



# Report on TRIZ fest-2016

# The main theme — TRIZ and Quality in Design and Manufacturing



# Dear colleagues!

The TRIZfest-2016 was successfully held on July 28-30 in Beijing, People's Republic of China. The TRIZfest-2016 was very special for TRIZ community because this year we celebrate Altshuller's 90<sup>th</sup> birthday and 60 years of TRIZ development.



The conference was co-organized by CAQ, China Association for Quality. We are very fortunate to receive the support from such prominent Chinese organization.

The Organizing Committee consisted of:

The Organizing Committee Co-Chairs:

Dr. Duan Yonggang, Secretary General of China Association for Quality

Dr. Mark Barkan, TRIZ Master, MATRIZ Executive Director.

The Organizing Committee members:

Ms. Lilin Wang –Director of International Exchange Department of CAQ

Mr. Valeri Souchkov, TRIZ Master – Chairman of the Papers Review Committee;

Dr. Yury Fedosov, TRIZ Master – Treasurer;

Dr. Simon Litvin, TRIZ Master – Chairman of the TRIZ Master Certification Council (TMCC);

Dr. Yongwei Sun, Shenhua Group– MATRIZ VP and Presidium member, Chinese representative

#### The setting

The conference Organizing Committee did an excellent job hosting the conference. The team of CAQ should be commended for the great efforts in making TRIZfest-2016 a great success. The meeting facilities were conveniently located and well equipped, the breaks were timely, evening activities, the cocktail party and the banquet, were very well organized.

On top of all that, the city of Beijing offered many sightseeing spots and picture taking opportunities.

# The participants

This year, the conference attracted over 150 participants from 16 countries. Another testimonial for TRIZ increasing World popularity.

# The papers

This year we continued with the practice of selecting submitted papers based on peer review. Valeri Souchkov organized the review process. He was able to assemble quite representative group of reviewers, consisting of academia and industry representatives. This time, 47 papers, out of 96 submitted, which successfully passed through the review process, were presented. The papers were differentiated into research, cases and best practice categories.

#### Preconference tutorials.

On July 27th TRIZfest-2016 participants attended the following tutorials by the world's top TRIZ experts; the tutorials are present by 5 MATRIZ masters and 1 MATRIZ level 4 specialist.

- 1. Dr. Sergei Ikovenko, TRIZ Master "Patent Circumvention".
- 2. Dr. Simon Litvin, TRIZ Master "MPV Identification".
- 3. Valeriy Prushinskiy, TRIZ Master and Dr. Oleg Feygenson, TRIZ Master "Modern TRIZ Tools: Hybridization with elements of Advanced Function Approach".
- 4. Dr. Mark Barkan, TRIZ Master "How to succeed in the 21st Century".
- 5. Dr. Yongwei Sun, Level 4 TRIZ Specialist Introduction to Modern TRIZ.

#### Day 1

The Conference began at 9:00am on July 28t, 2016. Dr. Mark Barkan, Co-Chair of TRIZfest-2016 Organizing Committee, opened the conference.



Dr. Yonggang Duan, Secretary General of CAQ, reviewed the history of cooperation with MATRIZ, as well as the prospects for future cooperation, and the future deployment of TRIZ job in CAQ. Later, Representatives from the CAQ, MATRIZ, Hong Kong, and Chinese enterprises held a ceremony for the establishment of the CAQ TRIZ Promotion Committee.





Dr. Sergei Ikovenko, MATRIZ President, delivered the opening speech. Firstly, he expressed MATRIZ appreciation to CAQ, and gave a warm welcome to all participants; he gave MATRIZ appreciation plaque to CAQ. In the following award ceremony, National Institute of Clean-and-Low-Carbon Energy (NICE) of Shenhua Group and the GE Global Research Center (India) were presented with the annual MATRIZ special honor

award. Yihong Dong, Zhongyue Zhang, and Guohua Gao were awarded the annual MATRIZ individual contribution award.















The opening ceremonies were followed by a plenary session, devoted to Genrikh Altshuller's 90<sup>th</sup> birthday. Altshuller was born on October 15, 1926. This day is now celebrated as the International TRIZ Day by the TRIZ community. Dr. Simon Litvin, the Chairman of the MATRIZ TMCC and one of the Altshuller's close friends and collaborators, reviewed Altshuller's life from a different prospective. He used some photos which were never published before and shared a few stories about Altshuller's life, which allowed the participants to see Altshuller as he was in real life.



Then, Dr. Yongwei Sun, TRIZ Specialist from NICE of Beijing Shenhua Group, delivered a keynote speech, in which he introduced the TRIZ status in NICE, including the promotion history, achievements and some promotion strategies, etc.



The paper presentation followed in the afternoon.

After a full day of work, the participants enjoyed a well organized cocktail party. In addition to the traditional Chinese and international hors d'oeuvres and various drinks, there were plenty of toasts and jokes by all present.

#### Day 2

The second day of the conference started with more papers' presentations.

At noon four TRIZ experts from various enterprises held an Industrial Panel. They were: Dr. Martha Gardner from General Electric in United States, Dr. Oleg Feygenson from Samsung Electronics in South Korea, Mr. Sylvio Näther from Continental automotive in Germany and Dr. Yongwei Sun from NICE of Shenhua Group in China. Many very important issues were raised during panel discussion. TRIZ deployment process in different companies, promotion strategies, the role TRIZ played in enterprise, the reasons for failure of TRIZ projects, and so on. Due to the time constrains, not every participant had a chance to ask their questions. We will attempt to allocate more time to this activity in future *TRIZfest* conferences.



After lunch, Dr. Edward Lumsdaine delivered his keynote address on "Creative Problem Solving and TRIZ in Engineering Design Process". After the keynote, more papers' presentations followed.

After the official part, Day 2 concluded with the banquet. We were treated to the delicious traditional Chinese cuisine and Shede Wine of Sichuan Tuopai (MATRIZ membership No. 80) very much. The wine was donated to the conference by the company. Members of the MATRIZ Presidium, the

leadership of CAQ, and the conference organizers representatives toasted the participants.

#### Day 3

Day3 started with a session of the TRIZ Master Certification Council. The Council consisted of nine TRIZ Masters:

- 1. Dr. Simon Litvin, Chairman, USA
- 2. Dr. Oleg Feygenson, Academic Secretary, South Korea
- 3. Dr. Oleg Abramov, Russia
- 4. Mr. Len Kaplan, South Korea
- 5. Dr. Sergey Logvinov, Russia
- 6. Mr. Alex Lyubomirskiy, USA
- 7. Mr. Valeriy Prushinkskiy, USA
- 8. Dr. Yong Won Song, South Korea

MATRIZ TMCC considered two on merit defenses with the following results:

Name	For	Against	Result
Mr. Jung-Hyeon Kim	8	0	TRIZ Master
Mr. Heungyeol Na	7	1	TRIZ Master

Then, the conference followed with more paper presentations.

# **Closing ceremony**

The three days had passed very fast. At last, Dr. Sergei Ikovenko, MATRIZ President, closed the Conference. He expressed his best wishes to all the participants, and announced that TRIZfest-2017 will be held in Krakow Poland on September 14-16, 2017.



# **Visit to Shenhua Group**

In July 31st, some participants of the conference went to NICE, Shenhua Group, to learn about the use of TRIZ in the industrial research institute. The visitors were divided into two groups for a visit to the low carbon technology corridor, talent exhibition, and research laboratories. The research focus areas, talent development, major events and business models of NICE etc. were introduced. Researchers of NICE presented the six major areas of NICE's development direction, scientific research, the role of TRIZ and Design for Six Sigma (DFSS) in their projects.



Subsequently, in the NICE meeting room, four practical cases using TRIZ were presented by R&D NICE researchers, which allowed the participants to understand the role of TRIZ in R&D projects. After that, Dr. Yongwei Sun, TRIZ promoter of NICE, introduced the history of TRIZ in NICE, its promotion strategy and so on, especially how to overcome the difficulties in the promotion process, which drew a lot of interest from the participants. Finally, an in-depth discussion was carried out on the role of TRIZ in real life problem solving. Dr. Sun gave detailed answer to each question.

TRIZ was implemented in NICE more than three years ago. More than 150 researchers have finished various level TRIZ trainings. With the combination of TRIZ and projects, a large number of results were achieved. Furthermore, R&D efficiency and the innovation capability of the researchers were greatly enhanced.

### **Evaluation by the participants**

In the past few days, we have received a lot of very good feedback from the participants.

- Some participants, who attended the international TRIZ conferences in the past, think this conference was one of the best TRIZ conferences they ever attended.
- Many Chinese (including Taiwan, Hong Kong) TRIZ experts believe that this conference is the highest level TRIZ conference happened ever in China.
- Some latest developments in the TRIZ theory were displayed. In particular, there were a number of world-class TRIZ masters, who presented their latest progress.
- TRIZ application in many fields of activity, such as technical problems, patent activities, business, management, education, cost management, was presented. Those successful stories will give us more confidence to move forward.
- The NICE visit was a first for a TRIZ*fest* conference. The visit enabled the participants to learn the application of TRIZ in real life situation. We need to continue with this activity.