SUMMARY OF CONCLUSIONS OF THE ISCID-DISCUSSION (APRIL 2006 - FEBRUARY 2007) OF THE PCID-PAPER "THE THEORY OF EVOLUTION IN THE PERSPECTIVE OF THERMODYNAMICS AND EVERYDAY EXPERIENCE" (PCID, Vol 4.1 July 2005)

(If the link <u>http://www.iscid.org/pcid/2005/4/1/dejong_everyday_experience.php</u> does not give entrance to the paper mentioned above, please use: http://www.evoskepsis.nl/docs/Evolutionary%20theorie%20and%20empirical%20science.pdf)

- 1. A fundamental property of our universe is that all differences (e.g. of temperature, energy, density, pressure, concentration, information or complexity) will ultimately equalize. If, for instance, a temperature difference would not ultimately equalize, a heat engine could be attached to it and run forever, resulting in a perpetual mobile. The laws of thermodynamics tell us perpetual mobiles cannot exist. Increase of complexity is the opposite of equalization of differences. Since the natural course of events is the equalization of differences, increase of complexity is an unnatural course of events.
- 2. In his initial experiment, Miller found that random flashes of lightning can make basic substances stick together as building blocks for life and that new flashes of lightning destroy them again, the bigger the sooner. Therefore, Miller adjusted his experiment and constructed a transportation system moving away the produced building blocks for life to a safe retort. In his adjusted experiment, Miller showed that the production of an ever concentrated organic soup requires directed effort. The initial Miller-experiment combined with the adjusted Miller-experiment falsify the central hypothesis of the theory of (macro) evolution that random processes can make molecules order themselves into ever expanding structures.
- 3. In any book on evolution, the theory can be found that random processes (of lightning) have produced billions of tons of building blocks for life in the primordial oceans in hundreds of millions of years; these building blocks started to combine themselves into ever more complex molecules, which developed themselves into reproducing macro molecules, turned themselves into RNA, then into DNA, subsequently into cells, and finally arranged themselves into ever complicated organisms. This theory of macro-evolution is (1) in conflict with empirical science; (2) is not supported by any empirical evidence; (3) is falsified by the combination of the initial Miller-experiment and the adjusted Miller-experiment; (4) cannot be true, since if it were true complex molecules and molecular structures would become available without effort for free, putting the greater part of chemical industry out of business. The theory of macro-evolution is as invalid as the theory that the earth is flat or that the sun is spinning around the earth.
- 4. In the fantasy world of the theory of macro-evolution, random mutation of the DNA will improve it. In the real world, random mutation of the DNA leads to dysfunctioning, cancer, and hereditary diseases. In the fantasy world of the theory of macro-evolution, random mutation of the DNA will make its information content grow ever further. In the real world, the DNA in every human cell loses about 5000 adenine or guanine bases per day by depurination and about 100 cytosine bases per day by deamination to uracil. If these mutations would not be continuously repaired by mutation repair systems, the DNA program would turn into chaos within a lifetime. Despite the continuous mutations with numerous struggles for food, shelter and a partner where individuals and populations with

dysfunctioning repair systems are losers, the difference between information and noninformation will equalize. Ultimately, the information content of the DNA will be wiped out.

- 5. When investigating the fossil record, any objective observer will notice that the shape of organisms may vary through time within a number of dimensions (small large; broad sharp; firm fragile; curved flat; et cetera). These variations can be fully explained by the mechanism of recombination and selection of alleles from the gene pool of a species. If also a mechanism of random mutation and growth of the DNA program of organisms would exist, resulting in the expansion of their genetic system space into new dimensions, numerous scrapheaps of unsuccessful trials should be present in the fossil record (for instance, a multitude of fossils of unsuccessful organisms produced by the random change process that turned a four-legged mammal and it into a whale). Any objective observer will agree that such scrapheaps are completely absent.
- 6. The (complicated) convection streams in the atmosphere of the earth equalize differences of temperature and pressure, and do not represent a "weather machine" that builds up differences.
- 7. Let S be a 100,000 km. radius sphere with 2ndEarth (identical to our Earth, except the presence of living organisms) in its center. S is put in the sunlight. It can be proven in three ways (empirically, analytically, and logically) that 2ndEarth is a "zero-left-term-system" for which the entropy increases. As a consequence, the claim that the free moving energy of the sun can make molecules on 2ndEarth start ordering themselves, preserve that order and expand it ever further, is false.
- 8. The further away from us, the bigger the redshift of galaxies. The Big Bang theory explains this observation by hypothesizing that galaxies move away, the further from us the faster, resulting in an increasing expansion of our universe, and increasing differences in the concentration of matter. Thermodynamics, however, teaches us that differences will not increase but will equalize, and contradicts the Big Bang theory. An alternative explanation for the increasing redshifts is that our universe is curved (like a plain wrapped around a sphere) resulting in an infinite but closed universe. The curvedness produces a distortion in the observation of objects, which become noticeable on long distances by a redshift. This hypothesis can be tested by the radio signal of Voyager 2. Its frequency is known. The prediction is that the frequency will decrease when the distance to the Earth becomes very large.
- 9. In space, random flows of energy can make "ripples in the molecular sand". But random energy flows cannot preserve them and make them grow ever further, as demonstrated by Miller's initial and adjusted experiment, and taught by empirical science.
- 10. Beliefs (= assumptions that cannot be proven) can be subdivided into rational-beliefs and irrational-beliefs. The belief that the 3 gigabyte DNA-program in every human cell and the mutation repair systems that preserve its integrity are designed is a rational-belief, since all programs and mutation repair systems we encounter in our daily life are not produced by random processes but are designed. The belief that matter possesses an intrinsic property that maintains differences and expands them ever further is an irrational-belief, since it is in flat contradiction with empirical evidence and empirical science. This irrational-belief corresponds with the belief of the Alchemists that matter possesses a hidden, magic property (the "quintessence of matter").

- 11. Despite explicitly asking many times during this discussion, not any empirical evidence has been produced to confirm the basic hypothesis of the theory of macro-evolution that random processes can make molecules start ordering themselves, preserve that order and expand it ever further. Clearly this hypothesis is only grounded in wishful thinking and is no more than a belief. In line with the ideas of Stephen Jay Gould, this belief should be removed from the domain of science to the domain of religion.
- 12. Although the basic hypothesis of the theory of macro-evolution is no more than a belief, this belief is presented as a scientific fact that is beyond discussion. Scientists who dare to question the theory of macro-evolution are attacked with religious fire and their scholarly life is made difficult. In fact, we have returned to the Dark Ages, when the priests told the people what to believe and when heretics were excommunicated.
- 13. Our children should be taught that the natural course of events is that all differences ultimately equalize and that the claim of Darwinism that molecules have an natural desire of ordering themselves, preserve that order, and expand it ever-further, is no more than a belief. Moreover, they should be taught this belief is in flat contradiction with empirical science and everyday experience in homes, offices, factories and laboratories. It should become compulsory at schools and universities to conduct and discuss both the initial Miller-experiment and the adjusted Miller-experiment. In the discussion of both experiments, attention should be given to the differences between science and religion, and how religion often tries to hijack science to make itself credible.
- 14. In the domain of religion, any guess, fantasy or belief on the origin of living nature is allowed. In the domain of science, however, we need a falsifiable (and therefore somehow testable) hypothesis that does not contradict empirical evidence and empirical science. If such a hypothesis on the origin of living nature is missing, the position: "We don't know yet" can be taken. Such a position is perfectly normal in any branch of science, and offers a possibility of rejecting untenable theories, serving the progress of science.