

Struvite Program Installation Instruction

1. Download and install the ‘Anaconda Python distribution’ from:

<https://www.anaconda.com/products/individual>

2. Download and install the two ‘IPhreeqc Modules’ from (circled in red below):

https://www.brr.cr.usgs.gov/projects/GWC_coupled/phreeqc/

Graphical User Interfaces

- Windows 32-bit: [phreeqci-3.6.2-15100.msi \[13M\]](#) - Executable, database files, examples, PDF documentation
- Windows 32-bit: [Notepad++ interface](#) - Appelo's Notepad++ interface to PHREEQC version 3
- Windows 32-bit: [PHREEQC for windows](#) - PHREEQC for windows home page

Batch Versions of PHREEQC

- Windows 64-bit: [phreeqc-3.6.2-15100-x64.msi \[15.6M\]](#) - Executable, database files, examples, PDF documentation
- MacOS (OS 10.7 - 10.12) 64bit: [phreeqc-3.5.0-14000.dmg \[12M\]](#) - Executable, database files, examples, and PDF documentation
- Windows (any processor): [phreeqc-3.6.2-15100.zip \[12M\]](#) - Source, CMake, database files, examples, PDF documentation
- Linux (any processor): [phreeqc-3.6.2-15100.tar.gz \[12M\]](#) - Source, configure, database files, examples, PDF documentation

PhreeqcRM Reaction Module for Transport Models

- Windows (any processor): [phreeqcrm-3.6.2-15100.zip \[7M\]](#) - Source, CMake, database files, examples, HTML documentation
- Any Platform (any processor): [phreeqcrm-3.6.2-15100.tar.gz \[7M\]](#) - Source, configure, database files, examples, HTML documentation

IPhreeqc Modules

- Windows (any processor): [iphreeqc-3.6.2-15100.zip \[12.6M\]](#) - Source with CMake, database files, examples, and documentation
- Linux (any processor): [iphreeqc-3.6.2-15100.tar.gz \[12.5M\]](#) - Source with configure, database files, examples, and documentation
- Windows COM 32-bit: [IPhreeqcCOM-3.6.2-15100-win32.msi \[3.4M\]](#) - COM server, CHM documentation
- Windows COM 64-bit: [IPhreeqcCOM-3.6.2-15100-x64.msi \[3.6M\]](#) - COM server, CHM documentation (Both 32-bit and 64-bit COM versions should be installed on 64-bit versions of Windows)

3. Unzip the content of ‘Struvite Model’ to a chosen folder.

4. You are ready to go. Launch the Python editor ‘Spyder’ and run the model using either the Graphic User Interface (struvite_GUI31) or the Struvite_main4 IDLE interface

The ‘Struvite Process Design and Operation’ Tool was developed at the Technion - Israel Institute of Technology, Faculty of Civil and Environmental Engineering.

It is now updated and maintained by Dr. Oded Nir, Senior Lecturer at the Zuckerberg Institute for Water Research, Ben-Gurion University of the Negev, Israel.

For questions and support, please contact Oded Nir at odni@bgu.ac.il

Please cite as: L. Birnhack, O. Nir, M. Talzhenski and O. Lahav, Computerized algorithm for design, operation and cost assessment of struvite (MgNH_4PO_4) precipitation processes, Environmental Technology, 2015. DOI: [10.1080/09593330.2015.1015455](https://doi.org/10.1080/09593330.2015.1015455)

