



Report of the 2014 SUTA reunion

Milan, August 1-3, 2014

1. Prelude

The 8th global reunion of Sharif University of Technology Association (SUTA), with over 250 delegates coming from all across the World, has been held in Milan, Italy from 1st to 3rd of August 2014. The delegates have arrived from Iran, Italy, Canada, United States, Sweden, Germany, UK, Australia, Norway, UAE and other places.

Milan had been chosen among a few cities that have been nominated as the venue of this reunion, based on its attractions, overall proximity to countries delegates were coming from, the comparatively easier visa process for those travelling from Iran, being served by two international airports with services from many important cities and the access to a pool of volunteer resources to run the reunion.

After Milan was chosen as the 8th SUTA reunion's host in November 2013, a local team started working on the details immediately. The team was finalized by early December, milestones and dates were set in December, the reunion's website was ready by January, the researches for the venue started in January, the registrations started by early February, the venue was chosen by the end of February, the communications with the local authorities started in March, the communication with the Italian consulate in Iran started in April and the visa procedure started and continued throughout May, June and July. In the last few months, three teams in Iran, Italy and North America were working closely and in parallel to prepare the reunion.

2. Report of the events

2.1 The Program

A committee composed of Ms. Atieh Moridi, Mr. Mohammad Mahmoodi, Dr. Bahram ZahirAzami, and Dr. Masoud Olfat, and chaired by Dr. Hamid Mostaghaci developed a program composed of an opening session, three keynote speakers, three panels, and some other presentations to fit Saturday Aug/2, and Sunday Aug/3. Friday afternoon was mainly dedicated to registration, social activities and networking, along with some in-city tours.

2.2 Opening Ceremony

The main session of SUTA Reunion 2014 officially started on Saturday Aug/2 with Mr. Mahmoodi's welcome message. Mr. Mahmoodi, acted as the president of the Organizing Committee, and the president of SUTA Italy Chapter, but was not present due to some personal issues. His message was read by Mr. Ali Samei, another member of the local organizing committee. He presented a brief summary of the organizing committee activities before and during the reunion. A welcome letter by Mr. Giuliano Pisapia, the mayor of Milan was also read. This introductory speech was followed by a short welcome address by Dr. Fredun Hojabri, Senior Advisor of SUTA and honorary chairman of the conference, a short message by Mr. Mahmood Shiri, the Secretary General of SUT Alumni Association (SUTAA) presented by Mr. Hashem Sajjadi, and finally the welcoming remarks by Dr. Bahram ZahirAzami, SUTA president. He also introduced the sponsors of the reunion, on behalf of the Sponsorship Committee.

2.3 Technical, Cultural, Artistic, and SUT related Presentations

The opening ceremony was followed by a keynote speakers and a presentation. The keynote speaker was Professor Behrooz Parhami, former SUT professor and current professor at UCSB. During his speech, he portrayed the future trends of dynamic systems toward self-organizing, self-healing, self-improving, and self-sustaining systems. In his keynote speech, Dr. Parhami explained that information and computer systems already have some of the four attributes named in the title of the talk, and they are moving in the direction of greater agility, robustness, and independence. The four notions of self-organization, self-improvement, self-healing, and self-sustenance are not independent. Rather, the four attributes are overlapping in terms of techniques used to design, implement, and assess them. For example, reconfiguration strategies are applicable to self-organization, self-improvement, and self-recovery, while automatic learning is mandatory for both self-organization and self-improvement. The talk presented a number of relationships between these ideas, the nomenclature for talking about them in the context of various types of systems, and examples to demonstrate how they are used in human-made and natural systems.

The annotated slides for this talk, in both PowerPoint and PDF formats, are made available via Dr. Parhami's Publications Web page [3].

After Dr. Parhami's presentation, a video message from Dr. Sourena Sattari, Iran's vice president of science and technology, and the head of Iran's Elite's Foundation, was presented by Mr. Ali Morteza Birang, the deputy of international affairs. He introduced Iranian Elite Foundations, and played a video clip professionally made for SUTA that included Dr. Sattari's speech.

The next presentation was made by Mr. Farrokh Malihi who explained the activity of a private sector incubator and technology development acceleration center in Iran called MAPS.

The Saturday morning session was completed by the first panel, which is described in more details in Section 2.4.

The afternoon session started by an Iranian traditional music performance by Mr. Amir Javidani from Germany on "Ghaanoon", Mr. Hamed Tehrani from Iran on "Taar" and another young performer from Iran on "Santoor."

Ms. Foroozandeh Tabibi and Mr. Zahrai from Iran's AASUT presented the future plans of AASUT in Iran including the celebration of 40th anniversary of SUT's 5th year graduates. Dr. Hajialigol followed their presentation by describing the upcoming technical conference by Sharif graduates that will take place in Iran in October 2014.

The Saturday program was concluded by the second panel, described in more details in Section 2.4.

We had three presentations and a video clip during Saturday night at the Gala. In the first presentation Mr. Alireza Hamzeloui provided an update on the status of developing SUT's new campus called SUT Pardis. His presentation was followed by Mr. Nader Ghadessi's talk about Yaarane Alborz, a group who are engaged in building schools in Sistan and Baloochestan and Eastern Azerbaijan provinces for under-developed areas, using the agreement of OPAC for zones hit by earthquake. The last presentation was from Mr. Reza Arya, the President of the Iranian Scholars Worldwide Association (ISW), where he explained the mission of ISWA and SUTA's affiliation with this group. In between, a short documentary video clip made by Mr. Morteza Mortazavi from Sydney, Australia was projected.

During Sunday we had two panels, one cultural presentation, the AGM, and an art performance. The two panels are described in more details in Sections 2.4 and 3.1.

The cultural presentation was made by Mr. Reza Zarghamee, Senior Associate Attorney at Pillsbury Winthrop Shaw Pittman, and the son of Dr. Mehdi Zarghamee, former chancellor of SUT. In his attractive presentation, titled after a book he has published with the same name, "Discovering Cyrus: The Persian Conqueror astride the Ancient World," he portrayed the history of a land later known as Iran prior to the start of Cyrus the Great's dynasty. He explained and analyzed the

historical developments concluding in Cyrus building the largest empire the earth had ever seen, based on diplomacy, rather than war, and respect rather than annihilation. He continued by describing the events during Cyrus reign, and finally his tragic death in a fierce battle with the Massagetae, a tribe from the southern deserts of Khwarezm.

2.4 Award Ceremony and Gala Night

After a long day of speeches and meetings, all members and their guests were relaxed into a gala night setting on Saturday night.

SUTA's 2014 award winners have been introduced by Dr. Jalil Kamali and Dr. Bahram ZahirAzami, from the Awards Committee, as follows:

- Dr. Reza Mansouri winner of Dr. Amin's Lifetime Achievement Award
- Dr. Mahmoud Tabiani winner of Alumni Achievement Award
- Mr. Alireza Hamzelou and Mr. Mehdi Hakimpour winners of Distinguished Service Award
- Ms. Afsaneh Tehrani and Mr. Mansour Ajoudani winners of Staff Appreciation Award

Towards the end of the dinner, the Barbad group came to stage and performed some traditional music accompanied with dance for the audience. After the live music performance by Barbad group, the music and dance continued till after midnight.

Report of the panels

Panel 1:

Panel Chair: *Dr. Behrooz Parhami*

Panel Organizer: *Dr. Bahram ZahirAzami*

Title *“Engineering in Iran and the World: Cultures and Infrastructures for Education and Innovation”*

Panelists:

- *Dr. Mahmoud Tabiani, Sharif University of Technology*
- *Mr. Farrokh Malihi, Fargol*
- *Dr. Jalil Kamali, Samsung*

Summary:

The title of this panel includes four keywords: culture, infrastructure, education, and innovation. Visualize a 2-by-2 table with its rows labeled “culture” and “infrastructure” and its columns titled “education” and “innovation.” This panel aimed to explore the four boxes in the table and to compare their contents for Iran and other countries. A number of general topics and specific questions had been provided by the panel chair to the panelists in an effort to focus the discussions. It was noted in the panel chair's introductory remarks that Iran's culture of education is rather strong, as the most capable students are attracted to engineering specialties. The verdict on the educational infrastructure is mixed, with both strengths (e.g., nearly free higher education) and weaknesses (practical training and the requisite tools). Culture of innovation faces a number of challenges (e.g., in the patent system), while the infrastructure for innovation is perhaps in need of most work (pertaining to teamwork, particularly on multidisciplinary projects, and supporting long-term research projects).

Dr. Tabiani directed his remarks at the twin roles of fundamental studies and practical training, including working on real projects from the industry. Both culture and infrastructure are deficient for bringing such projects into Iran's engineering schools. Mr. Malihi advocated a focus on entrepreneurship and the attendant set of skills, including teamwork, design of experiments, technical communication, knowledge of economics and marketing, and multidisciplinary efforts. A key question is where and how such skills are to be imparted to engineering students. Dr. Kamali

focused on brain drain, maintaining that the term “escape of brains” used in Persian implies that something very awful happens when talents shift across borders to find optimal conditions for development and technical contribution. He suggested that a more neutral term (“relocation of brains”) might better reflect the fact that the process has positive effects as well.

Panel 2:

Panel Chair: *Dr. Hamid Mostaghaci, member of the Board of SUTA*

Title: *“Engineering challenges in Water, Energy and Power”*

Panelists:

- *Dr. Azadeh Ahmadi, Isfahan University of Technology, Iran*
- *Dr. Ali Moridi, University of Shahid Beheshti, Iran*
- *Dr. Hossein Banijamali, Canadian Petroleum processing Equipments, Canada*
- *Eng. Aras Sheikhi, Seven Qeshm company, Iran*

Summary: One of the major engineering challenges of our time, not only in Iran but in the entire world, is the management of water resources. Dr. Ahmadi and Dr. Moridi, provided some insight on the current situation of water resources management in the world, and discussed some of the challenges that lie before us on the current water crisis in Iran. In their presentations they also offered some short-term and long-term solutions for the water crisis in Iran. In their presentations, they have also provided examples of water crisis in other parts of the world as well. For example due to the lack of rain in the past 3 years in the state of the California, the level of fresh water in this State has reduced almost 50%, and these shortages has strongly affected on the sectors such as agriculture and power generation, which critically rely on water.

The second part of the discussions at this panel designated to the outlook of oil and gas globally, and the challenges which Iran has been facing in the light of sanctions over the past several years. Dr. Banijamali, an oil and gas expert for more than 3 decades, presented an overview of the oil and gas industry in the world, and discussed the issues related to the competing energy resources such as solar and wind, and also the impact of ever-increasing environmental limitations on this industry. Following Dr. Banijamali’s presentation, Eng. Sheikhi provided some information on the problems related to the foreign investments in the Iran’s oil and gas industry, and the problems that Iran has been facing after several years of sanctions by the Western countries on its oil and gas industry. After the presentations, due the time constraint, there has not been enough time for interactions between the audience and the panelists. Nevertheless, after the session a number of participants had individual discussions with members of the panel, and due to request by many participants, the PowerPoint presentations of the panelists, will be posted on the SUTA website for the attention of everyone.

Panel 3:

Panel Chair: *Dr. Olfat from LightSquared (and SUTA)*

Title: *“Success Stories on Engineering Innovation*

Panelists: *Dr. Ladan Behnia from Mitrastech, Mr. Goodarz Mahboobi from Axxessio, Mr. Hamid Jeddi from ITMAX, Mr. Mehdi Emamian from Duke University, Mr. Ali Morteza Birang from Iran’s Elite Foundation, and Dr. Alayar Kangarlu from Columbia University.*

Summary: The speakers in this panel presented and discussed some case studies on engineering innovation and challenges in different engineering disciplines in Iran and from around the world. These case studies included the research and development in the field of technology and engineering. Dr. Behnia presented Three Success Stories in Engineering and Business Innovations. Mr. Mahboobi talked about Internet of Things – Industry revolution and planned projects in the German Industry. Mr. Jeddi described challenges and opportunity of Business in Iran through

successful manufacturer companies. As well as SUTA Solution Network (SSN), in the face of sanctions, Mr. Emamian explained the Duke Free Electron Laser: Design, Development and Applications, Mr. Birang introduced Pardis Technology Park to the audience, and finally Dr. Kangarlu presented a talk about Brain: Engineering Challenges in unraveling the secrets of human mind.

3. Non-technical discussions

3.1 Organizational Panel

Title: *SUTA's activity in Iran and relation with AASUT*

Panel Chair: Dr. ZahirAzami

Panelists: *Dr. ZahirAzami, Dr. Mostaghaci, and Dr. Olfat from SUTA, Mr. Hamzeloui, Mr. Sajjadi, and Mr. Zahrai from AASUT.*

Summary: In this panel, the participants explored the similarities and differences of SUT and AASUT, and explored the common ground where the two organizations can collaborate more fruitfully, in the future.

3.2 AGM

- President's Report, Dr. Bahram Zahir

- Treasurer's Report, Ms. Negin Sadr read by Dr. Hamid Mostaghaci

- Report on Membership, Chapters, and Bylaws Committees by Dr. Masoud Olfat

- Report on Communications Committee by Dr. Hamid Mostaghaci

The board gave a brief report on its activity and the financial status of the association. Achievements of the 7th BoD were explained, as well as the projects that this Board was interested to carry out and could not, because of lack of resources.

A change in the membership fee structure has been introduced by the Board, but because of several concerns raised by the present members, and after a poll by show of hands, the Board decided to evaluate the matter once more.

Some changes in the Bylaws were also briefly introduced, and the Board mentioned that these changes will be communicated to the members, before being put for vote.

The Board invited members to actively engage in different SUTA projects, and to help strengthen the association, particularly in the chapter level. Also a preliminary call for candidacy for the SUTA elections (to be held in December 2014 or January 2015) was made.

The Board also encouraged established chapters, to nominate themselves to become the host of the 9th Global SUTA Reunion, in 2016.

The Board then opened the speech onto the floor and answered the questions raised by members.

The AGM and the reunion were adjourned by a series of songs by Mr. Hashem Sajjadi, and a session of souvenir group picture taking.

4. Conclusions

SUTA had its 8th biannual reunion in Milan Italy, attracting scholars, students, members, industrialists and friends from all around the world. The scientific and social aspects of the reunion were quite attractive and the reunion was successful in putting up SUTA's mission statement loud

and clear: “The mission of Sharif University of Technology Association is to enhance professional, academic, and social contacts among its membership, and to strengthen the ties between the association members living outside of Iran and the University with the goal of contributing to the advancement of the academic programs at the University and more importantly having a measurable impact on the technological advancement of Iran.”

This reunion was particularly marked by the spirit of collaboration between the members living in Iran, and the AASUT members, and members living outside of Iran, while everybody respects the existing limitations, and there is no intention to circumvent the rules or the abiding laws.

5. Annexes

1. [DW report on the 2014 SUTA Reunion](#)
2. [SUTA pictures gallery](#)
3. <http://www.ece.ucsb.edu/~parhami/publications.htm> (See item [283])