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## Preface

It is a great pleasure for me to publish the 1991 UVSOR Activity Report which presents a number of recent synchrotron radiation studies carried out with our UVSOR Facility as well as the recent situation of the Facility.

During the last year, in the UVSOR ring we have installed a new computer control system to control the operation of our storage ring, and carried out various testing experiments controlling the bunch length. We have also remodelled our conventional transverse undulator into an optical klystron, with which FEL (free electron laser) gain measurements have been successfully carried out.

Our UVSOR synchrotron radiation source has been regularly operated with an electron energy of 750 MeV and at an initial ring current of 200 mA. The nine well-established beam lines (BL1B, BL2B1, BL3A1, BL3A2, BL6A1, BL7A, BL7B, BL8A, and BL8B1) have been provided for general users. On the other hand, the eight beam lines (BL1A, BL2A, BL2B2, BL3B, BL4A, BL4B, and BL6B) have been used by the in-house groups. Another beam line (BL5B) which belongs to the National Institute for Fusion Science has been used for calibration.

The various joint programs operating at UVSOR throughout in the 1991 fiscal year can be classified as followed; 3 Special-Project Programs, 27 Cooperative-Research Programs, and 114 Use-of-Facility Programs. Furthermore, two synchrotron radiation symposia were held at this Institute; One was a users' meeting, and the other was a workshop on synchrotron light sources.

I would like to express my thanks to all the UVSOR staff for their great efforts and contributions to the UVSOR Facility and its activity. I would also like to thank all the users for their kind cooperation.

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