The Bangladesh Observer

তারিখ 11 APR 1989
পৃষ্ঠা 5 কলাম 3

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Proposal

Introducing Astronomy At The University Level

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DESPITE the growing need of studying Space Science the universities of our country do not offer Astronomy as a subject which students could take up as a major. Is this not a matter of concern that even at the end of the twentieth century the people of our country are not familiar with the "oldest of the sciences"?

Astronomy, which in Banglades is a neglected branch of Pure Science, is in fact, one of the most demanding of the sciences in the Western arena. Even now as in the olden days of the ancient civilizations the commoner gazes out at the night sky and wanders about the vastness of creation. His privilege to look at the night sky is followed by an urgent desire, the premature guest for knowledge of the universe which to him at that moment is more than any other field. Interest in this field is huge, research is nonstop and information is very little. The astronomer's laboratory "the universe" is so great that, Dr. Carl Sagan of the Cornell University once said." Space is The Last Frontier".

In Bangladesh, a big confusion is there, this is: relating Astronomy to the ancient psuedo science of Astrology, which by calculation and assumption of stellar lines of symmetry predicts statistically, the fortune of others.

But Astronomy is nothing like Asrtrology. Based on certain accepted scientific principals and experimental observations, astronomers can predict say, the Lunar Eclipse, the age of a star, the possibility of humans elsewhere, the epoch of a comet and much more. Astronomy is in fact the science which knows no bounds, the intensity of curiosity is huge and so is the frequency of evolution of the new theories, we yet don't know the many systems underlying the principals of the universe.

It was only in the beginning of this century that some of the systems undergoing in the universe was under cover and rapid developments had been made. Astronomy, which was only a section of Physics and Mathematics blossomed as a single subject in the western universities. Today, with wide ranging research oriented section, Astronomy comprises independent subjects like Spherical Astronomy, Astrophysics, Cosmochemistry, Exobiology, Planetary Science, Cosmology, Radio Astronomy, Infrared, X-Ray and Gamma Ray Astronomy. These rapid developments were not easy to bring about. Astronomers in the United States, Europe and developing nations made constant research activities. Even today, in the hope of learning more about the secret of the universe they have launched space shuttles and set up space stations; manned flights to the planets have been proposed and continuing. The great Space Age has already begun. Now man has conquered the moon and shuttles have reached the far corners of our solar system. To keep pace with the changing patterns, continued research is always desirable.

A look into our neighbouring India will reveal that even Indians have involved themselves in the race of space. The step for taking up broad-based research centers have been established. Not only the construction of the biggest optical telescope in Asia or the setting up of the biggest Radio telescope in the world, she has also launched satellites and sent astronauts with foreign space rockets to further gear up her activites to establish herself as a competent member in the Inernational Astronomical Union.

A More westward look will show us that Pakistan has also marched forward. The Center for Astrophysical Studies has taken up studies related to Solar Evolution and Galactic Formation of the Nutrinos. More then that, the Center for Space Research has built and developed rockets for boosting into space. Similar developments are also being witnessed in other South Asian nations like Srilanka, Phillipines, Indonesia and Malaysia. The question is why we are sitting idle.

In Bangladesh there is no observatory, no planetarium, no institution of Astronomy and even no library where books of Astronomy are huge. Yet the books written by advanced amateur astronomers are good sellers in South Asia, particularly India. It will be more surprising to not that the only astronomical magazine in South Aisa is published from Bangladesh. The magazine is brought about by students who were given a mini course on basic Astronomy in 1987. Bangladesh will certainly prosper in Astronomy if governmental assistance and support is there. We need an institution for Astronomical Studies, very urgently.

I have observed the serene and pleasant atmosphere of the Jahangir Nagar University, it is an excellent place for studying Astronomy although with an observatory, studying by the Chittagong Hills under the Chittagong University would be a far better idea. An observatory may be a costly one, but for the moment we can do without it. I recall reading that the department of Astronomy of the University of Toronto (Canada) functioned nonstop for twenty years before it received a nineteen inch reflecting telescope in 1932. All we need is a good atmosphere, some teachers and a rich library.

At present there are three major Dhaka-based clubs where research in Astronomy is regular. Alphabetically, these are the "Anushandhitshu Chackra" the "Avhijit Astronomical Club" and the "Sputnik Science Club". These clubs, apart from many small ones, hold meetings, seminars and conferences regarding various topics of Astronomy. They also do observations within themselves and for the public in and out of Dhaka. The common aim of these clubs is to promote interest in Astronomy and improve the status of Astronomy in Bangladesh. The only support available to these clubs is through the National Science Museum, and the Bangladesh Astronomical Society which comprises a group of advanced amateur Astronomers like Dr. Jabbar of the Engineering University and Dr. A.R. Khan of the Department of Applied Physics, Dhaka University, which hail the deeds of these ambitious clubs.

To increase research in Astronomy, university education is a must. For the first few years some teachers will have to come from abroad and some help will be available from teachers of our country from Geophysics, Quantum Physics, Theoretical Physics, Chemistry and Applied Mathematics, etc.

The outcome of Astronomy is something we will be eager to know. Many people will term it as a losing concern. Investing in it will not earn us foreign currency and will not give any practical result. They will also say that being a poor nation, we cannont afford to spend on research where loss is concerned. On the contrary, becoming a poor nation we cannot afford to rely on the research of developed countries, because that involves a lot of money. More than that, we cannot afford to send talented students to foreign countries for research, losing many students forever.

Astronomy is no losing concern. Expenditure on it will not be a loss. We cannot weigh money and knowledge in the same balance. If we are to march towards development we must think in a straight forward manner. This always involves rapid improvement of the sciences. In this respect we are very backward and even to this day we have been neglecting science.