



PRESS RELEASE

EMBARGO: 18:45, 7TH DECEMBER 2011

**EARTO AWARDS 2011 INNOVATION PRIZE TO SINTEF, TNO AND
TECNALIA**

Brussels, 7th December 2011

Tonight EARTO awarded the 2011 EARTO Innovation Prize to SINTEF (Independent Research and Technology Organisation in Norway) for the development of a **Superconducting Induction Heater**, a revolutionary energy-saving heater for the metals industry which is the first commercial application of the 1987 Nobel Prize winning high-temperature superconductor technology.

The EARTO Innovation Prize was awarded during a ceremony held at the Royal Belgian Institute of Natural Sciences in Brussels. The Prize rewards recent innovations, developed totally or in part by RTOs, which have high social and/or economic relevance, innovative originality, and demonstrated practical application and viability. The prize is awarded by an independent jury, comprising:

- **Jan A. Dekker**, President of KIVI NIRIA (Royal Dutch Society of Engineers), former President of EARTO, former President of TNO, non-executive director of several companies large and small, The Netherlands
- **Leopold Demiddeleer**, President of EIRMA, Director of Future Businesses, Solvay, Belgium
- **Satu Hassi**, Member of the European Parliament
- **Richard Hudson**, founder and publisher of Science|Business, London and Brussels
- **Allyson Reed**, Director of Strategy and Communications, Technology Strategy Board, United Kingdom

The SINTEF Superconducting Induction Heater is a major breakthrough towards establishing superconductors as a key technology for sustainable power engineering. This world-first magnetic billet heater makes the production of aluminium parts faster, cheaper, of higher quality and dramatically more energy efficient. It increases energy efficiency by 50% and pushes up productivity by 25%. SINTEF has licensed the technology to Zenergy Power for manufacture by its partner Bultmann. The first industrial user of the heater, aluminium profile manufacturer Weseralu, has confirmed the 50% reduction in energy consumption, and now customers include the world's largest aluminium extrusion company.

Two other innovations were highly commended by the Jury: **Fast Atomic Layer Deposition** developed by TNO and **HYPERSPECTRAL** developed by TECNALIA.

Fast Atomic Layer Deposition (F-ALD) increases deposition rates a hundredfold or more, enabling many applications in high-quality thin layer production. F-ALD rivals many other deposition techniques and allows a range of economically viable applications to be considerably expanded. TNO's spin-off Solaytec is now producing Fast-ALD. This technology is expected soon to be producing many hundreds of square kilometers of solar cells per annum. F-ALD technology can lead to higher efficiencies and more cost effective manufacturing.

HYPERSPECTRAL is a detection system for classifying Waste from Electrical and Electronic Equipment (WEEE) for recycling purposes. The system analyses optical characteristics of the material, obtaining a detection rate of up to 98%. HYPERSPECTRAL offers robust, real-time, highly accurate detection of recycled materials that increments their market value and reduces the recycling cost. It improves overall economic profit, complies with the EU WEEE directive, and ensures more sustainable economic development.

On the same day, EARTO has published the 2011 edition of its "**Impact Delivered**" brochure, a collection of innovations featuring EARTO members which gives a flavor of the wide range of RTO's work. They include innovations at the leading edge of science and technology, but also clever combinations and integration of existing technologies to produce new opportunities and solutions. Included in this edition are several cases of innovations produced with funding from EU Framework Programmes.

END - For further information, please contact Kadija Taffah, EARTO Association Manager, +32 (0)2 502 86 98

Notes to Editors

RTOs (Research and Technology Organisations)

RTOs have a distinct mission and a key role in the knowledge and innovation economy: they produce, integrate and transfer science and technology to help resolve the grand challenges confronting society and to exploit opportunities for new wealth creation and, hence, improved standards of living. RTOs accomplish their mission through a portfolio of activities and services:

- **monitoring social and economic developments** in order to anticipate and identify future science and technology needs;
- **strategic research** to develop new knowledge and technologies for future application;
- **collaborative and contract research** to develop technologies for specific applications and clients, and
- **knowledge transfer** to ensure the widest possible diffusion and adoption of technologies

EARTO is the European trade association of the research and technology organisations (RTOs), a non-profit organisation founded in 1999. EARTO groups over 350 RTOs, with a combined staff of 150,000, an annual turnover of €15 billion, special equipment and facilities to a value of many € billions and more than 100,000 customers from the public and private sectors annually. www.earto.eu

SINTEF is the largest independent Research and Technology Organisation in Scandinavia. It is a broadly-based, multidisciplinary research group with international top-level expertise in technology, medicine and social sciences. SINTEF has 2,100 employees from 69 different countries. Forty-six per cent of its researchers hold doctorates. The organisation's turnover in 2010 was €350 million, more than 90% of which was won in open competition for contracts from industry and the public sector. www.sintef.com

TNO is an independent innovation organisation. TNO connects people and knowledge to create innovations that sustainably boost the competitive strength of industry and the welfare of society. TNO's more than 4000 professionals work on practicable knowledge and solutions for the problems of global scarcity. TNO focuses its efforts on seven themes: Healthy Living, Industrial Innovation, Energy/Geological Survey of the Netherlands, Transport and Mobility, Built Environment, Information Society, and Safety, Defence and Security. www.TNO.nl/themes

TECNALIA is a private applied Research and Technology Organisation in Spain. Its mission is to transform knowledge into GDP and to improve people's quality of life by generating business opportunities for companies through multidisciplinary research in the areas of sustainable development, innovation and society, ICT, healthcare, industry and transport. It has 22 worldwide offices, 1,500 employees and 3,900 clients. www.tecnalia.com