F. SATO LAB.

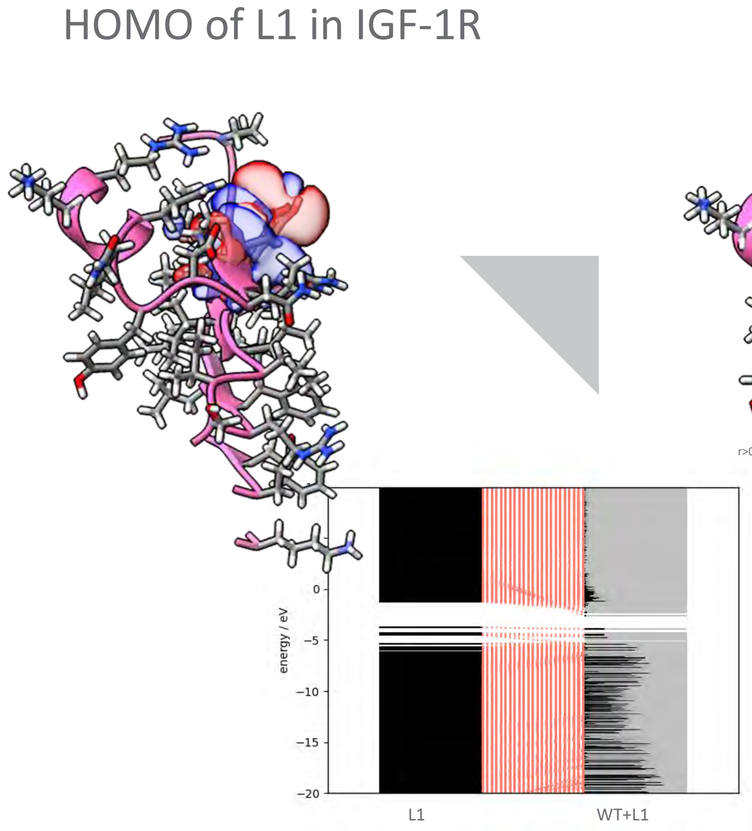
Innovative Simulation of Bio and Nano Molecules

Center for Research on Innovative Simulation Software
Center for Research on Engineering in Medicine and Biology

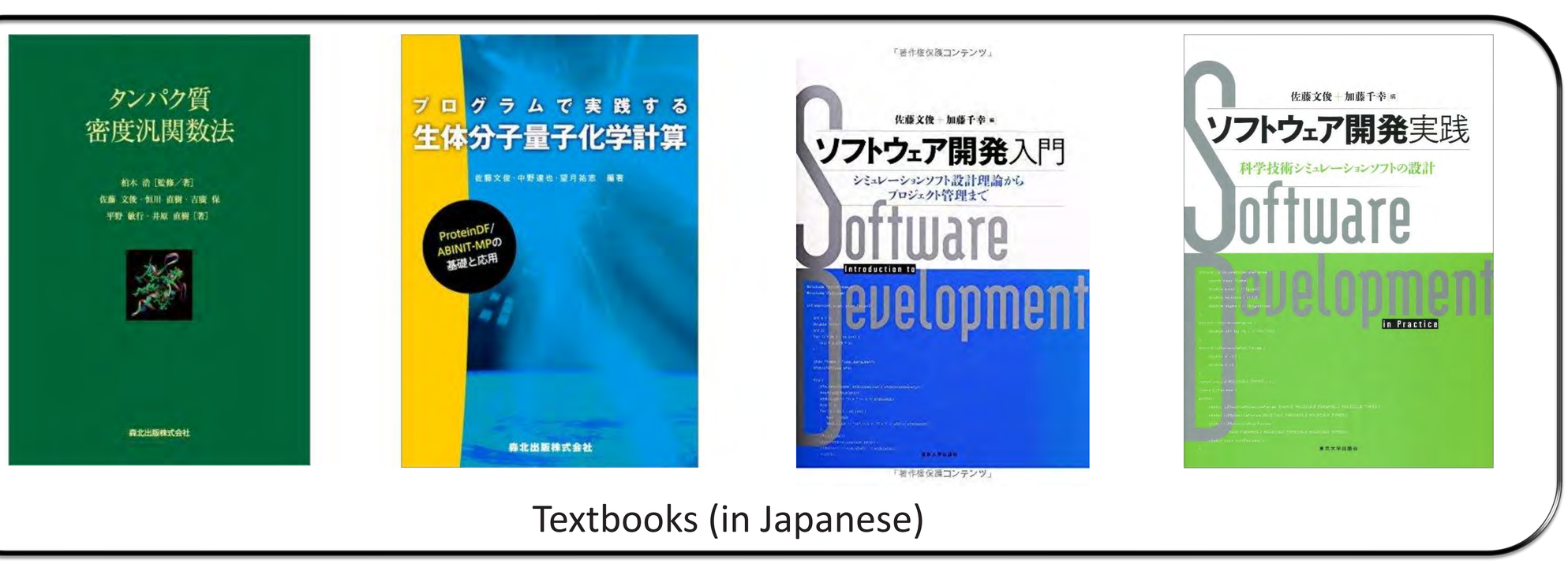
Computational Biomolecular Science http://www.satolab.iis.u-tokyo.ac.jp/
Department of Mechanical Engineering, Graduate School of Engineering http://www.ciss.iis.u-tokyo.ac.jp/english/ https://www.remb-utokyo.jp/en/

Protein Design
Using Quantum Chemical Calculation

Our group has been developing the quantum chemical calculation software "ProteinDF/QCLObot" which can calculate all canonical molecular orbitals of proteins.
https://proteindf.github.io/
We are using these software to analyze and design the electronic structure proteins.



Molecular orbital overlap analysis of the WT insulin/IGF-1 receptor complex



Textbooks (in Japanese)