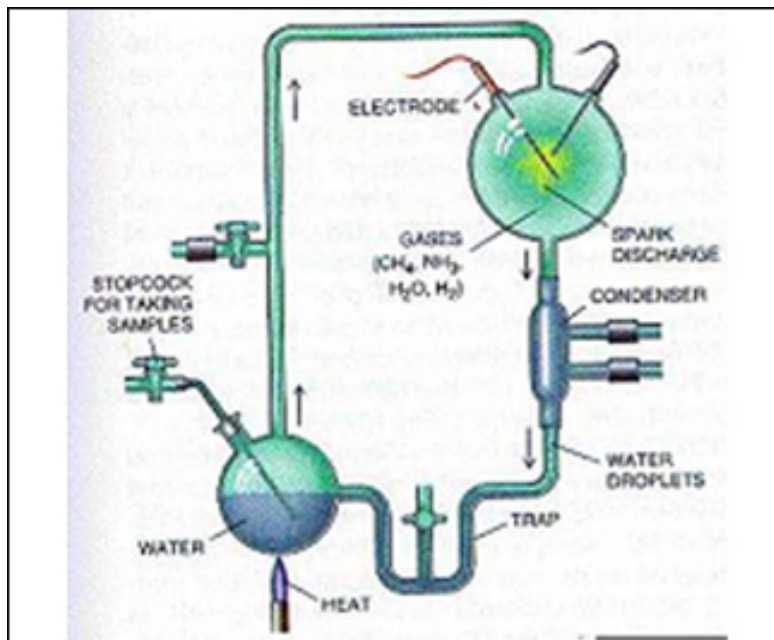


02/2007

The Miller-Urey experiment



As a part of the activities of the UAB Year of Evolution, The faculties of Biosciences and Sciences have held a conference on Prebiotic Evolution. The event included various seminars and the inauguration of the reproduction of the Miller-Urey apparatus, that has been set up permanently at the Bioscience and Science Faculties.

The day began with a talk by Dr Josep Castells, of the Institute of Catalan Studies, on "Evolutionary scenarios prior to the planetary scenario". This was followed by a session by Dr E Gelpí, from the Barcelona Institute of Biomedical Research, on "Studies on the abiotic origin of the Earth's organic material and the Apollo space project".

Dr Antonio Lazcano, of the National Autonomous University of Mexico, spoke on "Comparative genomics and early cell evolution: optimism and despair". Finally, Jordi Isern, of the Institute of Space Studies of Catalonia, chaired an open discussion.

During the inauguration of the reproduction of the Miller-Urey experiment, Xavier Parès, the UAB Chair of Biochemistry and Molecular Biology, thanked the faculties, the Rectorate and AFORA

for their collaboration in producing the reconstruction, and went on to explain the history of the experiment and how it works.

On behalf of AFORA SA, Josep Puig spoke of the honour it was for AFORA to contribute to the UAB Year of Evolution with this replica of the famous experiment. Finally, Joan Carbonell, Vice-Rector for Students and Cultural Promotion, highlighted that the equipment is "a monument commemorating an important step forward in understanding our origins".

Also attending the event were the Dean of the Faculty of Bioscience, Jordi Barbé, and the Dean of the Faculty of Science, Jordi Bartolí.

The Miller-Urey experiment

The experiment devised by SL Miller and HC Urey (1953) provided substantial proof of the hypothesis on chemical evolution and the origin of life formulated by AI Oparin and JBS Haldane: that primitive conditions on Earth brought about the synthesis of organic compounds from inorganic materials.

Miller and Urey, at the University of Chicago, built an apparatus that simulated these conditions, and by running an electric current through a system consisting of water vapour, methane, ammonia and hydrogen, they obtained various organic molecules.

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