Dave West, Professor of Geology

I continue to devote much of my research energy towards studies aimed at unraveling the tectonic evolution of coastal Maine. This has included the mapping of another 7.5 minute quadrangle for the Maine Geological Survey and bringing two students up to Maine this past summer for the collection of samples that will form the basis of their senior thesis research during the upcoming academic year. I have also continued to be heavily involved in administrative duties associated with the Northeastern Section of GSA. This culminated in March with my election to the position of Secretary-Treasurer of the Northeastern Section – becoming only the 3rd person in the last 25 years to hold this permanent position on the Management Board. The duties associated with this office include all the financial responsibilities associated with the Section, the distribution of all funds for GSA-funded undergraduate student research and meeting travel within the Section, and overseeing the selection of venues and local organizing committees for all Northeastern Section meetings.

In addition to research and service activities, my past year has involved significant travel including a week-long visit to Middlebury’s three schools abroad in Russia. Finally, one of my most significant accomplishments involved the acquisition of external funding for the purchase of a new Scanning Electron Microscope (SEM) for the College. This significant grant, from the George Alden Trust, will replace our antiquated 20-year old SEM with a state of the art fully integrated SEM. This new $350,000 instrument will not only quickly produce superior high-magnification images (up to 100,000 times with a resolution of up to one billionth of a meter), but it will also allow for the determination of chemical compositions and zoning patterns within minerals, cathodoluminescence imaging of minerals, as well as quick and accurate assessments of preferred crystallographic orientations of minerals within deformed rocks. The new instrument is scheduled to arrive in late October and will quickly be utilized in classes and student-faculty collaborative research.