

Call in April: Shakun x 3683

NEWS

**From GEORGIA TECH'S
ENGINEERING EXPERIMENT STATION**

Atlanta, Georgia 30332

3 subtasks (1st under contract)

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GEORGIA TECH DEVELOPING LARGE SCALE
THERMOELECTRIC CONVERSION SYSTEM

For Immediate Release
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ATLANTA, GA -- Omnimax, Inc., and the Georgia Institute of Technology are collaborating in the development of thermoelectric generation to produce direct current electricity from industrial waste heat.

Omnimax has developed the conceptual basis for such a system, and contracted with Tech's Engineering Experiment Station to develop a large-scale prototype.

Design of the thermopile and selection of active materials will be matched to the waste heat source and sink temperatures. A modular design concept will be the basis for the thermoelectric generator.

Georgia Tech will use its computer-aided design and materials expertise to configure the system for optimal conversion of heat to electricity. Omnimax, Inc. has identified utilities, steel and foundry industries, and glass manufacturers as initial targets for this technology.

Project director Dr. Wallace Shakun of Georgia Tech's Energy and Materials Sciences Laboratory is an authority in thermoelectric conversion technology and has had extensive experience in the design and development of thermal-mechanical

products. He and his team are in the process of evaluating alternative design concepts and reviewing waste energy parameters at various industrial locations where thermoelectric generators may be sited.

"Our preliminary analyses indicate that combining state-of-the-art fabrication techniques with modern material technology can lead to commercially attractive conversion efficiencies," Shakun says. "A product featuring non-moving equipment powered by waste heat would establish thermoelectric power generation as an extremely attractive investment in this period of rising energy costs."

Omnimax, Inc. is engaged in advancing new sciences for commercial application. It has received a notice of allowance from the U.S. Patent Office for its thermoelectric invention, and expects to obtain comparable patent protection in foreign countries.

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