Putting my concerns on the Table

by Chris Willmott, Science Editor

In this issue of *The Biochemist* we join with other scientific communities in marking the International Year of The Periodic Table, which celebrates the 150th anniversary of Dmitiri Mendeleev’s ground-breaking systematic organisation of the elements. As our contribution to the celebration we have a collection of features describing facets of the contribution played by several of the elements most important to the chemistry of life.

A recent visit to MediaCity, home to parts of both the BBC and ITV networks, illustrated the reason why I have a love-hate relationship with the periodic table. In ways reminiscent of the cultural appropriation of the double-helix, wider society has taken and abused the notion of the periodic table for purposes that reveal a fundamental lack of understanding about its power and significance. Many people are under the false impression that the periodic table is merely a convenient way to put vaguely related things into a series of boxes. The grid on display at MediaCity, for example, was serving to advertise different components of the BBC’s output. A quick Google search also throws up “periodic tables” for beer, cocktails, iPad apps, wrestling, horror movies and even meat. Whatever your interest, it seems, some wag had authored a “periodic table” for it.

There may or may not be an element (no pun intended) of rationality underpinning the clustering of components within such grids. However, even the most logical arrangements fail to recognise the crucial dimension of Mendeleev’s original and its descendants. As most readers of *The Biochemist* will, of course, be aware the elegance and power of the periodic table is the predictable progression in properties associated with moving across any row or down any column. The astonishing thing about Mendeleev’s table were the blank spaces—gaps left for as-yet undiscovered elements about whose properties he was able to make accurate predictions. Subsequent research not only confirmed their existence, but also Mendeleev’s description of their characteristics.

Random things put in boxes doth not a periodic table make. So, my churlish attitude towards these faux periodic tables largely derives from what is, in effect, their black and white appreciation of Mendeleev’s masterpiece where there ought to be wonder expressed in glorious technicolour.

Now the T-shirt emblazoned “Ah – the element of surprise”, however, that IS funny.