

PREFACE

This annual report reviews the research activities of the Laboratory of Advanced Science and Technology for Industry (LASTI) in the academic year of 2014 (April 2014 –March 2015) including activities using a 1.5GeV synchrotron radiation facility “NewSUBARU” and compact 15-MeV linac "LEENA" at the site of SPring-8. Other research activities on the nanotechnology facility and on the laser facility are carried out energetically at Research Building II. In addition of the regular report of the fiscal year of 2014, this volume include summary reports of last several years in Japanese, such as joint development of industrial research and introduce typical academic papers, because of the fiscal year 2014 corresponds to the founding 20th anniversary of LASTI.

LASTI is established in 1994. Institute organization is composed of two major courses of "Light-Quantum Science and Technology" and "Light Applications and Advanced Technology", including five research areas, it is configured in "Advanced Photon System", "Beam physics", "Nanostructure Science and Technology", “Synchrotron Radiation Nanotechnology”, and "Nano-Microsystem Technology”. In addition, an industrial analysis beam-line is installed and we are promoting the project research and industry support.

From fiscal year 2015, in cooperation with the Graduate School of Engineering, we established the new department "Materials and Synchrotron Radiation Engineering". We are promoting the further use of the synchrotron radiation facility for the graduate education. Thank you for your support and encouragement to LASTI in advance.



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