What is I2P®?
I2P® stands for Idea To Product®, a global competition which seeks to find the next great idea for a technology-based product, service or business. It started at the University of Texas at Austin in 2001, and is now an annual global competition with branches in Asia and Europe as well as the United States.

Why Participate in I2P®?
Borrowing from the UNCF, “An idea is a terrible thing to waste.” Today, the first step in getting an idea rolling is to articulate it and present it for feedback. I2P® starts with a simple, two-page submission – just nine questions. In return, you get feedback on your idea, and for those with the most promising ideas, the chance to move them forward to get the opinions (and perhaps the interests) of blue-ribbon judges, as well as a chance to make some money to underwrite the costs of making your idea into reality. Ideas coming out of I2P® competitions have ranged from educational software to green technologies to medical devices.

Round One Submission
Each university in Missouri and Illinois has been invited to submit ideas. They will hold an I2P competition of their own choosing in the fall of 2013. Many professors incorporate the two-page entry submission in their syllabi. Up to five ideas from your university may be submitted to the Regional Competition which will be held on the campus of Saint Louis University on April 4-5, 2014. The two-page submission deadline is Monday, February 17, 2014.

In this write-up, the finalists from each school must describe the idea and its underlying technology; explain how it is innovative and unique; describe the target customer group and provide a general market size; explain the need that the product fulfills in the market; and provide a minimal intellectual property (IP) protection strategy. (See Round One Submission Guidelines)

A panel of judges selects the semifinalists from these submissions. The most promising applicants are chosen based on identification and communication of market need, market opportunity, and the uniqueness and innovativeness of the product and the underlying technology. The names and departments of the entrants are not shared with the judges. The number and quality of the Round One submissions, determines the number of semi-finalists.

I2P® Missouri-Illinois Team Requirements
- Each college and university provost office in Missouri and Illinois is entitled to submit up to five I2P® ideas.
- Although winners receive cash prizes, the greater benefit is the opportunity for participants to receive substantial feedback on their early stage ideas. I2P offers the larger technology and financial communities the opportunity to get an early view of new ideas, thereby jump-starting the development process. To assure that only early stage ideas are competing at I2P, ideas submitted to I2P cannot have been previously submitted to, presented at, or currently under consideration at a business plan competition.
- The I2P® MO-IL Regional Competition is open to all students, graduate and undergraduate, from any area of study.

For help see http://www.slu.edu/x19099.xml or contact ecenter@slu.edu

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• Teams can be of any size but generally are comprised of 2-4 students.
• All team members must be registered students at the nominating school sometime during the competition year.
• Teams may be intercollegiate, that is comprised of students from more than one college or university.
• All presentations must be made by someone physically present at the event.
• An idea submitted in any previous I2P® competition that was not selected for the semifinals can be resubmitted.
• An idea already presented at any business plan competition is not eligible.
• Teams may submit more than one idea for a competition and/or may participate on more than one team.
• Multidisciplinary teams are encouraged.

**ROUND ONE SUBMISSION GUIDELINES**

All teams will submit a two-page (10 point or larger type, one-inch margins – like this page) summary answering the following 9 questions about their technology, product or service. An example is included at the end of this packet.

1. What is your product or service?
2. What is the technology that underlies your product/service?
3. How is your underlying technology unique?
4. Is your product or service innovative? How?
5. How would you define the best initial set of customers? (Who will buy it?)
6. What marketplace need does your product or service address better than any other option? (Why will they buy it?)
7. Describe how you create value for your customers.
8. What is the market and its size?
9. How do you anticipate developing IP protection/strategy for your technology?

Round One Submissions **will not be considered** if:

• The submission is over two pages.
• The student or team describes in detail how their technology works instead of explaining what it does and how it fulfills customers’ needs. *Do not tell us any technical details on how it works.* [Part of the reason to not tell us how it works is to preserve your patent rights. Publicly telling how it works may limit your ability to patent it later.]

For written submissions, please use the following format:

• Answer the 9 Questions in two pages
  • Include a separate cover sheet that lists the team members, their college and degree program, and whether they are graduate or undergraduate students. This information will not be shared with the judges.

Check out [http://www.slu.edu/x19099.xml](http://www.slu.edu/x19099.xml) for more information on I2P®.

**I2P MO-IL Schedule:** Two-page submissions due February 17, 2014. Semi-finalist (5-page) packets are due March 26. Semi-final presentations are on April 4 and Final presentations are on April 5, 2014.

**I2P MO-IL Prizes:** To be Determined.

**I2P Questions?** Contact either Tim Hayden ([haydent2@slu.edu](mailto:haydent2@slu.edu); 314-977-3850) or Jerome Katz ([katzja@slu.edu](mailto:katzja@slu.edu); 314-977-3864) at Saint Louis University or go to eweb.slu.edu.

For help see [http://www.slu.edu/x19099.xml](http://www.slu.edu/x19099.xml) or contact [ecenter@slu.edu](mailto:ecenter@slu.edu). ©I2P is a registered trademark of the University of Texas at Austin.
I2P® JUDGING CRITERIA

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<th>Team/Technology</th>
<th>Elements of Business Opportunity</th>
<th>Max. Score</th>
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<tr>
<td>Judge</td>
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<tr>
<td>Team Score</td>
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<td>What is your product or idea?</td>
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<td>What is the technology that underlies your product/idea? (Concise/Explained sufficiently/Clear/Does it have a technology component?)</td>
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<td>Is your underlying technology unique? Describe. (level of uniqueness/Is it new?/How is it new?)</td>
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<tr>
<td>Is your product/idea innovative? Describe. (Level of innovation/How is it different?)</td>
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<td>Who is your market or initial customer group (who will buy it)?</td>
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<td>What need or pain of your customers does your product/idea address?</td>
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<td>Provide some idea of the general size of the market</td>
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<td>How do you anticipate developing IP protection for your product?</td>
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<td>Team Total</td>
<td>Maximum Total</td>
<td>60</td>
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GETTING IDEAS FOR I2P®

You might have an idea you have been working on from your classes, or something you have had in mind for a while. But you’re far from out of luck if you don’t have an idea of your own right now. Other sources you can get ideas from include:

- Your friends or family;
- Your boss or from an entrepreneur or a company with whom you deal;
- Faculty or researchers at yours or another school;
- University or government technology transfer office: these offices help get ideas developed at universities (like Gatorade) or government research labs (like Tang) adopted to become commercial products. You can search their holdings for free. One advantage to using technologies based at your university is that you can more easily find and talk with the people developing it. There are also dozen of sites sponsored by the Federal government, with the central location called the National Technology Transfer Center at www.nttc.edu, or just Google “technology transfer center” to see the thousands of centers around the world.

I2P’s® HISTORY

I2P® was developed at the University of Texas at Austin in 2001 and had its first international competition in 2002. Its website is www.ideatoproduct.org. Saint Louis University received permission to have a campus wide competition as well as hosting a regional competition for universities in Missouri and Illinois since the 2006-2007 school year.
Silicon Carbide Evolution

What is your product or idea? Silicon carbide is one of the world's hardest and most chemically resistant substances. In fact, silicon carbide is used to cut and grind the toughest steels. Unfortunately, this also makes it extremely difficult to manufacture or mold into component parts. These factors have limited silicon carbide's acceptance to high cost structure, high precision production processes. Silicon Carbide Evolution has a novel technology to rapidly manufacture silicon carbide parts.

What is the technology that underlies your product/idea? Silicon Carbide Evolution's manufacturing process occurs in three basic processing stages. A 3 dimensional direct printing of the finished product shape (left) allows virtually unlimited design freedom as well as limiting setup and transition times. Following this, a furnace operation (right) allows for the synthesis of the silicon carbide composite material. Finally, critical dimensions or special surface finishes are machined into the part. The total build cycle for a single part, including setups and finishing, requires less than three days.

Is your underlying technology unique? Competing silicon carbide manufacturing processes require longer process times and more extensive operations. Quartz, the competing product for silicon carbide in the semiconductor fabrication (fab) industry, often requires unique fixtures for each product and complex build operations. Additionally, all current manufacturers of silicon carbide and quartz products are limited to a small set of possible product shapes. Silicon Carbide Evolution's process is not.

Is your product or idea innovative? Silicon Carbide Evolution's launch strategy relies upon the ability of our technology to provide a superior manufacturing service to our customers. By uniting a patented 3-dimensional direct manufacturing operation with a novel material processing method, we can support the design and validation of new products with a speed and ease not yet seen in the industry.

How would you define the best initial set of customers? (Who will buy it?) Silicon carbide's characteristics of high stability, excellent temperature tolerance, and good chemical resistance have many applications within the semiconductor, chemical processing, and automotive industries. Semiconductor “fabs”, in particular, utilize high temperature furnaces and a formidable array of processing chemicals. Very specialized fixtures for wafer handling must meet exacting specifications while eliminating almost every other material. The silicon base in silicon carbide alleviates many of these concerns with silicon wafers. Other industries, such as petroleum and chemical production, pollution control, and automotive industries all have problematic applications for which silicon carbide would be ideal.

What marketplace need does your product or service address better than any other option? (Why will they buy it?) The vast majority of semiconductor capital equipment purchases during 2002 were driven by the desire to upgrade technology, not to increase production capacity [Reed Electronics Group]. Our manufacturing technology not only provides superior products but also has many significant advantages over the competition. Our “just-in-time” supply to customers allows semiconductor equipment manufacturers to significantly reduce inventory. In addition to the speed at which we can manufacture products, Silicon Carbide Evolution requires only a CAD file from the customer for our process to immediately adjust production. Superior material qualities, flexibility in design, and speed of delivery contribute to make our product superior to existing processes.

Describe how you create value for your customers. Designs which could never before be made using silicon carbide can be fabricated using our unique process. Our process also produces designs (even conventional ones) much faster than competing processes. Our process makes design and fabrication of silicon carbide based products easier for the end user.
What is the size of the market? The semiconductor capital equipment industry had total sales of $28.1 billion dollars in 2001. Wafer fabrication accounted for almost 75% of this. The wafer manufacturing equipment segment is fairly consolidated, with ten companies holding more than 70% share. Focusing purely on the initial launch market of quartz replacement represents $147 million annually. From this point, Silicon Carbide Evolution can expand into additional material applications.

How do you anticipate developing IP protection for your technology? The University of Texas at Austin has a patent application pending with international options on the manufacturing process. Furthermore, the intellectual property position of the process is greatly enhanced by The University's ownership of a large portfolio of patents protecting the underlying processes from which the silicon carbide manufacturing technology was developed.

[Note to I2P Submitters: You can use photos, drawings or graphics in your submission, but you are not required to do so. Note also that this submission reflects the nine-question, two-page, ten-point-type, one inch-margin standard you need to follow.]

I2P® SUBMISSION ADVICE
(Adapted from Entrepreneurial Small Business, published by McGraw-Hill)
1. What is your product or idea? This is a nontechnical description of the concept simple enough for everyone to understand.
2. What is the technology that underlies your product/idea? This is where you describe the concept in a general sort of way using the appropriate technical, scientific, or professional jargon. Do NOT tell about anything you consider proprietary, doing so may prevent you from patenting your product or service, and get your proposal rejected.
3. Is your underlying technology unique? This is where you explain how the technology you are using is different from other approaches to the problem. Note that not all technologies solving problems are unique. Think of the different forms of MP3 players. They may be different, but one may not be unique. When you can claim a unique approach, you have a better chance of getting intellectual property protection for it, like a patent.
4. Is your product or idea innovative? This is where you explain how your technological approach is better than other approaches. Why might a cell phone that can play music MP3s be a better approach than a dedicated MP3 player?
5. How would you define the best initial set of customers? (Who will buy it?) This question looks at the specific individuals, groups, or organizations you would approach first to buy your product or service.
6. What marketplace need does your product or service address better than any other option? (Why will they buy it?) The question in parentheses might better be phrased "Why would they buy yours?" Ideally if there are competing products or services, you want to explain why the customer would buy your product or service instead of the competitors.
7. Describe how you create value for your customers. Good products or services meet the customer’s basic need. Great products or services create additional value for a customer, helping them get more out of work or life, or making life easier, or helping them meet other goals (e.g. saving money, living greener, help others). For example, the value of a cell phone is far greater than a landline phone. It permits mobility, access to the Internet, taking photos, and even keeping your contact list. All of those add value over the use of the phone to call and receive calls.
8. What is the market and its size? This looks like the simplest question but is actually the hardest one. “Everyone” is not acceptable as an answer. While precise numbers are not expected, you need to have some idea if we are talking about a market of hundreds, thousands or millions. Where there are competing products, you can get an idea of the market size. For new products or services, you have to look at the type of customer and then look for demographic, census, or marketing information which can give you a sense of the size of a market.
9. How do you anticipate developing IP protection for your technology? This question asks you to think of your strategy for protecting your idea from competitors. Examples include patents, trademarks, or trade secrets (see Chapter 18 for more information), licensing, and strategic partnerships or distribution agreements.