

## "Materials management in biotech R&D can be more effective,"

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*Dr S Roychowdhury is working with National Centre for Cell Science (NCCS), Pune, as the head of the materials department since 1994. He has written a thesis on "a comparative study of materials management practices in select biotech organizations under the Ministry of Science & Technology (GoI)". He shares with us some of the findings of the study.*

#### What were the key objectives of the research in this area?

We found out that research institutes today can be more effective with regard to providing enabling environment for the researchers through provision of adequate and timely supply of materials. This is important for carrying out meaningful scientific research as well as meeting the targets set for completion of various in house and sponsored projects in labs and institutions.

There is a considerable loss in total procurement by the institutes, especially with perishable consignments due to fulfillment of the import formalities with various authorities like Customs, Drug Controller, Quarentine, Warehouses (under the control of international Airport Authorities), and banks. Besides that, poor handling of the material in the airport as well as at the institute, miscellaneous factors like P&F, transportation, purchasing cost, and wastage due to non-utilization of reagents prior to its expiry date and un-systematic preservation of chemicals in laboratory also affect the institutes. In addition, failure of

electricity, power fluctuations as well as non-availability of UPS contribute to the losses. These can be avoided and considerably reduced by trained and professional logistic manpower, planned and scheduled procurement methodology and modern preservation system and analysis respectively.

#### How can better knowledge of material management help the research fraternity?

Material management helps in reducing material costs, preventing large amount of money being locked up for a long period or wasted especially in biotech sector where most of the materials are perishable items. About 90 percent of the total requirement of material in biotechnology R&D organizations is from countries around the globe, which requires an effective and good system for the procurement of materials. Besides, storage being an essential part of the economic cycle, stores management becomes a specialized function, which can contribute significantly to the overall efficiency and cost effectiveness. Sophisticated laboratory equipment, reagents and chemicals of highly perishable nature like restriction enzymes, antibodies, media, sera and other consumables are required to be procured and handled in such a way that cost can be effectively reduced.

#### What steps need to be taken to ensure effective materials management in R&D institutes?

We need to establish and formulate a systematic procedure for procurement of different kind of materials useful for R&D organizations in general and biotech R&D organizations in particular. A rationalized manual or guidelines could be prepared for all the R&D biotech organizations in India that can serve as a portal to enter this vast area and draw attention to basic norms and practices governing public procurement.

A guideline will be immensely helpful to establish transparency, competition, and fairness to eliminate arbitrary public buying. There has to be an exchange of ideas between biotech organizations in this direction and to find a suitable solution for avoiding discrepancies in material handling, proper way of preservation of special type of items, which are classified according to the nature of the usage.

Notification for customs can be drawn separately for the biotech institutes under the Government of India. This will require a better understanding and discussions with different authorities under the jurisdictions of the respective ministries.

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