

The Tunisian Youth and Science Association

Activities during 2011

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The Youth and Science Movement was born in Tunisia in 1959. The Association Jeunes Sciences de Tunisie (AJST) was founded May 2, 1974. The AJST is a cultural, scientific, nonprofit youth organization. Its objectives are popularizing science, disseminating scientific culture among youngsters by encouraging them to practice scientific and technical activities during their free time, giving youths a taste of scientific research and technical invention, working to popularize scientific and technological culture for the general public, and organizing scientific activities and camps. The work of the AJST has enabled the young and old alike, through the facilities available to them, to uncover the secrets of science and develop their knowledge, handling their own equipment, tools, and other instruments.

I. Science Camps

1. The science camp in Raoued at the Higher Institute of Technological Studies of Communications of Tunis (Iset'COM) was organized in partnership with the Ministry of Youth and Sports July 8–22, with the participation of about 100 youths. It included scientific, cultural, and social activities. All camps also have sports and swimming.

a. Scientific activities

- Ecology (visit to Nahli Park)
- Computer science (audiovisual programming)
- Energy (solar cooker, solar water heater)
- Astronomy (observing the sky, studying the solar system)
- Jack-of-all-activities (simplified scientific experiments)

b. Cultural and social activities

- Visit to cities of la Marsa and Sidi Bou Said
- Visit to the “Tunis Science City”
- Participation at the conference of American astronaut Marsha Ivins.

2. The science camp in Tabarka, at the Silvo-Pastoral Institute of Tabarka, was organized in partnership with the Ministry of Women July 8–22 with the participation of 100 youngsters.

a. Scientific activities

- Ecology (environmental study of the area, botany, entomology, etc.)
- Natural sciences (distillation of aromatic plants, etc.)
- Climatology: the study of weather: wind, humidity, heat, etc.)
- Jack-of-all-activities (simplified scientific demonstrations and physics applications)
- Computer science (websites)
- Electronics (alarm system, FM system, etc.).

b. Cultural and social activities

- Sea excursion
- Evening entertainment
- Visit to the town of Ain Drahem
- Visit to the Dam of Bni Mtir

3. The science camp in Chott Mariem, at the Agricultural Sciences Institute of Chott Mariem, held July 12–26, was organized for 130 youngsters between 12 and 18 years of age

a. Scientific activities

- Electronics
- Computer science (Pascal and PHP programming, website creation)
- Jack-of-all-activities (games and science experiments)

b. Cultural and recreational

- Visit to the cities of Hergla, Monastir, and Sousse

- Evening entertainment
- Astronomy

II. The Expo-Sciences International (ESI, Bratislava, Slovakia, July 8–24, 2011

Participation in Expo-Sciences is an opportunity for youngsters to highlight the efforts of students, teachers, and community leaders in advancing research, science, and technological innovation. Participation also enhances the students' motivation to contribute to their own personal development. Youngsters can establish relationships with other individuals and institutions that share similar goals about developing scientific, technical, and social projects. The students exchange ideas that aim at benefiting today's world, industry, the educational sector, and society at large. Participation gives youths exposure on an international level, thereby facilitating scientific collaboration among the young participants. Finally, participation promotes scientific culture in a multicultural environment, allowing the sharing of educational experiences so as to achieve a higher level of scientific activities.

The 13 categories of projects are biology, behavioral and social sciences, chemistry, computers, earth sciences, energy and transport, engineering, environmental analysis and environmental management, electrical and mechanical technology, mathematics, medicine and health, physics and astronomy, and technology and biotechnology,

The Tunisian delegation to ESI was composed of two members of the steering committee of the association and five youngsters who contributed to the participants' projects.

III. The “Night of Stars,” August 5–7, 2011

This event is carried out jointly with various French associations. There are opportunities that should not be missed. One is the “Night of Stars,” in its 21st session, on August 5–7. For 20 years, this popular festival has offered more than 100,000 of the curious around the world the opportunity to discover the sky and its wonders. The AJST and its partners are proud to organize such an activity and to make the link between the public and science stronger. The “Night of Stars” offers free access and assistance from experts and volunteer leaders to allow students to discover the sky. The participants identify the colors and the ages of stars.

Since 1994, AJST and its partners have been organizing the “Night of Stars”. In 2011, the event was held in Tunisia, but also in France, Belgium, Switzerland, Italy, Latvia, Albania, and Algeria. Observation sites, the same number every year, are led by teams of amateur astronomers, animators, and just plain enthusiasts. The objective of the event is to offer the public the opportunity to better understand the sky and the stellar "signals" that enable us to comprehend the place of human beings in the universe and to understand the importance of preserving our planet. The theme this year is the color of the stars, a way to evoke the cycle of stellar life and death, from red giants to white dwarfs. This year, the AJST chose to celebrate as well the 60th anniversary of the orbital flight of the Russian cosmonaut Yuri Gagarin in 1961.

The sites of the 2011 “Night of Stars” are as follows:

- Tunis: Sidi Bousaid Park, August 6
- Nabeul: Sidi Mahersi, August 12
- Jerba, Borej Ghazi Mustapha, July 24, 2011

The “Night of Stars” program in Sidi Bousaid includes the following events:

- Exhibition on the history of the conquest of space, presenting some models of spaceships made by youngsters
- Presentation on the scale of the solar system
- Conference on astronomy
- Workshops entitled "Nights of Junior Stars"
- "Universe in Your Hands"
- Astronomical observation with a telescope

- Interactive workshops entitled "Colors of the Stars"
- Exhibition of Jep-linear model.

IV. Science and Society: "The memory," November 25–26, 2011

1 - The Framework

After organizing the International Workshop on Ibn Al-Haythem held in Kebili, Tunisia in December 2006 and workshops on Galileo in Tunis in December 2009, the AJST organized New International Days dedicated to "Memory" for 2011 [a description of "Memory" follows]. Open to the general public, young and old, New International Days are in the area of "Science and Society." The event is multidisciplinary, involving national and international personalities of multiple backgrounds. The common denominator is their commitment to the promotion of scientific culture.

2 - Memory

Really, there is not one single memory, but rather "memories." There is the memory of the person who is remembering and the memory of the thing being remembered. There is a collective memory and a multiplicity of individual memories.

Individual memory allows us to capture, encode, store, and reiterate the information we perceive. Memory can be episodic, when it comes to storing the events in our personal lives. *Semantic* memory is used to hold our "store house" of words together with their meaning and our general knowledge about the world. Moreover, *procedural* memory permits us to perform repetitive mental or physical tasks.

Collective memory is not the sum of individual memories. *Shared*, it tells us "You cannot ever remember anything alone." *Distorted* or *forfeited*, it can lead to amnesia. Memory presupposes oblivion, as its necessary complement, when the issue (story) is to bring back that which was forgotten. In this sense, thinking of memory is also thinking of history. Written in human terms (time), memory is the intragenerational linkage and support for the transmission of values. There is no memory without emotion. All the memorials and archaeological heritage are our greatest "testimonial" (burden). The "duty of memory" is our most recent gesture.

The reading of "tree rings" on very old trees and the reading of geological strata tells us about past climates and their paleoenvironments; this serves as a most useful tool for modeling the changing climate ahead of us.

While memory is a characteristic quality of the human species, that does not mean it is limited to human beings alone. The return of the pigeon to its coop, as well as the "sense of direction" of the bee or the queen ant, has always fascinated humans, who are haunted by human difficulties and memory lapses. Overwhelmingly fascinated by animal memory, humans have not found anything better, when speaking of the power of the human memory, than to compare (compete) it to that of the elephant. It is true that for "the unnatural animal" that we have become, the elephant is one of the few mammals that is led by his emotions. As powerful as human memory is, it is not immune to temporary failures or irreversible failures. In recent years, the rapid progress of two separate disciplines — *neurosciences* and *information technology* — acting in concert, came to be a great help to human memory. The consequences are incalculable, both in bioethics and in the control of individual freedoms, and challenge us on this extraordinary quest for the amplification of our memory. When all the world's knowledge will be accessible on the Internet, our brain will have little opportunity to use its capabilities. Is Amnesia watching *Homo Sapiens Sapiens*, the man who "knows the drill?" The issue is far from anecdotal especially since it is a debate on memory.

It is those connections -narrow (tight), complex and multiple between memory, science and ethics—that the International Days dedicated to the MEMORY will try to decrypt through different points of view (perspectives).