

Using Flash Animation and Streaming Video for Laboratory/Lecture Demonstrations in Large Enrollment Courses

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Abstract:

Chemistry is a topic of study that frequently uses demonstrations to provide a tangible illustration of a concept being explored in a lecture course, or to demonstrate proper experimental procedure for a laboratory exercise. Instructors at large Universities often face the difficult challenge of providing these first person experiences to several hundred students in a lecture auditorium, many of whom are seated at such a distance that the overall impact of the demonstration is lost. We have been using Flash Animation, Streaming Audio, and Streaming Video to place demonstrations on the Internet using the Synchronized Multimedia Interactive Language (SMIL) file format. The SMIL format provides the opportunity to present the demonstration and an explanation of the concept being illustrated. SMIL is also an interactive file format providing an opportunity to actively involve the student in the demonstration. In this paper, we will present several illustrations of how we use these Internet resources in our Quantitative Analysis courses.

Follow this link to see the demonstrations:

<http://www.chem.vt.edu/chem-dept/anderson/cil/confchem.html>

(Demos require the free [Real Player 8.0.](#))
