honoured at a dinner hosted by the Dutch consulate. Willy de Roos had become the first man ever to make the 1,200-mile voyage through the Arctic waters of the Northwest Passage alone.

The 54-year-old former Belgian automobile dealer left Falmouth, England, on May 21, entering the Northwest Passage at Lancaster Sound near Labrador on August 3. Just over one month later, on September 5, de Roos left the Northwest Passage after getting across Amundsen Gulf and around Point Barrell. No other seaman has accomplished this single-handedly.

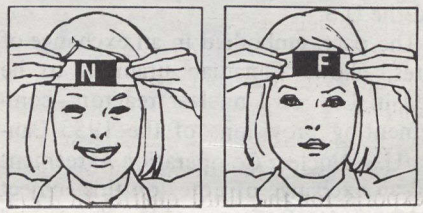
The RCMP icebreaker *St. Roch* was the first to make the voyage but its six-man crew was forced to spend two winters locked in the Arctic ice before reaching Halifax from Vancouver in 1942. It took 82 days for the *St. Roch* to make the return trip. It is now on permanent display in Vancouver's maritime museum.

In 1972, Willy de Roos sold his successful used-car wholesale company in Belgium to give him the time and money to take a three-year voyage around the world in his 42-foot steel-hulled ketch *Williwaw*. When that voyage ended, he decided not to re-enter the business world. He was determined to tackle a life-long challenge – the Northwest Passage. He tells of terrifying gales with frozen winds so strong he couldn't open his eyes. The winds caused ten-foot-high walls of ice to ram together, closing channels which only seconds earlier had been open. De Roos would wake up every hour on these nights for fear his small vessel would be crushed while he slept down below. On one occasion, two huge ice masses closed in on him, and forced his vessel straight up on top. It took days for it to recede so he could pass.

De Roos will spend several months resting in Vancouver and preparing a book on his adventure. He has taken movie film and hundreds of photographs to record the voyage. Then he will continue on the second segment of his history-making trip down the coast of both North and South America and around the Horn. That will make Willy de Roos and his small vessel the first ever to circumnavigate the American continent.

Fever detector

A Canadian pharmaceutical house, Frank W. Horner Ltd., of Montreal, Quebec, has developed a method of detecting fever instantly through the use of a specially treated plastic strip applied to a dry forehead for just five to 15 seconds.



The one-by-four-inch transparent reusable strip, called "Fevertest", is coated on one side with temperature sensitive micro-encapsulated liquid crystals. Two letters, not visible when the strip is not in place, indicate if the patient is running a temperature. If an N appears, body temperature is normal. If an F appears, the individual is running a fever. An exact record of temperature is not given.

SEM scans an invisible world

The SEM, an electron scanning microscope being used at the University of Victoria, British Columbia, by a variety of researchers explores a world that not only cannot be seen by the naked eye, but cannot be seen by most microscopes.

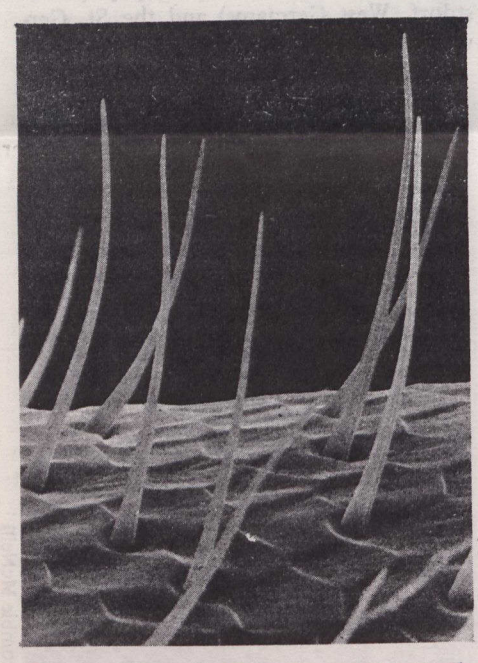
SEM was obtained by UVic's biology department through a National Research Council grant to Dr. Arthur Fontaine, who is chairman of the department. The $65,000-grant, which was the largest single NRC-equipment grant given in 1976-77, represented 22 per cent of all capital funds available for animal biologists in Canada last year.

Many fields

The reason for the grant's going to UVic was the "diversity of application", said Fontaine. "It is being used for a variety of research projects, and not just by biologists."

The machine is used among other things to study how the Alberta tar sands were formed; the sense organs of bees; fungi from birds' nests; the development of pine cones in commercial forests; ways of attacking the harmful bark beetle with a parasitic fungus rather than pesticides; and in a study of the blood cells of invertebrate animals.

Jack Dietrich, the biology department's microscope technician explained how the SEM works:



Lee Humble

Sensory hairs on the antenna of a male solitary bee, magnified 2,000 times.

The specimen to be photographed is first placed in a critical point dryer where it is dehydrated. It is then put in a gold-coating machine that showers the specimen with molecular gold.

The gold-coated specimen is then ready for the SEM. In the microscope is a tiny electron beam which is magnetically focused by adjusting dials. The electron beam scans the specimen and the results are visible on an oscilloscope screen.

With a flick of a switch the magnification can be increased anywhere from ten to 180,000 times.

A picture can be taken from the oscilloscope screen with an ordinary camera.

"What makes the SEM special is that despite the magnification, you can get excellent depth of field and resolution in the photographs," explained Dietrich.

Results of experiments involving the SEM are on display at UVic. Pictures of the eye of a fly, looking like the speaker of a stereo, and huge floating pods which are actually pollen from pine cones, line the walls.

"It's an incredible machine," said Fontaine. "And it's proving to be an invaluable research tool."