

## CSIR fellowship norms

In the article entitled 'The condition of science in India - Further thoughts' (*Curr. Sci.*, 1997, 77, 1385-1386), the author, while mentioning the sorry plight of young researchers in India, has also mentioned about the delay in receiving fellowship money from CSIR. We have examined the records for IIT, Bombay (1994-1998) that the author had specially referred to and would like to mention the following points.

CSIR (HRDG) does not pay stipend/fellowship to research fellows/associates directly. Through a well-established and time-tested mechanism, the stipend of all the eligible schol-

ars/fellows is sent to IITs/Universities. The balance amount is sent by CSIR after receiving a claim bill from the authority. The Institutes then disburse it to the students as per their administrative and financial norms. Our record shows that during 1994-1998 (the time period the author has mentioned), IIT Bombay received advances of between 4 and 5 lakhs of rupees every year, which were sent in the beginning of the financial year for payment of stipend to the eligible scholars. The time of actual disbursement by the institutions, is of course, not maintained in our record nor do we have any control on it. CSIR also

has an understanding with most institutions to pay the amount even if there is some delay caused by CSIR itself. Thus CSIR tries its best to eliminate any potential hardship that any young scholar may have.

SUKUMAR MALLICK

*Council of Scientific and Industrial Research,  
Human Resource Development Group,  
CSIR Complex, Pusa,  
New Delhi 110 012, India*

## Water and our future

The Gandhian quote 'There is enough on the earth for everyone's need, not for everyone's greed' is true about our water resources too. The burgeoning population is exhausting the available freshwater resources as a result of which the world is heading towards a water crisis. According to experts, most of the social conflicts in the future are going to be water-based and pure water will be a heavily priced commodity. Water tax, rationing of piped water, water laws and water politics are going to be a norm rather than an exception.

The world population is going to touch 8 billion by the year 2025 and there will be about 22 mega cities around the world having a population of more than 10 million including the Indian cities of Calcutta, Mumbai and Delhi. This means a wider demand-supply gulf in terms of domestic water.

If the global warming figures are found to be correct, by 2025 the average global temperature would be still higher, thereby creating more hot summers and an additional increase in the demand for water.

Piped water supply, especially in developing countries such as India will have to be rationed, thus creating social tensions.

Water pollution in industrial belts, slums and other thickly populated areas with poor sanitary conditions is perfect for epidemic outbreaks and for other health hazards.

In order to minimize the negative impacts of population growth and development in the coming decades we need to treat water as an endangered resource. Water conservation and management should become part of our culture rather than a technique. Here are some measures to be taken.

Water should be declared as a resource under threat and policies should be formulated to save and conserve it. This should contain provisions for (1) Protection of all surface water bodies from human encroachments and pollution; (2) Penal action against filling up of rain water infiltration areas with artificial structures; (3) A moratorium on any kind of urban activity on the catchment areas of river basins; (4) Prevention of wastage of piped water; (5) Incentives for those preaching and practising water conservation; (6) Setting up of separate cells by the government with water management experts and policy makers to enact and enforce effective water laws both through mass awareness programmes and legal sanctions. Central and State government

departments dealing with water should focus on the availability of clean and safe water and devise innovative ways to achieve this.

There are many areas where we can recycle waste water. Low-level waste water from households, business centres and factories can easily be collected and recycled. Water saved is as good as water produced and this would make a big difference in the water budget.

Rain water is an abundant and cheaply available resource that can easily be collected and utilized. Rainwater harvesting from individual households could generate a large share of additional water source. Terrace areas, artificial basins and pits are good rain water catchment areas.

Hunger and thirst are the two basic human feelings and we need to address these in the future since our very survival depends upon them. Safe and pure drinking water has already found its way to plastic bottles in the shops and before it reaches bank lockers along with gold, let us do something.

K. P. JAI KIRAN

*Central Groundwater Board,  
Kedaram, Kasavadasapuram,  
Thiruvananthapuram 695 004, India*