a dichotomy – establishing R&D institutions for research and universities for higher education. The former supposedly cater to the research and development sector ultimately aiming at technology transfer to the industrial wing. When we do a serious introspection, neither the universities nor the research laboratories have succeeded in producing quality researchers/scientists/technologists. Only quality education[2] with high intellectual inputs can produce excellent youngsters to serve the country in testing situations. Further, universities have an added advantage of freedom to pursue subjects of academic interest and also advanced courses relevant to societal needs. The recent discussions on deemed university status[3] to national laboratories further necessitate a rethinking on our ability to formulate need-based framework for university/R&D areas. No doubt universities are considered to be temples of learning and their main objective is to produce 'qualified' students to be absorbed in mainstream of science and technology. Mere imparting degrees cannot make excellent manpower. It is high time national laboratories too adapt to changing realities and reorient their programs to fit into the much talked about patent regime[4]. There is absolutely no harm if research laboratories are given deemed university status, since every laboratory has its own framework of specialities. Suitable manpower can be moulded within these organizations, after youngsters qualify from universities. Let there be competition for excellence both at universities and at R&D laboratories. Let us remember Japan's story and acquire the spirit of *bushido*.

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A. RAJANIKANTH

Birbal Sahni Institute of Palaeobotany,
53, University Road,
Lucknow 226 007, India
e-mail: annamraju_2000@yahoomail.com

Plagiarism: A librarian's view

I read the editorial[1] on plagiarism and agree with the concerns. Increasing number of articles are appearing in scientific journals presenting varying opinions on the topic. Opinions run from outrage at student offenders to pointing fingers at faculty members, who fail to create plagiarism-proof assignments[2]. One also reads about controversial new methods for deterring and detecting plagiarism; most notable, online plagiarism detection systems are: *My Drop box* and *Turnitin.com*. At present, there are no foolproof tools/techniques available to detect plagiarism but efforts are being made in this direction and here librarians may play a vital role.

Although *per se*, scientific research should be repeatable and respectable, there is no mechanism to verify validity of research and experiments. Librarians have to play a major role even to help reviewers take right decisions to detect/to avoid/minimize plagiarism, as librarians are used to such skills to retrieve a piece of information from the ocean of knowledge.

Most of Ph D works remain unpublished due to various reasons. It is difficult to detect plagiarism, when senior researchers make research proposals modifying substantial portion of data/text, which are taken verbatim from these unpublished sources.

Scientific cyber-plagiarism has increased multifold thanks to cut and paste technology. It is common practice, especially when a senior scientist has to deliver his lecture during important meetings/conferences and has no data; but slides of his interest are available on Internet.

As librarians, we know that detection is not the main objective in a campaign against plagiarism. Rather, research organizations should concentrate on educating students and their scientific and technical staff as to what constitutes plagiarism and how to avoid it[2]. There are some information officers/librarians who directly and/or indirectly deal with publication of works. They can offer their services to faculty to help them solve some of their plagiarism problems. Librarians may be assigned the work to check proper references and match with full text in case of suspicious text. They may also be asked to suggest, if one is not very sure, how to acknowledge the sources.

If librarians are given an opportunity to play a new role (by using various tricks/techniques) to detect plagiarism to enable reviewers prevent such unethical practices, it will be a new initiative to minimize plagiarism. The librarian can take the help of search engines to make it easy for instructors to find web sites that are used for plagiarized material. It is true, that they cannot prevent plagiarism but can reduce plagiarism.

The easiest method to avoid being accused of plagiarism is to include everything that one uses in an article/book in the list of references. In this way, one acknowledges that one is using ideas and words of others and giving these people credit for their work. However, citing the works that one uses in one's paper is not enough on its own, all the time. If one quotes words of someone else, be it a paragraph/a few words, one must put quotation marks around what he quotes. This lets the reader know that the author did not write the material in that part of paper. In case of copying graphs and figures, sources must be cited with permission, if need be. If one paraphrases someone else's writing, he or she must give credit to the original author[3].

It is not justified to turn in an article that someone else has written either, even if they have been given permission to do so. This is called *collusion* and it is still plagiarism. Another area that is plagiarism, is using translated material and passing it as one's own work. It is expected that one gives proper credit to the author of the work that one has translated.

The best way to avoid plagiarism is simply to write one's own papers using one's own data and words.

1. Balaram, P., *Curr. Sci.*, 2005, **88**, 1353–1354.
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S. N. SINGH

National Institute of Virology,
Pune 411 001, India
e-mail: nivicl@pn3.vsnl.net.in