Europe's atom watcher rewarded

Professor Pratibha Gai's modified electron microscope is helping scientists develop new medicines and energy sources.

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It can watch chemical interactions on the surface of catalysts at less than 100 billionths of a millimetre – the size of a typical atom.

In March, she will be named as the 15th L'Oréal-UNESCO For Women in Science Laureate for Europe, and receive USD 100 000 for her work. 'It is humbling to be the laureate for the whole of Europe,' she said in a statement after the award was announced.

Cosmetics firm L'Oréal and the United Nations Educational Scientific and Cultural Organization (UNESCO) teamed up in 1998 to create the award. It is given annually to a female scientist from each of five world regions – Africa and the Arab States, Asia-Pacific, Europe, Latin America, and North America.

'We found that the most efficient teams were made up of roughly the same number of men and women,' said Jennifer Campbell, Secretary General of the L'Oréal Foundation. 'That's one reason we developed the programme.'

Two previous winners, US Professor Elizabeth Blackburn and Israeli Professor Ada Yonath, have gone on to win Nobel Prizes.

> Professor Pratibha Gai has been named as the 15th L'Oréal-UNESCO For Women in Science Laureate for Europe. © P
> Professor Pratibha Gai has been named as the 15th L'Oréal-UNESCO For Women in Science Laureate for Europe. © Pratibha L. Gai

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The L'Oréal-UNESCO prize 'proves that half of humanity has been the victim of the discriminatory stereotype that women are not gifted for pure science,' said Dr Sonia Bahri of UNESCO.

University of York-based Prof. Gai is the second British scientist in two years to win the award, which alternates yearly between life sciences and physical sciences.

She started her career as a scientist heading the surface reactions and catalysis group at the University of Oxford before moving to the US in 1988 to work on nanotechnology as research fellow at DuPont Central Research Laboratory. In 1997, she made a breakthrough in microscopy, developing an instrument that allows observers to see chemical reactions occurring at the surface atoms of catalysts. Ten years later, she returned to the UK and founded the York JEOL Nanocentre at the University of York, still perfecting this new instrument.

Last year, the University of Oxford's Professor Frances Ashcroft won the L'Oréal-UNESCO For Women in Science prize for Europe for her work on insulin secretion and neonatal diabetes – a rare form of the disease – which has allowed those born with it to take pills instead of having injections.

On 28 March, the five new laureates will collect their prizes at an awards ceremony in Paris, France.

Each year…

The L'Oréal-UNESCO Foundation offers:

1 International special fellowship
5 international awards
15 international fellowships
20 regional fellowships
180 national fellowships

The L'Oréal-UNESCO Awards recognise exceptional women who have made great advances in scientific research. Two of them have gone on to receive the Nobel Prize.
In its aim to promote and encourage women throughout their scientific careers, the *For Women in Science* partnership has also developed a global network of International, Regional and National Fellowship programs aimed at supporting young women who represent the future of science. The programme has become a benchmark of scientific excellence on an international scale.

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