
Philip John Smith — One Page Résumé¹

- ADDRESSES** 380 INSCC, 155 S. 1452 E., The University of Utah, Salt Lake City, UT 84112
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- EDUCATION** University of Saskatchewan (1969-1971)
B.S., Chemical Eng. and Physics, Brigham Young University, 1975
Ph.D., Chemical Engineering, Brigham Young University, 1979
- AWARDS** Univ. of Utah Student Choice Award for Excellence in Teaching, 1999
The Outstanding College Faculty Member, College of Engineering and Technology, Brigham Young University, 1988
- RESEARCH** Computational Simulation of Combustion and Reacting Flow Systems
- PROFESSIONAL EXPERIENCE**
- 2003-present Chair, Conflict of Interest Committee, The University of Utah
2000-present Chair, Dept. of Chemical and Fuels Engineering, The University of Utah.
1990-present Professor, Dept. of Chem. Eng., University of Utah, Salt Lake City, Utah.
1990-1998 Vice-President (co-founder) Reaction Engineering International², Salt Lake City.
1979-1990 Associate Professor, Dept. of Chem. Engineering, and Head of Computational Combustion Laboratory, Brigham Young University, Provo, Utah.
- CREATIVE PRODUCTS³**
- **ARCHES/GLACIER/BANFF** (1993-present)—A suite of computer software for simulation of three-dimensional, multi-phase combustion and reacting flow systems.—Couples computational fluid dynamics, homogeneous & heterogeneous chemical reaction, radiative heat transfer, turbulent micromixing, finite-rate chemistry. Includes massively parallel computing.
 - **PCGC3/PCGC2** (1980-1990)—A computer software package including graphical pre- and post-processing for combustion of gaseous fuels in three-dimensional geometries—licensed by Brigham Young University.
- SIGNIFICANT RECENT UNIVERSITY RESEARCH GRANTS**
- Current, DOE ASCI Center for Simulation of Accidental Fires and Explosions, associate director and one of several PI's, \$45.0 million.
 - Current, DOE OIT contract for simulation, optimization and control of a glass float tank at PPG in Mt. Zion, Illinois, \$210,000.
 - 1991-2001, DOE "Combustion 2000" contract for computational simulation support for designing a new coal-fired power system, \$2.2 million.
 - 1985-1990, director of Combustion Computations Lab, a participant in the NSF Engineering Research Center in Advanced Combustion at BYU with a personal research budget in excess of \$400,000/year.
- PUBLICATION SUMMARY**
- Authored 1 book, several book chapters and 90+ technical publications.

¹ full curriculum vitae available upon request.

² an engineering consulting company serving the process industries with design & problem solving solutions. a list of clients and services rendered, including the mineral processing industries, is available at http://www.reaction-eng.com/who_are_we/clients.html

³ all of these computer programs have been distributed to and used by industrial, governmental and academic users, including several metals processing organizations (User references available upon request).

