray-IT can be easily applied anywhere, to existing or new structures, without harmful effects to the environment.

Dr. Tsung-Tsan Su, General Director of ITRI's Material and Chemical Research Laboratories, comments on Spray IT winning top prize, "We're glad to have the endorsement of Wall Street Journal! Spray IT is an energy conservation material ITRI takes pride in. We'll never abandon our research spirit and hope to have more diversified applications for Spray IT which is outstanding in energy conservation and insulation. We will continue to pursue our mission for environmental protection by developing more eco-friendly energy conservation materials."

"Managing energy consumption is critical for individuals and businesses, especially in warm and cool climates where a lack of proper thermal insulation causes increased energy consumption," adds Dr. Tzer-Shen Lin, Division Director of the Electronic Materials & Devices Research Group. "ITRI's Spray-IT thermal insulation coating is inexpensive to produce, easy to apply and environmentally friendly." 



Spray-IT is a heat-reflecting technology for windows and other building surfaces that lets in light without straining air conditioning.

Source:ITRI

and building tiles at one-tenth the cost of existing techniques, prompting greater adoption and reducing energy consumption.

ITRI's Spray-IT uses a tin-dioxide material that can be easily sprayed onto building surfaces and is less costly than typical silver-based films, which are expensive to produce and

i2R e-Paper

In addition to the 2011 R&D 100 Award from US R&D Magazine in October, ITRI's i2R e-Paper has won first place in the Wall Street Journal TIA Materials and Basic Science and

Technology category. i2R e-Paper is the first electronic paper technology to provide a re-writable, re-usable and environmentally friendly recyclable print medium to reduce traditional pa-

per consumption.

i2R e-Paper, whether note card or banner roll size, does not consume electricity to maintain an image. To print and change content, users simply need a thermal printer fitted with a thermal head. Heat generated from the thermal head uses minimal power consumption and interacts with the environmentally friendly composition of the e-Paper to capture an image. Re-using the i2R e-Paper is as easy as putting it back into any thermal printer device. The old image is removed and replaced with a new one – no ink, no toner and no paper are consumed. i2R e-Paper delivers a 300 dpi high-resolution image that remains crisp until users decide to re-use the e-paper. It is both eco-friendly and re-writable more than 260 times.

“To be recognized for the third year in a row by an organization as prestigious and well-respected as The Wall Street Journal is a great honor,” said Dr. John Chen, General Director of ITRI’s Display Technology Center. “I am very proud of our team’s ability



to deliver breakthrough technologies consistently and receive continued recognition for ITRI’s innovations, year after year.”

He continues, “Our focus on innovative research and the work attitude of pursuit of excellence are important factors for i2R e-Paper simultaneously winning the Wall Street Journal TIA award and the US R&D 100 Awards this year. The successive honors are also testimony to ITRI’s R&D performance and convergence with global future trends. We expect these two new technologies will become a fresh force for bringing changes in green life around the world.” [i](#)

i2R e-Paper delivers a 300 dpi high-resolution image that remains crisp until users decide to re-use the e-paper. It is both eco-friendly and re-writable more than 260 times.

Source:ITRI

WSJ Technology Innovation Awards (TIA)

Now in its 11th year, the 2011 Wall Street Journal Technology Innovation Awards received 605 applications from companies, organizations and individuals in 31 countries. A team of Journal editors and reporters reviewed the entries and forwarded 155 to an independent panel of judges from venture-capital firms, universities and other organizations and companies. From that pool, the judges chose a total of 35 winners and runners-up in 16 categories. Judges were instructed to consider the technology’s application, commercialization and market potential in addition to its innovation.

In this competition in recent years, ITRI won the top prize with its fleX-speaker in Consumer Electronics category in 2009, and in 2010 the Flex-UPD won the Overall Gold Award, while the MDPS was named Runner-up in the category of Semiconductors. [i](#)