Abstract

Chemlogic is a logic program for performing stoichiometric calculations, converting chemical quantities between units, balancing and completing chemical equations and converting chemical formulas to and from chemical names.

These features are implemented using a database of chemical information, a set of grammars, and a linear equation solver. Chemlogic can detect and provide guidance for resolving syntax and other errors.

It is available as an Android App and a Web interface, designed as a study tool for chemistry students, and also includes a command-line domain-specific language.