This is Sedimentary Geology research on shelf & shelf-margin clinoforms, supported on a year-to-year basis by Industrial Associates. The companies are interested because we can provide them with outcrop images and data that can sometimes be useful analogs for their work with subsurface reservoirs in different parts of the world.

The main objective of this new phase of the research is to utilize the outcrop analog, clinoform database of the WOLF consortium (2002-5) and to enhance our understanding of different segments within the clinoform. We aim to understand how shelves are constructed, how shelf-edge river-mouth output feeds directly to deepwater environments, or is buffered by tides and waves, and how turbidites change their character from slope to basin-floor fans. The detailed research program is outlined from year to year, and that for 2006 is given below. The program for 2007 will be available in December 2006.

This Consortium is led by Ron Steel (UT), Piret Plink-Bjorklund (CSM), Dave Mohrig (UT), and Cornel Olariu (UT) as well as graduate students at UT and CSM.

The project leaders and other project workers have publishing rights for all the activities carried out and ideas generated, but the Industrial Associates are guaranteed early access to the results, i.e., access prior to publication. This early access is given via field & review meetings and from a CD of reports prepared by students and project leaders at the end of each year. There are no data in these reports that are ‘confidential’.

WORKPLAN 2006
In keeping with our plan to focus on a variety of problems within different segments of shelf-margin clinoforms (the shelf, shelf-edge, slope and basin floor segments), our research aims in 2006 are:

- **Documentation of sediment and facies partitioning (sand-shale ratio, grain size, cementation etc.) on mixed river-wave influenced shelves**, in a case where the lowstand segment is distally developed but still ‘attached’ to the HST/FSST (Chimney Rock, SW Wyoming). This study is being conducted by Piret Plink-Bjorklund.

- **Documentation of facies partitioning between highstand and lowstand tracts where the lowstand unit is turbidite-bearing but is ‘detached’** (Desert/Rangely system, NW Colorado). This research will be done by Raffaello Sacerdoti and another graduate student at CSM.
• Documentation of mouth bar-to-delta slope sediment-gravity flows in the Panther Tongue of N Utah. The Panther Tongue appears to have been a mixed river-wave influenced system, and the gravity flows will be evaluated for evidence of hyperpycnal or wave-borne undercurrents. This work will be led by Cornel Olariu (UT).

• Documentation of deepwater slope facies immediately seawards of wave-dominated deltas at the shelf edge. Here we are trying to evaluate the efficiency of deepwater sediment delivery from deltas in the face of storm-wave domination at the shelf edge. Eocene outcrops on Spitsbergen and Mio-Pliocene outcrops (paleo-Orinoco shelf edge-to-slope) on southern Trinidad (Battfjellet, Cruse and Mayaro formations) are being worked by Carlos Uroza and Ron Steel (aided by work of former student Rene Winter). Carlos is also producing an architectural model of how the wave-dominated Spitsbergen shelves were constructed.

• Comparison of river versus wave-dominated shorelines at the Maastrichtian shelf edge of Washakie Basin of S Wyoming, and the dramatically differing partitioning of sand into the deepwater basin along these two types of shelf-edge. This work is being done by Cristian Carvajal at UT.

• Dave Mohrig is planning an experimental module that should help constrain the processes controlling the temporary sediment storage at river mouths and its release onto the slope as undercurrents. Dave is arriving at UT in August 2006 and will need much of the semester to set up his experimental facility. He will report on the planned work and any progress made by end 2007.

• Morphometric analysis of satellite imagery on modern river mouths will start at the end of 2006 with expected reports in 2007. The un-interpreted satellite images for the selected rivers will be available via consortium internet website in 2006. Images will be on river mouths that are influenced by river-wave-tide processes in different proportions.

• The consortium website will be build and available at the end of the summer 2006 with information about field work progress and future activities.