

**Awards and Prizes**

## **Global Engineering Excellence Medal for Mashelkar**

R. A. Mashelkar, Director General, Council of Scientific & Industrial Research (CSIR), has been honoured with the prestigious *Model of Engineering Excellence* by the World Federation of Engineering Organizations (WFEO) for his outstand-

ing contributions to the practice, theory, and public status of engineering. WFEO, headquartered in Paris, is a worldwide body comprising 80 national engineering institutions from equal number of nations and 13 regional organizations. It repre-

sents about 10 million engineers around the world. The first presentation of the WFEO Medal was made in 1989 in Prague. It is being presented every two years thereafter. Mashelkar is the first Indian to receive this prestigious medal.

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## **Nobel Prizes – 2003**

The Nobel Assembly of the Karolinska Institutet awarded this year's prize for Physiology or Medicine to Paul Lauterbur, 74, of the University of Illinois at Urbana-Champaign and Peter Mansfield, 70, of the University of Nottingham, England. Lauterbur and Mansfield share the Nobel award for their work on magnetic resonance imaging (MRI), which has led to the widespread use of this method in medical imaging. Lauterbur's pathbreaking paper appeared in 1973 in *Nature*, when he reported the possibility of creating two-dimensional images by utilizing magnetic field gradients. Mans-

field introduced methods for rapid imaging, including the widely used echo-planar scanning procedures, which permitted development of clinical scanners.

The Royal Swedish Academy of Sciences has announced the award of the Physics prize to three pioneers of work on superconductivity and superfluidity. Alexei Abrikosov, 75, Argonne National Laboratory, Argonne; Vitaly Ginzburg, 87, P. N. Lebedev Physical Institute, Moscow and Anthony Leggett, 65, University of Illinois, Urbana, share the prize for developing theories that explain these ultra-low temperature phenomena.

The prize for Chemistry has been shared by Roderick Mackinnon, 47, of the Rockefeller University, New York and Peter Agre, 54, of the Johns Hopkins University, Baltimore for their work on channels in cell membranes. Agre discovered the aquaporins or water channels across biological membranes. Mackinnon has over the past few years successfully determined structures of ion channels, specifically potassium and chloride channels, which have illuminated the field of membrane transport.

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