

AN ALTERNATIVE FOR ACCELERATING R&D: TEXAS INSTITUTE OF SCIENCE

With a strong oil and gas industry and scarce human resources, the research community, like the producing sector, is challenged with accomplishing needed R&D and product development quickly and in a cost-efficient manner. Accelerating technology development is key for the developer to receive a return on investment. On the user side, the technology must be applied to realize opportunities and solve problems. An alternative, developed by the Texas-based, for Profit Corporation in 2006, Texas Institute of Science (TxIS), delivers faster time to market with significant cost savings.

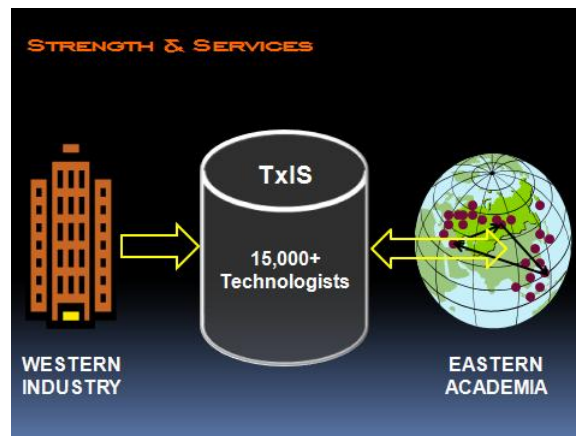
TxIS relies on the Institute's Global Research Alliance, consisting of 15,000+ professors and research scientists in 1800+ departments at 192 affiliated universities and research institutes. 95% of TxIS's technologists are located in Eastern Europe, Turkey, and the former Soviet Union. Others are located in South Korea, Hong Kong, Taiwan, and China. TxIS maintains close relationships with the affiliated scientists, and is the only global operation that successfully leverages these Eastern scientific resources on behalf of Western industries.



TxIS provides excellent research, development, and application-science projects to its partner universities, research institutes, professors, and scientists. In addition, the Institute also provides other services such as financing for new technology or innovation, commercial evaluation, and finding markets for newly developed technologies.

The core of the business model involves assembling a real-time, multi-phase, multi-site and multi-discipline "virtual research group" connected and communicating through the Internet, tailoring the group's activities to the client's project, and actively managing the project to its successful conclusion. Typical clients are those whose success depends on an ever improving technology, but have limited engineering/science resources to produce the required technology. In addition to geophysics and exploration, TxIS's areas of expertise include signal processing, mechanical & material sciences, nanotechnology, communications technology, and robotics. In 2012, TxIS plans to expand to include projects in other disciplines as well, such as in the food and medical fields.

The TxIS Global Alliance network of 15,000+ scientists provides great flexibility in tailoring disciplines and identifying/selecting experts to specifically fit the client's needs. If rush jobs are required, "parallel research groups" can be assembled. Historically, the proven time-to-market is about 25% faster than a traditional scientific group. Clients and researchers communicate directly, but TxIS assumes full responsibility for completing the program on time and at budget. Ownership of all created patents belongs to the clients. Typical projects are Technology Trend White Papers. As many companies do not establish "Technology Trend" departments, aiming and guiding new research properly can be challenging. Knowing exactly which research was previously unsuccessful, as well as where technology is going, helps companies to avoid critical missteps that may be costly, if not fatal, to technology development efforts. A company may work on new research for a year before finding out that component vendors took a different route, or that the research has gone in another, more productive, direction.



Eight out of ten projects at TxIS start with a Feasibility Study. This gives the client a chance to decide which of the TxIS recommended solutions is the most advantageous to pursue. By taking on projects on a step-by-step basis, we can almost guarantee success; we go into projects with our eyes wide open and help clients mitigate the risks. On average, within two hours of the client sending a project description, the project management team already knows the most probable resources for the project, and within four to six days, the plan is in place.

TxIS has a well-designed contract flowchart when it takes on a new project. The most important factor is that TxIS, not the client, manages the parties. Both resource and Client sign a contract and Non-Disclosure Agreement (NDAs) with TxIS; financing and payment flow the same way.

One of the most critical issues for TxIS is confidentiality and document control. Clients bring their best ideas, technology plans, objectives, and many times their problems to TxIS. We therefore have an extremely tight document control system. All of the TxIS scientists are under NDA, and in addition, their organizations are inspected by the regional TxIS offices.

Once a project starts, TxIS opens up all communication channels between the Clients' engineers and the Institute's scientists. Lead scientists usually visit directly with the client because this is the best way for people to work together. When the project is complete and the result turned over, all credits, publications, announcements belong to the clients' Engineering Department. The TxIS staff and scientists have the attitude that they are invited in by the engineering department to work under their direction and augment their existing force, and therefore the recognition belongs to them.

Case Studies, which include a small sampling of our work, may be found on the TxIS website (www.txis.us). The following disciplines are in the highest demand:

Corrosion	Coating
Metallurgy	Material Science
Chemistry	Drilling
Nano-structures	Mechanical Issues
Measurements	Fluid Dynamics
Gas Dynamics	Surface Problems
Algorithms	Modeling
Seals	Cryogenic Problems
Sensor Technologies	Welding

Those interested in becoming a part of the TxIS Global Research Alliance may send an email to technology@txis.us.



www.txis.us

Cristina Popescu

Director/ Field Development Romania

M (+4)-0723-646030 | c.popescu@txis.us |

Subscribe to our newsletter at:

<http://www.txis.us/txis/about/press/NewsLetters/NewsLetterSubscr.aspx>