

August 19, 2015

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1 Citric and reverse citric acid cycles as origin of life

Discussion is in the following papers:

- Morowitz, H.J.; Kostelnik, J.D.; Yang, J.; Cody, G.D. The origin of intermediary metabolism. Proc. Natl. Acad. Sci. USA 2000, 97, 77047708.
- Smith, E.; Morowitz, H.J. Universality in intermediary metabolism. Proc. Natl. Acad. Sci. USA 2004, 101, 1316813173.
- Wachterhauser, G. Evolution of the first metabolic cycles. Proc. Natl. Acad. Sci. USA 1990, 87, 200204.
- Wachterhauser, G. On the chemistry and evolution of the pioneer organism. Chem. Biodivers. 2007, 4, 584602.
- Ross, D.S. The viability of a nonenzymatic reductive citric acid cycle Kinetics and thermochemistry. Origins Life Evol. Biosphere 2007, 37, 6165.
- Orgel, L.E. The implausibility of metabolic cycles on the prebiotic earth. PLoS Biology 2008, 6, 513.
- Kalapos, M.P. The energetics of the reductive citric acid cycle in the pyrite-pulled surface metabolism in the early stage of evolution. J. Theor. Biol. 2007, 248, 251258.
- Powner, M.W.; Gerland, B.; Sutherland, J.D. Synthesis of activated pyrimidine ribonucleotides in prebiotically plausible conditions. Nature 2009, 459, 239242.