

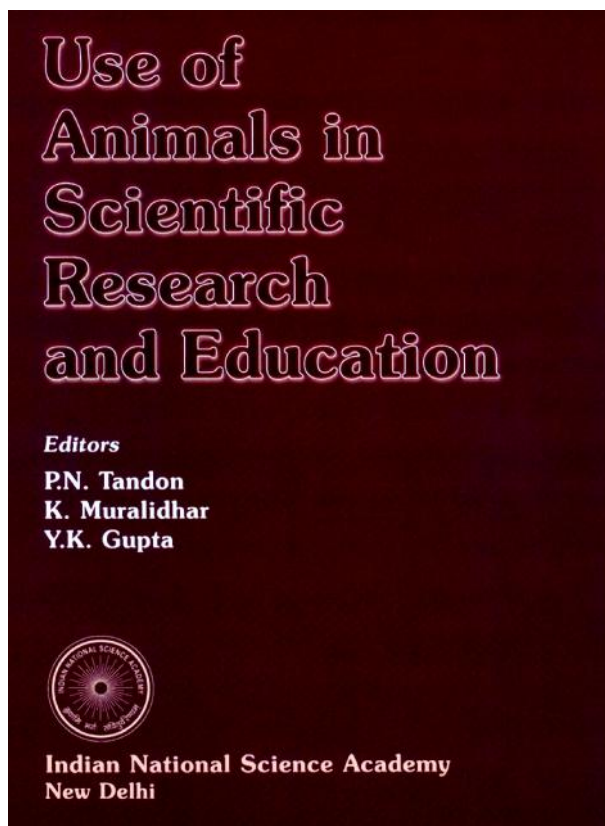
Book Review

Use of Animals in Scientific Research and Education

P N Tandon, K Muralidhar, Y K Gupta (Eds.), 2012, Indian National Science Academy, New Delhi
Pp. I-xvi+1-350 (Price: Rs. 1500.00, US \$110.00)

Cruelty to animals is arguably an important issue of concern for all of us who believe in a safe, flourishing, clean world in which all could live and prosper. The debate is on how to optimise the conditions so that all living beings (including plants) make use of available resources equitably so that this ecosystem survives and flourishes. In independent India, the first visible effort in this direction was made by the famous theosophist Rukmini Devi Arundale who placed a private member bill in the Rajya Sabha in 1956 for prevention of cruelty against animals. Pt Jawaharlal Nehru, the then Prime Minister, admitted that the issue was so important that instead of a private member bill, a legislative proposal should come from the government. The Prevention to Cruelty to Animals Act thus came into being in 1960. The legislation kept the provision that “Nothing contained in the Act shall render unlawful the performance of experiments on animals for the purpose of advancement by new discovery...”.

A Committee for the Purpose and Supervision of Experiments on Animals (CPCSEA) was also constituted in 1963 to monitor abuse of this exemption by animal experimentalists. This committee acts as a watchdog for misuse of animals in scientific laboratories. Sensing the far reaching consequences of some of the observations of CPCSEA, the Indian National Science Academy (INSA) took the initiative by constituting a committee of scientists to provide rational road map and guidelines to the animal scientists regarding the use of animals in scientific research. The guidelines were brought out in 1992, but sufficient notice was not taken of them either by those in authority or the scientific community. In 1996 “Breeding of and Experiments on Animals Rules” were notified by the



Govt. of India. One of the requirements under these rules was that the institutional units using animals for research and teaching needed to be registered with CPCSEA. Apparently, this requirement itself has not been fulfilled. But these Rules make some far-reaching stipulations, such as banning the use of animals for teaching. To make matters worse, Ministry of Environment and Forest brought out in 2011 a draft proposal for “Animal Welfare Act”. These rules assumed that development of *in vitro* experiments, animation models and computer simulations etc. are good enough for teaching as well

as R&D experiments and should replace animal experimentation. There are more such recommendations which, even though attractive in concept, neither facilitate learning nor promote enough inquisitiveness in students.

The book under review is the outcome of a Brain-Storming session on “Man, Animal and Science” organised by INSA on 11th September, 2011. Different stakeholders in animal research and welfare, representing R&D labs, researchers on animals, teachers, animal welfare activists, legal experts etc. participated in the session. The book is compilation of articles from these participants. There are articles from specialists involved in research on brain and other organs or systems, users of different animal models (monkey, mouse, rabbit, guinea pig etc.) for basic research or drug testing, and from those on the other end of the pendulum-swing who profess options against animal use and legal implications of the provisions of the Act etc. Most of the articles are scholarly and informative. Some like that of Dr B N Mallick goes at some length to explain the physiology of brain functioning during sleep and how animal experimentations have contributed to generating the vital information, which might not have been possible with tissue culture studies. This has been the common theme in most articles by researchers or those involved in teaching (e.g., the article by Dr K Muralidhar). The article of Sri Chinmoy Krishna draws a systematic history of the efforts made since independence in legislating laws and their execution. Dr Akbarsha’s article highlights the alternative mode of experimentation, sans animals. The book also includes summary of the brain storming session, official guidelines for the use of animals for research and Drugs and Cosmetics Amendment law as useful appendices. All these documents will be helpful in getting a proper and judicious view of the limitations of the rules, proposed to be introduced.

The book thus is a compilation of articles which individually bring the issue addressed by the author(s) well. Based on these deliberations, certain recommendations appear on pages 217 and 218, which make a sincere effort to bridge the gap between the viewpoints of experimenters and those who find use of animals for research, teaching or R&D as dispensable. These are very useful suggestions which take a balanced view of the problem, suggesting formulation of a new set of guidelines on “animal house design, animal handling and housing protocols by a specially constituted committee consisting of scientists, veterinarians and CPCSCA members”. Many of the suggestions/recommendations are of a nature that requires the institutions to improve their animal house conditions and have better trained personnel, and request governmental funding bodies to provide funds to achieve this objective. In my opinion the most relevant suggestion is that the new legislation be brought out after due consultation, which “should emphasize both strengthening of Animal Welfare organisation and strengthening of scientific research and not the former alone”.

An issue that worries me is how would this book be known to those outside INSA, and who gets to read this volume? It is obvious that there is impending need for academic institutions and other research and R&D labs to play a more informed and participatory role in comprehending the issue and the legislations rather than take an indifferent attitude which has unfortunately been the situation until now. There is a need to create a constituency of stake holders who are aware and willing to take steps to make creative inputs for developing a reasonable approach. The book, in my opinion will serve only a limited purpose if it does not reach the stakeholders and educate them on the issues involved, which I believe would have been the primary objective of this laudable exercise. I hope armed with this thorough work, INSA would make its voice heard in the echelons of power. Then only the fruits of this labour will be borne.

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