

## Peking-to-Paris in checker cab

Two Canadians who set a world record for driving across the world have entered the Peking-to-Paris auto rally to be held this month.

The Canadian pair, Garry Sowerby and Ken Langley, who earned a spot in the *Guinness Book of World Records* for their 43 030-kilometre jaunt in 1980-81, plan to make the next trip in a checker cab.

Sowerby and Langley formed a company called Odyssey 77 to collect money and manage their trip across the world in a Volvo. The two adventurers have since written a book about the experience and have produced a film.

The maritimers — Sowerby of Moncton, New Brunswick and Langley from Sydney, Nova Scotia, now are looking for sponsors for their next journey. The checker cab will not be the regular street variety, however. They plan to equip it with a truck transmission and other heavy-duty accoutrements.

They chose a cab because of its durability. "We are going for a simple, heavy-duty drive train and I like the image of the checker," Sowerby said.

### Itinerary

The Peking-to-Paris race may not be as long as their world trip, but it offers a good many challenges. Crossing some fearsome terrain, the 19 000-kilometre race will follow Marco Polo's silk route across China and Pakistan to Bombay, India, where a ferry goes to Kenya. Then on to Ethiopia, into the Sudan and Alexandria, Egypt.

Next there is a ferry trip to Greece, a drive through Yugoslavia into Europe and eventually to Paris. The Odyssey team expect it will take about six weeks to complete the course.

Unlike their earlier adventure where Sowerby drove and Langley was navigator, the duo will share duties. Langley, a lawyer, said any good adventure is worthwhile, but he is not enthusiastic about the background work it takes to put things together.

Sowerby, a former jet pilot, said the Peking-to-Paris race is a chance of a lifetime. However, he conceded that the soliciting of corporate sponsors is wearing.

"We are not in the same company as Marco Polo or Christopher Columbus," he said. They were sponsored but they did not have to solicit a dollar in the same way modern-day adventures do.

## Cleaning muddy waters — advances in water purification

Orest Nowakiwsky admits his latest business venture is, well, all wet. But that is not likely to dampen his enthusiasm for it.

According to the Ottawa *Citizen*, Mr. Nowakiwsky and his colleagues are developing ways to separate and purify water from most liquids. Experts say the process — already in use in many countries — could soon play a major part in pollution control, high-technology, medicine and the conversion of unpotable water into clean drinking water.

So far, Mr. Nowakiwsky's company, Memtek Corp. of Nepean, near Ottawa, is using it for the relatively modest job of helping maple syrup producers boil the water off sap and produce syrup more cheaply and efficiently than conventional boilers. But next year Memtek will start building a \$2.5-million research plant in Gloucester, near Ottawa, to explore all areas of water purification.

### Reverse osmosis

Memtek's made-in-Canada technology has only now started to attract the attention of Canadian companies working on water purification. The process is known as "reverse osmosis" and it is based on an understanding of one of the basic functions of living cells.

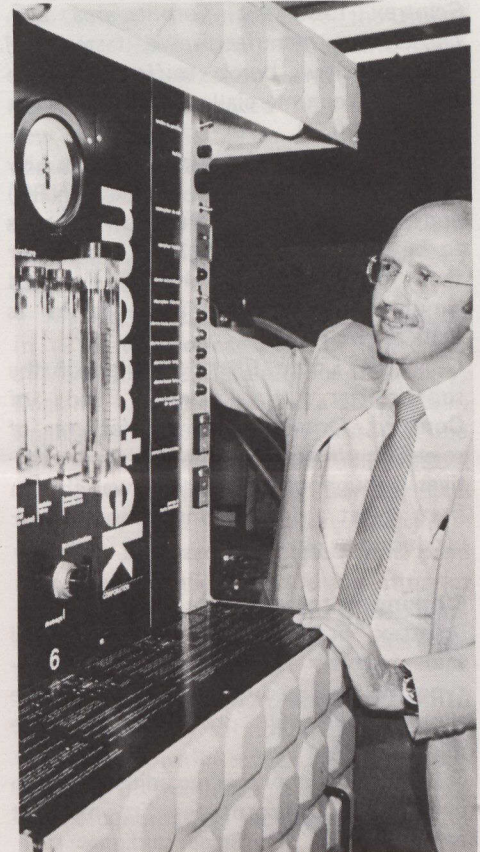
In osmosis, cells take in liquids or oxygen through a semi-permeable membrane — a tiny molecular filter that lets some things pass through while rejecting others. Some substances, such as water, have an affinity for the membrane and pass through it easily. Others, because of their electrical charge, are repelled.

### Cheap and simple method

National Research Council scientist Srinivasa Sourirajan turned this natural process around more than 20 years ago and found he could use it to separate water from other ingredients. Mr. Sourirajan's process uses a membrane of cellulose acetate — which looks somewhat like saran wrap — in a fibreglass pressure tube. The process quickly developed a reputation outside Canada as a cheap and simple water filtration method.

Saudi Arabia has reverse osmosis purification plants that process millions of litres of sea-water a day. US researchers are completing plans for a plant on the Colorado River to process millions of litres a day of polluted water.

Mr. Nowakiwsky and Memtek Corp.



The Citizen

Orest Nowakiwsky demonstrates water filtration device.

entered the scene in 1980. Starting with a \$30 000 federal grant, the company set up in Nepean and developed a refrigerator-sized reverse osmosis unit now used by the maple syrup producers.

### Water-purifier

Memtek researchers are developing a portable water-purifier for Environment Canada under a contract worth \$35 000. The federal government wants to use it to clean up spills of toxic material in lakes and rivers.

Environment Canada also plans to sponsor an experiment in Gloucester, pitting the reverse osmosis technique against the problems at the Gloucester dump, where hazardous wastes have leached into wells in the area.

Meanwhile, the Department of National Defence has let a \$400 000 contract to the company for a field unit that can supply troops with fresh water during war. And Northern Telecom Ltd. is taking delivery of a 25 000-litre unit to produce water pure enough for use in cleaning and rinsing printed circuit boards.