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The [Science of Engineered Materials™](#)

Case Western Reserve University Completes Successful Evaluation of SCI's Innovative Material for Thin Film Solar Applications

COLUMBUS, Ohio (October 2, 2017) SCI Engineered Materials, Inc. ("SCI") (SCIA: OTCQB), a global supplier and manufacturer of advanced materials for physical vapor deposition thin film applications, including thin film solar products, today announced Case Western Reserve University's (CWRU) successful evaluation of test films using SCI's Zinc Magnesium Oxide (MZO) material. These results support use of SCI's innovative material in thin film solar applications that could lead to higher efficiencies.

CWRU's evaluation involved the use of two facilities, the Materials for Opto/electronics Research and Education Center and the Swagelok Center for Surface Analysis of Materials. These resources were leveraged to sputter the MZO material into thin films and then measure the band gaps that impact the efficiency of thin film solar cells. As a result of this collaborative effort, manufacturers will have valuable data to make product decisions concerning the use of SCI's MZO material for the buffer and/or window layer of their thin film solar products. These layers work in tandem to admit light to the absorber layer of a solar cell.

Jing Yang PhD, SCI's Senior Product Development Engineer, said "We are pleased to receive CWRU's independent confirmation that SCI's MZO material has certain advantages versus other buffer materials. For CIGS applications, these include wider bandgaps and improved compatibility of band alignment with zinc oxide based transparent conducting oxide, potentially superior solar cell efficiencies plus opportunities for manufacturers to label their products Cadmium free."

Jeremy Young, Vice President of Operations, commented “We are pleased to add MZO to our portfolio of material and product offerings. It reflects SCI’s ongoing commitment to research and development of innovative solutions for our markets and growing customer base. This application enables us to reach a greater number of thin film solar manufacturers. Importantly, we are able to use existing manufacturing equipment to produce this new application. An initial order for targets utilizing MZO has been received and we are actively marketing it to current and potential customers.”

About SCI Engineered Materials, Inc.

SCI Engineered Materials is a global supplier and manufacturer of advanced materials for PVD thin film applications that works closely with end users and OEMs to develop innovative, customized solutions. Additional information is available at www.sciengineeredmaterials.com.

About Case Western Reserve University

Case Western Reserve University is one of the country's leading private research institutions. Located in Cleveland, Ohio, Case Western Reserve offers a unique combination of forward-thinking educational opportunities in an inspiring cultural setting. Case Western Reserve’s leading-edge faculty engage in teaching and research in a collaborative, hands-on environment. Case Western Reserve’s nationally recognized programs include arts and sciences, dental medicine, engineering, law, management, medicine, nursing and social work. About 5,100 undergraduate and 6,200 graduate students comprise Case Western Reserve’s student body. Visit case.edu to see how Case Western Reserve thinks beyond the possible.

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