

## Metal Twins

Languishing in Group 5B of the Periodic Table are two rather esoteric transition metals, niobium (Nb) and tantalum (Ta), whose technological demand continues to grow at a rapid rate. The major use of Nb is as an alloy component in high speed steel while Ta finds use in capacitors for PCs, automobile electronic components, and mobile phones. New applications for these metals are emerging in markets related to architectural materials, consumer products (*e.g.*, razor blades), and in the medicine and pharmaceutical industries where their high corrosion resistance is a boon. High-purity Ta is also being considered for the microelectronics industry as a diffusion barrier between silicon and copper in integrated circuits.

The Tantalum-Niobium International Study Center celebrated its 25th anniversary recently in Perth, Western Australia. Further information on this center can be obtained from [tantniob@agoranet.be](mailto:tantniob@agoranet.be).

## Global Climate Change

Discussions on global warming continue to heat up (no pun intended) within the scientific, engineering, and environmental policy communities. The Second International Conference on Issues in Environmental Pollution (IEP 2000) will be held in Lisbon, Portugal in October 16-18, 2000. Further information on this conference can be obtained from

[gill.heaton@virgin.net](mailto:gill.heaton@virgin.net). Coincidentally, ECS is also organizing an interdisciplinary forum in a very similar vein entitled "Electrochemistry vs. the Global Climate Change: A Coordinated Response" during its 198th Meeting in Phoenix, Arizona, October 22-27, 2000. The stated aims of both these gatherings is to create a forum for interdisciplinary dialogue.

## Japan's Silicon Valley

Japan's former capital, Kyoto, has a reputation for traditional arts and scenic beauty. But a new high-tech spirit is infusing this historic city. Kyoto's first crop of ventures got their start just after the war, prompted partly by the fact that Kyoto, unlike other major cities, was relatively unscathed by bomb damage. Now the city's entrepreneurs want to create a new wave with the energy and intellectual resources needed to spawn a Silicon Valley style phenomenon. Thus about 300 high-tech ventures have sprouted in recent years and Kyoto is the only Japanese city to boast a privately-owned research park in its downtown district. This new breed of entrepreneurs seem unafraid to break the old industry practices that mired many of the country's corporate giants in red ink. ■

*These news items originated from various media releases. Further information may be obtained by contacting the Editor, K. Rajeshwar, [raj@utarlg.uta.edu](mailto:raj@utarlg.uta.edu).*