



# **Optimization of Lattice Mismatched Heteroepitaxial Layers – Equipment Only**

**Cooperative Research and  
Development Final Report**

**CRADA Number: CRD-09-331**

**NREL Technical Contact: Daniel Friedman**

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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.

**Parties to the Agreement:** South Dakota School of Mines

**CRADA Number:** CRD-09-331

**CRADA Title:** Optimization of Lattice Mismatched Heteroepitaxial Layers - Equipment Only

**Joint Work Statement Funding Table Showing DOE Commitment:**

<b>Estimated Costs</b>	<b>NREL Shared Resources</b>
Year 1	\$ 71,406.00
Year 2	\$ 5,000.00
Year 3	\$ 5,000.00
Year 4	\$ 5,000.00
Year 4	\$ 5,000.00
TOTALS	\$ 91,406.00

**Abstract of CRADA Work:**

This CRADA combines the expertise of South Dakota School of Mines and NREL to develop and characterize lattice-mismatched III-V semiconductor structures for use in high-efficiency multijunction photovoltaic devices.

**Summary of Research Results:**

Metamorphic grading structures were analyzed by electron microscopy.

**Subject Inventions Listing:**

n/a

**Report Date:**

4/18/15

**Responsible Technical Contact at Alliance/NREL:**

D. Friedman

**Name and email address of POC at company:**

Phil Ahrenkiel, [Phil.Ahrenkiel@sdsmt.edu](mailto:Phil.Ahrenkiel@sdsmt.edu)

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