## Report on the "Innovation Through Collaboration" Conference, held at the NASA Johnson Space Center in Houston, Texas, Oct. 25-26, 2005.

## by Abram Teplitskiy, Ph.D., Scientific Consultant and J. Michelle Edwards, Ph.D., Futron Corporation

The "Innovation Through Collaboration" conference organized by NASA, the Houston Technology Center, Bay Area Houston Economic Partnership, and Rice Alliance was successfully held at the NASA Johnson Space Center in Houston, TX on October 25-26, 2005. The goal of this free conference was to bring together innovators from industries in the Houston-Galveston area including Oil and Gas, Chemical and Petroleum Products Manufacturing, Information Technology, Space, Academia, and Medicine. These industries have helped to make Houston the technological powerhouse it is today, but it has been determined there are possibilities for cross-industry sharing of innovations which can only enhance developments to these industries and to Houston itself.

One of the primary objectives of ITC 2005 was to encourage networking of representatives from different industries. Participants at the conference enjoyed the networking opportunity and proclaimed the participation very successful. The conference hosted 100 attendees of which about half were from the Space Industry and the other half were from other industries. In addition to a large participant list there were 15 speakers present for most or all of the event. The Keynote Speaker, **Michael Guidry** of **Guidry Associates**, gave a rousing call to cross-industry collaboration and improved networking for the benefit of all. To help encourage the networking of the participants the organizers invited **Margaret Anderson** from **Anderson Persuasive Training** to give a short 30-minute lecture about effective networking combined with a 60-minute practical lunch exercise on this topic.

The afternoon of the first day was devoted to TRIZ training. This training included 3 TRIZ lectures and 15 minutes of exercises. Even though the TRIZ methodology was developed in Russia and the United States and Russian collaborate on the International Space Station program , few Engineers and Scientists at **Johnson Space Center** are familiar with TRIZ methodology.

Effective examples of TRIZ applications were presented from different branches of industry including Chemical, Construction, Microelectronics, and others. **Jack Hipple,** Principal of **Innovation-TRIZ,** presented in detail how TRIZ basic principles work in technical and non-technical problem solving including a short group exercise based on a case study of innovation managers. **David Bonner,** Managing Partner of **Pretium Consulting Services,** concentrated his lecture on a real-time demonstration of their software with audience participation in a failure prediction scenario leading to concepts for improvements in system design. Additionally, Mr. Bonner showed participants how the **TRIZ** approach can improve effectiveness in Intellectual Property Protection. **Steve Boehlke,** of **SFB Associates,** presented a brief talk and extensive exercise titled DISCIPLINED INQUIRY®: A Tool for Reframing Business Challenges and Dilemmas.

**Abram Teplitskiy**'s lecture presented attendees with examples of how using TRIZ tools we can effectively solve problems based on examples from the construction industry.

The remaining three-quarters of the conference covered talks on innovation and crash-courses on broad areas of technology such as NASA nanotechnology and robotics; innovation in the Oil and Gas industry; a panel discussion between academia, local homeland security, NASA, and the Oil and Gas industry on Innovation; as well as an introduction to genetics and informatics in drug discovery from the Biotech Industry.

"I'm grateful for the support of the TRIZ community in this conference," said Don Stilwell of the NASA Johnson Space Center, one of the event's organizers. "This conference was an experiment that was extremely successful by all accounts. Innovators in any geographic area, with a large variety of industries, can apparently benefit by meeting with innovators in other industries to share best practices, knowledge about how to encourage innovation and creative thinking, and to see if new technologies and ideas in one industry could be adopted in other non-competitive industries. Well more than 90% of the attendees thought that this process would lead to collaborations."

Streaming audio along with slides of the event lectures/talks will be available soon at: <a href="http://advtech.jsc.nasa.gov/itc05.asp#Schedule">http://advtech.jsc.nasa.gov/itc05.asp#Schedule</a>. You will need the RealPlayer media player (<a href="http://www.real.com">http://www.real.com</a>) to listen to the talks.