Project: Development of an isotopic periodic table for the educational community

Number: 2007-038-3-200 Start: 01 April 2008

Project of Objective

The objective of this project is to clarify the role of isotopes in chemistry and other sciences.

Description

This project along with a follow-on project will develop, with the help of the Committee on Chemistry Education (CCE), learner oriented materials on an interactive periodic table that emphasizes the existence of isotopes and the role of isotopic compositions of elements on determination of atomic weights, and applications in sciences. In order to reach, and capture the attention and the interest of students and teachers at the primary, secondary, and tertiary educational levels, there is a need to make creative use of wide range of media. Working CCE, a periodic table will be developed which will provide a wide range of isotopic based information (e.g., number of stable and unstable isotopes, representative isotopic composition, and atomic weight values). Information, case studies, and other links about the application of isotopes to chemistry and other sciences will also be provided. CCE will provide input on topics of relevance to interest to students and advice on the types of interaction, while other task group members will provide the scientific data. Advice will be sought on the best educational strategies to capture and hold students' attention. Both online and paper based versions of the materials will be developed. In this first project, the isotope based information will be collected and stored in data files and CCE will provide input on topics of relevance to interest students and advice on the types of interaction, while other task group members will provide the scientific data. The web-site version of the Periodic Table will be addressed in the subsequent project proposal.

Progress

project announcement published in Chem. Int. July 2008