



# **Inverted Metamorphic Cell Development**

## **Cooperative Research and Development Final Report**

**CRADA Number: CRD-05-156**

NREL Technical Contact: Mark Wanlass

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**CRADA Report**  
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In accordance with Requirements set forth in Article XI.A(3) of the CRADA document, this document is the final CRADA report, including a list of Subject Inventions, to be forwarded to the Office of Science and Technical Information as part of the commitment to the public to demonstrate results of federally funded research.

CRADA number:           CRD-05-156

CRADA Title:    Inverted Metamorphic Cell Development

Parties to the Agreement:       Emcore

Joint Work Statement Funding Table showing DOE commitment:

Estimated Costs	NREL Shared Resources
Year 1	\$       00.00
Year 2	\$       00.00
Year 3	\$       00.00
TOTALS	\$       00.00

Abstract of CRADA work: This CRADA targeted technology transfer of the inverted metamorphic multi-junction (IMM) solar cell innovation from NREL to Emcore Photovoltaics. The technology transfer was successfully completed. Additionally, NREL provided materials characterization of solar cell structures produced at Emcore.

Summary of Research Results: Mark Wanlass attended an initial meeting at Emcore in Albuquerque, NM and gave a seminar to the Emcore group describing the IMM solar cell invention and the status of work done at NREL on the IMM concept. Following the meeting, numerous teleconferences between the Emcore group and Dr. Wanlass occurred to transfer additional information. Furthermore, numerous solar cell structures produced at Emcore were sent to NREL for analysis and data on these were sent back to Emcore. As a result, Emcore has been highly successful in developing the IMM solar cell technology.

Subject Inventions listing:       None

Report Date: 2/28/12               Responsible Technical Contact at Alliance/NREL: Mark Wanlass

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