stability. Such catalysts will include zirconium carbide, cadmium, bismuth, titanium, indium and mercury.

Task III — Investigation of electrolyte modifications (as compared with the standard electrolyte 2N HCl, 1M $CrCl_x$ solution), aimed at (a) the use of less expensive chromium solutions, (b) the tolerance of the redox cell to crossover through the ion exchange membrane, and (c) the effects of various impurities that might be expected in inexpensive forms of chromium chloride.

COST PROJECTIONS FOR REDOX ENERGY STORAGE SYSTEMS

United Technologies Corporation, Power Systems Division, P.O. Box 109, South Windsor, CT 06074 (U.S.A.)

The objective of this contract is to estimate the cost of redox system hardware based on the extensive company experience in estimating costs of electrochemical systems for various applications including fuel cell systems and components.

ENERGY SAVINGS BY MEANS OF FUEL CELL ELECTRODES IN ELECTROCHEMICAL INDUSTRIES

Prototech Company, 70 Jaconnet Street, Newton Highlands, MA 02161 (U.S.A.)

The objectives of this contract are: (1) to evaluate experimentally, on a laboratory scale, energy and cost savings in electrowinning of zinc by substituting, for the conventional lead anode, a Prototech proprietary hydrogen anode; (2) similarly to evaluate experimentally, again on a laboratory scale, voltage, and thus energy savings in chlor–alkali membrane cells by substituting, for the conventional steel cathods, a Prototech proprietary air cathode; (3) to consult with Lockheed and Lawrence Livermore Laboratory (LLL) on the subject of suitable air electrodes for metal/water/air batteries.

Prototech's air cathodes have been tested by Ionics, Inc. of Watertown, Massachusetts. A joint program is under discussion with Ionics; it is intended to scale-up the air electrodes and to demonstrate their performance in an