ITRI was recognized as an Excellent Organization by the 2011 Solar Industry Awards (SIA) for its Green Energy Antenna Technology in fierce competition amongst 2000 entries. This is a remarkable achievement in solar energy technology R&D on a par with the major solar energy manufacturers including 3M, Oerlikon Solar, and REC. The SIA, organized by Angel Business Communications Ltd. of the UK, is one of the most prestigious awards in the energy field. The award ceremony was held in conjunction with 26th European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC) in Hamburg, Germany.

Chief editor David Ridsdale of the SIA offered high praise for ITRI’s R&D accomplishments. He noted that ITRI has a long history of honors for its multidisciplinary integration research, and that the panel of judges believes this winning technology will be beneficial to promote development of solar energy optoelectronics technology.

Dr. Cheng-Wen Wu, General Director of ITRI’s Information and Communications Research Labs, who represented ITRI to receive the award, said that ITRI has made every effort to research and develop computer and telecommunications system technology. ITRI is happy to present this excellent interdisciplinary R&D achievement which integrates the synergy of the antenna and photovoltaic solar energy panel technology to simultaneously improve the efficiency of the antenna and the solar energy panel. In the future, ITRI will continue to develop more innovative production solutions. Presently ITRI is looking for manufacturers and international cooperation partners for transfer of this
The slim high-gain antenna developed by ITRI successfully integrates antenna transmission and solar panel power storage technology. It simultaneously improves the conversion efficiency of solar energy optoelectronics and the efficiency of antenna reception and transmission. Not only has signal strength been doubled, it is a 10-fold increase in distance compared to the current international antenna technology, and can store power at the same time with lower power consumption. Furthermore, size of the antenna has shrunk by half. It will be applicable to small handheld mobile devices (PDAs, cell phones, personal GPS devices, etc.), and to medium and large station antennas. In the future, this green energy antenna technology can replace the current 3G stations (with estimated power consumption approximately 500W). It is estimated that it can provide approximately 30% supplementary power which will effectively mitigate peak hour power consumption during day time and relieve loading of the power grid.

The SIA is also jointly sponsored by the PV Group formed by major players of the solar energy optoelectronics industry, the International PV Equipment Association (IPVEA) representing the European and US photovoltaic manufacturers and suppliers, the Dutch PV solar energy industry research company SolarPlaza and UK’s Loughborough University. The judge panel of the SIA is formed by the magazine chief editor and experts from the solar optoelectronics field. Since SIA’s inception in 2009, it has selected the most innovative and influential solar energy products, creative ideas and organizations for commendation. The reputed TS Space Systems of the UK won this group award in 2010 and the leading player of the solar energy optoelectronics industry First Solar won the same award in 2009.

Chief Editor of Angel Business Communication Ltd., David Ridsdale presents the award for Excellent Organization to Dr. Cheng-Wen Wu.

Source: ITRI