

# 200 YEARS OF INSPIRING SCIENCE

Johnson Matthey's journey from pioneers of new applications for precious metals to global science leader in technologies that make our world cleaner and healthier.

**1st January 1817**

Percival Norton Johnson establishes his business as gold assayer in London, with just £150 of capital (equivalent to £11,500 today). In the early days of his business he is the only refiner able to extract palladium from Brazilian gold.

**1838**

George Matthey becomes apprentice to Percival Norton Johnson at the age of 13 and begins to experiment in metallurgical science. His skills see him make partner, forming Johnson & Matthey, in 1851.

**1846**

Percival Norton Johnson becomes a Fellow of the Royal Society, after sponsorship from his contemporaries such as Faraday. The relationship with Faraday leads to Johnson Matthey (JM) supplying platinum leads for the first electric lamps in 1875.

**1852**

JM appointed official assayers to the Bank of England followed by official refiners in 1861. Assaying of coinage still takes place today in The Trial of the Pyx, held once a year to ensure minted coins conform to legal standards.

**1854**

Medical history is made when morphine hydrochloride produced by J F Macfarlan is the first drug given to a human by injection. Following a partnership with T & H Smith, their combined business, Macfarlan Smith, is brought into JM in 2001.

**1894**

JM creates 'liquid gold' for use in ceramic painting. This expertise in gold chemistry marks the start of a long list of products created using gold, including the thin gold film applied to astronauts' visors to shield them from the glare of the sun.

**1918**

Alan Richard Powell is recruited as the first JM research scientist in Hatton Garden, London, heralding the company's commitment to innovation. This continues today with 13% of our 13,000-strong workforce involved in science and one pound in every twenty generated reinvested in R&D.

**1927**

JM expands into North America, acquiring a majority interest in J Bishop Platinum Works in Malvern, US. This marks the origin of JM's present day operations in the Delaware Valley.

**1874**

JM produces first standard metre and kilogram in iridium-platinum alloy for the International Metric Commission. The kilo is still the standard measure, at least until the end of 2018 when the weight will be defined using a more modern approach.

**1867**

At the Paris Exhibition, JM is awarded two gold medals for fine display, fabrication and uses of platinum group metals. George Matthey is awarded the rank of Chevalier in the Légion d'Honneur, one of France's highest honours.

**1960**

JM supplies electrocatalysts for fuel cell systems used in the NASA space programmes.

**1962**

A patent for the first low pressure methanol process is filed by ICI, revolutionising technology to make this vital chemical building block. This technology became part of the JM portfolio through acquisition in 2002 and continues to be used by customers around the world.

**1964**

JM expands into Asia with the formation of Arora-Matthey Limited in India. This is followed in 1969 with operations in Japan.

**1928**

JM scientists develop and patent the Powell-Deering method for extraction of platinum, a process which smelts ore and enables it to be refined. A facility is built in Brimsdown near Enfield, UK, which is still in operation today, to carry out the process.

**1942**

Ordinary shares in the company are listed on the London Stock Exchange.

**1980**

JM wins the MacRobert Award, the UK's top engineering distinction, for work on controlling car exhaust emissions.

**1974**

Production begins in the US and UK of autocatalysts to control exhaust emissions in line with new legislation.

**100 MILLIONTH CATALYST**

**1998**

As air quality grows in importance globally, JM expands its autocatalyst manufacturing operations with new facilities in Mexico, Malaysia and Argentina. In 2017, JM produces catalysts for emission control at 13 facilities around the world.

**1989**

JM's US autocatalyst manufacturing operations celebrate the production of the 100 millionth autocatalyst. Today, around one third of all cars globally are fitted with a JM autocatalyst every year.

**1983**

JM commercialises platinum based anticancer drugs. This marks a new application for JM's science, in products for the pharmaceutical industry that benefit people's health and wellbeing. Today the company also supplies ingredients for pain management and a range of other therapeutic areas.

**2001**

JM opens its first manufacturing operation in China. Today, JM has seven facilities in the country and employs approximately 1,000 people.

**2002**

JM strengthens its offering to the chemical industry with the acquisition of ICI's catalysts division and then in 2006 with the acquisition of Davy Process Technologies, a process design and technology licensing business.

**2007**

JM launches Sustainability 2017 and commits to six challenging targets, including halving carbon intensity and reducing waste to landfill to zero by 2017. This further drives the commitment to the development of sustainable technologies across the company.

**2013**

Changes in the customer base and a strategic review sees JM focus on further expanding its science and technology beyond the platinum group metals.

**2017**

JM celebrates its 200th anniversary. Today, JM is a global leader in science that makes the world cleaner and healthier and continues to invest in new, sustainable technologies to improve the lives of future generations.

**2016**

JM opens a state of the art platinum group metal refinery in Zhangjiagang, China, to provide recycling and refining services to Chinese customers. JM is the world's largest recycler of these valuable metals.

**2015**

JM expands into the growing area of automotive battery materials, applying its science expertise to the development of electric vehicle technologies.

**Britain's Most Admired Company**

**2014**

JM awarded the prestigious title of 'Britain's Most Admired Company'. In the same year, JM commits to making health and safety its priority.