

EXCELLENCE AND THE CLOSED SHOP

The nomination and selection of the Nobel Prize winners are, by tradition, shrouded with secrecy and subject to subtle manipulation by interested groups. The public is informed only of the verdict.

Two restrictions in the nomination process, closing on 31 January, work against the inclusion of scientists from Third World countries. First, only a handful of individuals are eligible to nominate candidates for the prizes; and second, nominations are submitted only on invitation from Stockholm.

Those invited to submit nominations fall into six categories:

- Swedish and non-Swedish members of the Swedish Academy of Science and the Caroline Institute;
- Nobel committees;
- Previous prizewinners in the various categories;
- Professors of physics, chemistry and medicine at universities and technical colleges in Scandinavia;
- Physics, chemistry and medical faculties all over the world; and
- Invited participants.

Most fall into the fifth category and the dice are loaded in favour of nominees from the US and selected European countries, since the majority of fifth-category nominations are invited only from big western universities and academics in the US, Britain, West Germany, France and the Scandinavian countries. The 1953 medicine Nobel laureate and one of the great biochemists of this century, Hans Krebs, once remarked: "Nobel awards are to some measure a matter of good luck, because their number is too small to do justice to all who would merit an award."

The Nobel Foundation opened its archives recently to release documents related to the first 30 years of awards. A group led by physicist Gunter Küppers of the University of Bielefeld, West Germany, analysed the factors determining the award of physics and chemistry prizes from 1901 to 1929, and arrived at some astonishing inferences. First, there were no rational and fixed criteria to guide the decisions of the Nobel committees and the academy. Second, nominators suggested mainly candidates from their own countries, "indicating perhaps an overestimation of the scientific merit of their own compatriots," according to Küppers. Third, "national imbalances in the nominations were only slightly levelled out" and



● Welcome to the club: Japanese chemistry winner Kenichi Fukui with Sweden's Princess Lilian

the recommendations largely followed the majority votes of the nominators.

The group found past Nobel laureates in the various categories had an "extraordinary influence" on the final selection, compounded by the relative longevity of these scientists.

Another key factor which had not been critically considered in the selection of

Nobelists was the language in which scientists publish. English is dominant.

A survey of about 200,000 scientists in the US highlighted the fact that the majority of the nominators for science Nobel prizes do not scan (let alone read) science publications published in languages other than English.

Sachi Sri Kantha in Tokyo

The South's honours list

The South now has a platform of its own to acknowledge the contributions of its scientists.

On 14 September in Beijing, four scientists from India, Egypt, Brazil and China received prizes of US\$10,000 each for fundamental contributions in biology, chemistry, mathematics and physics. More than 200 scientists from Asia, Africa and Latin America were there to honour them, establish ties with Chinese colleagues and get firsthand experience of science in China.

The annual prizes are an important activity of the new Third World Academy of Sciences. A brainchild of Pakistan's Nobel Prize winner Abdus Salam, the academy, based in Trieste, aims to give more prominence and support to Third World science.

Indian physicist K Sud and Sri Lankan cellular biologist K Theivendirarajah have both benefited from spells at overseas universities through the South-South cooperation schemes run by the academy.

Twenty scientists have benefited so far, and many more will do so if the academy's pledge to expand the scheme is implemented. Lu Jiayi, president of the Chinese Academy of Sciences, has offered another 50 annual study visits for Third World scientists; India committed itself to 15 places with another 50 likely; and the Brazilian national council for research said it would offer a further 30.

With 10 Third World Nobel laureates associated with it, and support from many science academies in developed nations, the academy is now well established, though its early years were clouded by a lack of funds. Since then it has granted fellowships and research grants worth US\$500,000 to more than 100 scientists.

About a third of the grants have gone to Chinese scientists, who are among the most active users of the academy's facilities, according to its secretary, Mohammed Hassan.

The grants support research in many fields. The academy also publishes scientific literature, awards prizes to young scientists and arranges South-North conferences on problems of the Third World.

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