

ESTSC
Energy Science and Technology Software Center
Software Abstract

Package ID	TOUGHREACT, 000219MLTPL07
Submitted By	Milner, Joseph R.
Limitation	Copyrighted
Audience	Unlimited
Available	11-03-2004
Description	<p>TOUGHREACT is a numerical simulation program for chemically reactive non-isothermal flows of multiphase fluids in porous and fractured media. The program is written in Fortran 77 and was developed by introducing reactive chemistry into the multiphase flow code TOUGH2. Interactions between and mineral assemblages and fluids can occur under local equilibrium or kinetic rates. The gas phase can be chemically active. Precipitation and dissolution reactions can change formation porosity and permeability. The code is distributed with a comprehensive user's guide that includes worked sample problems addressing geothermal reservoirs and hydrothermal systems, nuclear waste isolation, groundwater quality, sequestration of carbon dioxide in saline aquifers, and supergene copper enrichment. Additional information is available on the TOUGH2 homepage, at http://www-esd.lbl.gov/TOUGH2/.</p>
Contents	Media Directory; Software Abstract; Media Includes User Guide, ReadMe File, Source Code, Executable Module(s), Compilation Instructions, Sample Problem Input Data, Sample Problem Output Data, Installation Instructions;\1 CD ROM
Source Code	Is available
Computer	MLT-PLTFM
Operating System	Windows, Unix, Others
Programming Language	Fortran 77 (any)
Abstract Status	Released AS-IS 11/03/2004
Sponsor	DOE