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[\[Report of Honor\]\[Green Materials\] ITRI's High Safety STOBA Material Technology Wins 2009 R&D 100 Awards](#)

[Report of Honor][Green Materials] ITRI's High Safety STOBA Material Technology Wins 2009 R&D 100 Awards ([Chinese Version](#))

ITRI Latest News & Now News (2009/10/05) The newly released US R&D Magazine has announced ITRI (Industrial Technology Research Institute) won the 2009 R&D 100 Awards for its high safety STOBA lithium battery material. ITRI won this honor successively two years in a row after winning the AC-LED technology in 2008, putting it on a par with Intel, NASA and the US Argonne National Laboratory. The R&D Magazine holds that the new generation battery technology should have multiple advantages "to gain stable business opportunities in the future market and must conform to the green environmental protection material, aside from high performance." Hence, the STOBA technology was elected to be one of the 2009 R&D 100 Award winners.

General Director Jong-Min LIU of ITRI's Material and Chemical Research Laboratories (MCL) says the lithium battery is the important power source of current electronic products, yet it is the most unstable electronics component. In the past, the safer lithium battery could not be required because throughout the world there was no solution. The currently developed STOBA material can greatly enhance the safety of lithium battery. The technology has currently applied for 9 patents in 29 projects. This will make Taiwan's lithium battery industry stand out on the international arena.

Deputy General Director Alex PENG points out that STOBA is a nano-grade high molecular material added to the lithium battery to form a protective film. When the lithium battery encounters excessive heat, external impact or piercing, STOBA would immediately generate the locking effect to avoid shorting of the battery and interrupts electrical and chemical action to prevent excessive heat and ensure safety and practicality of the 3C product batteries and the electrical vehicle battery. STOBA technology has already passed the mandatory shorting and piercing experiments which is more stringent than the international safety standard. Presently, it is the only technology in the globe using innovative material that has fundamentally resolved the lithium battery safety issue.

As a result of repeated trials and efforts, the R&D team of STOBA led by Division Director of MCL Jing-Pin PAN, eventually found similar structure with features of heat-resistant, fair bonding and flexibility in the high molecular substance. After years of material improvement and testing, the predicament was overcome and all-new material was finally found. Except for effectively resolving the safety problem, the high temperature recycle life has been extended by more than 20%. Like the Buddhist practitioners, the material researchers need perseverance and anti-stress personality, making 99% efforts to win the last 1% inspiration.

Over the last couple of years, ITRI has frequently won international awards with its R&D accomplishments. Aside from elected by the R&D magazine for the R&D 100 global technology awards, recently ITRI's paper-thin flexible loudspeaker also won the Technology Innovation Awards of the Wall Street Journal in its Consumer Electronics Category. In face of critical economic recession, ITRI will continue to lead technology R&D and search new opportunities for the industry.

Further Information:

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