

## Award Speech

*Prof. Hiroshi Nakatsuji -*

On behalf of the International Scientific Committee of the *Sixteenth International Workshop on Quantum Systems in Chemistry and Physics*, and in the name of the CMOA, in front of this distinguished assembly of your peers, gathered tonight, on the fourteenth day of September 2011, in the Premises of the Ishikawa Prefecture Museum of Art, Kanazawa, Japan, I have the privilege, the honour and the pleasure:

To award you the *Senior CMOA Medal* for outstanding scientific achievements, known to all of us, in various fields of chemical physics and physical chemistry. In particular for:

***Making groundbreaking contributions to the complete solution of the many-electron Schrödinger equation, and developing symmetry-adapted-cluster configuration interaction (SAC-CI) in molecular sciences, with imperative consequences in biological quantum chemistry***

*In addition to introducing the SAC-CI, now included in the widely spread GAUSSIAN program suite, you have promoted applications to photosynthesis, bioluminescence, and vision, and investigated the role of proteins in biological reactions, including solvent effects in reactions in solution and catalytic effects in surface chemistry.*

*You have also embarked on the accurate determination of relativistic effects in general and in the NMR chemical shifts in particular. The development of rigorous methods to determine the second-order reduced density matrix without using a wave function is another significant pioneering endeavour.*

*In 2006 you became the first Director of the newly founded 'Quantum Chemistry Research Institute' after completing two terms as the Director of the prestigious 'Fukui Institute for Fundamental Chemistry', both at Kyoto University. You have also served in many national and international administrative bodies, including organizing the XII:th ICQC congress in Kyoto in 2006.*

*In 2006 you were the recipient of the prestigious Löwdin Lectureship award at Uppsala University.*

*It is a privilege indeed to award you the CMOA Medal for distinguished senior scientists.*