

# **CREEP DEFORMATION IN STRUCTURES**

**D.L Marriott**

## **Abstract**

This thesis is concerned with the estimation of deformation in complex structures due to creep. Part I is primarily a survey of existing theoretical work on material creep behaviour. Some suggestions for an improved theory are made. In Part II an approximate method is proposed for the calculation of structural deformation due to creep. In Chapter VI this method is introduced by the use of several intuitive assumptions. It is re-examined more rigorously on Chapter VII using an approach based on energy dissipation considerations. Estimations of the error incurred by using the approximate method of analysis are obtained in several important cases. A revised version of the approximate method is proposed including a correction term to account for the error.