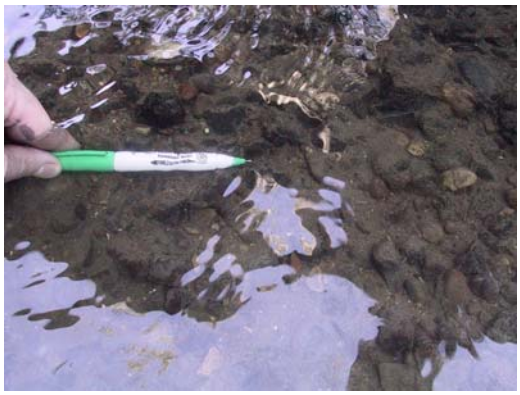
Interested in becoming involved in geologic research? YES! Well than read on.



One of my areas of research examines the interaction of surface water with ground water. This interaction is important to the biological communities that exist in both systems as well as the community that resides where the two waters mix. I am interested in determining how changes in the stream bed alter the rate of mixing between surface water with ground water. If the rate of mixing changes than the rate of chemical exchange and heat transfer are also modified. Altering the chemical conditions and the temperature regime can cause problems for the ecosystems. Therefore, the work that is being done is critical to expanding our understanding of stream and ground water ecosystems.

From the work that I am doing, I have a number of small research projects that undergraduate students could complete. The projects deal with understanding the physical properties of the stream bed and determining the frequency of particle movement. The experience would include both field work, lab work, and computer work. The field work would involve sediment sample collection at the field site; I would teach you the protocol and allow you to gain the experience of collecting the samples. The lab work would be the analysis of the collected samples. The work would include measuring the grain size of the sediments and the organic content of the sediment. The data would then need to be entered into spreadsheets and analyzed. A small report would be generated to provide closure on the work. I do not expect that you would now how to do any of the processes, and I will train you for the work.

Some specific questions that I would like students to look at are:

How often does the sediment move?
Does the size of the streambed material change, and if so what is the range of grain sizes?
Is sediment movement uniform along the stream?

If you are interested in this work please let me know (email me ewpeter@ilstu.edu, call me 438-7865, or met with me), and we can discuss the opportunity. If you work on this project you could enroll in independent research hours in the spring. This is a great experience, and is something that future employers like to see.