



Science Content 3-Day Institute *Fridays: June 11, 18 & 25, 2010*

“Moving Students Towards Scientifically Accurate Conceptions in the Chemistry Classroom”

This workshop will explore some of the fundamental themes in the Regents Chemistry Core Curriculum. Each topic will be approached from several different perspectives. First, an overview of the chemical concepts, their historical development and issues of why some of the content might be difficult to learn, will be introduced. Second, research about students' conceptions (often termed 'misconceptions') of the chemical ideas will be explored. Thirdly, teachers will be immersed in a variety of activities that illustrate ways to assist students in moving towards more scientifically accurate conceptions. These activities also will provide teachers with strategies for establishing differentiated learning methodologies in their classrooms. Topic areas include atomic structure and bonding, molecular kinetic theory, chemical reactions, kinetics and equilibrium, acids and bases, organic and nuclear chemistry.

Dr. Keith Sheppard, Director of Science Education at Stony Brook University, Associate Professor in the Department of Biochemistry, and EduChange consultant
Prior to arriving at Stony Brook in 2007, Dr. Sheppard was the Program Coordinator for Science Education at Teachers College, Columbia University with direct responsibility for Science Teacher Preparation programs. He has taught high school chemistry in the USA, Africa and Europe. Dr. Sheppard's research activities include studying the historical development of the chemistry curricula, investigating teachers' conceptual understanding of chemistry and the learning of science in informal educational settings. Recent articles can be found in the *Journal of Chemical Education*, *American Journal of Physics* and *Chemistry Education Research and Practice*. Dr. Sheppard has taught Chemistry Methods courses and workshops for pre-service and in-service chemistry teachers for many years and has been the major advisor of several chemistry education doctoral students.

Enrollment Deadline: April 23, 2010
Space Is Limited ~ Apply Today

■ **The Details...**

- Location: Manhattan location TBD upon enrollment.
- The NYCDOE is sponsoring this event, so participation is free
- Daily Timeframe: 8:30 am – 3:00 pm
- Teachers must participate all 3 days
- No sub coverage will be provided, though we're hoping that these dates will not present lots of coverage challenges!

Enrollment Form for 3-Day Institute: High School Chemistry
June 11, 18 & 25, 2010

Do us a big favor: write legibly and darkly!!

Name: _____

Email Address (the one you check, and attachment-friendly):

Contact Phone Number: _____

School: _____

Grade Levels Taught in 2009-2010: _____

Subjects/School Roles in 2009-2010: _____

Grade Levels to Teach in 2010-2011 (projected): _____

Subjects/School Roles in 2010-2011 (projected): _____

FAX one (1) enrollment form per educator to 1-866-402-7543

OR

Scan and email to Catherine@educhange.com

Secondary fax number: 646-613-8444