Time to Re-energize

The end of the academic year at the University, and the beginning of "summertime" (even in California), is a time for me to relax, rest, and most importantly restore my energy. For me that restoration often occurs in many small ways, such as filing those stacks of papers on my desk (and usually finding a **Journal** paper to review), taking care of those home maintenance projects, finally getting to the dentist, and backpacking in the mountains over a weekend. Also, planning and enjoying a vacation is a great way to revitalize myself. I am already excited about the vacation I have planned after the next Society Meeting in Paris which is a bike tour through the French countryside, visiting the chateaux and wineries. Even the thoughts of this vacation (and of course, the Meeting itself) give me energy.

Energy technology is the focus of the Division featured in this issue of ***Interface.*** My working as an engineer at a National Laboratory during the US "Energy Crisis" of the 1970s greatly influenced my own lifestyle. For instance, I recently began shopping for a new car and have difficulty considering buying a "gas-guzzler." What happened to the 1970s promise of all cars attaining 40-50 miles per gallon?

I also examine the energy consumption figures when purchasing major appliances. I am one of those who is constantly turning off lights and appliances and feel guilty about the energy I waste by keeping my hot tub up to its therapeutic temperature.

At the University, the lessons of the 1970s energy conservation and alternative energy sources have been incorporated in process design courses in which I teach concepts of energy integration, particularly for the design of heat-exchanger networks. These concepts also have been extended to heat and power integration that is useful for the design of utilities systems. I have taught a popular seminar class on batteries and fuel cells. These topics are of particular relevance and interest to my students with the zero emission vehicle mandate in California and the molten carbonate fuel cell demonstration project in our neighborhood at the Miramar Air Station. In general, California is a home for many alternative energy forms from solar to wind to geothermal.

This issue of ***Interface*** will give you an update on the energy technologies of fuel cells and solar cells. And I hope that you too have found ways to re-energize yourself this summer.

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Editor

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