

Personal Report of The Fifth TRIZ Symposium in Japan, 2009

Held by the Japan TRIZ Society, NPO,
on Sept. 10-12, 2009, at National Women's Education Center
(NWEC), Saitama, Japan

Toru Nakagawa (Osaka Gakuin Univ., Japan),
Nov. 22, 2009, Mar. 9, 2010

[Posted on Nov. 23, 2009; Updated: Dec. 6; Dec. 24, 2009; Feb. 4; Mar. 11, 2010]

For going to Japanese pages, press buttons. Japanese translation of this page is not scheduled.

Editor's Note (Toru Nakagawa, Oct. 16; Nov. 22, 2009) (Mar. 9, 2010)

We held the 'Fifth TRIZ Symposium in Japan' with 137 participants (including 19 from overseas) and 43 presentations (including 14 by overseas presenters). Here is (the first part of) my personal report of the Symposium for the purpose of introducing this significant TRIZ event held in Japan to people all over the world who are interested in TRIZ and its applications. Please refer to the [Official Reports and Documents](#) posted in the Official Pages in this Web site and also in the [Official Site of Japan TRIZ Society](#) .

The present report is written 'personally' along the line of my series of 'Personal Reports' of important TRIZ conferences, including [TRIZCONs in USA](#) , [ETRIA TFCs in Europe](#) , and [TRIZ Symposia in Japan](#) . I would like to introduce you to the present Symposium, especially in its scientific contents, in a manner as fair as possible even under the limitation of my personal view. I served as the Chairperson of the Program Committee of the Symposium again, but my main face here is just a researcher in TRIZ who has been working to promote TRIZ. A report of this kind would be helpful, I believe, for you to understand the current TRIZ situations in Japan and the world and for you to read some further documents. (For some more description about my intentions in writing 'Personal Reports', please refer to my previous reports (e.g.,).) The paragraph starting with *** shows my (especially) personal comments.

Since the number and contents of the presentations are big this year again, it has become increasingly difficult for me to write a report in detail. To my regret, this year I had to have given up writing my Personal Report of TRIZCON2009 even though I prepared for it to certain extent. I am now much delayed in writing this Personal Report of Japan TRIZ Symposium 2009, but I will definitely write it through.

[Nov. 22, 2009] Because of the large volume of work, I have decided to post my Personal Report in steps in several divided parts. The following table shows the tentative plan of the contents, and the progress of posting:

[Feb. 4, 2010] The parts up to Part H have been posted for these two months. A little more is left for the next posting probably in two weeks.]

[Mar. 11, 2010] I have just finished writing the concluding part, and adding the table of presentations in each category. For your convenience a set of PDF files are also made and attached at the left-most column of the following table. Click here for the PDF file of the whole set of this Personal Report .]

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[Note (Nov. 22, 2009, TN)] Japan TRIZ Society has decided to post the slides/papers of Keynote Lectures and 5 Award-winning Presentations in its Official Web site publicly in December 2009, and to post the slides/papers of all other Presentations in the Members-only pages of its Official Web site in March 2010. This Web site "TRIZ Home Page in Japan" is going to post the slides/papers of selected presentations publicly, under the permission by the Authors in due course.

[Note (Dec. 6, 2009, TN)] Japan TRIZ Society has publicly posted the Presentation slides of the Keynote Lectures (See [Part A](#)) and three Award-winning presentations.

[Note (Mar. 11, 2009, TN)] Japan TRIZ Society has posted the Presentation slides of all the Oral and Poster presentations in the Members-Only pages of its Official Site.


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1. Outline of the Symposium

Name of the conference:	The Fifth TRIZ Symposium in Japan, 2009
Date:	Sept. 10, 2009 (Thu.) 10:00 -- Sept. 12, 2009 (Sat.) 16:00 (3 days)
Location:	National Women's Education Center, Japan (NWEC), Ranzan-machi, Hiki-gun, Saitama Prefecture, Japan (A conference and training facility, located in the north-west far suburbs of Tokyo)
Held by:	The Japan TRIZ Society, NPO (Chairperson of Board: Toshihiro Hayashi (T. Hayashi Professional Engineer's Office))
Participants:	137 in total (118 from all over Japan, and 19 from overseas)
Presentations:	2 Keynote Lectures, 1 Tutorial, 24 Oral Presentations (plus 1 absent), 15 Poster Presentations, 2 Opening/closing addresses, 1 Discussion session.
Proceedings:	English Edition and Edition for Japanese people

Please refer to the [Official pages](#) for the [Agenda \(in a sheet\)](#) , the [detailed Agenda \(in a tabular form\)](#) , [Abstracts \(overseas\)](#) , [Abstracts \(from Japan\)](#) , etc. The Opening Address by [Toshihiro Hayashi](#) (Chairperson of Japan TRIZ Society) [to be posted later] is also useful as an overall view of the present Symposium.




The whole Symposium was carried out almost exactly in the order and time as shown beforehand in the

Advanced Agenda  , except that one paper [O-4 E13] was cancelled because of absence and another [E15] was moved from a poster [P-B8] to the oral [O-4] presentation.


	First Day, Sept. 10 (Thu.)	Second Day, Sept. 11 (Fri.)	Third Day, Sept. 12 (Sat.)
		8:45 Japan TRIZ Society Meeting Excursion	9:00 Free & Group Discussion D
Morning	10:00 Tutorial 12:00 Introductory Discussion A	10:00 Oral Presentations 6 papers (Doble tracks) 12:20	10:00 Keynote Lecture Poster Introduction B 11:50
Afternoon	13:00 Opening of Symposium Keynote Lecture Oral Presentations 6 papers (Double tracks) 17:50	13:20 Oral Presentations 4 papers (Doble tracks) Poster Introduction Posters and Demos A 8 Posters Oral Presentations 18:15 4 papers (Doble tracks)	12:50 Posters and Demos B 7 Posters Oral Presentations 4 papers (Doble tracks) 16:00 Closing
Evening	18:10 Buffet Dinner and Communications 20:00	18:40 Dinner 19:40	
	21:40 Free & Group Discussion B	21:40 Free & Group Discussion C	

Presentations are referred here in [] with the session name, e.g. O-4 for oral and P-A8 for Poster presentations, and the paper submission number, e.g. E13 from abroad and J03 from Japan.

2. Organization of the Symposium (with some pre-history)

The present Symposium is the fifth one annually held in Japan by the former '[Collaborative Board of TRIZ Promoters and Users in Japan](#)'  and its successor '[Japan TRIZ Society, NPO](#)'   . Japan TRIZ Society was officially approved by the Tokyo Metropolitan Government in December 2007. The Society has about 140 members and is operated by about 20 voluntary managing members.

The following table briefly summarizes the growth of our TRIZ Symposia in Japan for these five years:

	First  The First TRIZ Symposium In Japan	Second  The Second TRIZ Symposium In Japan	Third  The Third TRIZ Symposium In Japan	Fourth  The Fourth TRIZ Symposium In Japan	Fifth  The Fifth TRIZ Symposium In Japan
Date	Sept. 1 (Thu) - 3 (Sat), 2005	Aug. 31 (Thu) - Sept. 2 (Sat), 2006	Aug. 30 (Thu) - Sept. 1 (Sat), 2007	Sept. 10 (Wed) - 12 (Fri), 2008	Sept. 10 (Thu) - 12 (Sat), 2009
Place	Laforet Shuzenji, Izu, Shizuoka	Pana-Hills Osaka, Suita, Osaka	Toshiba Kenshu Center, Yokohama	Laforet Biwako, Moriyama, Shiga	NWEC, Ranzan-machi, Saitama
Organizer	Japan TRIZ CB	Japan TRIZ CB	Japan TRIZ CB	Japan TRIZ Society	Japan TRIZ Society
	Keynotes: 2 (T. Nakagawa; D. Mann) ;	Keynotes: 2 (H. J. Linde; E. Sickafus);	Keynotes: 2 (L. Ball; S. Dewulf); Invited talks: 3 (T.	Keynotes: 2 (A. Roggel, S. Ikovenko);	Keynotes: 2 (B.

Invited talks	Vendor talks: 4 (Y. Konishi; M. Sawaguchi; M. Hotta; M. Zenko)	Invited talks: 2 (S. Hibino; K. Yamaguchi) Introductory: 1 (M. Sawaguchi)	Hayashi; S. Tamai; N. Okuzumi); Tutorials: 2 (N. Nagase; M. Sawaguchi)	Invited talk: 1 (Y. Fukushima); Tutorial: 1 (M. Hotta)	Zlotin, D. Mann); Tutorial: 1 (Y. Fukushima)
Contributed papers	11 Oral presentations; 5 Poster presentations	17 Oral presentations; 12 Poster presentations	15 Oral presentations; 14 Poster presentations	23 Oral presentations; 20 Poster presentations	24+1 Oral presentations; 15 Poster presentations
Other features	Opening & Closing Addresses; Closing discussion	Opening & Closing Addresses	Opening & Closing Addresses; Meeting of Japan TRIZ CB & Japan TRIZ Society.	Opening & Closing Addresses; Introductory Discussion, feedback discussion; General Assembly Meeting of Japan TRIZ Society	Opening & Closing Addresses; Introductory Discussion; Free & Group Discussions; General Assembly Meeting of Japan TRIZ Society
Participants	104 (Japan 100; overseas 4)	157 (Japan 139; overseas 18)	202 (Japan 191; overseas 11)	180 (Japan 165; overseas 15)	137 (Japan 118; overseas 19)
Official Report	2005 Pre Engrt , Post Engrt	2006 Pre Engrt , Post Engrt	2007 Pre Engrt , Post Engrt	2008 Pre Engrt , Post Engrt	2009 Pre Engrt , Post Engrt
Personal Report	Nakagawa 2005 Engrt Jap.	Nakagawa 2006 Engrt Jap.	Nakagawa 2007 Engrt Jap.	Nakagawa 2008 Engrt Jap.	Nakagawa 2009 Engrt Jap.

The TRIZ Symposium was started as an open National conference on TRIZ in 2005 and then have added the International features little by little since 2006. For overcoming the language barriers we have needed much efforts. And the efforts have been supported by many presenters/participants/volunteers from Japan and abroad and resulted in much success. I would like to state **our policy of organizing this Symposium** with minor modification of my last year report:

For the Fifth TRIZ Symposium, we set its goals in three main points, essentially the same as in the preceding years:

(1) The first goal is to make the Symposium **an open and active conference** of all the people involved in TRIZ on the basis of **a standard procedure as an academic conference**. This procedure was actually carried out very smoothly: In Oct. 2008 we announced the outline, including the date and the place, of the Symposium. In Feb. 2009, we announced the plan of Symposium and called for papers openly (both in Japanese and in English) [Engrt](#), while in March we announced two Keynote speakers. In May, by receiving one-page extended abstracts of contributed papers, we reviewed them and set up an advanced agenda. In mid June, we announced the advanced agenda together with the abstracts and called for participation openly [Engrt](#). The final manuscripts of slides and (optional) full papers were collected by the end of July (the official due date), and prepared for publishing the Proceedings. We are very happy and proud of having done all these smoothly, as you see the Agenda carried out actually has only very minor changes in the Advanced Agenda announced in June, i.e. three months prior to the Symposium.

You may notice that we **do not adopt the procedure of peer-reviewing of full papers**. The extended abstract of one full page is checked and temporarily accepted by the Chairperson and Vice Chairperson of the Program Committee. Then at the Organizing Committee Meeting (of 9 members including all the 5 members of Program Committee), the submitted papers are screened with rough evaluation of the quality and the scope of subject. We request revision/clarification to the authors from time to time but we very rarely reject the papers at this stage. The Advanced Agenda is decided by the Organizing Committee and then approved by the Managing Meeting of Japan TRIZ Society. The final manuscripts are also quickly checked (and sometimes advised for improvement) by the Program Committee but not reviewed/screened. Thus the authors, and not the Committee, should have the full responsibility for the contents of the presentations. The choice of Oral or Poster presentations were mostly (or nearly entirely) based on the Author's preferences (This is done smoothly because almost all Japanese authors

knew the merits and demerits of the two styles in our previous symposia). These policies are made for the purpose of encouraging people to give presentations. We think the one-page extended abstracts have enough information for the Program Committee to roughly evaluate the quality of the paper and to set up the Agenda in a sensible and appropriate manner.

(2) The second main goal was to **provide as much opportunities of presentation and discussion** among all the participants. We would like to have **as many and as high-quality presentations as possible**.

The reviewing/screening policies mentioned in (1) are taken of course for this purpose.

The choices of **presentation styles** should be considered carefully; especially choice of either oral or poster, and choice of either plenary, double track, or multiple tracks. We want to keep enough time for presentation and discussion for each paper and need to accommodate over 40 papers in the limited period of time.

We have chosen the Keynote sessions to be 80 minutes (60 min. talk + 20 min. Q&A) and the contributed oral sessions to be 40 minutes (30 min. talk + 10 min. Q&A). This length of time is found both necessary and sufficient in almost all cases. We have to choose double tracks for all the contributed oral presentations (and no single track contributed papers).

We also had two **Poster & Demo Sessions** for multiple parallel presentations. We carried out these sessions as follows: We had a short plenary session for 'Introduction to Posters' where every author outlines their work in 3 minutes by using only 2 to 4 slides. Then after moving to separate rooms we had the Poster & Demo Session of 8 or 7 posters in parallel. By using max. 16 slide pages, the presenters gave a short talk (and discussion) of 20 min. and repeated it two, three times during the 70 min. session. Almost all the Symposium participants visited 2 or 3 poster presentations one after another. Presenters at the Poster sessions reported afterwards that they presented and discussed for full 70 minutes with eager participants and that they were glad to have given their presentations in the form of posters. --- We feel some types of presentations are suitable for posters and some others for oral talks.

(3) The third main goal was to increase the International nature of the Symposium by somehow overcoming the language barriers. 'Either National OR International' is a form of ordinary choice enforced by a contradiction. We set the target of the Symposium as '**Primarily National AND Partially (but as much as possible) International**' since 2006 and have already established our own way of achieving this target.

The ordinary solution of **overcoming language barriers** (between Japanese and English languages, in the present case) would be using interpreters. This solution faces with the difficulties in getting skilled interpreters and in cost; Moreover, sequential interpretation loses half of the time while simultaneous interpretation needs special facilities. In contrast to such an oral/contemporary/temporary assistance, we have chosen a new solution based on visual/preparative/permanent assistance. We have translated the slides beforehand and projected the slides in two languages in parallel, and published the Proceedings in the two language editions. This is a solution based on 'Prior Action' and 'Using Another Sense' (visual assistance). The solution was implemented by the cooperation of Japanese authors to provide both Japanese and English slides and by the organizing members' work of supporting the Japanese authors and also of translating English slides into Japanese. The translation work was also supported by a number of voluntary people outside the organizing members. On the other hand some Japanese authors chose the option of no English translation, which was approved as a practical choice.

This solution has been evaluated highly by most of the participants and even Japanese authors, according to their answers to our post-conference inquiry. It is useful and good enough for most of Japanese people, who understand English more or less in listening. For people from overseas, however, this solution is helpful to a large extent but not fully, depending on the ways of making slides. The double tracks of the oral presentations are designed mostly English speaking in one track while Japanese speaking in the other. Some Japanese participants went back and forth between the two tracks, but few overseas did so.

Discussions in most oral presentations having slides in two languages are sequentially interpreted in both directions. This was done by two organizing members and two more

voluntary people.


In this Symposium, submission of **presentation slides is requested**, while submission of full paper is optional. This policy is preferred by many Japanese industrial people, because writing a full paper is a heavy burden for them. As a results, the submission of full papers was done only by a small number of authors (6 full papers in Japanese and 4 in English). -- This issue need to be considered and improved further step by step.

Anyway, this year we received **19 overseas participants giving 16 presentations**. The presentations were given by the people coming from USA, UK, Germany, Italy, Malaysia, Taiwan, Korea, (and Austria though absent). We are very happy to have received world leaders in TRIZ and also people working actively in Asian countries.



(4) Especially this year, **under the severe World economic depression**, how to obtain large enough number of presentations and participants was the critical issue. Around last March some people expected max. 100 participants, down from 180 of the last Symposium. Calling for papers and for participation one by one with email communications and with personal contact seemed to have the effects. Even though a number of Japanese companies reduced or eliminated their delegates, we are very glad to have so many presentations and 137 participants. We feel these are the 'core people' of Japan TRIZ community, without losing their passion and activities in TRIZ.




Our policy of encouraging personal communications/discussions and inter-company collaboration in the Symposium as well as in the regular TRIZ activities has the effects, we believe. An European leader said he was impressed with the Japanese multi-company study groups in TRIZ and an Asian participant wrote "It is like a cultural shock that TRIZnik from different companies came together and discuss in front of the poster. It is unthinkable in my country."

As you see, the style of our Japan TRIZ Symposium has been established and extended since 2005 and has brought a big success in the growth and in keeping in the numbers and qualities of presentations and participants. The **voluntary cooperation** by people outside the organizing members increased further this year, giving us much light for the next year Symposium.



All the presentations are categorized according to their topics and reviewed/introduced below in separate pages. The  buttons in the tables below will guide you directly to Nakagawa's review/introduction to the individual presentation.


3. Keynote Lectures and Tutorial






[Part. A](#)  (Nov. 23, 2009) 

	Author(s)	Affiliation	Title of presentation	Review	Postings
A1 Keynote.	Boris Zlotin , Alla Zusman	(Ideation International, USA)	Use of TRIZ for Prediction of the Future of Technological Systems		
A2 Keynote	Darrell Mann	(Systematic Innovation, UK)	TRIZ: Necessary But Not Sufficient: Customers And Theories Of Everything		
A3 Tutorial	Yojiro Fukushima	(Panasonic Corp.)	Using TRIZ in an Effective Way for Problem Recognition and Solving		

4. Methodologies in TRIZ




[Part. B](#)  (Nov. 23, 2009) 

B1	Davide Russo , Caterina Rizzi , Tiziano Montecchi	(Univ. of Bergamo, Italy)	Interconnectivity and White-Space Opportunity: Bringing Together Forecasting and Scenario Planning to find	
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			Innovative Opportunities	
B2.	Gaetano Cascini , Niccolo Becatini (*1), Federico Rotini (*2)	(Politecnico di Milano, Italy); (Universita degli Studi di Firenze, Italy)	Network of Evolutionary Trends and Maturity Assessment through Contradictions Analysis	
B3.	Shinsuke Kurosawa	(The SANNO Institute of Management)	Using “Stages of Evolution of a Technological System”: The Basic Tool for Problem Solving	
B4.	Davide Russo , Daniele Regazzoni, Valentino Birolini	(University of Bergamo, Italy)	How to define the right problem in a problem solving activity	
B5.	Takao Adachi	(The SANNO Institute of Management)	A Design Method with TRIZ for Pursuing Ideality	
B6.	Rikie Ishii	([Miyagi TRIZ Study Group (Mi-TRIZ)] IDEAPLANT)	Development of a Tool That Supports TRIZ Leaders during Idea Generation Meetings: 9-Windows Board	
B7.	Makoto Unno , Hideaki Saegusa , Nobuhide Matsuda , Kazuyasu Ikeda	(Kawasaki Heavy Industries), (Panasonic Co.), (Sekisui Engineering Co.)	Study on Development-Phase-TRIZ (part 3): Case Study on Contradiction Solving Process	






5. Integral Use of TRIZ with Relevant Methods






Part C  (Dec. 6, 2009) 

C1.	Toru Shonai , Junji Shigeta	(Central Research Laboratory, Hitachi, Ltd.)	Survey on Thinking Methods for Invention and Discovery — A Step for Combining TRIZ with non-TRIZ methods—	
C2.	Osamu Kumasaka , Fumiko Kikuchi, Akio Fukushima	(Pioneer Corp.)	The Role of TRIZ in the System of Monozukuri Solution Methods	
C3.	Koji Tsumagari , Masaaki Sakai	(Logo Corp.)	Make an Effective Use of TRIZ Result: Project Management with TOC and the Practical Use	

6. Case Studies in Industries








Part D  (Dec. 6, 2009) 

D1.	Takahiro Shoji , Yosuke Koga	(Panasonic Communications Co.)	Practical Use of Scientific Creative Techniques for the Development of Telecommunication Devices	
D2.	Paul Devaraj	(Intel, Malaysia)	An Innovative Approach on Module Ionizer Efficiency Management	
D3.	Surendran Selladurai	(Intel, Malaysia)	Innovative Leakage Safety Detection System using TRIZ	
D4.	Darin Moreira , Sushiph Sum Bun, CT Ong	(Intel, Malaysia)	Simplifying Conventional and Enhancing Outgoing Product Quality on the ICOS Vision System with TRIZ	
D5.	Ragubalan Shanmugam ; Cheng, Chiew Shan	(Intel, Malaysia)	Customize Picoclock Checkers (Software)	

			Program)	
D6.	Jahau Lewis Chen, J.-F. Wang	(National Cheng Kung Univ., Taiwan)	Eco-Innovation by Using Unified Structured Inventive Thinking	
D7.	Shoichi Tsuge, Tateki Oka	(Konica Minolta Business Technologies, Inc.)	Case Study for Verifying the Effectiveness of Applying USIT	
D8.	Hajime Kasai	(IDEA, Inc.)	Application of TRIZ to Environmental Problems: For Further Extension of TRIZ	
D9.	Takuo Maeda (*1), Kazushige Aoki (*2), Masaaki Ohogami (*3), Fumiko Kikuchi (*4), Kazunori Kurabayashi (*5), Toru Shonai (*6), Hirotake Makino (*2), Yuji Mihara (*7)	[SW/IT Working Group of MPUF USIT/TRIZ Study Group] (Takumi System Architects), (Yokogawa Electric), (USIT Planning), (Pioneer), (Accenture Japan), (Central Research Laboratory, Hitachi), (Creative Technology Institute)	Practical USIT Workbook to Develop New Ideas on Software/IT Products	
D10.	Wolfgang Sallaberger	(Congelo, Austria)	The Evolution of Cooking with TRIZ	


7. Promotion of TRIZ in Industries



Part E  (Dec. 6, 2009) 

E1.	Yojiro Fukushima, Tsutomu Hata	(Panasonic Corp.)	Engineers' Understanding of TRIZ As a Consequence of Questionnaire Survey	
E2.	Toshihiro Tamura, Shigeki Nishikawa	(Sharp Corporation)	Adaptation Example to Engineer Education That Uses TRIZ -- Aimed at Comprehensible TRIZ Training	
E3.	Tomohiko Katagiri, Toshiaki Tsuchizawa, and Shuichi Hosaka	(Koganei Co.)	Case Study of Introducing and Applying TRIZ to Real Projects for Obtaining Results (= Profits) (Part 2): Having Used QFD → TRIZ → TM, What are the Results?	
E4.	Atom Mirakyan, Nikolai Khomenko, Laurent Lelait, Igor Kaikov	(European Institute for Energy Research, Karlsruhe, Germany)	The potential of OTSM-TRIZ as a frameworking method for modern regional, integrated energy planning and modeling	
E5.	KyeongWon Lee	(Korea Polytechnic Univ., Korea)	TRIZ Activities in Korea and Its Success Factors until 2009	
E6.	Manabu Sawaguchi	(SANNO University)	On The Roles of TRIZ at the Workshop Based on "Cross-industrial association" - TRIZ to facilitate Innovation Activities -	
E7.	Mitsuo Morihisa (*1), Hiroshi Kawakami, Osamu Katai (*2)	(SKI), (Kyoto University)	Spreading and Socialization Model of TRIZ by an Activity Theory Approach". First I will quote the Authors' Abstract:	

8. Usage of TRIZ in Education and in Academia



Part F  (Dec. 6, 2009) 

F1.	Masao Ishihama, Minami Hamada	(Kanagawa Institute of Technology)	Concept Design of a Child-Seat by TRIZ Style Problem Identification	

F2.	Yutaro Ueda , Hiroki Nabeshima, and Toru Nakagawa	(Osaka Gakuin Univ.)	TRIZ/USIT Case Study: How to Help Recall Passwords	
F3.	Toru Nakagawa , Tomoyuki Itoh, and Masanobu Tsukamoto	(Osaka Gakuin Univ.)	How to Prevent Cords and Cables from Getting Entangled: A Study of Systematic Classification of Various Solutions	








9. Patent Studies and Tools

Part G  (Dec. 6, 2009) 

G1.	Kimihiko Hasegawa , Hiroshi Ueda, Nozomu Takeuchi, Teruyuki Kamimura, Toshimitsu Kataoka, Narumi Nagase, Hirotake Makino, Mikio Suzuki, Shigeru Suzuki	([Intellectual Property Creation Study Group, Japan TRIZ Society])	Invention Analysis through the Patent Journal (Part 2)	
G2.	Hideaki Kosha (Fujifilm Corp.), Yuji Mihara, Noritaka Nakayama, Kouichi Nakamura, Hirotake Makino	([MPUF USIT/TRIZ Study Group])	Study on USIT Operators Application Examples	

10. Applications to Non-technical Areas

Part H  (Feb. 4, 2010) 

H1.	Atsushi Takeuchi	(Niigata Institute of Agricultural Research)	Rather “Que Solar, Solar” Than the “Systematic Innovation” on Agro-technology in Japan with TRIZ/USIT	
H2.	Ikuo YOSHIZAWA (*1), Kazumasa YOKOYAMA (*2), Kimihiko HASEGAWA (*3), Akira SATO (*4), Shigeru KUNO (*5), Yasuo MORIYA (*6, Takuo MAEDA (*7), Teruyuki KAMIMURA (*8), Fumiko KIKUCHI (*9)	[Business & Management TRIZ Application Study Group, Japan TRIZ Society] (SANN0 Inst. of Management), (Toshiba),(Sano & Associates International Patent Firm),(Keio Univ.), (NKN Consulting),) (Fujitsu Advanced Technologies), (Takumi System Architects), (Willfort International Patent Attorneys), (Pioneer Co.)	Application of TRIZ Way of Thinking and Its Tools to Develop a New Business Model	
H3.	Shigeru Kasuya	(Pro Engineer Institute)	Effective Use of TRIZ, in the “Career Design” Education	
H4.	Atsuko Ishida	(Hitachi Consulting Co.)	Pursuing Essence of Innovation through Applying TRIZ to Problem-Solving on Business	
H5.	Toshio TAKAHARA		TRIZ as the Way of Life?	
H6.	Sachio Matsubara	(Niigata Univ.)	Transitions of Japanese Manufacturing Methods from the Viewpoint of Constructing and Utilizing Explicit and Tacit Knowledge - The Rise of New Empiricism -	
H7.	Vitali Altholz	(International Graduate School Zittau, Germany)	Legitimacy of A Problem Solving Approach and Its Success in Practice As A	

11. Miscellaneous

On the First day morning, we had a preliminary session of **Introductory Discussion** for 2 hours with the coordination by Shinsuke Kurosawa (The SANNO Institute of Management). This was held, in parallel to the Tutorial presented only in Japanese, with the aims at having a chance of getting acquainted well among the people from overseas and from Japan. 30-40 people joined this session.

In the First-day evening, we had '**Buffet Dinner & Communications**' for 2 hours. People met and talked freely without seating, while having food and some soft and alcoholic drinks. Keynote Speakers and Presenters coming from overseas were welcomed and introduced to people. This is an effective way of having informal and intimate communications.

In the evenings after dinner, we had informal and voluntary **Group Discussions**. Six topics were chosen and coordinated. Discussions were carried out in parallel in separated rooms. The discussions were not meant to be recorded for the purpose of informal and frank communications among the people. The topics were:

- **"How to promote TRIZ in industries"** (Coordinated by Teruyuki Kamimura; about 20 people, for 3 hrs. + 1 hr.): Experiences of difficulties in various companies, and some cases of success.
- **"What are the keys to smooth use of TRIZ for beginners?"** (Coordinated by Narumi Nagase and Katsuya Miyanishi; about 20 people, 2 hrs + 1 hr.): Following the coordinators' description of the motive, people wrote their viewpoints/questions/opinions on Post-it notes. Grouping them on a big table, the subtopics of people's interest became visible. Then people introduced themselves and their thoughts one after another with free discussion. A short article on this activity will be posted in the near future (in Japanese and photos).
- **"TRIZ for IT/Software"** (Coordinated by Yojiro Fukushima and Toru Shonai; about 15+ people, for 2 hrs.): Unclear still for many people new to this field of TRIZ application, but already used effectively in several companies. It is desirable in this field to start a new study group inside Japan TRIZ Society.
- **"Discussion with Boris Zlotin, TRIZ Master"** (Coordinated by Shinsuke Kurosawa; about 15 people, for 2 hrs.): Q&AAA with Boris Zlotin. He introduced much on the Ideation's new software product for IP management.
- **"Free discussion in English"** (no coordination necessary; 4 people from overseas, for 3 hrs.).
- **"TRIZ and Education"** (Coordinated by Toru Nakagawa; 3 people from Italy + about 12 people, for 2 hrs): Communications on the current situations of TRIZ in universities and at schools. TETRIS project and the teaching activities in Italian universities were introduced. A new study group will be started soon in Japan TRIZ Society for the communication among the people interested in "Education and TRIZ" in universities and at schools.

*** This type of Group Discussions was new for us to arrange. It was found nice but needs improvements. The size of each group may better be a bit smaller, probably around 10, and should have clearer description of its topic/motive. For this purpose, we may have an entry system, where each participant is asked to show the entry application to one of the groups shown on a big board. If a topic attracts much more people, multiple subgroups should be organized by assigning coordinators among the entry people. The topic/motive should be expressed in a way of positive thinking; finding the ways of overcoming big difficulties together is our common attitude in TRIZ. Coordination/facilitation may be tried in their own ways of group coordinators.

On the Second-day morning, the General Assembly Meeting of the NPO Japan TRIZ Society was held for 40 minutes. This was an official meeting as an NPO, as requested by Japanese law. Japan TRIZ Society has about 120 members on the voluntary basis. The General Assembly Meeting approved the activity and finance reports for 2008-09 and those plans for 2009-2010, and elected the new Board members. (Note: the fiscal term of the NPO starts on July 1, while the term of the Board members starts on Oct. 1.)

The venue, National Women's Education Center, Japan (NWEC), is located in the suburbs of Tokyo, 2 hours apart from Tokyo station. The national facility is open to any non-commercial academic activities at a very low rate under the condition of their giving 'Introduction to NWEC's activities' for 30 minutes in the plenary session. We were lucky to be made available the big auditorium (capacity of 600), a nice conference room, and two big rooms for poster presentations. The facility has a nice green campus, giving us comfort. The facility, unfortunately, does not have a high standard of guest rooms, restaurants, and internet services like modern excellent hotels. We, the Symposium Organizers, would like to ask your tolerance for such inconveniences.

During the Symposium, an [Award was presented to Mr. Darrell L. Mann](#)  by Toru Nakagawa from

The "TRIZ Home Page in Japan" Foundation for his nearly two-decades long contributions. This was the first Award of the newly established Foundation; history sometimes starts without formality of official ceremony. The Award Certificate expresses:

For Your Contributions: In recognition of your contributions and services over many years in the research, writing, development, and training on TRIZ and Systematic Innovation for guiding people in the World and in Japan, an award is hereby presented with sincere appreciation and gratitude.

12. Concluding Remarks (Mar. 9, 2010)

As the basis of writing concluding remarks on the 5th TRIZ Symposium in Japan, 2009, I would like to quote the statistics shown in the **Opening Address** by **Toshihiro Hayashi**, Chairperson of the Board, Japan TRIZ Society.

TRIZ シンポジウム 2009			Participants breakout transition through 1 st to 5 th TRIZ Symposium in Japan				
			2005 (1)	2006 (2)	2007 (3)	2008 (4)	2009 (5)
Presenters	Japan	University/research institute	1	6	3	4	↗ 5
		Industries	9	10	10	10	→ 10
		Personal study group and others	2	2	6	10	↘ 6
		Service providers	5	5	5	8	→ 7
	Overseas	3	11	10	14	→ 14	
	Total	20	34	34	46	→ 42	
Tutorials				2	2	→ 2	
Attendees *	Industries users (except IP)		71	94	142	97	↘ 62
	Education/consulting		9	43	42	40	→ 50
	TRIZ tool vendors		15	2	1	7	↘ 4
	Others (IP, IT, personal etc.)		9	8	10	23	↘ 16
	Total		104	147	195	167	↘ 132
Final attendees				157	204	179	

(* including presenters, based on advance registration) (as of Aug. 28, 2009)
 TRIZ Symposium 2009 in Japan (10/09/2009 - 12/09/2009) 6

(1) The most important factor in the Symposium is the **presentations**. This year we had 2 invited talks, 1 tutorial, and 40 contributed presentations. The number is quite large even though slightly smaller than in the last year. The quality of the presentations has been improved year after year, as you may feel from my reviews. There are a number of good and rich presentations based on much research and experiences.

(2) The number of **participants**, i.e. 137 including 19 from overseas, showed an remarkable success of the Symposium particularly under the very severe depression of Japan and World economy. The number of participants from Japanese industries reduced much (by about 35) but still remained at a high level. We understand that these participants are the 'core people' of TRIZ in Japan who are working hard to study, apply, promote, improve TRIZ in their own organizations. Most of the participants stayed at the venue for two or three days.

(3) **Predominant involvement by industries and industrial engineers** has been the feature of our Japan TRIZ Symposia. Here is the list of 8 companies who made presentations this year: Intel (Malaysia), Hitachi, Pioneer, Panasonic, Panasonic Communications, Konica Minolta Business Technologies, Sharp, and Koganei. Furthermore the following 8 companies joined group presentations this year: Kawasaki Heavy Industries, Sekisui Engineering, Yokogawa Electric, Accenture Japan, SONY, Fujifilm, Toshiba, and Fujitsu Advanced Technologies. Special thanks we wish to express to Intel Malaysia who made 2 Oral and 2 Poster presentations on their real cases of applying TRIZ. Excellent case studies were presented by T. Katagiri et al. (Koganei) and by T. Shoji et al. (Panasonic Communications).

(4) Contributions by **voluntary, multi-company study groups on TRIZ** are also active this year, too. The groups are: TRIZ Spreading/Use Study Group (of Japan VE Association Kansai Branch), Miyagi TRIZ Study Group, USIT/TRIZ Study Group (of MPUF), IP Creation Study Group (of Japan TRIZ Society) and Business &

Management TRIZ Study Group (of Japan TRIZ Society). Please refer to my Personal Report of last year for some summary description on these groups.

(5) For **further development of TRIZ methodology**, we are happy to have Keynote Lectures by B. Zlotin and by D. Mann and also research papers by G. Cascini and his group from Italy. These are related to the topic of how to understand the (potential) markets in the future and how to set our target for product/service development. Presentation on OTSM-TRIZ by A. Mirakyan et al. (Germany) is noticeable as an approach to tackle with large-scale complex problems. O. Kumasaka et al. (Pioneer) reported on a matrix for indexing from task to method covering very large area of monozukuri (i.e. engineering).

(6) **Extension of TRIZ application field** is taking place gradually. Reports by T. Maeda et al. in the IT & software field, by A. Takeuchi in the agriculture field, and I. Yoshizawa et al. in the business application are noticeable. T. Takahara gave a presentation on "TRIZ as the Way of Life?"; this expresses a very deep life-philosophy based on the TRIZ thinking.

(7) Results of **education of TRIZ in universities** were reported by students themselves. M. Hamada is a 1st year MC student at Kanagawa Inst. of Tech. and Y. Ueda is a 4th year undergraduate student at Osaka Gakuin Univ.

(8) Report by K.W. Lee on **TRIZ activities in Korea** is remarkable. He describes that TRIZ in Korea is now at the rapid growth stage of S-curve and has listed up several 'success factors'. Reflecting his points, I wrote a summary table of the current Japanese situations. There are several points where Korea seems ahead of Japan (and other countries) and there are several other points where Japan seems ahead of Korea (and other countries). We should notice that last January this year ICSI2010 (Intern'l. Conf. on Systematic Innovation) was held in Taiwan with about 150 participants and that on March 11-12 KoreaTRIZCON2010 (Global TRIZ Conference in Korea) is going to be held in Seoul with a rushing preparation. Thus the interest in TRIZ is now growing in Asian countries, including Korea, Taiwan, and China.

(9) Our Symposium has been operated with the policy of '**Primarily National AND Partially (but as much as possible) International**'. From overseas, this year we had 14 presentations (2 Keynote Lectures, 9 Oral, and 3 Poster presentations) from 8 countries (USA, UK, Italy, Germany, Austria, Malaysia, Taiwan, and Korea) and 19 participants. We made a lot of efforts for **overcoming the language barriers**; such as translating slides from English to Japanese and from Japanese to English, publishing the Proceedings in two language editions, interpreting the discussions during the sessions, etc. Besides the organizing members, we could obtain nearly 10 voluntary people for helping us in these activities.

In short, TRIZ is already rooted in Japan in various organizations and need to be persistent and strong for growing steadily in the current severe situations. I wish this Personal Report helpful for TRIZ people in Japan and in the World.

Next TRIZ Symposium in Japan: Announcement and Call for Papers

Japan TRIZ Society, NPO, has announced as follows on Feb. 22, 2010:

The 6th TRIZ Symposium in Japan, 2010 is going to be held by Japan TRIZ Society, NPO


Date: Sept. 9, 2009 (Thu) through Sept. 11, 2009 (Sat.) (for three days)

Venue: Kanagawa Institute of Technology (Atsugi City, Kanagawa Prefecture)

Address: 1030 Shimo-ogino, Atsugi, Kanagawa, 243-0292, Japan







Location: South-west of Tokyo, about 2 hours from Tokyo Station

URL (in English): <http://www.kait.jp/english/> 

Call for Papers  has been announced on Feb. 22, 2010.

Due date of Extended Abstract: May 17, 2010; Full Paper: Jul. 26, 2010.

We look forward to your presentation and participation in this coming active TRIZ event in Japan next year!!

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Last updated on Mar. 11, 2010. Access point: Editor: nakagawa@ogu.ac.jp