

LETTERS

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In Gainesville, Rutllant met Alex G. Smith, who wanted to observe Jupiter's decametric emission from the Southern Hemisphere.

As a student I tested the prospective sites. After Maipú was selected, I worked with the DTM in designing and building a 1200-meter-long, 16-element interferometer to observe the Sun at 175 MHz. John W. Firor and Bernard F. Burke, then at the DTM, helped me with the fundamentals of interferometry. Jorge May, also a student, worked with Thomas D. Carr on different types of antennas to observe Jupiter. The first successful observation was made on 25 November 1959, when the interferometer recorded a strong solar storm.

As far as we know, the ROM was

binned later with others made from the Northern Hemisphere with a similar antenna, resulting in an all-sky survey at 45 MHz.

The ROM made significant contributions to teaching. A number of electrical engineering students obtained their degrees under the guidance of engineer Juan Aparici, who was responsible for most of the electronic design and construction. Also, several students received MS degrees in astronomy.

The ROM became a solid research center, establishing cooperative programs with international institutions. The first was in the mid-1980s with Columbia University in the US, through the installation and use of a 1.2-meter dish, built to observe molecular line emission in the mm-wavelength range, at Cerro Tololo InterAmerican Observatory. Carbon monoxide is important in the

it received equipment donations from the University of Florida, the NASA satellite tracking station near Santiago, and the European Southern Observatory. Many people associated with the ROM deserve mention here, but space limitations prevent it. Credit for keeping the ROM running belongs to Jorge May.

So, with the great satisfaction of knowing that the ROM achieved its primary goal, yet with deep sadness, we have turned the power off at the Maipú Radio Observatory.

HÉCTOR ALVAREZ

(halvarez@das.uchile.cl)

University of Chile

Santiago, Chile

Internet: Valuable Resource and Peddler

University professor Richard Hammond (PHYSICS TODAY, February 2001, page 14) says he was unable to use the Internet to obtain information on the element europium for his daughter's school project. Curious, I also tried a search, using Metacrawler, and it yielded 55 results. I scanned through the titles and quickly located several promising sites. In case Hammond's daughter is still interested, the first one I tried was <http://www.klbproductions.com/yogi/periodic/Eu.html> which gave a brief summary of europium's chemical and physical properties, atomic structure, and even its history of discovery. In less than five minutes I accomplished what would have taken me at least an hour in the pre-Internet days of driving over to the local campus library, thumbing through a card catalog, and walking down rows of book shelves. The answer to Hammond's question, "Is the Web a valuable source of knowledge or a glitzy new form of yellow pages?" is yes and yes.

STEVEN RYAN

Mauna Loa Observatory

(sryan@cmdl.noaa.gov)

Hilo, Hawaii

While I agree with many of Richard Hammond's reservations about the Internet as a universal tool for learning and teaching, his example of finding only the price for europium from an Internet search indicates a failure on his part to use it even moderately well. A search using Google led quickly to <http://www.webelements.com/webelements/elements/text/Eu/key.html>, which gives history, uses,



THE RADIO ASTRONOMY OBSERVATORY at Maipú, Chile, in October 1959. In the left foreground is a Yagi radio antenna of the solar interferometer; on the right is the inclined plane of another antenna. In the middle, near the building, the tall V-shaped structures make up the corner reflector. Both the inclined-plane antenna and the corner reflector were used primarily for observations of Jupiter.

the first operating radio observatory in Latin America. It worked at very low frequencies and carried out observations of the Sun, pulsars, SN1987A, the Magellanic Clouds, and so forth. However, its most successful tasks were the decametric observations of Jupiter that spanned two Jovian years, and the 45-MHz continuum survey of the southern sky. The latter survey was done with a large filled array that worked as a transit instrument; because of problems inherent in very low-frequency observations, the southern survey took 15 years to complete. The observations were com-

interstellar medium because it radiates a strong line in the 1–0 transition and is a good tracer of molecular hydrogen, which does not emit radio waves. The main goal, successfully accomplished, was to make a survey of the southern Milky Way in that transition. This pioneer project opened the rich field of mm-wave spectroscopy. Part of the ROM's legacy is a new generation of Chilean radioastronomers who are involved in important cooperative programs with the US, Japan, and several European countries.

The ROM had scant funding, but