Editorial 50

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Published online: 3 July 2015

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It gives me great pleasure to present the 50th issue of Foundations of Chemistry and to announce that we have been granted our first impact factor by the Thomson Reuters agency. Quite remarkably the IF of 1.36 for the journal is higher than for any other journal in history or philosophy of science or even history and philosophy of science. It is also higher, at the time of writing, than for any journal specifically dealing with chemical education.¹ All I can conclude from these facts is that it might have been worth the long wait!

The issue opens with a numerical study from Colombia of autocatalysis in far from equilibrium thermodynamics. The “extent of reaction” is a concept that is increasingly discussed in chemical education circles. The second article in this issue from an Italian author presents further elaboration as well as a distinctive angle on the subject. On a more philosophical note, three authors, two of whom are based in Uruguay, discuss the questions of emergence and non-reducibility in the context of quantum mechanics.

The subject of chirality has always held deep questions. Article number four from Russia, discusses ways that can be used to estimate the degree of chirality of complex chiral systems. The fifth article takes us to the history of chemistry in the form of a translation, by a US based author, of one of Lavoisier’s lesser known articles and indeed a first translation into English. Article six perhaps deserves a special mention as it is the work of a UK based author, Peter Nelson, who has made innumerable original contributions to attempts to understand chemistry at a deeper level. I would strongly recommend to readers that they might also seek out his previous writings, many of which have appeared in the magazine *Education in Chemistry*, over a long period of time. Returning to the article in this issue, Nelson proposes a modern version of Lewis’s theory of valency which

¹ http://www.citefactor.org/journal-impact-factor-list-2014_0-A.html.

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is intended to accommodate a modern quantum mechanical understanding of bonding including such topics as hypervalency, nonclassical compounds and the like.

The final article comes from India and will appeal to the more theoretically minded readers. It presents an interesting introduction and extension of the sub-discipline of hadronic chemistry. This is a field that has been placed on a theoretical footing following the work of Ruggero Maria Santilli on a time-invariant, non-unitary formulation of quantum mechanics.

Finally, I regret to announce the passing away of Professor Ray Hefferlin who was well known to many researchers in the periodic table community. Ray was one of the world's foremost experts of periodic systems of molecules and a true gentleman who will be missed by everybody who ever came into contact with him. We are in the process of gathering a special issue of the journal in Ray's honor and any submissions for this issue are kindly requested.