## Noli turbare circulos meos Julius Lothar Meyer (1830-1895), Dmitri Ivanovič Mendeleev (1834-1907) and the Periodic System of Elements

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Although the phrase "don't disturb my circles" is attributed to Archimedes, Julius Lothar Meyer admitted in 1880 that he also uttered it while reading Dmitri Ivanovič Mendeleev's 1869 paper on the *Natural System of Elements*. Meyer and Mendeleev – contemporaries and counterparts forging a path to our periodic system?

When we look at the logo of the International Year of the Periodic Table of Chemical Elements published by the United Nations General Assembly and UNESCO, we see only the face of Mendeleev. A closer examination of Mendeleev's and Meyer's biographies reveals that they worked on the same problem in the 1860s and each published several papers on element systems. Both men attended the Karlsruhe conference, both were writing textbooks and contemplating in which order elements should be introduced. Numerous other scholars, such as Alexandre-Émile Béguyer de Chancourtois, John Newlands, William Odling, and Gustavus Hinrichs, were also working to classify the elements. This leads us to ask: why is it Mendeleev's work we hold in such high regard? An answer may be found in the papers of Meyer, Mendeleev, and these other scholars.

This talk compares their works under the aspects of how they referred to periodicity, if they predicted new elements, and how they themselves evaluated their own input to the periodic system. The development of different displays of the system, including two-and three-dimensional presentations, is also discussed. Finally, the results of a study about the reception of the Periodic system in textbooks and in popular writings will be presented.