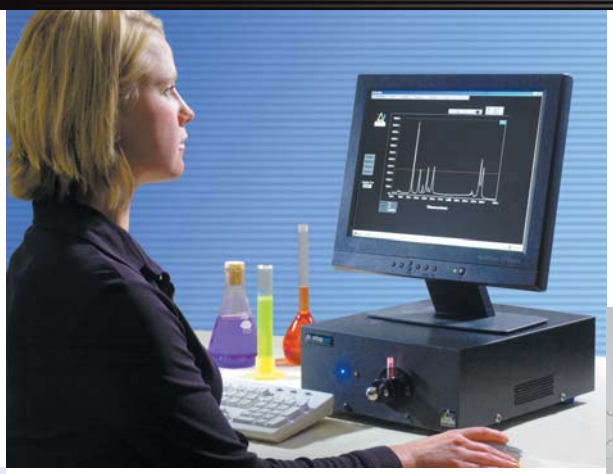
DeltaNu®

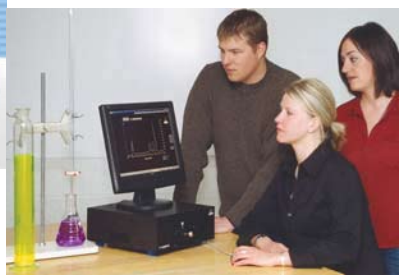
Discover the Raman Advantage!

Looking for something NEW to teach?

Need textbook results fast?



Add Raman to your lab!



Easy to use...

"We have used the Delta Nu Raman Spectrometer in our quantitative anlysis, instrumental analysis, and physical and organic chemistry labs. It is extremely easy to use and obtains very good results within the quoted specs. It is so easy to use that students use it instead of the IR spectro-photometer. We have used it for solids, liquids, and films with excellent results. We are extremely satisfied with the instrument and will expand its use this semester."

–Leon L. Combs
Kennesaw State University

Advantage 633™

Raman System

Delta Nu announces the Advantage 633 Raman system. It's perfect for academic settings and comes complete with:

- compact, sensitive and versatile Raman spectrometer
- computer with flat panel LCD monitor
- easy to use software
- complete package of accessories

and best of all … prepared labs!

Easily demonstrate topics in analytical, physical, inorganic and organic chemistry. Choose from pre-tested experiments, each with instructor and student versions. Examples include:

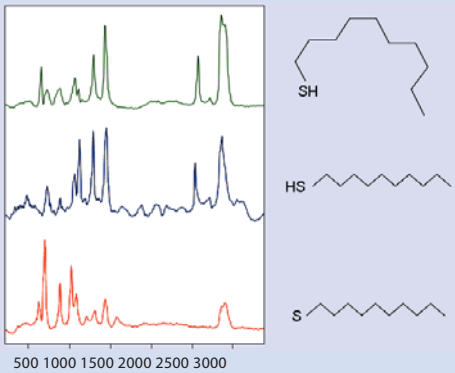
- group theory and vibrational spectroscopy
- periodic trends using Raman spectroscopy
- adsorption isotherms using SERS
- instrumental analysis: ethanol & water

Conformational…

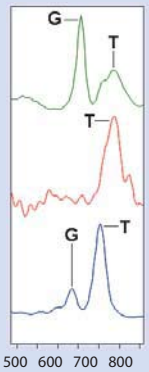
The study of monolayers usually invokes images of large, expensive pieces of equipment and time-consuming experiments. DeltaNu's Advantage 633 provides excellent monolayer sensitivity when coupled with Surface Enhanced Raman Scattering (SERS). Our feature this month demonstrates the study of rotational conformations about the C-S bond. Alkanethiols bind strongly to SERS substrates and depending on their size undergo self-assembly. The self-assembled monolayers (SAMS) provide many unique properties to surfaces. The C-S bond is naturally very intense in Raman scattering from the polarizable sulfur. In SERS it is even stronger due to its proximity to the surface. 1-decanethiol is a liquid at room temperature, can be solidified with a dry ice, and on a colloidal silver suspension it shows the predominance of the trans conformation due to self-assembly.

Applications Series: #7 – Monolayer Spectroscopy

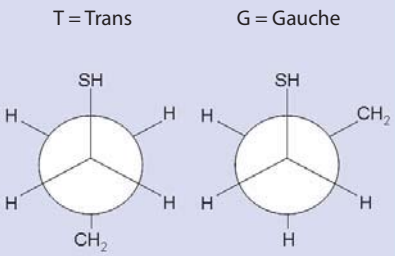
Raman Spectroscopy of 1-Decanethiol



C-S Stretching Region



Rotational Conformers



www.deltanu.com

DeltaNu®
A Division of CC Technology, Inc.

For information call **866 301 6328** toll-free or visit us on the Web at **www.deltanu.com** for complete technical specs.