Editorial 52

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It is with great regret that I must announce the passing away, in recent months, of two members of our community. The first was the much loved Ray Hefferlin, a physicist by training, who attended many of our conferences and published articles in the philosophy of chemistry literature.¹ Ray was one of the world's leading experts on periodic tables of diatomic and triatomic molecules and one of the most dignified and gentle academics who it has been my pleasure to ever meet.

A short time later another modest and gentle member of our group, Rein Vihaelemm died suddenly in his native Estonia.² Rein attended many of our international meetings and hosted one such meeting at his home institution of the University of Tartu in 2003. He published a number of articles on a range of topics including what he termed ϕ -science, in which he sought to clarify why physics has become the epitome of all the sciences. Ray and Rein will both be greatly missed by the philosophy of chemistry community.

The present issue contains five full-length articles as well as a book review. We begin with the second half of a first-time translation of one of Lavoisier's articles by Nick Best from Indiana University. Given the continued interest in the chemical revolution among historians and philosophers of chemistry this will no doubt come as a welcome addition to the literature.

Peter Nelson from the University of Hull, who has previously published in *Foundations of Chemistry* is the author of an article on how to introduce the theory of relativity to chemists. As in the case of the previous article this study will be of interest to many readers in view of the growing importance of relativistic effects in attempts to understand many

¹ <http://www1.southern.edu/academics/academic-sites/physics/Faculty/rayhefferlin.html>.

² <http://www.flfi.ut.ee/en/news/memorial-professor-rein-vihaelemm>.

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chemical questions such as the operation of lead storage batteries, the color of gold and the chemical behavior of super-heavy elements (Scerri 2013a; Pyykko 2012).

Naum Imyanitov, another returning author, writing from a research institute in St. Petersburg, Russia, provides an interesting article that straddles the topics of chemical periodicity and oscillating reactions. Next comes a contribution from a pair of theoretical chemists in Iran, Salehzadeh and Maleki on a subject that has been of great interest to me over the years, namely the relative occupation and ionization of the 3d and 4s orbitals in the first transition metals (Scerri 2013b).

Josef Sima, from the Slovak University of Technology and, you guessed it, another returning author, brings the articles to a close with a study of the relationship between structural factors in inorganic compounds and their melting and boiling points.

The issue ends with a book review written by Jean-Pierre Llored on the history of quantum chemistry by Gavroglu and Simoes who have produced much origin research on this topic. On a related point, it may interest readers to learn that Kostas Gavroglu, who is one of the editorial board members of this journal, has recently become a minister in the new Greek government.

Finally let me close by announcing that the 20th International Conference for the Philosophy of Chemistry will be held in Boca Raton, Florida and is being organized by Marina Banchetti at Florida Atlantic University.³ The deadline for submitting abstracts is April 1st. I look forward to meeting new and old friends there in a few months. Incidentally one of the plenary speakers will be Manuel De Landa the author of an interesting new book entitled *Philosophical Chemistry*.⁴

References

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³ <https://sites.google.com/site/ispc2016/>.

⁴ http://www.hyle.org/journal/issues/21-1/rev_schummer.htm.