

HYLE Reports

Third ISPC Summer Symposium, Columbia, South Carolina, USA, July 28 - August 1, 1999

*by Klaus Ruthenberg**

“Columbia can be very hot in summer”, said the organizer to potential participants during the last conference (Cambridge 1998, see HYLE 4, p. 169-170), and so it was. Davis Baird – he and his team of the Department of Philosophy of the University of South Carolina did an excellent and brilliant job – had indeed not underestimated the situation, because this summer was one of the hottest ever since in the United States. Nevertheless, all approximately 45 participants from six countries (approx. 80% from the US) of the Third Summer Symposium on the Philosophy of Chemistry by the International Society for the Philosophy of Chemistry evidently enjoyed the conference. 33 oral papers were given, 12 on epistemology and general topics, 6 on historical issues, 5 about explanation in chemistry, 4 on theoretical concepts, two on ethics in chemistry, and one about didactics. Only few examples will be referred to very briefly here. It goes without saying that I do not intend to undervalue the contributions not mentioned.

Tony Edmonds, a professional analytical chemist from Loughborough University, UK, spoke about “A Philosophical Approach to Analytical Chemistry”. Edmonds approaches philosophy – in a very serious meaning – by refreshingly looking at new things rather than reasoning within stiff traditional frames. Thus, one of his results is that analytical chemists are performing a triad: purification, synthesis, and comparison. To a reasonable extend this is as striking as unusual, since at least part of the literature on general issues of analytical chemistry does not even discuss or mention one of these concepts at all. The participants will certainly remember for a long time Edmonds’ demonstration “Counting Oranges” that referred to correct/false comparison. Johannes Hunger, who received his Ph.D. in chemistry in Heidelberg and is now at the Centre for Philosophy of the Natural and Social Sciences of the LSE, London, UK, called his talk “Explaining Molecular Structures”. He criticized traditional models of explanation in the natural sciences by using three examples: Neural Network simulations, Molecular Mechanics, and ab initio calculation methods. According to Hunger, van Fraassens theory is more promising in application to chemical explanation. Hunger claimed an autonomous character of chemical explanation and the need to adapt modern philosophical approaches. In his “Models and Material Theories” the organizer himself, philosopher Davis Baird made clear that there are good reasons to take instruments and material models into account whenever scientific knowledge is discussed. As one example, he took the DNA ball-and-stick model as applied by Watson and Crick and the likes. Such material models do have an impact on the making of scientific views. A highlight of his standard-setting talk was a video tape clip that shows the actor Goldblum in “Double Helix”, puzzling around with pieces of a DNA model.

As a result of his valuable efforts during the last years, Davis Baird was elected as a member of the Scientific Committee of the ISPC (which now consists of Akeroyd, Baird, Rothbart, Ruthenberg, and Scerri) during the business meeting. The next ISPC conference will take place in Poznan, Poland, August 7-10, 2000. (For information contact Ewa Zielonacka-Lis, zielo@main.amu.edu.pl).

Copyright © 1999 by HYLE and Klaus Ruthenberg