MARYLAND INDUSTRIAL PARTNERSHIPS

PROGRAM DESCRIPTION AND GUIDELINES

For Proposals Due April 29, 2011

Funding for Industry/university Partnerships:
Stimulating Technical Innovation and Enterprise in Maryland

MARYLAND INDUSTRIAL PARTNERSHIPS
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INTRODUCTION

The Maryland Technology Enterprise Institute (Mtech) was established to promote technological interaction between the University of Maryland and industry. Through the activities of the MTECH, faculty and students are given the opportunity to participate in addressing industry's problems. The goal of this participation is to assist Maryland industry in remaining competitive in today's technology-dominated environment. As industry benefits from these associations, the university is likewise strengthened by working with the industrial community.

MTECH conducts ten principal programs:

- **Maryland Industrial Partnerships (MIPS)** — provides matching funds for university-based research leading to commercialization of new products and processes by Maryland companies.
- **University of Maryland Manufacturing Assistance Program (UMMAP)** — provides on-site technical assistance to companies throughout the state of Maryland.
- **Technology Advancement Program (TAP)** — operates an "incubator" for start-up technology companies, lending business and technical support.
- **Hinman CEOs** — the nation's first living-learning entrepreneurship initiative bringing students together from diverse majors to learn how to start their own businesses.
- **Biotechnology Research & Education Program (BREP)** — provides expertise in bioprocessing, education, workforce training and consulting for biotechnology companies.
- **Venture Accelerator (VA)** — mentoring for faculty and student entrepreneurs.
- **Hillman Entrepreneur Program** — an innovative educational initiative tailored to the needs of transfer students who begin their study at Prince George’s Community College and complete their bachelor's degree at the University of Maryland College Park.
- **Entrepreneurship and Innovative Program** — living-learning entrepreneurship and innovation program for freshmen and sophomores from all majors.
- **MI2** — Incubator for international, technology-based companies to successfully enter the United States market place.
- **China Research Park** — connects Maryland and Chinese companies for successful joint ventures through an exclusive array of business services, state-of-the-art facilities, and world-class resources.

This booklet explains the MIPS program in detail and provides the background material required for applying for MIPS funding. **Application packages from previous award periods are not to be used**. For additional information about MIPS, a match with a university faculty member or to request a MIPS application, see our website: [http://www.mips.umd.edu](http://www.mips.umd.edu).

**IMPORTANT CHANGES:**

1. MIPStrack will open for account registrations on **March 11, 2011**. Go to [www.mipstrack.umd.edu](http://www.mipstrack.umd.edu) to register.

2. All companies are required to provide their State Department of Assessments and Taxation (SDAT) ID number from the Maryland Department of Assessments and Taxation — see page 2, item number i-1 of the application form.

3. **All application submissions** are electronic and are due **April 29, 2011 by 5:00 pm** in the MIPStrack on-line system. However, the application must be routed through the appropriate University Contract and Grants office prior to submission. Please allow sufficient time for processing. This could take 3-5 days and in some cases up to 3 weeks. **Advanced planning is strongly recommended**.

4. MIPS has expanded its covered institutions and now includes projects from Morgan State University and St. Mary’s College.

The electronic versions **do not** require university/company/PI signatures.
ABOUT MARYLAND INDUSTRIAL PARTNERSHIPS —

Maryland Industrial Partnerships (MIPS) promotes the development and commercialization of products and processes through industry/university research partnerships. MIPS provides matching funds to help Maryland companies pay for the university research. Projects are initiated by the companies to meet their own research and development goals.

Through MIPS, Maryland firms have the opportunity to leverage their research and development funds and gain access to the creative talents and extensive research base of the University System of Maryland. MIPS matching funds are awarded on a competitive basis for projects based on proposals submitted jointly by Maryland companies and researchers from any of the 12 University System institutions.

Amount Of Awards

The maximum MIPS awards for any single project is $100,000 per year for large and small companies and $90,000 for start-up firms. (See definitions of business size, page 6.)

The Program To Date

MIPS was authorized by the State of Maryland in April, 1987. As of October, 2010, 47 rounds of awards have been completed.

Awards for October 2010

- 33 project applications
- 16 projects
- 12 new companies
- 7 new faculty
- 7 participating University System of Maryland institutions

Cumulative Awards

- 1740 applications
- 683 projects
- 461 companies
- 372 faculty
- 12 participating University System of Maryland institutions

Impact

$21B product sales based on MIPS projects to the State of Maryland
TYPES OF PROJECTS

Research and Development

The research may be in engineering, computer science, physical sciences and life sciences.

Education and Training

MIPS also supports projects designed to help a company plan and develop industrial training programs for its employees.

BENEFITS OF THE MIPS PROGRAM

The potential benefits of MIPS projects to the state, to its companies, and to the university are many:

Benefits to Maryland businesses:
- cost-effective research through university partnering;
- access to world-class research and development facilities and expertise;
- companies can select research capabilities to meet specific requirements;
- easier access and more efficient transfer of technology from university to industry;
- student participants are potential future employees;
- makes companies more competitive, domestically and internationally.

Benefits to the State of Maryland:
- self-funding economic development program
- helps create and retain jobs;
- helps to diversify and strengthen the state’s economy;
- helps to improve the state's business climate and to enhance its reputation;
- makes a more attractive environment to firms considering relocation to Maryland.

Benefits to University System of Maryland:
- provides faculty with the opportunity to perform commercially relevant research leading to new products and processes;
- helps to improve university research facilities;
- improves university academic programs to meet industry needs;
- students gain experience in industrial environments.
BEFORE YOU APPLY

HELP WITH PROPOSALS AND MATCHMAKING

We strongly suggest that you meet with a member of the MIPS staff before writing your proposal, even if you are familiar with the MIPS program. A staff member can advise you on planning a proposal and assist you with submitting the application. A preliminary review could be invaluable; for example, some applicants fail to include readily available information that might make the difference in qualifying for an award.

MIPS personnel and other professionals in the Maryland Technology Enterprise Institute (MTECH) can assist companies in finding and selecting appropriate faculty researchers for the companies' projects. The researcher and the company will jointly prepare the proposal. If a proposal is not funded, a MIPS staff member can debrief the proposal team and assist the team in making improvements for re-submittal in the next round of awards.

ELIGIBILITY FOR MIPS FUNDING

There are four basic eligibility requirements for funding under Maryland Industrial Partnerships. They are:

(1) Maryland Companies
To be eligible for a MIPS award, a company must be a Maryland business, in good standing with the state Department of Assessments and Taxation; and, it must have a manufacturing, service or research and development operations within the state or it must set up operations in Maryland within the year in which an award is received (see the section: APPLICATION REQUIREMENTS, "Out-of-State Companies"). The industrial sponsor may be a company, a group of companies, a business association or a nonprofit organization.

(2) University Participation
Each proposal must be co-authored by a faculty member from any public state institution within the University System of Maryland, Morgan State University, or St. Mary's College, and the university researcher must be the Principal Investigator (adjunct faculty members are eligible). MIPS funds will be applied only toward work performed by university researchers (MIPS funds do not go to the participating company).

(3) Technology-Based Projects
While all Maryland companies are eligible for MIPS awards, and while traditional as well as high-technology end products and processes can be addressed, the proposed research projects must deal with innovative technological or scientific concepts. These are usually in the areas of: engineering, computer science, physical sciences, environmental sciences or life sciences. MIPS does not fund non-technology-based projects such as market research.

(4) Matching Funds
Company matching funds include both "cash" paid toward the university's project budget, and "in-kind" which is the company's effort on the project. The minimum requirements are specified in detail on pages 6 and 7 in this booklet.
MIPStrack is an interactive, secure system for application submission and review for the Maryland Industrial Partnerships, an MTECH program.

(1) Introduction

MIPStrack was developed to enable easy and secure online electronic application submission and review of proposals. Project applications, company information and other pertinent information can be submitted by proposing companies and their UM faculty partners. Technical and economic reviewers will have electronic access to these applications as appropriate, and can submit their reviews electronically. MIPS staff will be able to monitor application submissions and reviews.

(2) How to enter the MIPStrack system

Go to http://www.mipstrack.umd.edu to request an account and fill out the necessary forms. The MIPS application and Projects Discipline & Suggested Reviewers Forms are web-based forms to be filled out online and can be saved as PDF’s and printed.

(3) Ready to begin submission

When you are ready to begin submitting your application, fill out the PI Information. Make sure your application packet is complete with discipline/reviewer page, SDAT ID from State Department of Assessments and Taxation, company pro formas, business plan and technical proposals as appropriate. You can submit each individually at different times, but a “complete” application must include all items. (see page 6 for a description of what documentation should be attached according to your company size).

(4) Routing

Proposals must be routed through the PI’s department and the campus Grants and Contracts Office before submitting to the MIPS Office. The Technical proposal must be uploaded before the campus administrators can approve the submittal by the PI. Please allow sufficient time for campus routing, which could take up to 3 weeks. All submissions and signatures are electronic including university signatures on page 1, company and PI signatures on page 2 or company and PI initials on page 10 (under conflict of interest).

(5) Submission

Submission is complete when the application is electronically uploaded in its entirety into MIPStrack by the deadline April 29, 2011 at 5:00 pm. Permissible file formats for each document are indicated on the proposal update page in MIPStrack. The electronic version is locked after the submission deadline and no other revisions may be submitted. MIPStrack requires Internet Explorer 6.0 or higher and is now compatible with Firefox, or MAC OS browsers.

(6) Revisions

Occasionally, after the deadline, MIPS may request that you revise certain pages of your proposal. (example: budget, company information etc.). You will be contacted directly by one of the MIPS staff with further instructions if this occurs.

(7) Suggested Reviewers

You may suggest potential technical reviewers for your proposal on the project and discipline sheet. Reviewers should be actively pursuing research in federal labs or universities, not from private industry. Reviewers should not have a conflict of interest with the proposed work. Please contact reviewers in advance to advise them that MIPS may ask for a review.
APPLICATION REQUIREMENTS

MIPS makes every effort to keep the proposal process simple for applicants. However, in order to make well informed and fair judgments in a competitive situation, the Evaluation Board will need certain basic information, including:

- Description of the proposed project;
- Faculty and student on-campus involvement;
- Company’s participation in project performance;
- Schedules and budgets;
- Company’s intentions for commercialization;
- Potential benefits to the company, the state and the university;
- Company’s matching commitment;
- Agreement to progress reporting during and after project.

Company must be in good standing in the State of Maryland

Start-up Firms: If your company is a start-up firm, you are required to submit with your application an executive summary of your business plan (8 pages maximum). The executive summary should, at a minimum, include: year established, value proposition (customer, problem, solution – and why yours is better), market (size, segmentation, growth projections, competition), company team (who, expertise, relevance, track record), and business model (how you create, deliver, and capture your value). A current financial statement (balance sheet) and a financial pro forma (income statement projection for 3 to 5 years forward) are also required. Submission of a full business plan is optional and only in addition to the executive summary and may not get read by the reviewers.

Small Firms: If your company is a small firm, enclose a product brochure or other pertinent literature about your company. If you are proposing a new product or venture that is outside of your area of experience and expertise (such as a distributor of medical instruments proposing to develop, manufacture and sell a line of home security equipment), you are required to submit a business plan summary and a financial pro forma for the contemplated new venture. See “Start-up Firm” above.

All Firms: must also provide their State Department of Assessment Taxation (SDAT) ID from the Maryland Department of Assessments and Taxation on page 2, item number i-1 of the application form. Note: This is not the company’s Federal Tax ID number.

Out-of-State Companies: An out-of-state company that does not have a substantial portion of its manufacturing or service or research and development operations in Maryland, but is planning to establish such operations in Maryland within the year in which an award is received, should write a letter advising MIPS of this intent and enclose the letter with its application. The letter should include information about the planned Maryland facilities and workforce. Any MIPS award to an out-of-state company will require the company to pre-pay both the MIPS and company portion of the award. MIPS will reimburse the company for the MIPS portion after the Maryland facility requirements have been met.

Intellectual Property: Issues of intellectual property ownership, and the handling of licensing and royalties, are addressed elsewhere in this booklet. Each proposing company must agree in advance to abide by the intellectual property model which applies to its specific situation.

Conflict of Interest: The state of Maryland has very stringent ethics standards and rules regarding conflict of interest for its employees. For this reason, each proposing company will be required to disclose any substantial ownership position in the company by an employee of the state or any other potential conflict of interest situation involving a state employee.

Insurance: Company shall maintain comprehensive and/or commercial liability and property damage insurance coverage for itself, its officers, employees and agents, in the minimum amounts as determined by MIPS and prescribed in Attachment A of contract agreement. A certificate of insurance must be delivered to MIPS before the execution of a contract agreement. For more information regarding insurance, please refer to page 7, section 8.2 of the contract agreement.
FUNDING REQUIREMENTS

The minimum requirements for industry matching funds are dependent upon the company size and type. Size categories for MIPS matching determination are established as follows:

- Large firm: more than 1000 full-time employees
- Medium firm: 100 to 1000 full-time employees
- Small firm: fewer than 100 full-time employees
- Start-up firm: see definition below

Definition of a Start-up Firm

General guidelines for start-up company qualifications are as follows:

- A new company in product development mode;
- Time in business does not exceed 4 years;
- No public stock offering;
- Annual sales do not exceed $1,000,000;
- A minimum of one full-time employee and no more than 12.

Matching Requirements

**Cash:** Matching requirements are based on the University Budget for the project. Both MIPS and the company contribute cash, the total of which equals the University Budget.

**In-kind:** Companies are required to make an in-kind contribution in addition to their cash contribution. An in-kind contribution is the company’s budget for its work on the project. This includes salaries and wages, materials and equipment, travel and other company expenses budgeted for the project.

**Large Firms:** Company cash contribution is at least 50% of the University Budget. Company’s in-kind requirement is at least equivalent to 25% of the University Budget.

**Medium Firms:** Company cash contribution is at least 50% of the University Budget. Company’s in-kind requirement is at least equivalent to 25% of the University Budget.

**Small Firms:** Company cash contribution is at least 35% of the University Budget. Company’s in-kind requirement is at least equivalent to 30% of the University Budget.

**Start-up Firms:** Company cash contribution is at least 10% of the University Budget. Company’s in-kind requirement is at least equivalent to 35% of the University Budget.
Note on Equipment

**Equipment Gift:** If the company donates equipment to the University that is needed for the project, the required equipment is to be valued according to "DESCRIPTION AND ESTIMATED VALUE OF EQUIPMENT GIFT" in the Application Form.

**Equipment Loan:** If the company lends equipment to the University, the value of the loan for the applicable period may be determined by fair rental value or by depreciation for the period of the loan. This estimate should be included in "COST ESTIMATE - COMPANY EFFORT" in the application form.

**Cost Sharing:** Consider a project with a proposed University Budget as shown below. The following examples illustrate the minimum required contributions of three types of companies.

<table>
<thead>
<tr>
<th>University Budget</th>
<th>$200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large company invests</td>
<td>$100,000 cash, $50,000 in-kind</td>
</tr>
<tr>
<td>MIPS invests</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University Budget</th>
<th>$200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium company invests</td>
<td>$100,000 cash, $50,000 in-kind</td>
</tr>
<tr>
<td>MIPS invests</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University Budget</th>
<th>$153,846</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small company invests</td>
<td>$53,846 cash, $46,154 in-kind</td>
</tr>
<tr>
<td>MIPS invests</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University Budget</th>
<th>$100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up company invests</td>
<td>$10,000 cash, $35,000 in-kind</td>
</tr>
<tr>
<td>MIPS invests</td>
<td>$90,000</td>
</tr>
</tbody>
</table>

**MIPS Funding Limits:** MIPS awards are limited to $100,000 per project per year for large, medium and small companies and $90,000 for start-up firms. The minimum is $5,000 per project per year. University overhead, as well as company overhead, are included in the matching-fund computations. Each institution of the University System of Maryland has its own overhead structure.

**Alternative to Matching Requirements for Start-up Companies:** This provision applies only to a start-up company’s cash matching requirement and involves making an equity contribution in place of the otherwise required cash contribution. If the Company is interested in the equity alternative, it is necessary to advise MIPS well in advance of the proposal (Project Application) submittal deadline date and for the company and MIPS to agree to the contractual arrangements, should the Company receive an award.

The equity contribution alternative is as follows: The Company shall contribute to UMD, Company equity shares (in the form of Company common stock) or Company membership interests, as the case may be, in the amount of two percent (2%) of the total issued and outstanding equity or membership interests in the Company, unless any of the following conditions exists for the twelve month period prior to the date of the MIPS proposal: i) a patent applicable to the Company’s business has been issued, ii) the Company has received gross revenues for the period exceeding $50,000, iii) the Company has received equity investments during the period, in the aggregate exceeding $100,000, or iv) the Company has more than five full-time employees. In the event that any of these conditions exists, then the Company’s equity share or membership interest contribution shall be one percent (1%) of the total issued and outstanding equity or membership interests in the Company. This equity contribution shall be subject to restriction on dilution, allowing UMD to purchase additional equity or membership interests in the event that the Company increases same. The details of any such arrangement would be outlined on a separate MIPS Equity Agreement.
Note: (unless otherwise noted, page numbers refer to the MIPS Application Form)

Page 11: The financial aspects of the proposal begin with developing the University Budget on page 11 of the application form. This budget will be created by the faculty researcher according to policies and rates currently in effect at his/her university campus, and in consultation with the company. **Normal campus overhead rates must be applied.** The PI should check with his/her institution on items such as tuition or equipment that may be exempt from overhead. The total University Budget should be placed on line 12(a) of the application form. **Important:** Remember to include percent effort/hours/rates for University PI – page 11 of application.

The examples shown on page 8 of this guidelines booklet in the section on “Cost Sharing” show University Budgets and matching requirements assuming the proposal requests the maximum allowable amount from MIPS (see MIPS Funding Limits, page 8 of this booklet) and the corresponding minimum required contribution from the company (see Matching Requirements, page 7 of this booklet). Proposals may have a larger University Budget than those shown in the examples, but these will require a correspondingly larger cash contribution from the company since the MIPS funding limits cannot be exceeded. Conversely, proposals may have a smaller University Budget than those shown in the examples, thereby requiring a smaller cash contribution from the company.

Page 12: For its in-house effort, the company fills in the Cost Estimate – Company Effort on page 12 of the application, making sure that the total company budget, line 12(b), meets or exceeds the minimum required in-kind contribution (see Matching Requirements, page 7 of this booklet). If the company is gifting equipment to the University that is necessary for the project, the company states the value of that equipment on line 12(c), page 13 of the application form. **Important:** Remember to include percent effort for company personnel – page 12, Item #1 of application.

Page 14 of the application form, lines (a), (b), and (c) are automatically taken from lines 12(a), 12(b), and 12(c) as developed above. In line (e), the company fills in its cash contribution. This is subject to the minimum described earlier. The company is also free to exceed the minimum required contribution. Line (f) is filled in automatically. Make sure this amount does not exceed the maximum MIPS contribution (see MIPS Funding Limits, page 8 of this booklet). Lines (g)-(j) are calculated automatically according to the formulas given for them in the application form.

Page 1: After completing page 14, the appropriate amounts are automatically transferred to page 1 of the application form.
Each proposal is subjected to a thorough review. First, it is screened by a MIPS staff member. If information is incomplete or unclear, the staff member may work with the company to solve the problem. Second, a small group of technical experts in the subject area rates the proposed project on its technical merits. Third, a small group of business experts evaluates the business, cost, and economic development aspects of the proposed project. Finally, an Evaluation Board recommends projects for MIPS matching funds.

The most important criteria for selection are: technical feasibility and economic development factors. The proposed project first undergoes scrutiny with respect to the likelihood of success from a technical viewpoint. At the same time, the project must have the potential to create or help retain jobs in Maryland, to improve the company's competitive position or to help the state's economy in some other way. Thus, each proposing company must discuss in the proposal its plans for commercializing the research results and the extent to which commercialization is expected to affect its business. Additional considerations are given to companies which exceed their required minimum contribution, especially if it is in the form of cash. Donated equipment is considered more favorably than other in-kind contributions.

Other factors which are considered in the selection process are: level of commitment by the company, contribution to the goals of the university, affiliation with the university based incubators, association of company founders with the university, and any enhancements to university/industry interaction, such as personnel exchanges and student internships. Other factors — such as equitable geographic, industry, business-size, and campus distributions — may be considered in the evaluation. In the case of a start-up company, the summary business plan is subjected to careful scrutiny.

**Multiyear Projects**: Both one-year (one-phase) projects and two-year (two-phase) projects are eligible for MIPS funding. In the case of a two-year project proposal, the evaluation is made upon the technical and economic development merits of the entire project. One MIPS evaluation factor is the total cost of the project to MIPS; therefore, other considerations being equal, a one-phase project may be more attractive to MIPS than a two-phase project.

If a two-phase project is selected, it is funded for the first year. Its status is reviewed by MIPS near the end of the year, and if satisfactory, a proposal for year two is requested. The second year or phase is awarded on a non-competing renewal basis, subject to satisfactory progress having been made in the first year of the project. The Phase II proposal is awarded and authorized using an amendment to the existing contractual agreement. Thus, the terms and conditions remain the same for both phases of the project.

**Evaluation Forms**: All reviewers are provided with standard MIPS evaluation forms. Copies of these forms are provided herein as information for potential applicants.

**Reviewer Feedback**: Feedback forms are provided to both company and PI following the review for both funded and unfunded projects. The feedback may be valuable for the conduct of a funded project, or as information to be considered if an unfunded project is re-submitted in a subsequent round.
PROJECT MANAGEMENT REPORTING REQUIREMENTS

MIPS requires a minimum number of reports and meetings to ensure that projects are running smoothly. In addition, MIPS uses these reports and meetings to prepare for a follow-on phase and to assess project results.

The schedule for these events is as follows:

**Project Initiation:** A "kick-off" meeting brings together all project participants (project manager, faculty principal investigator(s) and a MIPS staff member) to ensure that all parties agree on the objectives of the project and to review administrative procedures.

**6-Month Point in Project Phase:** A short, written report is required in order to update the status of the project. In addition, a meeting is convened only if it appears necessary to resolve a problem.

**9-Month Point in Project Phase:** A meeting is held and a written report required for those projects that are expected to have a follow-on phase. The staff and technical coordinators review the research results to determine whether the project is on sound footing and is qualified for the next phase.

**Project Completion:** A short final report is required by MIPS at the end of the project. In addition, at the discretion of the company and faculty principal investigator, a more comprehensive technical report may be submitted. There is also an "exit" meeting to review the result of the project, to discuss plans for company implementation of the project results, and to consider other matters of interest to the company, such as any necessary follow-up action or undertaking a new project.

**Economic Development Follow-up:** Commencing a year after the completion of the research project, the company is required to file annual reports for five consecutive years. These reports are brief and require such information as: improvement in sales, job creation and retention, cost reduction, competitiveness, export enhancement, or other aspects of business related to economic development.
MIPS PROCESS AND SCHEDULE

The schedule of events of the greatest interest to potential participants is as follows:

**SPRING SCHEDULE – 2011 – Round 48**

- Availability of application package: February 1, 2011
- MIPStrack accounts available: March 11, 2011
- Proposal deadline due at MIPS office: April 29, 2011
- Evaluation Board selections: June 23, 2011
- Executed agreements returned by companies to MIPS: July 15, 2011
- Project commencement: August 1, 2011

**FALL SCHEDULE – 2011 – Round 49**

- Availability of application package: July 1, 2011
- MIPStrack accounts available: September 1, 2011
- Proposal deadline due at MIPS office: October 17, 2011
- Evaluation Board selections: December 15, 2011
- Executed agreements returned by companies to MIPS: January 13, 2012
- Project commencement: February 1, 2012

**Schedule for Execution of MIPS Agreements**

In order for the university to meet its commitments, including hiring of students for projects, we require companies to meet the above deadline for signing and returning contracts to MIPS. Therefore, we suggest that the sample agreement be reviewed by the responsible company person well in advance of the date for Evaluation Board selections (see above schedules).
INTELLECTUAL PROPERTY

Ownership and procedures for licensing, protecting and using intellectual property that is created or first reduced to practice in the course of performing the MIPS project are highlighted below.

OWNERSHIP

- The company owns all intellectual property that is developed solely by the company.
- The university owns all intellectual property that is developed solely by the university.
- The company and university jointly own all intellectual property that is developed jointly by the company and the university.
- The company has no rights to university-owned intellectual property developed prior to or outside of the MIPS project.

RIGHTS TO USE INTELLECTUAL PROPERTY

- The company selects what level of use rights it wishes to exercise in university and jointly owned intellectual property.
- The company has a nonexclusive license in all intellectual property for research purposes.
- The company has the first option to negotiate an exclusive license in all intellectual property.

ROYALTY AND OTHER PAYMENTS

- The company pays no royalty for a nonexclusive license on intellectual property that is not formally protected under applicable laws.
- The royalty rate company pays on intellectual property that is formally protected under applicable laws (patent or copyright) varies depending on whether the intellectual property is patentable or copyrightable, and whether the university or university and company own the intellectual property.
- The company is responsible for paying all costs associated with patenting or copyrighting intellectual property in which company wants an exclusive license.

A sample copy of the current contract may be obtained by contacting the MIPS office at (301) 405-3891 or by email: mips@umd.edu.
QUESTIONS AND ANSWERS ABOUT MIPS

Question: How do I find a university technical expert to perform my company's research under the MIPS program?

Answer: The Maryland Technology Enterprise Institute (MTECH) will provide information on faculty members working in your technical area of interest. Fill out a "Matchmaker" form and return it to the MIPS office.

Question: Does the MIPS cash go directly to the company?

Answer: No. MIPS funds, as well as the company's cash contribution, are applied to research done by university personnel for the benefit of the company.

Question: Which University System of Maryland institutions are involved in the MIPS program?

Answer: MIPS involves any public state institution within the University System of Maryland, Morgan State University and St. Mary’s College.

Question: Can a company or a university researcher participate in more than one MIPS project at one time?

Answer: Yes, within the limits of MIPS resources and at the discretion of the evaluators.

Question: Who evaluates the proposals?

Answer: Technical and business/economic development evaluations are performed by separate small groups of independent experts. Final selections are made by an Evaluation Board consisting of representatives of the Maryland Technology Enterprise Institute (MTECH), representatives of the state government of Maryland, and legal counsel.

Question: How is MIPS policy determined?

Answer: MIPS has an Advisory Board — consisting of high-level business, state government, federal government, investment community, and university executives — which advises the MIPS Director on policy matters.

Question: Are two-year projects possible under the MIPS program?

Answer: Yes; however, the award of a phase II is dependent upon the progress made in phase I.

Question: How is proprietary information in proposals treated?

Answer: MIPS endeavors to protect confidential information you submit via the MIPStrack proposal website or by internet electronic mail. For example, MIPStrack uses password protected accounts and SSL. Marking parts of your proposal as “confidential” or “proprietary” is allowed and encouraged where appropriate (such as an executive summary). But because MIPStrack is connected to the internet and because we share your information with outside reviewers, neither MIPS nor its outside reviewers can completely guarantee confidentiality or security of the information you submit, regardless of any marking of “confidential” or “proprietary.”

Question: Can we get help in preparing a proposal?

Answer: Definitely. Maryland Technology Enterprise Institute (MTECH) professionals will be happy to provide you with guidance and assistance. Just request such help, but, please, don't wait until the last moment.
Question: How can a non-Maryland company participate in MIPS?

Answer: A non-Maryland company can participate in MIPS by becoming a “Maryland company” (by our definition, as stated in this booklet) during the first year of the project. The company must provide a commitment letter to this effect along with its proposal.

Question: What type of business information do you require from a start-up company?

Answer: A start-up firm must submit an executive summary of its business plan, along with financial statements (actual and pro forma).

Question: How is overhead treated in the proposal?

Answer: The university researcher applies overhead according to the current practices of his/her campus. If the company contributes labor hours to the project, it applies its standard “loading” (not including profit) to such charges.

Question: Are non-profit organizations and trade associations eligible for the MIPS awards?

Answer: Yes, and they are subject to the same eligibility rules as for-profit firms. However, we do not accept proposals from government organizations.

Question: How much detail should I include in my proposal?

Answer: MIPS reviewers need enough information to evaluate the technical as well as the economic merit of a project. Direct the technical proposal to your technical peers, but address the material on the application form to the intelligent layman (see Evaluation Forms in the back of this booklet).

Question: What if I want to include additional information that won’t fit on the application form?

Answer: We purposely limit the space so that applicants will keep their responses concise. Please use the space provided. While you may attach an exhibit containing supplementary information, the reviewers are obligated to consider only the material on the form.

Question: Who reviews MIPS proposals?

Answer: Economic evaluators and technical reviewers evaluate the proposals. Economic evaluators are professionals from the community involved in early stage technology commercialization. Technical reviewers are active researchers from federal labs and universities and can be suggested by the proposing company or PI.

Question: What is MIPStrack?

Answer: MIPStrack is an interactive secure system for on-line application submission and review for the Maryland Industrial Partnerships program. The URL is http://mipstrack.umd.edu

Question: How do I get a password to log into the system?

Answer: Go to the URL and follow the instructions on page 5 of this guidelines booklet.

Question: Do I still need to submit paper copies?

Answer: No. All proposals are submitted electronically through MIPStrack and no paper copies are required.
ECONOMIC IMPACT EVALUATION FORM

PROPOSAL # ____________________________ TITLE: ______________________

COMPANY: __________________________________________________________________________

UNIVERSITY RESEARCHER(S): __________________________________________________________

INSTRUCTIONS:

a. Please provide a written response to each question; do not limit your response to indicating a number. Applicants greatly appreciate your narrative comments. (Please type or write clearly).

b. Answers to all questions are very important. However, the numerical scores are not weighted, nor is there a formula for computing overall rating. The written responses you provide should guide you to your OVERALL RATING. The latter is most important to the MIPS Evaluation Board.

c. Score each question on a scale from 1 to 10 (1 = Lowest; 10 = Highest). Hint: move from field to field using the tab key.

d. For start-up companies, please complete pages 1-3. All other companies complete pages 1 and 2 only.

1. Product or Process Being Commercialized. Has the company adequately described the product or process to be developed and its role within the company’s core business? Does the project contribute significantly to the company’s product or capabilities?
   Score: __________
   Remarks:

2. Market Analysis. Has the company adequately assessed the market for this product or process? Have they clearly articulated their competitive advantage? Have they addressed the competition?
   Score: __________
   Remarks:

3. Company’s Chances of Successful Commercialization of Results of this Project/Commercialization Plans. Consider commercialization strategy, further development, ability to finance full commercial development, etc. Does company have resources, capability, commitment to carry through?
   Score: __________
   Remarks:
4. **Believability of Projections.** Consider competition, management experience, potential product acceptance sales cycle, financial forecasts, etc.
   Score: 
   Remarks:

5. **Economic Impact for MIPS Dollars.** Measurable results: estimate of jobs, increased sales, improved competitiveness, revitalization of an industry, etc. Consider impact relative to company’s size and stage of development.
   Score: 
   Remarks:

6. **Other Considerations.** Is the company incubator affiliated, in a unique market space, underserved economic area, a university spin out, etc? Is the project likely to benefit Maryland in a unique way?
   Score: 
   Remarks:

7. **Importance of Project to Company’s Future.** If large company, consider importance to division or Maryland operation.
   Score: 
   Remarks:

8. **OTHER COMMENTS:**

OVERALL: (Pick One)
- Excellent
- Excellent –
- Very Good +
- Very Good
- Very Good –
- Good +
- Good
- Good –
- Fair
- Poor
Economic Impact Evaluation Form (continued)

FOR START-UP COMPANIES ONLY:

A. Completeness of business plan executive summary (please check off):
   □ nature of business    □ management
   □ company objectives   □ sales plan
   □ market factors       □ financials (actuals)
   □ competition          □ financials (pro formas)

B. Is executive summary satisfactory for company evaluation?
   □ Yes  □ No

C. Your comments about start-up company's chances for success. (strengths, weaknesses, etc.)

D. Would the investment community consider this company to be worthy of further investigation?
   □ Yes  □ No

E. Do you feel company is on a reasonably good footing and worthy of MIPS funding?
   □ Yes  □ Questionable  □ No
MIPS TECHNICAL EVALUATION FORM

DISCIPLINE: ____________________________________ PROPOSAL #: ____________

TITLE: ______________________________________________________________________

COMPANY: ___________________________________________________________________

UNIV. RESEARCHER(S): ______________________________________________________________________

INSTRUCTIONS:

a. Please, limit evaluation to technical aspects of project; if you have comments on other matters (market, competition, etc.), write them on separate page and attach to evaluation form.

b. Provide written response to each question; do not limit your response to indicating a numerical score. Applicants greatly appreciate your narrative comments. (Please type or print clearly).

c. Do not make judgment regarding appropriateness of research from the university standpoint (i.e., is it sufficiently esoteric for the university?). The fact that the university department chairman and the dean have approved is sufficient evidence of such appropriateness.

d. If evaluation should address additional questions or you just need more comment space, please add a page.

e. Answers to all questions are very important. However, the numerical scores are not weighted, nor is there a formula for computing the overall rating. The written responses you provide should guide you to your OVERALL RATING. The latter is most important to the MIPS Evaluation Board.

f. There are 3 places where you should look to find important information:

   (1) 5-page technical proposal document
   (2) Investigator CV (usually submitted as an attachment under attachment tab)
   (3) Main application page 11, 14 for budget, schedule and equipment facilities information.

g. Score each question on a scale from 1 to 10 (1 = Lowest; 10 = Highest). Hint: move from field to field using the tab key.
1. Is the problem clearly defined?  (Is the proposal written in such a way that the problem and proposed solution are clearly understood?) (See Technical proposal document).
   Score: 
   Remarks: 

2. Alternate Approaches. Are potential alternate approaches discussed and described?
   Score: 
   Remarks: 

3. Technical Feasibility. Does proposed solution seem feasible and is it likely to solve the problem? Can work be performed based on the current state-of-the-art; are the results achievable? Is awareness of other pertinent research demonstrated?
   Score: 
   Remarks: 

4. Qualifications of key researchers. Are proposed researchers experienced in the project area? (You will need to look for researcher CV attachment and in application form page 7).
   Score: 
   Remarks: 
5. **Equipment and Facilities.** Are they sufficient, appropriate, necessary? (See page 10 of application form).
   
   **Score:**
   
   **Remarks:**

6. **Budget and Schedule.** Is it reasonable to expect the proposed results within the stated budget and performance period? (See page 9, 11, 14 of application form).
   
   **Score:**
   
   **Remarks:**

7. **Risk Factors.** Are risk factors properly addressed and planned for? Are they identified so that the company can appreciate the risk?
   
   **Score:**
   
   **Remarks:**

8. **Quality of Proposal.** Rate the quality of the proposal: clarity, completeness, etc.
   
   **Score:**
   
   **Remarks:**

9. **OTHER COMMENTS:**

   **OVERALL:** (Pick One)
   
   - Excellent [ ]
   - Excellent – [ ]
   - Very Good + [ ]
   - Very Good [ ]
   - Very Good – [ ]
   - Good + [ ]
   - Good [ ]
   - Good – [ ]
   - Fair [ ]
   - Poor [ ]