

P25 The Interplay between Science and Music

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science, music, interplay

Exploring the interplay between music and mass spectrometry.

Science and music are not immiscible. Three interconnected areas of overlap between science and music are:

- 1) Artistic impressions of scientists – such as Philip Glass's modern opera "Einstein on the beach".
- 2) Scientific investigations of art include identification and differentiation of paint and artefacts by mass spectrometric techniques to determine fraudulent painting, art work which can also be applied to verification of a questioned musical manuscript.
- 3) Scientists who are also artists and vice versa – such as the chemist/composer Borodin or Elgar[1] to name but two.

However, of the many examples of work that occupies the interplay of science and music, and music and science, few relate to mass spectrometry. Exceptions include "McLafferty's Rearrangement" a piece of music that has six bars which rearrange themselves each time they are played in the manner of atoms in a six membered McLafferty Rearrangement [2].

Using these examples as a starting point this presentation, will explore interplay between music and mass spectrometry at the ANZSMS22 mass spectrometry conference which has adopted a musical theme.

[1] Anecdotes on Elgar, Hunt C, *Chemistry in Britain*, March 1987, 209

[2] Walker, G.S 'McLafferty's Rearrangement', *European Journal of Mass Spectrometry*, 9, 527, 2003.