Beulah Heights University

Current Event Critique

Submitted to Professor Myra E. Bolton

In partial fulfillment of the requirements for the completion of

SC366

Principles of Science

by

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This week's writing assignment is a current event critique on the article, "Rewriting the Periodic Table at High Pressure". This article was written by Martin Rahn from Chalmers University of Technology and was published by the Journal off American Chemical Society on August 14, 2019. This was a very interesting article that dealt with the possibilities of new compounds being discovered because of the use of high pressure.

In this selected article, Martin Rahn tells us that because of high pressure, extremely remarkable chemical structures that have extraordinary qualities can arise. Because of the reaction of high pressure on the compound, there is an astonishing number of new combinations of atoms that can be studied. Martin goes on to explain that at high pressures the properties of atoms can change radically. The author tells us that this process is done by effecting the electronegativity and the electron configuration of elements by high pressure. Martin goes on to give us example such as how, at high pressure, a diamond can be formed from graphite.

I feel that the use of the process of high pressure, motivates researchers to seek and study the new interesting findings. But, according to the article, this research requires a dedication of time and resources. Because of this need of man power and money, only a fraction of all possible new compounds have been investigated. This resulted in four elements, Nihonium (Nh), Moscovium (Mc), Tennessine (Ts), and Oganesson (Og) being added to the Periodic Table.

References:

Martin Rahm, Chalmers University of Technology, *"Rewriting the Periodic Table at High Pressure.* “ScienceDaily, 14 August 2019. www.sciencedaily.com/releases/2019/08/190814093903.htm.

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Chamberlain Smith, *“New Elements Make the Periodic Table”*, Paste magazine, December 20, 2016. www.pastemagazine.com/articles/2016/12/new-elements-periodic-table.html