A galaxy of elements

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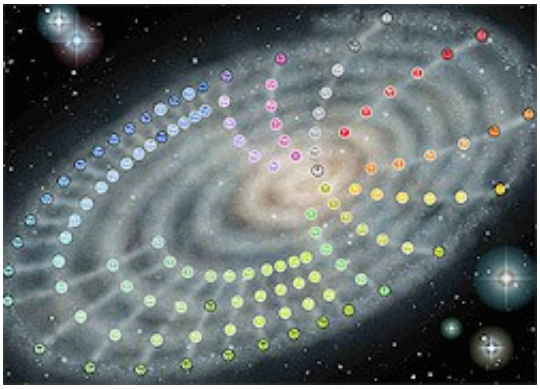

A revamped version of the periodic table designed by an Oxford plant scientist is finding favour with chemists and non-chemists alike. A copy of the poster, which displays the elements in a ‘galactic’ spiral, has been sent to every secondary school in the country.

The original periodic table, on which the rectangular design most people studied at school is based, was devised by the Russian chemistry professor Dimitri Mendeléev in 1869. Listing the elements according to increasing atomic weight, Mendeléev found that when arranged into horizontal rows, elements with similar properties appeared at regular intervals in the vertical columns. There have been numerous renditions of the table since, but most have stuck to the classic rectangular format.

In his spare time Philip Stewart, a University Lecturer in Plant Science,

set about creating a design that would both represent the continuityof the sequence of elements and be visually exciting. Inspired by a mural of the periodic table created by the artist Edgar Longman for the South Kensington Science Exhibition, part of the Festival of Britain held in 1951, Mr Stewart created an image in which the elements are set against a galaxy of stars. Instead of figuring in adjacent boxes, each element is represented by a colour-coded circle and all are connected in a spiral, at the centre of which is the neutron.

The new design has generated intense interest both in Britain and in the United States. The Royal Society of Chemistry commissioned 7,000 copies of the poster and sent one to every secondary school in the country earlier this year, and a number of teachers have already requested extra copies, whilst the US distributor of the posters has sold 250 copies in two months.

Mr Stewart said: 'Though I intended my version of the periodic table to be used as a teaching aid, my main objective is to excite the feeling that the periodic system is a thing of beauty. Science needs the emotions as well as the intellect. Young people must have enthusiasm to sustain them in the study of difficult subjects, and I hope my table will help by conveying the message that the matter of which we are made is the same as the stuff of the stars.'

For more information visit the Chemical Galaxy website.