

Sponsoring of Genetic Engg.

Institute offered

By Ahmed Masood

ISLAMABAD, March 7: A National Institute of Genetic engineering is imperative for the country within the shortest possible time to bring Pakistan at par with the developed world. Unlike electronics where Pakistan is far behind, Genetic Engineering is a field where the West is only a few years ahead. There is no apparent reason, therefore, to let this gap widen.

Emphasising this in an interview with *The Muslim*, the visiting Canadian scientist of Pakistani origin, Dr. Anwar Nasim said the technology required for this purpose was not very complex and arrangements could easily be made at our universities.

"In a meeting with the Chairman of the University Grants Commission, I specifically discussed the possibility of sponsoring an Institute of Genetic Engineering and he showed a great interest", revealed Dr. Nasim.

Defining the Genetic Engineering in simpler terms, he said it was the technique enabling scientists to transfer a gene from one organism to another in a manner that the

useful properties of both are combined.

"The process is also known as Gene Cloning, Clones are capable of regeneration.

Experimentation on these grounds really started only in 1973 and the magnitude of achievements so far is enormous", he said.

Insulin, he said, was an outstanding example. By virtue of Genetic engineering, bacteria have been made capable of synthesising insulin.

One of the companies in United States is coming up with plant this year to produce insulin through Gene Cloning. Then there is interference, a protein found in the human body and other living objects, and is known to be cancer inhibiting. It is now possible to synthesise and obtain this protein through Genetic Engineering, he said.

"Finally, there is Energy Crisis. This is a field where millions of dollars are being spent. Here the breakthrough is to convert

cellulose into Alcohol using yeast," he said.

Asked if he had any information about the kind of work being done on these lines in the Soviet Union, Dr. Nasim said the lines of communication unfortunately were not so good. "They do not publish much of their work. I have seen some of the review articles by them on Genetic Engineering.

We have also read reports indicating that work is being carried out in China". He added.

When asked about the impressions he was carrying on biological research activity in Pakistan, he said the teaching aspect was much stronger as compared to research in a couple of the universities.

"In Punjab University, for example, as far as I know, nothing is going on. In fact, the best way to judge is the number and rate of scientific papers being produced. At

NIAB, however Dr. Riaz Sheikh and his team is doing quite well despite, a number of factors which are otherwise presented as an apology by many", he observed.

"Are we not helping the West at the cost of our poor exchequer by doing all this activity in the absence of any equipment or technology to properly utilize the results?"

"I am not sure if that is true in the case of agriculture and energy crisis", he replied.

When asked to comment on the scientific and technological planning and policies in Pakistan, he said: "The document I ever saw was National Science Policy, if there is any, and it was extremely unrealistic. We cannot afford to follow the West blindly by opening more than two dozen institutes on space sciences, astronomy, oceanography and theoretical physics.

"My impression is that we do not have a well defined and coordinated Science Policy in this country. I don't see any overall strategy", he said.