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MELO3D

Learning Objects for

CH216

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Identified Best Learning Objects

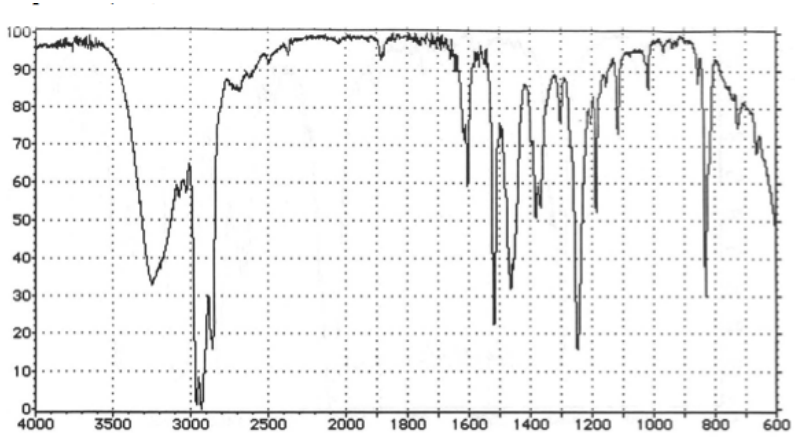
- Excellent for review, visualizations and theory
  - University of Alberta IR Spectroscopy Tutorial
  - University of Alberta NMR Spectroscopy Tutorial

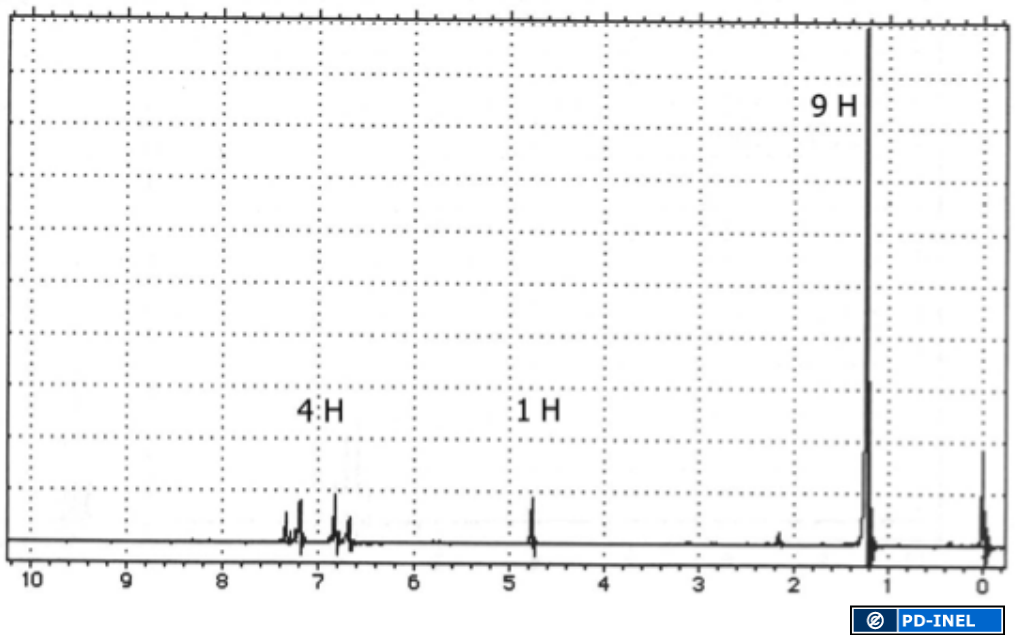
We Need More Practice!

Identification of Organic Compounds Using IR and ^{1}H-NMR Spectroscopy

The following infrared and proton NMR spectra provide a good introduction to the use of these techniques for identifying organic compounds and their structures. The top spectra are IR and the bottom spectra are ^{1}H-NMR. Based on the spectra and the given molecular formula, write the structure of each compound.

Compound 1, $C_{10}H_{14}O$





PD-INEL

We Need More Practice!

- Practice is GREAT.
- These can be improved.
- No information is given regarding to HOW to solve these problems.
- No explanations accompany answers.

Jing Wrappers!

Help to guide problem solving!

What About Student-Run Discussions?

- Students teaching other students how to understand spectroscopy is great on every level.

- Can we use new online learning objects to facilitate discussions about spectroscopy?

Voice Thread.

- Upload difficult problems and have students make their own interpretations of what the spectra may indicate.
    - Extra GSI points for insights and good chemical intuition shown in the thread?

Implementation

- Using Sitemaker to make a comprehensive website full of our new wrapped learning objects.

- Install LOs in Renata and Gracie's lab sections.

- Assign certain LOs and collect work.
  - Work will not be graded.

- Continue developing technique-based LOs for the winter term.

Other Ideas

- Include a repository of optional LOs on our Sitemaker site for additional practice
  - Carry over topics from 211 for refreshers
  - Include advanced references for topics covered
  - Endless amounts of practice problems

Other Ideas

Thank You!

Questions? Suggestions?