

受賞者の声

living system. To understand the underlying mechanism of these carbohydrate functions, it is crucial to characterize their conformational dynamics at atomic level. However, the conventional methods are not so efficient to provide the 3D structures of oligosaccharides due to the high conformational flexibility of the glycosidic linkages. Hence, I have developed a method by the combination of computational simulation and paramagnetism-assisted NMR spectroscopy. By using this method,

I have successfully elucidated the conformational dynamics of flexible oligosaccharides. The approach opens a new prospect for the conformational analysis of dynamic structures of oligosaccharides toward decoding *glycocodes* from 3D structural aspects.

Through these presentations and discussions with other young participants, I got deep knowledge about the biological roles of oligosaccharides and experimental techniques. In addition, I benefited a lot from other presenters on how to make a

good presentation.

Finally, the organizers announced that I was one of the three award winners among all presenters. I was so excited that I got this award. But without the help from our group, I could not make it. So I would like to express my sincere gratitude to Prof. Koichi Kato, Dr. Takumi Yamaguchi and all members in our lab for their immense help. In addition, I would like to thank the community of Japanese glycoscience for giving us the honor and this kind of invaluable opportunity.

平成25年度9月総合研究大学院大学修了学生及び学位論文名

| 専攻 | 氏名 | 博士論文名 | 付記する専攻分野 | 授与年月日 |
|--------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------|-----------|
| 構造分子科学 | 藤原 邦代 | 時間分解フーリエ変換赤外分光計測による光駆動型塩化物イオンポンプタンパク質 ファラオニス・ハロロドプシンのイオン輸送機構に関する研究 | 理学 | H25. 9.27 |
| | CHEN, Xiong | Design and Synthesis of π -Electronic Covalent Organic Frameworks | 理学 | H25. 9.27 |
| | JIN, Shangbin | Design, Synthesis, and Functions of Two-Dimensional Covalent Organic Frameworks | 理学 | H25. 9.27 |
| 機能分子科学 | KONG, Weipeng | Edge-pumped Yb:YAG ceramic microchip laser for high-power mode control | 理学 | H25. 9.27 |
| | 井本 翔 | Theoretical studies on ultrafast dynamics of liquid water using linear and nonlinear spectroscopy | 理学 | H25. 9.27 |
| | CHANDAK MAHESH SHANTILALJI | Structural Fluctuations of the <i>Escherichia coli</i> Co-chaperonin GroES Studied by the Hydrogen/Deuterium-Exchange Methods | 理学 | H25. 9.27 |

総合研究大学院大学平成25年度(10月入学) 新入生紹介

| 専攻 | 氏名 | 所属 | 研究テーマ |
|--------|-----------------|------------------|--------------------------------------------------------------------------------------------------|
| 機能分子科学 | YAN, Shuo | 生命・錯体分子科学研究領域 | Design, synthesis, and application of heterogeneous copper catalysts for organic synthesis |
| | YAN, Gengwei | 岡崎統合バイオサイエンスセンター | Structural characterization of carbohydrate-carbohydrate-interactions involved biological events |
| | SIKDAR, Arunima | 岡崎統合バイオサイエンスセンター | Structural elucidation of the mechanisms underlying biomolecular assembly |