

## **From the President**

On behalf of the Instrumentation Study Centre I would like to inform you that we have organized a small training center in the field of electronics and instrumentation for the needy students. You may kindly visit our website [www.instrumentationstudy.org](http://www.instrumentationstudy.org) and the related link of the president, [www.nbmanik.in](http://www.nbmanik.in).

In our website one may find about the aim/objectives and activities of the centre. In the following section I am trying to give a brief idea of this centre.

Development of instruments means precise application of our knowledge to take command on our nature and of course to develop a comfortable society with greater economic growth to make life easy, smooth, stable and secured. Without the progress in this field development of the society will definitely be hampered. Practice of instrumentation is also a form to express our intellect. It may also be a good hobby to pass our time joyfully irrespective of our age, gender and education. Research, development, maintenance and other issues related to instruments play an important role in the commercial market and thereby control our daily life. Due to the recent development of science and technology, particularly in the nano regime, a tremendous change is expected in this field. Cost effective, power saving miniaturized design with different new sensors and actuators may be introduced in future instruments. It is our observation that in spite of having sufficient knowledge and skill there are difficulties to exploit it commercially. Different types of new business/applications are not being set up as expected. Desired results will not come unless attention is being paid in this direction. With other sectors, the role of the business persons is important. There is not much scope to address these problems in our regular course work. This is a major reason for which along with our regular training we will give stress on different business/applications aspects related to this field for the cultivation of instrumentation.

Before I conclude I would like to recapitulate again that instrumentation and technology play a major role in our everyday life. Its importance in personal to social life, related economical aspects and other issues like administrative, law-order or even the national and international relation may also be relevant for discussions to grow interest among the students. Generally the commercial and financial theories which deals various aspects of business, also do not address the varieties of business structures in this field to guide one in setting up new business incorporating its various aspects. It is also challenging, even to a policy maker, to formulate the suitable policy to face this technical world along with its emotional counterpart. It is interesting to note that the GDP is increasing along with the increase of dollar to rupees ratio of our country. Attempt to address the problem accordingly is meaningful. Discussion for adaptation or selection from a high budget to low scale home industry suitable for individual is also useful. They may get ideas to introduce new areas of application even with the existing skill and money available in the market.

Our attempt will be helpful to encourage our young students to grow interest in the field of electronics and instrumentation and its different applications. It will also helpful to grow a general awareness. We expect many students, people, business persons may get some ideas to initiate programmes of their own.

## **Specific work we intend to do:**

Activity of our centre may be classified in two different levels.

### **Level 1: Training programme:**

In the first level we will try to give exposure to young students in this field. We will teach basic electronics instrumentation and show different experiments. We will also demonstrate different experiments even to the kid. This attempt will help the students to grow interest in this field. After this programme they may extend this activity in any other training centre/institute to pursue further courses or take different initiation to apply it commercially. It

is my observation that any memories of our early ages are really helpful to pursue it in future. In some cases it really helps us to motivate even if the exposure is insignificant. We will also invite others to set up this type of training centre in a bigger way by incorporating some other facilities to extend the present activity.

## **Level 2: Awareness Programme :**

As a part of the awareness programme of this centre we try to publish some periodicals where views from experienced/senior persons will be reflected. We invite persons from different fields to write articles or to express their views, experiences, comments, message to us on any aspects of this field. We will publish/post their views in website from our society to help people to shape and re-shape their ideas. We hope this attempt to note their views will be meaningful and useful in future. We feel this is very important also. Students, different business persons, common people from different sectors may be helpful. This activity also provides a platform to share our views. They may get ideas to introduce new areas of application. Discussion for adaptation or selection from a high budget to low scale home industry suitable for individual is also useful.

We are working on the above two aspects in this centre. Apart from that it may also be mentioned that few services are available from this centre. We have designed and fabricated some low cost indigenous instruments which may be applied in different areas. We have also a very little R&D section. We find energy generation may be a major area of activity for future research, application and business. We have some work in this direction from our centre. Out of many renewable energy sources we have seen that conversion of energy from mechanical/human power to electrical, wind power, solar power may be useful. Some of our services are also mentioned in our website. This section will be extended in course of time.

We expect that you will come with different suggestions to improve the activity of this centre. Since its inception suggestions from different persons helped us to give the present shape of this centre. I hope in future we will also be able to run it smoothly. I strongly believe and none will also deny the fact that any attempt to provide even a little exposure to the young students in any technical field has definitely some meaning whatever may be our opinions and views. I hope in course of time one will be interested in our centre. I like to thank you for spending time to go through this write up. ....N. B. Manik

## **How this centre runs -- Source of fund and mode of operation:**

We have set up this centre from the idea of our President. He is an Associate Professor in Physics and engaged his R&D work and teaching. Apart from his regular work, he feels that any attempt to design/discuss different possibilities for the practical application of electronics and instrumentation is meaningful to address the recent problems like unemployment, illiteracy etc. Many persons including the business sectors have appreciated this attempt. Some of them are also benefited, as acknowledged by them.

As a part of the awareness programme he had tried to extend the application areas of electronics and instrumentation. He had mentioned different possibilities of this field that may be carried out by many people of our society. One may find it in his site, <http://www.nbmanik.in/consultancywork.html> . Many people have already appreciated this idea.

Regarding the budget of this centre, so far we did not receive any such donation. It was met by our group members, president, some beneficiaries and few well wishers. To meet the expenses of this centre few services are also introduced from this centre. We have designed and developed a few low cost indigenous instruments which may be applied in many areas. Due to lack of fund it is not possible to undertake any sophisticated designs. In this case we like to discuss about these designs only. We have also a little R&D section. Energy generation may be a burning issue in future. Out of many renewable energy sources the conversion of energy from mechanical/human power to electrical, wind power, solar power may be useful. Recently we have decided to advertise different companies in the sponsor section of our website <http://www.instrumentationstudy.org/sponsor.html>. Some of our write ups, lectures are also being appreciated. Some of our other services/consultancies are also mentioned in our website. The list of our designs and other specific services may be provided if required. We hope this list will be extended in course of time.

By providing such services, so far we have managed to meet the salary of two staffs, few instruments and one rented office for this centre. We hope we will be able to go this way in future. But sometimes we think it will be effective if we procure one office space for this centre instead of the rented one. We have a plan to approach different person/government sectors in this regard in future.

Regarding its mode of operation it is mentioned that this centre has a small rented office at Kolkata. Few members, mostly the students of Dr. Manik located at different places arrange for training the students which also helps the student to get training from their locality. At present at Kolkata we have not much space. But the materials etc are being monitored from our Kolkata office. We hope this way it will be possible for us to go in future. We hope the activities of this centre will effective in course of time.