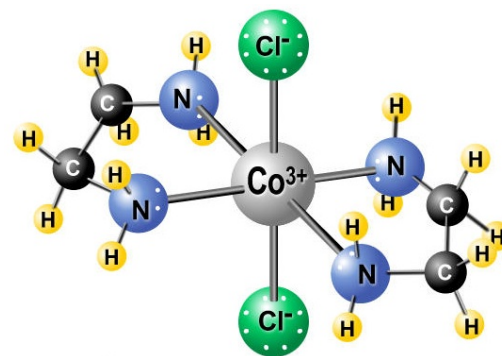


The North Carolina School of Science and Mathematics Distance Learning Technologies presents a workshop via videoconference

Explorations in Computational Chemistry



What is computational chemistry?

Computational chemistry, also known as molecular modeling, is the newest method of doing research in chemistry. Computational chemistry uses computers to build molecules and calculate a wide variety of properties and reactivities about those molecules. North Carolina is the only state to have a dedicated high performance computer available to pre-college students and teachers in computational chemistry. This workshop is funded by the Burroughs Wellcome Fund and the North Carolina Science, Mathematics and Technology Education Center.

Program Description: Explorations in Computational Chemistry is a 15 hour workshop via videoconference designed for both teachers and students with a strong interest in chemistry or molecular biology. The workshop consists of eight (8) 90-minute sessions for students and teachers. Teachers can take an additional two (2) 90-minute sessions to learn about classroom integration and support for research activities.

Workshop instructor, Robert R. Gotwals, Jr., will teach participants the technologies, techniques, and tools of computational chemistry, including the underlying methods, mathematics, and computer programs of computational chemistry. Participants will use the NC High School Computational Chemistry Server for their lab work.



Pre-requisites for both students and teacher participants: chemistry, solid algebra background, comfort with computers. Computers with Internet access must be available at the IVC site for participant use during the workshop sessions.

Costs: Instruction, computer access and all materials provided free of charge to all North Carolina pre-college teachers and students

Dates: every Tuesday Oct. 2- Nov. 27 except Nov. 20th
(Dec. 4-11 are the two optional sessions for classroom integration and support for research activities)

Scheduled Sites: A.L.Brown HS, Kannapolis; NCSSM, Durham. For additional sites, please inquire

Time: 4:15-5:45

Teachers receive a letter of completion recommending 1.5 CEU for 15 hours of instruction. Optional additional CEU credit may be arranged. Students receive a certificate of participation and a letter for inclusion in college application packets.



For questions on workshop content, contact:
Robert R. Gotwals, Jr., Computational Chemistry Educator
gotwals@ncssm.edu

To sign up contact:
Peg Kirk at the Distance Learning Department,
North Carolina School of Science and Mathematics.
Phone 919 416-2632 Email: kirk@ncssm.edu
Visit our website at http://www.dlt.ncssm.edu/distance_learning

BURROUGHS
WELLCOME
FUND

SMT
North Carolina Science,
Mathematics, and Technology
Education Center