

# The SAS Spectrum Newsletter

The Newsletter of the Society for Applied Spectroscopy



## February, 2005

### *Student Activities at FACSS 2004 - organized by Debbie Serna SAS Student Representative*

**STUDENT-PROFESSIONAL PANEL DISCUSSION AND BROWN BAG LUNCH  
TUESDAY, OCTOBER 5, FACSS, PORTLAND, OREGON  
NOON - 1:30 PM**

A mix of approximately 25 professional spectroscopists and students had lunch and discussed a variety of career issues. The professionals emphasized the importance of team-based research in industry, government labs, and academia. The Lone Ranger is dead in today's employment market. The professionals also emphasized the importance of problem-solving skills, more than technique-based research. It was also suggested that students try to do as many types of projects in their research experiences, whether they be co-operative, undergraduate, master's, Ph.D., or post-doc. Publications were discussed as evidence that potential job candidates can wrap up a project. A knowledge of business practices is recommended for industrial employment, although many companies provide this training to new hires. Students were also advised to maintain an external presence during their career to be attractive to other employers, as well as continuing to learn and develop new skills.



Chris Hassell, Jim Rydzak, and Mike Bradley discuss careers with students at FACSS 2004

Students were also given valuable suggestions in the job-search process. It was suggested to never use the same resume or cover letter twice, as these documents should be targeted for every position and company. These documents should also not contain any errors to merit serious consideration. Candidates were recommended to do their homework about the company and position. Realistic requests for salary should be made, and candidates were advised not to be arrogant about their abilities. However, it was recommended that students be prepared to show the skill sets they can offer to a company. Special skills such as business training, a knowledge of patent law, or fluency in foreign languages should be highlighted. This frank discussion was positively received by both the professional and student spectroscopists.

**STRATEGIES FOR CAREER DEVELOPMENT PRESENTATIONS  
WEDNESDAY, OCTOBER 6, 2004, FACSS, PORTLAND, OREGON  
4:00-6:00 PM**

Four professional spectroscopists gave presentations about careers in a session sponsored by SAS. Prof. Gary Hieftje of Indiana University discussed opportunities at Ph.D. institutions. Prof. David Butcher (Western Carolina University) described work at a primarily undergraduate institution. Dr. Christian Hassell of Los Alamos National Laboratory reviewed options at government laboratories. Dr. Randy Bishop of GE Plastics provided his perspectives on industrial employment. The presentations made by the speakers are available at <http://s-a-s.org/Spectrum>.

### *Interview with Debbie Serna*



### *SAS Student Representative*

It is hard to imagine a stronger advocate for SAS, than Ms. Debbie Serna, the SAS Student Representative. Debbie's role is to meet with students, inform them of the advantages of SAS membership, and encourage them to join the society.

"I really enjoy meeting with students and talking about SAS," Debbie explains. "Students are often unsure of the opportunities available to them. My job is to make sure they know they are welcomed in SAS and at our national meeting, FACSS."

"SAS is a wonderful bargain for students," she adds. "For \$20 per year, you have receive a hardcopy and online access to Applied Spectroscopy, as well as the opportunity to learn about careers and network with leaders in all areas of spectroscopy. It's a great way to turn technical training into a high-paying career."

She is currently enrolled in the Ph.D. program in Chemistry at New Mexico State University, working with Professor Gary Rayson. Her research involves spectroscopic techniques used to determine the binding of lanthanide and actinide metal ions in cell walls of a plant-like material. She graduated from New Mexico Tech with a B.S. in Chemistry.

Debbie has organized a variety of activities for SAS student members, including the events described here. She organized a social event at Pittcon 2004, providing students with pizza and the opportunity to learn about the activities at the meeting. A similar event is planned at Pittcon 2005

"I have found that students are very interested in learning how they can convert their graduate training into professional employment," she explains. "What I find really interesting is that the employers learn almost as much from these sessions as the students. It is fascinating to listen to the differences between academic, government, and industrial employment."

Debbie is very interested in hearing from all students who are interested in learning more about SAS, the FACSS meeting, or suggestions for future activities. "We want to make SAS work for you, so please contact me with your ideas. I would love to hear them."

*Comments to [newsletter@s-a-s.org](mailto:newsletter@s-a-s.org)*