face research, but also serve as a means to inform various stakeholders of its implications.

2. The Asian Brown Cloud: Climate and other environmental impacts. The UNEP Executive Director Dr. Klaus Töpfer launched the first impact assessment report on the ABC on 9th August 2002 in London. Available at URL: http://www.rcap.unep.org/issues/air/impacts/study/index.cfm

**ACKNOWLEDGEMENTS**

I thank Dr Colin Butler (National Centre for Epidemiology and Population Health, Australian National University, Canberra, Australia) for his constructive comments to improve this article. Also, highly encouraging mentorship of Prof. Jos Lelieveld (Director of Atmospheric Chemistry Division, Max Planck Institute for Chemistry, Mainz, Germany) to co-standly support the scientific freedom is gratefully acknowledged.

B. R. GUJRAR

Atmospheric Chemistry Division,
Max Planck Institute for Chemistry,
P.O. Box 3060, D-55020 Mainz,
Germany
e-mail: gurjar@mpch-mainz.mpg.de

---

**PhDs and the development of a research culture in Indian universities**

The editorial on the quality of PhDs produced by our universities draws attention of the scientific community to a matter of great concern1. The month of December 2002 saw a steep rise in the number of PhD theses submitted to the universities in Maharashtra. This may be a record compared to previous years. Interestingly, a good number of the theses were by the lecturers employed in universities and colleges. This means, very poorly qualified lecturers may teach more and more number of our postgraduate students. This seems to be a happy development. It should be so in PG centres and universities. What is the reason for this sudden upward trend in PhD submission raising the curve of PhD submission further? Who ignited the spark for investigation in the minds of these people? The actual reason was an announcement that those who submit their PhD theses by December 2002 will be exempted from clearing the National Eligibility Test (NET) or State Eligibility Test (SET). This announcement gave one more opportunity to escape from appearing for NET/SET examination for those who are in service. We cannot blame those who could beat the deadline. There is nothing wrong in beating a deadline by working hard and without compromising on the quality. But what most of the people did was to make use of the sloppy system of conducting and awarding PhD degrees existing in most of our universities. All of a sudden where does all this data come from? What is the fate of the data contained in these theses? What is the quality of these data? Where will it be published? How much will it further our knowledge? These questions are not relevant to the December theses but also to all the doctoral theses submitted to our universities. Surprisingly, these questions are rarely posed or answered. Or if posed they are never seriously taken because by doing so we will be challenging an existing system well-rooted in our universities. The reality is that data in many of these theses may not even see the light of the day nor may enlighten any. They may merely decorate the library or personal shelves of the authors.

The current system of conducting PhD research and awarding degrees existing in majority of our universities has resulted in developing an inferior research culture. The system has passed on a bad message to young aspirants. The sincere attempt made by the UGC and our visionaries on higher education to improve the standard of higher education by encouraging teachers to qualify for doctoral degrees through incentives or through enhanced fellowships is being made futile. This is not just a December syndrome but a common practice. The introduction of a qualifying examination for junior research fellowship and enhancement of fellowship by the UGC and CSIR was a right step. This has attracted better students to research and provided support to poor students. However, it is not mandatory to pass NET to be a research student. A good percentage of PhD research is being done by non-NET candidates and guided by ill-trained supervisors. There is no condition that papers need to be published out of a doctoral thesis. Many times the candidates and their supervisors are satisfied with abstracts in some obscure conferences. It is easy to find supervisors who have no publication record in refereed journals. Plenty of supervisors are available even in places where basic amenities for research are lacking. How can we prevent recognized guides from guiding and producing PhDs?

The way research is conducted and PhDs are awarded in our institutions needs to be reviewed. Development of norms need not be from scratch. They already exist in good universities whose practices can be followed. This will greatly contribute to developing a healthy research culture in our country.


S. MOHAN KARUPPAYIL

School of Life Sciences,
SRTM University,
Nanded 431 606

e-mail: Karuppayil@yahoo.com

---

1382 CURRENT SCIENCE, VOL. 84, NO. 11, 10 JUNE 2003