



American Chemical Society Wichita Section

November, 2013 Newsletter

Stephen Donnelly, Editor

Section Meeting
Tuesday, 19 November, 7:00 PM
Wichita State University
Wichita, KS

Meal (optional): 6:00 PM

Dinner will be served in the Lucas Room (265) of the Rhatigan Student Center at Wichita State University in Wichita. The dinner will be a "Little Italy" buffet that includes an antipasto platter, Caesar salad, sautéed zucchini, a pasta bar, Chicken Cacciatore, Tiramisu and cannoli. The cost of the meal is \$14 and the section will cover the full cost for students who also attend the tour of the Chemistry Department. See the attached campus map for parking and additional information. Directions to campus can be found at www.wichita.edu.

Please RSVP by Friday, November 15 to Moriah Beck at moriah.beck@wichita.edu.

Meeting: 7:00 p.m.,

The meeting and tour of the Chemistry Department will follow dinner and take place at various locations in McKinley Hall. Check-in and tours will start outside the Chemistry Office in room 206 of McKinley Hall.

Title: *WSU Chemistry Department Scavenger Hunt*

Come discover what the Chemistry Department at Wichita State University has to offer by participating in the scavenger hunt. Whether you are a faculty member interested in collaboration and/or access to instrumentation OR an undergraduate who wants to get involved in research or contemplating graduate studies, this is the place to find the answers as you search for clues about the various labs at WSU.

The WSU Chemistry Department consists of top-notch faculty members who pride themselves in innovative research and quality education at all levels. Our department offers several undergraduate

degrees and graduate degrees at both the M.S. and Ph.D. levels. Both programs combine graduate-level courses with a strong research component intended to develop independent research skills. Graduate students, alongside faculty mentors, engage in various fields of chemical research, which are supported by and directly benefit local industry.

The Chemistry Department is located in McKinley Hall, a 96,000 ft² facility. The entire building was renovated in 2001 with 15 new research laboratories, along with an NMR instrumentation laboratory and analytical, inorganic, and biochemistry instrumentation rooms. The Department's modern instrumentation includes:

- Mass spectrometer
- Single-molecule spectroscopy
- X-ray diffractometer
- Rapid scanning stopped flow spectrometer
- UV-Vis spectrometers
- Fluorimeter with polarizers & lifetime capability
- NMR spectrometers
- HPLCs and FPLCs
- CD spectrometer
- Ultracentrifuges
- Isothermal titration calorimeter
- Microscope for live cell imaging & fluorescence
- Raman microscope
- Dynamic light scattering
- FT-IR and FT-Raman

Chair's Message

Dear Section Members:

Our last section meeting of the year will be in Wichita once again, and this will be my last meeting as section chair. Dr. Eric Trump will be taking over as chair with the start of the new year, but I will continue on as the newsletter editor.

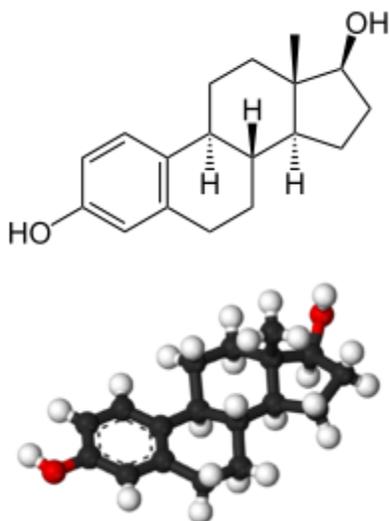
For this meeting the folks in the WSU Chemistry Department have arranged for an excellent Italian meal, and have graciously agreed to open their research labs for a tour and scavenger hunt. I am certain this will be an interesting event for our section members. For those of you in academics I ask that you encourage your students to attend as this event should be especially informative to them.

Best wishes for a happy holiday season!

Sincerely,

Stephen Donnelly, Chair, ACS Wichita Section

Molecule of the Week



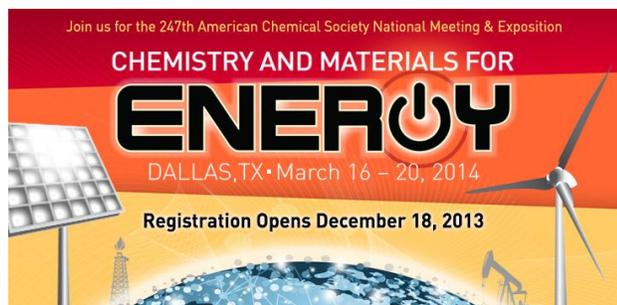
Estradiol

The Merck Index calls estradiol “the most potent naturally occurring estrogen in mammals”. Females produce it in the ovaries and, during pregnancy, in the placenta. In males, estradiol is a metabolic product of testosterone.

D. W. MacCorquodale and co-workers isolated estradiol from sows’ ovaries in 1936. Soon several researchers prepared it from other steroids. About 40 years later, two research teams reported its total synthesis.

Much research has been devoted to estradiol as a sex hormone, but it recently turned up in a study of eating disorders. K. L. Klump and co-workers at Michigan State University tracked estradiol levels in twin girls after mid-puberty and found that the hormone correlated with eating disorders in identical, but not fraternal, twins. Klump believes that estradiol, a gene transcription factor in the brain, may switch on genes related to the disorders.

Upcoming National Meetings



Wichita Section Web Site:

<http://wichita.sites.acs.org/>

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