



This is to certify that

A. P. KRISHNAJA

participated in and completed the

**INTERREGIONAL TRAINING COURSE  
RADIATION CYTOGENETICS IN BIOMEDICAL,  
ENVIRONMENTAL HEALTH AND RADIATION  
PROTECTION PROBLEMS**

held at the  
University of Tokyo  
Tokyo, Japan

from 26 October to 6 November 1987

This Training Course was organized by the International Atomic Energy Agency and the Government of Japan and the University of Tokyo.

The objective of the Course was to present to operating, research, regulatory and technical personnel of the National Radiation Protection as well as Environmental Health Services an overview of the practices and scopes of radiation cytogenetics-based biological dosimetry for the health protection of nuclear workers and of the general public.

The programme included the following main topics:

- Chromosomal aberration analysis methods and guidelines for assessment of absorbed radiation dose (biological dosimetry in radiation protection)
- Whole- and partial-body exposures to radiation: radiobiology and statistical considerations of the dose assessment and risk assessment
- Case studies for biological dosimetry applications: (i) A-bomb survivors; (ii) overexposed occupational workers (external and internal radiation)
- Other cytogenetical methods in population monitoring and epidemiology of radiological health problems: sperm cytogenetics; micronuclei; SCE; PCC; chromosomal mutations
- Comparative assessment criteria for biological and physical personal dosimetry in absorbed radiation dose estimation
- Organization and operation-management guidelines for a biological radiation dosimetry laboratory in the national radiation protection services
- Automated computerized chromosomal aberration analysis system: principles and practices demonstration

Mohammad Ridwan  
Director  
Division of Technical Assistance  
and Co-operation  
IAEA

Kanehisa Morimoto  
Course Director  
University of Tokyo

**WE**, the Chancellor, Vice-Chancellor,  
and Members of the Executive Council  
of the **University of Bombay**, certify

Krishna that the withinsigned

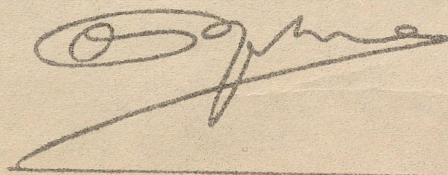
Krishnaja A. P. of  
Institute of Science  
having presented in the month of October  
in the year 1980, a Thesis for the Degree of  
Doctor of Philosophy (Science) which has  
been accepted by the Examiners, the Degree of

**Doctor of Philosophy**

( Science )

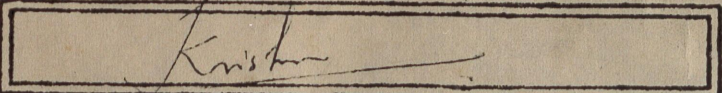
has been conferred on her at Bombay, on the  
twenty ninth day of the month of January  
in the year one thousand nine hundred and  
eighty one.

In Testimony whereof are set the Seal of the  
said University and the Signature of the said  
Chancellor.



Chancellor

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and Members of the Executive Council  
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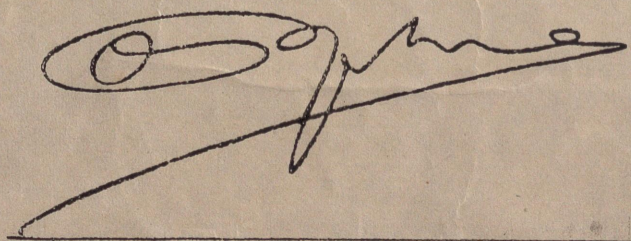
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Chancellor