

## Inventions win world acclaim

Four Canadian firms have separately won honours in important international competition for creating one of the world's top 100 technical innovations of the year. Sponsored by *Industrial Research and Development*, an international journal, the twentieth annual IR 100 Awards were presented recently at the Chicago Museum of Science and Industry to Hydro-Quebec, Kerney National Limited of Guelph, Ontario and Montreal, Seagold Industries Corporation of Burnaby, British Columbia and MacDonald Dettwiler & Associates Limited of Richmond, British Columbia.

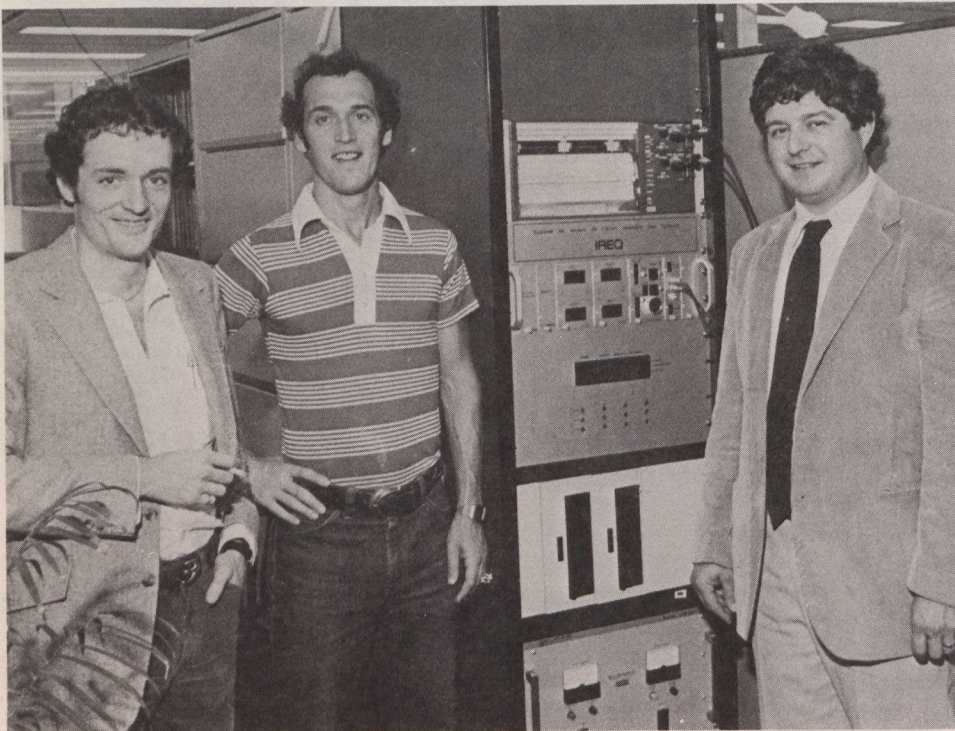
### Two awards for one firm

Hydro-Quebec, also a winner last year, picked up two awards. The first, shared with Kerney National, honoured a cadmium, current-limiting fuse designed to protect transformers in electrical distribution systems. A less expensive and safer technology than previously available, the "Q-fuse" was researched at the Institut de recherche de l'Hydro-Québec (IREQ) and underwent industrial development by co-winner Kerney International, which makes the fuse at its Montreal plant. The Quebec utility captured its second award for a measurement system which deter-

mines voltage differences in remote points of an electrical distribution network.

Seagold Industries won the award for a manual desalinator pump. Developed by Inventor Bowie Keefer, who along with Technology Development Corporation owns Seagold, the pump can be used in marine applications or to purify water in extreme environments such as jungles and deserts. Hand operated, it squeezes water at high pressure to reject salts and other impurities. By using waste water to wash the filter membrane, the pump improves energy efficiency. A recently-introduced motorized version operating on 12 volts consumes less than 50 watts of power.

MacDonald Dettwiler & Associates was honoured for its Colour FIRE 240 digital film recorder. The device transforms digital information stored on high-density magnetic tape into a high quality colour image on film. Deceptively simple, the Colour FIRE 240 produces microscopically precise images very inexpensively, according to the company, without the use of expensive and complicated colour lasers normally required for high resolution colour recorders. MDA's recorder is used in satellite remote sensing and computer graphics. Other applications such as medical microphotography are under investigation.



Hydro-Quebec, a double winner of the IR-100 Awards held annually to honour the year's most significant technological advances, was one of four Canadian organizations to gain distinction. Shown with the power utility's winning voltage phase-angle measurement system are its developers, (from left to right) Jean Béland, Germain Bédard and Dr. Gilles Missout.

## Gold maple leaf coins

The Royal Canadian Mint has announced that two 9999 fine unalloyed Canadian gold maple leaf coins have been minted.



The coins, weighing one-quarter and one-tenth of an ounce, have the Canadian maple leaf design on the reverse and the Arnold Machin effigy of Queen Elizabeth II on the obverse. The diameters are 20 millimetres for the one-quarter ounce coin and 16 millimetres for the one-tenth ounce coin.

President of the Mint James Corkery says that the Canadian gold maple leaf fractionals are the purest bullion coins available and they are expected to be highly prized by both small investors and by the jewellery trade.

The face value of the one-quarter ounce coin is \$10 and \$5 for the one-tenth ounce coin. They are available through selected banks, trust companies, brokerage houses and coin dealers.

## Area designated for nesting gulls

A special conservation area has been set aside in the vicinity of Churchill, Manitoba to protect nesting Ross gulls.

The conservation area is the first of its kind in Manitoba where bird-watchers and photographers are prohibited from coming within 100 metres of the nesting gulls. Known nesting areas are posted and patrolled by wildlife officials throughout the nesting and brood-rearing season.

The Ross gull was named after the nineteenth century Arctic explorer James Clark Ross. Key identifying features are its pink colouring and a thin black necklace type of mark which circles its neck. The Ross gull, a native of Siberia, is first known to have nested in the Churchill area during 1980.