and welfare of his students were appreciated by all. His two great passions were science and his family, and his devotion to both was evident.

MICHAEL WALKER University of Toronto

## Joachim Michael Nitschke

roachim Michael (Mike) Nitschke, a senior staff scientist in the nuclear science division of Lawrence Berkeley Laboratory, died on 24 February after an illness of several months. A longtime resident of Berkeley, California,

Nitschke was born in Berlin, Germany, on the eve of World War II. He received his undergraduate degree in physics in 1961 from the Technische Hochschule in Braunschweig, Germany. Nitschke arrived at LBL (then the Lawrence Radiation Laboratory) in 1966 as a graduate student. Working with Earl Hyde, he studied the decay schemes of radioactive nuclei and discovered several new nuclides.

He then began work on the Heavy Ion Linear Accelerator with Al Ghiorso. For HILAC he designed a new type of on-line mass spectrometer, which became the basis for his thesis when he returned to Germany to complete his doctorate in 1969 at the Technische Hochschule in Braunschweig.

After two years at the Centre National de la Recherche Scientifique in Orsay, France, Nitschke returned to LBL in 1971 to assist in the conversion of the HILAC into the SuperHILAC. He was a member of the research team that discovered the isotope of element 106 with atomic mass number 263 in 1974.

During the 1980s Nitschke designed OASIS, the On-line Apparatus for SuperHILAC Isotope Separation. He then devised a total absorption spectrometer to measure decay energies and thus define masses.

In 1989 Nitschke developed a concept for a combination of accelerators that would be able to accelerate radioactive beams with high intensities. His concept, christened ISL (for Isospin Laboratory), was recently recommended by the national Nuclear Science Advisory Council for inclusion in its ten-year plan.

In addition to his career in nuclear research, Nitschke was a gifted teacher, an exceptional athlete—he competed on the West German rowing team in the 1964 Tokyo Olympics-and an accomplished pianist and opera singer.

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