

Request for Proposals

MIT Energy Initiative (MITEI) Seed Fund Program

Application deadline – July 16, 2009

The MIT Energy Initiative requests proposals for its Fall 2009 round of seed fund grants. The Initiative's Seed Fund Program supports innovative, early-stage research projects addressing energy and related environmental issues. It is envisioned that funds will be granted across the entire spectrum of energy and related environmental research areas over the next five years.

AREAS OF INTEREST

MITEI is working to address science, technology, policy, and systems design issues required to meet the global energy/environmental challenge. Interdisciplinary research project proposals are strongly encouraged. Proposals may be submitted in any area of energy related research, including environmental research related to energy production, delivery and use.

Representative areas of interest include, but are not limited to, the following:

Science and technology for a clean energy future

- renewable energy sources (wind, solar, geothermal, waves, biofuels);
- electrochemical energy storage and conversion;
- core enabling science and technology (e.g., superconducting and cryogenic components, nanotechnology and materials, transport phenomena); and
- nuclear fusion.

Improving today's energy systems

- advanced nuclear reactors and fuel cycles that address cost, safety, waste, and nonproliferation objectives;
- affordable supply of fossil-derived fuels (oil, natural gas, coal) from both conventional and unconventional sources and processes;
- key enablers such as carbon sequestration;
- thermal conversion and utilization for dramatically enhanced energy efficiency, including in industrial uses;
- enhanced reliability, robustness, and resiliency of energy delivery networks; and
- system integration in energy supply, delivery and use;
- learning from the past and understanding current public attitudes towards energy systems;
- sound economic analysis of proposed policies for energy development and greenhouse gas mitigation;
- understanding and facilitating the energy technology innovation process; and
- in-depth integrative energy and technology policy studies that draw from faculty across the campus.

Energy systems for a rapidly evolving world

- science and policy of climate change;
- advanced, energy-efficient building technologies;
- advanced transportation systems, from novel vehicle technologies and new fuels to systems design including passenger and freight networks; and
- “giga-city” design and development, particularly in the developing world.

FUNDING AVAILABLE

It is anticipated that awards will be made for \$150,000 or less, with periods of performance of up to two years. These grants will be supported with Seed Fund Program funding provided through the MITEI Founding and Sustaining Members Program. Proposals that are submitted but not funded in this round may be reconsidered for support in the next round of seed grants, approximately six months later. In the third round, MITEI was able to fund (or partially fund) twelve proposals.

KEY DATES

June 4, 2009 – RFP for seed fund proposals

July 16, 2009 – Seed fund grant application deadline

September 16, 2009 – Review meeting with MITEI Governing Board and MIT Energy Council

October 1, 2009 – Start date for seed fund projects

ELIGIBILITY

The MITEI Seed Fund Program is open to all who, at the start of funding, are MIT faculty or members of the research staff with principal investigator privileges.

APPLICATION PROCESS

Please complete the cover and budget pages, along with the body of the proposal in accordance with the attached application format. In addition, the attached Co-funding/Background IP form(s) should be submitted along with the proposal. The complete proposal package must be sent electronically as a PDF file to energyseedfunds@mit.edu by the July 16, 2009 deadline.

REVIEW AND SELECTION PROCESS

The review criteria will emphasize the importance of the scientific problem, novelty of the ideas, and potential impact of the work. How the proposed work complements ongoing energy research on campus will be considered. The promise of opportunities for long term funding to continue the research project beyond the seed fund period of performance will also be considered. The MITEI Governing Board will advise the MIT Energy Council on awards.

CONDITIONS

Project management – The PI is directly responsible for performance of the work in the proposal and should not serve as proxy for others.

Co-funding - Any anticipated external source of support for the proposed project must be declared at the time of submission. If co-funding becomes an issue during the seed fund proposal/project process, this should be discussed with MITEI leadership prior to use of such funds.

IP –If the PI has existing IP relevant to the proposed project, this must be declared at the time of submission.

Deliverables – PIs are expected to submit an interim report at the end of the first year and a final report at the end of seed fund support. In addition, PIs should send publications resulting from the seed fund award to MITEI, ATTN: Karen Gibson (kgibson@mit.edu).

Submission of a seed fund proposal constitutes acceptance of conditions and requirements herein.

Cover Page

Application for Support from the MIT Energy Initiative (MITEI) Seed Fund Program

Contact Information

Please provide the following information for **each** Principal Investigator:

Name:

Title:

Department, Division, Center and/or Laboratory:

Telephone number:

Email address:

MIT room number:

Summary Proposal Information

Title of seed fund proposal:

Requested period of performance:

(Not to exceed two years)

Requested start date: (Earliest start date October 1, 2009)

Requested end date:

Total funding requested:

(Attach budget page in appended format.)

Co-funding/Background IP:

(Attach a separate Co-funding/IP form for each PI and Co-PI.)

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Please do not exceed five pages of text.

Project Description

Describe the opportunity and approach. The project description should include the objectives for the period of work and expected significance, and the proposed activity's relation to longer-term goals of the project. Describe how this piece of work complements other work on campus.

Research Team and Collaborations

List the names and titles of members of the research team and describe their roles in the project. Collaborations are not required, but multidisciplinary projects are encouraged.

Resources and Budget

Describe the approximate resources (people, equipment, materials) required to complete the project. Funding may be requested for up to a two-year period of performance. Normal MIT overhead rates for research grants apply. Include any co-funding issues relevant to the proposal. Include budget sheet and co-funding/background IP form in the attached format.

IP Disclosure

Any IP patents held by the PI of direct relevance to the proposal should be declared at the time of submission.