

ever was left of the nuclear material in the nuclei, it was seen precipitated towards the border. A significant decrease in the HSI values was observed.

Present studies on the cadmium treated liver of *G. mullya* shows severe histological damage when exposed for 30 days. It has been reported that cadmium exposure depletes liver glycogen of the fish⁴. It is possible that the reduction in the size of the liver may be related to glycogen depletion and further it might affect the capacity of liver to store glycogen. The mechanisms of cadmium toxicity is probably due to high affinity of cadmium with sulphhydryl and hydroxyl groups and ligands containing nitrogen^{5,6}. Thus binding with such groups in chemical systems might affect control functions of the organism through the chemical and physiological processes even at very low cadmium concentrations. The carbohydrate metabolism is also found to be impaired due to cadmium treatment^{7,8}. It is therefore likely that cadmium affects the metabolism of the hepatic cells by inhibition of the enzymes and damage to the organelles.

This work was supported by UGC, New Delhi by the award of a fellowship to GPW.

10 March 1983; Revised 30 April 1983

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ANNOUNCEMENT

NATIONAL SYMPOSIUM ON THEORY AND PRACTICE OF THERMALLY STIMULATED LUMINESCENCE AND RELATED PHENOMENA

A national symposium on Theory and Practice of Thermally Stimulated Luminescence will be organized by the Physical Research Laboratory, Ahmedabad, during 8-10 February 1984. The symposium will aim to consolidate Indian contributions in this area since the National Seminar on thermoluminescence and its applications organised by BARC at RRC, Kalpakkam during 1975. The focal themes of this symposium are:

1. Physics of thermally stimulated relaxations in solids including: (a) The role of defect states-colour centres and impurities in these processes. (b) Thermoluminescence kinetics and emission spectral studies, models for thermoluminescence for phenomena such as anomalous fading, supralinearity, pre-dose sensitization etc., thermally stimulated conductivity etc. (c) Other relevant luminescence studies including radio-photoluminescence, electro-, piezo- and triboluminescence etc. as also related optical absorption and electron spin resonance studies. (d) Mechanism of thermoluminescence in specific systems such as alkali-halides, minerals, biological materials etc.

2. Experimental techniques including preparation and properties of new thermoluminescent materials.
3. Applications of thermoluminescence in: (a) Radiation dosimetry-personnel and natural radiation environment, neutron dosimetry and fallout studies. (b) Nuclear medicine, *i.e.*, radiotherapy, *in vivo* dose measurements, forensic sciences and other biological materials. (c) Archaeology-chronology, provenance, thermal history etc. (d) Earth and space sciences-chronology of sediments, authogenic minerals, geological correlation, oreprospection, diagenesis, thermal and cosmic ray irradiation history of meteorites and lunar samples, electron spin resonance dating.
4. Other dating methods based on defect creation and retention such as electron spin resonance etc. The symposium is being supported by Indian Association for Radiation Protection and various other national institutions.

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