

## **TU Petroleum Engineering Newsletter**

### **May 2007**

Every April, we hold our College of Engineering Honors and Awards ceremony where students and faculty are recognized for their accomplishments. This year, the event was held on April 19<sup>th</sup>. One of our faculty members, Holden Zhang, was given the Outstanding Junior Faculty Research Award. Every year, this award is given to a junior faculty who has conducted outstanding research. Holden joined the faculty in 2003. His research area is mostly concentrated in multi-phase flow. He is involved in Tulsa University of Fluid Flow Projects (TUFFF) as an Associate Director. He is conducting research in paraffin wax deposition, as well as heavy oil flow.

Through consistent experimental and modeling efforts, Holden successfully developed a unified hydrodynamic model for predictions of flow pattern transitions, pressure gradient, liquid holdup and slug characteristics in gas-liquid pipe flow at all inclination angles and across wide ranges of other flow conditions. Unlike other mechanistic models, Holden's model is based on the dynamics of slug flow, which shares transition boundaries with all the other flow patterns. Holden's model is able to simplify the flow pattern boundaries and predict the pressure drop much better than existing correlations. Many oil companies are currently using this model for their pressure drop predictions in pipelines and tubing. For all his contributions, Holden won this award. Congratulations Holden!

In addition to Holden, many of our graduating seniors were also recognized for their academic success. These students include: Ricardo Gonzalez, Michael Mengers, Duc Anh Nguyen, Clay Padgett, Kien Phan, Kevin Smith, and Duc Huu Vuong. All these students have maintained a GPA of 3.5 or higher. Most of these students have either secured jobs in the domestic industry or have continued their education in graduate school. Congratulations to all these students as well for their outstanding achievements.

And now to our alumni news-

#### **Alumnus of the Month**

This month's Alumnus of the Month is John Redmond. John received his B.S. in Petroleum Engineering in 1988, followed by M.B.A. in 1995. He joined Conoco as a Petroleum Engineer in 1988 and, after working for three years, joined Samson Resources as an engineering manager from 1991 through 1996. He progressively moved to smaller companies taking on increasingly responsible positions, joining Prospective Investment and Trading Company as Senior Vice President of Engineering and Exploration. Eventually, he became his own boss at Axio Natural Resources serving as a President from 2003 through 2006. After the company was sold to Chesapeake in 2003, he started all over again with Blue Stone Natural Resources as President. He is currently developing a portfolio for the company by acquiring new properties. We wish him the very best in his new adventure. For more on John, please visit [http://www.pe.utulsa.edu/alumni/monthly\\_alumni/alumnus\\_200705.stm](http://www.pe.utulsa.edu/alumni/monthly_alumni/alumnus_200705.stm).