

## PREFACE

This volume contains lecture notes and a paper contributed from speakers of the Symposium on Decoherence Suppression in Quantum Systems held at Oxford Kobe Institute, Kobe, Japan, from 7th to 11th September 2008. The symposium was aimed to gather researchers working or having interests in the field of decoherence and its suppression in order to evoke further developments in the field and to extend mutual collaborations.

The symposium was supported by “Open Research Center” Project for Private Universities: matching fund subsidy from MEXT (Ministry of Education, Culture, Sports, Science and Technology).

This volume is organized so that a reader can learn many aspects of decoherence and its suppression methods from fundamentals to recent topics by following the lecture notes one by one. It is supposed to be useful for a wide range of audience from a graduate student to a researcher with interest in this field, as the lectures note have been prepared in a self-contained manner.

It is our hope that continuous and active researches in this field will eventually resolve the long-standing problems of decoherence in order for early realization of practical quantum computing.

We would like to thank Ms Zhang Ji of World Scientific for her editorial support.

Higashi-Osaka, September 2009

Mikio Nakahara  
Robabeh Rahimi  
Akira SaiToh