



The Oregon State University AIChE Student Chapter Newsletter

The Reactor - Spring 1997

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1997 WERC Competition

by Kelly Stinson

This year the OSU team for the Waste and Engineering Education Research Consortium (WERC) Competition in Los Cruces, New Mexico took home the award for the best poster presentation for Task II of the competition. There were over 29 schools present for the competition, many of which participated in the Task II problem which required cleanup of an aquifer contaminated with high concentrations of Sr90 and Cs137. The OSU team came up with a completely unique design for the problem using Spouted Bed Fluidized Reactors (SPFR's). The process was designed in accordance with the requirements of the problem, and a bench scale of the process was constructed to demonstrate the feasibility of the design.

The bench scale apparatus designed by OSU was very dynamic, drawing lots of attention to the OSU booth. Another feature that attracted much interest to the OSU team was the participation of joint team members from the United Arab Emirates University (UAEU). Many people were interested in how the two teams came together and how they coordinated on such an extensive project. CNN was present at the competition and covered the design of the OSU/UAEU team.

The competition provided many opportunities to talk with other teams from schools across the nation about how they chose to handle the same problems using disparate technologies. While there were many technical discussions about the pros and cons of each solution presented, there was still plenty of time to take in some of the culture of New Mexico. Food and music from the local area was sampled, much to the delight of the students from OSU. The sunshine was also very welcome, as many tans or even sunburns were apparent on the second day of the competition.

This year's competition provided OSU students with an opportunity to think on their feet as they discovered that the need to obtain beads developed for their proposed process in a short amount of time. A back of the envelope calculation, along with some ingenuity, led to an improved design of the bead-making process using crude materials on hand. Production of the beads was reported to have increased by a factor 10 while maintaining the bead quality.

Unfortunately, despite all the planning and innovative thinking done by the OSU students, a placing in the technical awards eluded the team. But this was only a temporary setback. The OSU team is already making their plans for next

year's competition which many students on the team are already talking about. Anyone interested in joining the WERC team next year should contact Dr. Jovanovic for details.

Welcome to Beautiful, Clean British Columbia!

...was the first sign we saw after crossing the US-Canada border on our trip to the 1997 AIChE Northwest Regional Conference. Vancouver, host to the conference, did not differ much from any equal-sized American city, except that it had street trolleys and the Great Canadian Bagel Shop which we all greatly enjoyed!!

Our exodus on **Friday**, April 25th was somewhat delayed (until 3 pm) but was sweetened by a delicious King Kone ice cream at the expense of Dr. Rochefort!! A group of our hardworking and adventure-seeking students, including Kanchana Bhaskar, Bryan Fiereck, Matthew Law, Tim Shenk, Kelly Stinson, Neda Vukmirovic, ably chaperoned by Skip Rochefort, set off to conquer the conference. Beto Dantas and Richard Fairchild, as well as Amy Chu and her family, drove up on their own, and their travel adventures remain unknown at the time of printing. (Hopefully, they did not have any major problems with crossing the border in their cars full of high-priced goods from Cuba or China) .

Tired out from a week filled with homework and the lack of a good night's rest, we soon fell asleep only to be awakened by a traffic jam at the Columbia River in time for a view of Portland skyscrapers in the blue evening sky. After a dinner at the Federal Way Subway, we spent about 20 minutes both looking for Dr. Rochefort's coffee and trying to get back onto I-5. This short delay was actually not bad--considering that we avoided getting thrown out of the van by Dr. Rochefort for a tour of the Federal Way Dialysis Center! Kanchana successfully assured our ChE 415 professor that visiting the Albany Dialysis Center would be more convenient for her class project.

Thanks to Dr. Rochefort or Kelly (lost coffee or slow driving) we avoided the Seattle traffic jam that followed the Suns-SuperSonics basketball game and arrived in Vancouver around midnight.

Saturday started early with the Regional Student Paper Competition. We proudly announce that *our* organization of this AIChE event two years ago was better than the organization of this year's event! A mild cultural shock came as we were strictly reminded by one of the judges to use the metric and not the 'American' system of units. Good job! for the four OSU presenters: Beto Dantas, Bryan Fiereck, Matt Law, and Neda Vukmirovic! CONGRATULATIONS for Kelly Stinson's presentation on Subterranean Spouted Bed Reactors which took third place!!! We also had two posters presented, one by Kelly and one by Neda.

After spending an hour in the Technical Trivia Competition (which consisted of answering some ChE-, Canada-, or even history-related questions) OSU placed second. It was apparent that Dr. Rochefort felt *uncomfortable* (to the point of yelling!) whenever one of our two groups, Beto-Bryan-Richard or Kelly-Matt-Tim, paused at any polymer-related question. Ah, that's life...

Soon thereafter, we enjoyed a formal dinner at the Plaza 500 Hotel. To be remembered is one small *BLUEBERRY* (!) that, in one moment, flew straight () from Dr. Rochefort's plate onto Richard's white shirt ()!!! Nevertheless, the evening ended gloriously with beer, shakes, and grasshopper wings . To be admired are those who stayed up late, until 1:30 am!, and were ready to leave Vancouver at 7:45! the next morning! Despite the rumors, Dr. Rochefort was well within time . Only Neda ran somewhat late, and was always seen with a camera in her hand. She claims to have taken the most beautiful picture of the trip after having run across the busiest street in Vancouver.

Sunday's 7:45 am start was actually rather decisive. We spent about two hours sightseeing around Vancouver and searching for souvenirs in the beautiful Stanley and Capillano National Parks. The morning was gorgeously beautiful and sunny--ah... Were it not for Dr. Rochefort, who just happened to be driving through the park, we would have enjoyed the natural beauties even more! With Dr. Rochefort, however, while frantically searching for *TOTEM POLES*, we felt like we were being hunted by the Indians . An equally thrilling feeling was gained from a wrong turn into a one-way street (!). Canada, of course, lacks many of the US traffic signs and it was unexpected to find a number of cars coming straight toward us. Fortunately, Bryan got us safely out of this interesting situation!!

With bags full of souvenirs (from a beautiful souvenir shop right next to the famous Capillano suspension bridge above a very deeeep canyon), we again hit the road, this time toward Corvallis. As we sweetly started the trip, so we finished it--at the King Kone in Albany (mmm...)! Dr. Rochefort, thank you very, very much!!! We all appreciated your presence during this trip. Also, special thanks to Bryan and Kelly for a safe and fun drive, and to all of you who support our enthusiastic AIChE chapter!

by Neda Vukmirovic

Meet Dawn Belveal

by Kelly Stinson

Most people in the Chemical Engineering Department know Dawn Belveal as the Department Secretary. Many of us see Dawn every day but do not know who she really is or what she does in her office on the first floor of Gleeson Hall. In this exclusive interview, Dawn tells us about her work and also a little about herself.

Dawn describes her position as caretaker of student files and accounting, and director of student workers. In general, she helps students to overcome those everyday little problems that crop up to hinder their progress toward graduation. Dawn has been with the department for seven years. She says, "My favorite part of my job is helping the students." Dawn likes to help sort out scheduling conflicts, student record errors, or to keep track of the changing degree requirements. One of Dawn's latest work projects is to get the general student schedule ironed out to help minimize conflicts that students currently encounter. Dawn also keeps very busy answering the phone calls from faculty, alumni, and current as well as prospective students.

Dawn's interests outside of the department include work in her greenhouse, where she tends to hundreds of fuchsias. Her favorite-colored fuchsias are pink and purple. She also loves to work in her yard on various projects. Dawn plans on taking a long trip (four to five weeks) during the summer of 1998 for a long deserved vacation. She plans on going to Colorado, as well as some of the Southwestern states, to visit family. Dawn's favorite music is Country Western.

So now you know who Dawn is and a little bit about her. If you are ever in a bind and need some help with class schedules, reserving classrooms, or help contacting the faculty be sure to stop by the department office and she will get you going in the right direction.

OSU ChE Outreach Program

by Dan Euhus

Starting May 22nd, the Chemical Engineering department will begin an exciting outreach program aimed at encouraging more Oregon high school students to go to college in state at OSU. Undergraduate students will present information about careers open to chemical engineers here in the Northwest, answer questions about OSU, then conclude by leading two projects. To show high school students a few of the diverse activities chemical engineers are involved in, the classes will make silly putty and paper. The first outreach will occur at Churchill High School in Eugene. Hopefully, we will also be able to visit other area high schools in the near future. If you would like to be involved, contact Dr. Rochefort or Dan Euhus (euhusd@ucs.orst.edu) for more information.

AIChE 1996-97 T-Shirts Available!

This year's T-shirt design was a combination of ideas from Neda Vukmirovic, Nathan Dunn, Danielle Amatore and Jason Reinhardt. The following list describes the types and sizes of shirts still available and their prices:

\$20 - XL white sweatshirts

(limited supply)

\$13 - L/XL white or gray long- sleeve T-shirts

\$10 - L/XL white short-sleeve

T-shirts

You can contact Skip Rochefort for T-shirts at his office (737-2408) or via e-mail (rochefsk@engr.orst.edu)

Special orders may be possible if enough interest is indicated.

AIChE Officer Nomination Sheet for 1997-1998 year

Please nominate only one person for a position and only people that will be interested in filling the position. Nominees will be asked if they wish to fill the position before they are entered on the election ballot. Please turn in the nomination sheet to Dr. Skip Rochefort's office or mailbox prior to Friday, May 16th.

President _____

Vice President _____

Treasurer _____

Secretary _____

Senior Class Representative _____

Junior Class Representative _____

Sophomore Class Representative _____

Freshman Class Representative _____

Newsletter Editor _____

Plant Trip Coordinator _____

Librarian _____

Tutoring Coordinator _____