

PREFACE

The year 2000 is the golden jubilee year of the foundation of Saha Institute of Nuclear Physics. A number of conferences/workshops were held to mark this auspicious occasion in our Institute. This Institute which was created by Prof. M N Saha as the first institute for conducting teaching and research in nuclear physics in India obviously demands a meeting of the scientists working in nuclear physics in the golden jubilee year. In view of the increasing branches in this discipline, it was decided to hold a workshop focussing attention on a specific area that is of much relevance today. The research in nuclear physics, which was earlier being done with single or two detectors, has now considerably changed. In order to extract new, important and interesting specific information from the background of huge unwanted events, arrays of detectors with increasing granularity are being used both in nuclear spectroscopy and reaction. The success of GDA (gamma detector array) at the Nuclear Science Centre, New Delhi using 12 Compton suppressed HPGe detectors has given a boost to develop multidetector array in our country. This has initiated the proposal of the development of MEGHNAD (multi element gamma heavy ion and neutron array of detectors) in the Institute. There have been discussions and plans to set up a national array using the available Clover detectors and associated electronics of the national institutes. With this background, the workshop 'Physics with Multi Detector Array' was held during 8–10 November 2000.

The workshop was held at the Salt Lake campus of the Institute. More than one hundred scientists from India and abroad participated in it. After the welcome address by Prof. Bikash Sinha, Director of the Institute, the workshop began with a talk by Prof. Paresh Mukherjee who narrated the development of nuclear spectroscopy work in this Institute since its foundation. In the subsequent talks we heard from the distinguished speakers the wealth of information about structure of nuclei and mechanism of nuclear reactions (including exotic nuclei) using multi detector arrays. There were also some interesting talks on the development of new detectors and arrays as well as data acquisition and reduction relevant to such arrays. The contributed papers (in general) were presented in the form of posters by the authors in a separate session. The workshop ended with a summary talk by Prof. C V K Baba and vote of thanks by Prof. J M Chatterjee, the convener of the workshop.

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Editor

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