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Platinum 1991

During 1990 the supply of platinum to the Western World increased to 3.73 million ounces, while demand rose by 5.5 per cent to a record 3.66 million ounces, due to increased usage for automobile emission control catalysts, by the chemical and petroleum industries, and for the production of jewellery. These are just a few of the many facts contained in "Platinum 1991", a 64 page comprehensive review of the platinum industry recently published by Johnson Matthey.

Sales of platinum and palladium by the U.S.S.R. increased by 27 and 12 per cent, respectively, compared to the previous year. Almost 20 per cent of platinum and over half the palladium supply comes from that country, although it is not known what part of the shipments represents current mine production and what was withdrawn from stock.

Demand for rhodium rose by 20 per cent during 1990, the increase being due entirely to purchases by the car manufacturers, and included some inventory building. Supply did not match demand, and a significant price increase resulted. On the South African Bushveld Igneous Complex, the source of almost 75 per cent of the Western World's supply of platinum, the platinum:rhodium ratio in the generally

mined Merensky reef is 19:1, but in the UG2 seam it is 6:1, thus more rhodium will become available as mining of the latter increases.

There are indications that fuel cells may become the next major application for platinum. In fuel cells, platinum catalyst coatings on the electrodes promote the combination of hydrogen and oxygen ions and thus the generation of electricity. During 1990 Toshiba and Fuji Electric in Japan, and International Fuel Cells in the U.S.A. decided to start the commercial production of fuel cell electricity generators. It is predicted that their commercialisation will make a significant impact on the demand for platinum, as the versatility of fuel cells for producing "clean" power becomes more widely appreciated, and as economies of scale reduce manufacturing costs.

Readers of *Platinum Metals Review* who do not have access to this survey and who believe that they would benefit from a better understanding of the platinum market, and many of the factors that influence it, are invited to request a free copy of "Platinum 1991" from the author: Mr. Jeremy S. Coombes, Johnson Matthey P.L.C., New Garden House, 78 Hatton Garden, London EC1N 8JP, England.