

## **A BRIEF REPORT OF THE DISCUSSION ON THE STUDY OF BALLISTICS IN THE UNIVERSITIES**

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The discussion on the study of Ballistics in the Universities was held at the Second Defence Science Conference on Tuesday, April 22, at 14-30 hrs. with Prof. A. C. Banerji, Vice-Chancellor, Allahabad University in the chair. The discussion was continued on Friday, April 25.

On the first day the discussion was initiated by Prof. Banerji, who was followed by Prof. N. R. Sen and Prof. Ram Behari. In his opening remarks Prof. Banerji laid stress on training in the practical aspects of Ballistics and the employment of persons having such training. Prof. N. R. Sen pointed out the connections of the subject of theoretical Ballistics with Rational mechanics and the solution of non-linear differential equations. He drew attention to some of the difficulties experienced in introducing Ballistics as a University Course. Prof. Ram Behari traced the historical development of Ballistics. On the 25th April, Dr. R. S. Varma emphasised the need for encouraging research in Ballistics and explained how such research can be taken in hand by University teachers and the Defence Scientists by mutual cooperation.

Prof. B. S. Madhava Rao expressed the view that Ballistics would be a suitable course of study for the University as a subject in Applied Mathematics, on account of its extensive connections with several subjects such as classical mechanics, Thermodynamics, Shock Wave phenomena, Hydrodynamics, non-linear differential equations etc. Dr. V. M. Ghatage (of the Hindustan Aircraft Factory), Mr. B. N. Sen (T.D.E., Kirkee) and Dr. J. N. Nanda (D.S.O.) also took part in the discussion. At the end the following resolutions were unanimously adopted:—

- (i) Resolved that the conference noted with gratification that in pursuance of the efforts of Defence Science Organisation, several Universities have introduced Ballistics as a part of the post-graduate Course in Mathematics. The Conference further noted with approval that Defence Science Organisation proposed to organise this summer a two month course in Ballistics for the benefit of University teachers and research scholars interested in the study of the subject.
- (ii) Resolved that the Defence Ministry be requested to arrange facilities for practical (computational) training of students taking up this course. This may be organised at the Defence Science Laboratory or at the Institute of Armament Studies.