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**expanded programme  
of technical assistance**

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**mexico**  
**electronic computation**  
**centro de cálculo**  
**electrónico**  
**national university of mexico**  
(September 1964 to October 1965)  
by Dr. NAIM ABOU-TALEB

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The Centro de Calculo Electronico has many varied activities. These activities can broadly be classified into four main areas which are:

- (a) Educational
- (b) Research
- (c) Services
- (d) Promotional

From the start Professor Beltrán who is the director of the Centre asked me to emphasize and concentrate my work in the Educational and Research areas.

The education they have in the Centre is given to Mexican nationals and also to foreigners mostly from Latin American countries who come to the Centre to further their education.

Their activities in the education field have a wide spectrum from giving up-to-date courses, holding seminars at different levels, convening conferences and disseminating information through the Centre's publications.

My contribution in this field was by giving the following courses (in the order in which they were given):

1. Topology and duality in network analysis and synthesis
2. Computer technology
3. Logistics
4. Logic design for computers
5. Advanced course in network synthesis

In the other activities, I helped in the preparation of the working group meeting on "Methodology for resource analysis and for assessment of scientific and technological needs" which was held at the Centre in August and was attended by experts, professors and representatives from different countries. I also was the chairman of the first technical session which was on "Advancements in Science and in its expected effects on development".

In the summer of every year, the Centre has a nice tradition of holding a colloquium and inviting professors from different countries to give series of lectures on the most advanced subjects of their specialization. My share here was to give a series of lectures on "Engineering-economic systems analysis".

I also visited a few universities here in Mexico and gave lectures and held meetings on computer technology, operations research and systems analysis.

A number of the students at the Centre have consulted with me for their work

I also helped other students of other institutions but who are taking courses at the Centre in their thesis work.

While working at the Centre, I have published two papers, one on:

"Problems facing developing countries in their planning for rural electrification". This paper took the Best Paper Prize of the 1965 Annual Rural Electrification Conference of the Institute of Electrical and Electronic Engineers held in San Francisco in May 1965.

The title of the other paper was:

"New technologies applied to the national planning of electric power systems".

This was besides being invited as a guest speaker at the annual meeting of the American Society of Engineering Education which was held in San Diego, California in December 1964 where I gave a talk on "The rôle of international organizations in helping developing countries in their engineering education".

#### Recommendations:

I feel Unesco help should continue to be given to the Centre in the following forms:

1. By providing the Centre with experts in the following fields:
  - (a) operations research applied to economic and social planning;
  - (b) advanced theory of programming;
  - (c) numerical analysis;
  - (d) electronics, circuitry and automatic control.
2. Help the Centre in establishing itself as a regional centre for the following:
  - (a) computer technology;
  - (b) operation research;
  - (c) systems planning.