

PREFACE

This special issue presents review and original papers written by many top specialists working at the forefront of ultrafast intense laser science. The subjects range from the physics of atoms and molecules in an intense laser field, femtosecond laser filamentation as well as modern laser technology and laser fusion. These include theories and experiments on high harmonic generation, attosecond physics, laser fusion, supercontinuum generation, filament induced lightning, filamentation control and applications, THz in air filament, filament chemistry in liquids. They are organized into the following categories, namely, atoms, molecules, filamentation, laser technology and laser fusion. In each category, the papers are organized in alphabetical order according to the name of the first author. This special issue should be useful for those working in the field and those who would like to get into the field. To this end, we would like to thank all the authors for their kind and enthusiastic support.

The co-editors

See Leang Chin, Laval University, Canada

Shih-I Chu, National Taiwan University, Taiwan and University of Kansas, USA

Sheng Hsien Lin, National Chiao Tung University, Taiwan

Jypyng Wang, Institute of Atomic and Molecular Sciences, Academia Sinica, Taiwan