

Report on MATRIZ Conference TRIZfest-2012

On August 2-4 the Lappeenranta University of Technology, Lappeenranta Finland, hosted the 8th Conference of the International TRIZ Association – TRIZ*fest*-2012. Traditionally, the Conference was preceded by TRIZ Developers Summit, TDS, which took place July 31st, August 1st in St. Petersburg, Russia, with the main topic "Identification of Secondary Problems". Most of the TDS participants attended TRIZ*fest*-2012.

The setting

The conference host, LUT, and the people involved did an excellent job hosting the conference. The team, led by Prof. Tuomo Kässi, Ms. Riitta Salminen, Ms. Lea Lonka, Ms. Alexandra Ijäs and Mr. Pekka Torvinen, should be commended for their great efforts in making TRIZfest-2012 very successful. The venue was convenient, the breaks were stocked with high quality items, the meeting facilities were conveniently located and smartly accommodated, both evening activities, cruise dinner through the sluice on lake Saimaa and the banquet at the Kasino restaurant, were very well organized. Of great help was language skills of the hosts. The participants could ask for assistance in English and/or Russian.

On top of all that, the city of Lappeenranta, such a nice little town on the banks of great lake Saimaa, offered many sightseeing spots and picture taking opportunities.

Last, but not least, the hosts have arranged for nearly perfect weather during the Conference.

The participants

Although not so great in numbers, the participants represented 14 countries. Another testimonial for TRIZ increasing World popularity. We had slightly fewer than 50 total participants.

The papers

This year we continued with the practice of selecting submitted papers based on peer review. The process was organized by one of the Presidium members — Dr. Leonid Chechurin. Leonid was able to assemble quite representative group of reviewers, consisting of academia and industry representatives. The solid approach to filtering submitted papers is confirmed by the fact that only 19 of more than 30 submitted papers were accepted for publication. Unfortunately, two of the authors could not make it to the conference. Therefore, only 17 total papers made the conference proceedings.

The papers were differentiated into scientific and practitioner sections. 6 papers made the scientific cut and 11 – the practitioner.

The Conference

Day 1

The Conference began at 14:00 on August 2nd, 2012. Dr. Sergei Ikovenko, MATRIZ President, and Dr. Veli-Matti Virolainen, LUT, Vice-Rector, opened the Conference with their respective remarks on TRIZ, MATRIZ and the University.



Dr. Sergei Ikovenko



Dr. Veli-Matti Virolainen

Their remarks were followed by the plenary speeches by Dr. Simon Litvin (Gen 3 Partners, USA) "Ten Principles of Successful TRIZ-based Innovation", Dr. Mijeong Song (Samsung Advanced Institute of Technology, South Korea), "TRIZ introduction history in Samsung", and Prof. Tuomo Kauranne (LUT, Finland), "Radical or Incremental Innovation?". Their speeches provided a lot of insight into the process of innovation in general and TRIZ role in this process in particular.

The plenary session was followed by a transfer to Lappeenranta City Hall for a reception hosted by the Mayor of Lappeenranta. After a short speech by the Mayor we enjoyed champagne with quite a few very palatable hors d'oeuvres. The Karelian pie was a smashing success!

To complete already wonderful day, we were transferred to a boat, which took us on a dinner cruise on Lake Saimaa and through the sluice. The sluice was a major attraction as the majority of the participants never went through a sluice before.

Day 2

The Conference papers were delivered in two tracks. One of the tracks was supported with the synchronous English/Russian/English translation.

PART 1. SCIENTIFIC PAPERS

Priven A.I., Kynin A.T. – A new approach to S-curve analysis

Litvin S. – Adaptation Approach – Methodological Basis of TRIZ Solutions Substantiation

Feygenson O.N. – Specifics of function analysis for engineering systems at the exploitation stage

Chechurin L.S., Bakker H.M., Wits W.W. – Dynamic function modeling concept and its software realization

Rubin M.S. – Seven Ideas on TRIZ in Software Development and in IT

Petrov V. – The Law of Increasing Degree of Su-Field (in Russian)

PART 2. PRACTITIONER PAPERS

Greenberg S. – Development of thinking skills course project summary: teaching TRIZ in various academic settings

Rubin M.S., Kirdin A.N. – ARIZ-U-2010: Software based Implementation Song Y.W., Berdonosov V. – International student online TRIZ conference Shcherbinov A.A., Fedoseev S.V., Mikrukov A.A. – Innovative approaches to

framing the conception of «Smart city in the modern world»

Petrov V. - Adaptation of methods to resolve TC for IT

Lee K.W. – Re: Analysis by TRIZ on success factors of Korean Pop Song (K POP) Popular in the world

Rubina N.V. – Inventive thinking: Formation and Diagnostics

Barkan M.G. – System Dynamics for System analysis and Problem definition

Priven A.I. – Evaluation of key technical contradictions in engineering

Sim G.H., Cho J.H., Kim C.W., Lim C.M., Park B.M., Lee Y.K., Lee H.J., Song

J.H., Ryu J.S., Kim H.S., Hong S.J. – TRIZ application for manufacturing

semiconductor device

Mayer O., Straussberger S., Bernal E., Lynass M. – One Axis PV Tracking

Then, Dr. Sara Greenberg led a Round Table discussion "TRIZ Education". The only certain outcome of this discussion is that most everybody has his/her particular opinion on how and when to teach TRIZ. Several participants decided to form a committee to further explore this topic. Hopefully, there will be some kind of report coming out of this committee in the near future.

Two more discussions took place later in the afternoon:

- TRIZ in Universities
- MATRIZ horizons a panel discussion

These discussions provided an excellent forum for participants to voice their opinions on the future of TRIZ and its role in innovation process.

After the official part, Day 2 concluded with the banquet, attended by all conference participants. The high points of the banquet were guitar playing and singing by Alex Kynin and Leonid Chechurin showing his playful side as he took the guitar and led the group in singing songs in Russian, English and Korean languages.

Day 3

Day 3 was devoted to the defense of TRIZ Master theses by 4 aspirants:

- 1. Oleg Abramov (Russia) "Complex Analysis of Engineering Systems at their Transitional Period"
- 2. Hongyul Yoon (South Korea) "New Formalization of Cause Effect Chain Analysis"
- 3. MiJeong Song (South Korea) "Evolution Navigator for Technical System Innovation"
- 4. Sergey Faer (Russia) "Non-technical TRIZ"

The detailed information on theses is available on www.matriz.org.

MATRIZ Dissertation Council consisted of 9 TRIZ Masters.

The score was as follows:

Name	For	Against
Oleg Abramov	8	0
Hongyul Yoon	3	5
Mijeong Song	7	2
Sergey Faer	7	2

Therefore, Oleg Abramov, Mijeong Song and Sergey Faer were certified as TRIZ Master, unfortunately, Hongyul Yoon did not receive the required number of "YES" votes.

Several Round Table discussions took place after MATRIZ Dissertation Council finished its work.

Then, Dr. Sergei Ikovenko, MATRIZ President, closed the Conference.

Please check our website for the announcement about TRIZfest-2013.

By: Dr. Mark G. Barkan Executive Director