

Brief summary of the Trieste Conferences on astrobiology events previous to the IAS workshop

JULIAN CHELA-FLORES

The Abdus Salam ICTP, Trieste, Italy, and
IDEA, Caracas, República Bolivariana de Venezuela
<http://www.ictp.it/~chelaf/index.html>

The Nobel Laureate in Physics Abdus Salam founder of the first major institution of Trieste, the ICTP, suggested in our meeting in May 1991 to organize a series of conferences in Trieste on Chemical Evolution and the Origin of Life. He introduced the astrobiology pioneer Cyril Ponnampereuma to head this initiative coordinated by myself. Salam was particularly impressed by Cyril's work on the lunar samples, but above that for his most timely work at his Maryland Laboratory on the meteorite that had fallen near the town of Murchison in Australia. From 1992 till 1994 Cyril directed the first three events till his untimely passing away in December 1994.

From 1995 till 1998 the Fourth and Fifth Trieste conferences on what we now call astrobiology, were co-directed by myself with Francois Raulin. During these events we had the presence of chemical evolution pioneers John Oro (Marquis De Oro, by Spanish Royal Decree due to his multiple merits in Astrobiology) and Sidney Fox. The SETI pioneers Frank Drake and Jill Tarter attended. In addition, we recall the presence of planetologists Michel Mayor and Chris McKay, Darwin's great-grandson, the electrophysiologist Sir Richard Keynes and the astronomer George Coyne SJ. Of the astrobiologists present today, Antonio Lazcano also began to attend the Trieste conferences at that time and the journalist Fabio Pagan contributed by chairing the public lectures since the Third Trieste Conference in 1993.

From 2001 till 2003 the Sixth and Seventh Trieste conferences were co-directed with Raulin and, to our good fortune, Tobias Owen came to Trieste as a co-director, blowing some fresh air in our Miramare campus. Both Francois and Toby are distinguished planetary scientists; amongst their multiple achievements they are both Interdisciplinary Scientists in the Cassini Mission to Saturn. Altogether some 500 scientists participated in the Trieste Conferences and some 150 were present at the Caracas ICTP School.

Stanley Miller attended both of these late Trieste conferences. The 7th one was dedicated to the 50th anniversary of Stanley's famous experiment, exactly 12 years ago, attended by people here today, not only by Lazcano and Pagan, but also Michael Simakov, Claudio Maccone (Rocco Mancinelli's paper was read by Rosalba Bonaccorsi now at the SETI Institute). Last but not least, two of the organizers of the current IAS Workshop were also present: Juan Vladilo, and Enzo Gallori. Now I have the special privilege to invite Dr. Gallori, President of the Italian Society of Astrobiology, to address the Workshop.

Proceedings

All the proceedings of the seven Trieste conferences are available at the ICTP Marie Curie, as well as the SISSA Libraries, also at the Marcel Roche Library IVIC, and University Simon Bolivar Library, Caracas (cf., Fig.1). There you can find a full list of our 500 participants.

Ponnampereuma, C. and Chela-Flores, J., eds. (1993). *Chemical Evolution: Origin of Life*, A. Deepak Publishing, Hampton, Virginia, USA.

Chela-Flores, J., Chadha, M., Negron-Mendoza, A. and Oshima, T., eds. (1995). *Chemical Evolution: Self-Organization of the Macromolecules of Life*, A. Deepak Publishing, Hampton, Virginia, USA.

Ponnamperuma, C. and Chela-Flores, J., eds. (1995). *Chemical Evolution: The Structure and Model of the First Cell*, Kluwer Academic Publishers, Dordrecht.

Chela-Flores, J. and Raulin, F., eds. (1996). *Chemical Evolution: Physics of the Origin and Evolution of Life*, Kluwer Academic Publishers, Dordrecht.

Chela-Flores, J. and Raulin, F., eds. (1998). *Chemical Evolution: Exobiology. Matter, Energy, and Information in the Origin and Evolution of Life in the Universe*, Kluwer Academic Publishers, Dordrecht.

Chela-Flores, J., Owen, Tobias and Raulin, F., eds. (2001). *The First Steps of Life in the Universe*. Kluwer Academic Publishers, Dordrecht, The Netherlands.

Chela-Flores, J. (2001). *The New Science of Astrobiology From Genesis of the Living Cell to Evolution of Intelligent Behavior in the Universe*. (First Edition.) Kluwer Academic Publishers, Dordrecht, The Netherlands.

Seckbach, J., Chela-Flores, J., Owen, T. and Raulin, F., eds. (2004). *Life in the Universe From the Miller Experiment to the Search for Life on Other Worlds* Series: Cellular Origin, Life in Extreme Habitats and Astrobiology, Vol. 7, Springer, Dordrecht, The Netherlands.

The proceedings of the ICTP Caracas School was published as:

Chela-Flores, J., Lemarchand, G. A. and Oro, J., eds. (2000). *Astrobiology From the Big Bang to Civilization*, Kluwer Academic Publishers, Dordrecht.



Figure 1. The Astrobiology proceedings sponsored by the Abdus Salam International Centre for Theoretical Physics, also referred to as the "Trieste Conferences".

Additional information and illustrations can be retrieved from:

<http://www.ictp.it/~chelaf/photogallery.html> and the links provided in:
<http://www.ictp.it/~chelaf/ss7.html>