

Poster Sessions

Poster Session I

March 16, 2009 (Monday)

15:00 - 16:50 Poster Presenting (Odd Poster Numbers)

Poster Session II

March 17, 2009 (Tuesday)

14:50 - 16:40 Poster Presenting (Even Poster Numbers)

Poster Session Program

- P-001 **Conformational Fluctuation of β -Lactoglobulin Monitored by Hydrogen Exchange**
Masatoshi Itoh, Yoshiteru Yamada, Kanako Nakagawa, Kazuo Fujiwara,
Masamichi Ikeguchi (Soka Univ.)
- P-002 **Sequence Dependencies of DNA Deformability and Hydration in the Minor Groove**
Yoshiteru Yonetani¹, Satoshi Fujii², Akinori Sarai², Hidetoshi Kono¹, Nobuhiro Go¹ (¹Japan Atomic Energy Agency, ²Kyushu Inst. of Tech.)
- P-003 **Sophisticated Regulation Mechanism of Loop-opening Motion of Bovine β -Lactoglobulin**
Kazumasa Sakurai, Tsuyoshi Konuma, Yuji Goto (Inst. Protein Res., Osaka Univ.)
- P-004 **Differences in Structural Cooperativity between Natural and *de novo* Cro Proteins Revealed by the Temperature and Pressure-variable FT-IR Spectroscopy**
Hiroshi Imamura¹, Eri chatani², Yasuhiro Isogai³, Minoru Kato^{1,2} (¹Graduate School of Science and Engineering, Ritsumeikan Univ., ²Department of Pharmacy, College of Pharmaceutical Sciences, Ritsumeikan Univ., ³Department of Biotechnology, Toyama Prefectural Univ.)
- P-005 **Designing Proteins with Dynamic Channeling Capability by Utilizing Membrane Fluidity**
Atsuo Tamurai, Naoki Yamamoto, Mei Kawamura (Graduate School of Science, Kobe Univ.)
- P-006 **Dynamics of Protein Hydration Water Studied from the Simulated Coherent Neutron Scattering Spectra**
Yasumasa Joti¹, Hiroshi Nakagawa², Mikio Kataoka^{2,3}, Akio Kitao¹ (¹IMCB, Univ. Tokyo, ²JAEA, ³NAIST)
- P-007 **On the Spectral Property of Retinal Proteins: Inhomogeneous and Static Disorder**
Hiroshi Watanabe¹, Yoshiharu Mori¹, Takahisa Yamato^{1,2} (¹School of Science,

Nagoya Univ., ²CREST, JST)

- P-008 **The Importance of Interplay among Physiological Structure, Fluctuation, and Electron States to a Proton Transfer across Peptide Backbone**
Katsumasa Kamiya¹, Yasuteru Shigeta¹, Atsushi Oshiyama² (¹Institute of Picobiology, Graduate School of Life Science, University of Hyogo, ²Department of Applied Physics, School of Engineering, The University of Tokyo)
- P-009 **Kinetic Association Detected by Solution Turbidity between IAPP Fibrils and Lipid Vesicles**
Kenji Sasahara, Daizo Hamada (Kobe Univ.)
- P-010 **Long-time Observation for a Single Molecule Trapped in a Capillary Cell: Application for Protein Folding**
Kiyoto Kamagata, Yuji Goto, Satoshi Takahashi (Osaka Univ.)
- P-011 **The Dynamic Force Spectroscopy with AFM Reveals the Internal Dynamics of Biomolecules at the Single Molecule Level**
Masaru Kawakami¹, Yukinori Taniguchi² (¹Japan Advanced Institute of Science and Technology, ²Japan Advanced Institute of Science and Technology, PRESTO)
- P-012 **Multi-site Protein Interactions Monitored by Heteronuclear NMR: Studies on the Interactions of the p53 Transactivation Domain with CBP**
Munehito Arai¹, Josephine, C. Ferreon², Chul Won Lee², Maria, A. Martinez-yamout², H. Jane Dyson², Peter, E. Wright² (¹AIST & The Scripps Research Institute, ²The Scripps Research Institute)
- P-013 **Slowing Down Downhill Folding: A Three-probe Study**
Seung Joong Kim¹, Yoshitaka Matsumura², Charles Dumont¹, Hiroshi Kihara², Martin Gruebele¹ (¹University of Illinois, ²Dept. of Physcis, Kansai Medical Univ.)
- P-014 **Various Alpha-Helix-Rich Structures of SH3 Domain Proteins**
Hiroshi Kihara, Xianju Jin, Jinsong Li, Yoshitaka Matsumura, Masaji Shinjo (Dept. of Physcis, Kansai Medical Univ.)
- P-015 **Denaturant-Induced Helix-Coil Transition of Oligopeptides II,**

Equilibrium Study of Short Peptides, C17 and AK16

Masaji Shinjo¹, Fumiaki Kano², Zhi-jie Qin³, Jinsong Li¹, Yoshitaka Matsumura¹, Akio Shimizu⁴, Akio Teramoto⁵, Hiroshi Kihara¹ (¹Dept. of Physcis, Kansai Medical Univ., ²Showa Univ., Dept. of Physics, ³University of California at Santa Cruz, ⁴Soka Univ., ⁵Ritumeikan Univ.)

- P-016 **Analysis of the Oligomerization Mechanism and Structure of the Hemolytic Lectin Cel-III Derived from Sea Cucumber by Small-angle X-ray Scattering**
Shuichiro Goda¹, Hitoshi Sadakata², Keigo Hisamatsu², Yuzuru Hiragi³, Tomomitsu Hatakeyama¹ (¹Nagasaki Univ., Fac. of Eng., ²Nagasaki Univ., Grad. Sch. of Sci. and Tech., ³Kansai Med. Univ., Phys. Lab.)
- P-017 **Locally Disordered State of the BTK-SH3 Domain and Pre-existing Hydration of Its Ligand-binding Cavity Revealed by NMR and Molecular Dynamics Simulation at Varying Pressure**
Ryo Kitahara¹, Tomoshi Kameda², Yuan-Chao Lou³, Kazumi Hata⁴, Takatsugu Hirokawaa², Jya-Wei Cheng³, Kazuyuki Akasaka⁴ (¹Ritsumeikan Univ., Pharmaseutical Science, ²AIST, CBRC, ³Tsing Hua University, ⁴Kinki Univ)
- P-018 **The Pressure-temperature Phase Diagram of Hen Lysozyme at Low pH**
Akihiro Maeno¹, Hiroshi Matsu², Kazuyuki Akasaka^{1,3} (¹Grad. Sch. of Biology-Oriented Sci. and Tec., Kinki Univ., ²Niigata Industrial Creation Organization, ³High Pressure Protein Research Center, Kinki Univ.)
- P-019 **Structure and Function of GroEL-GroES-nucleotide Complexes Studied by H/D Exchange Technique**
Atsushi Mukaiyama, Takashi Nakamura, Tapan K. Chaudhuli, Koki Makabe, Kunihiro Kuwajima (Okazaki Inst. Integr. Biosci.)
- P-020 **Folding Mechanism of Homologous Proteins: A Comparative Study of Goat α -Lactalbumin and Canine Milk Lysozyme**
Takashi Nakamura¹, Katsuaki Tomoyori², Kosuke Maki³, Koki Makabe¹, Kunihiro Kuwajima¹ (¹Okazaki Inst. Integr. Biosci., ²Tokyo Univ., ³Nagoya Univ.)
- P-021 **Proton Exchange between Asp Residues in the Substrate Binding Site of the Human MTH1 Protein**
Teruya Nakamura¹, Miyuki Inazato¹, Shinji Ikemizu¹, Yusaku Nakabeppu², Yuriko Yamagata¹ (¹Kumamoto Univ., ²Kyushu Univ.)

- P-022 **A Small Heat Shock Protein, StHsp14.0, Conceals a Denatured Protein Chain from Contact with Other Chains**
Toshihiko Oka¹, Tetsuya Abe², Atsushi Nakagome², Masafumi Yohda²
(¹Department of Physics, Faculty of Science, Shizuoka University, ²Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)
- P-023 **Glycerol-Induced Folding of Unstructured Disulfide-Deficient Lysozyme into a Native-Like Conformation**
Yasuo Noda (Kwansei Gakuin Univ.)
- P-024 **Direct Observation of Slow Dynamics in Adsorption-induced Protein Unfolding**
Yohko Yano¹, Hironari Yamada² (¹Research organization of Science & Engineering, Ritsumeikan University, ²Ritsumeikan Univ.)
- P-025 **Temperature Effect on the Fluctuation of Titin I27 Domain: A Single-molecule Force Spectroscopy Study with AFM**
Yukinori Taniguchi, Masaru Kawakami (Materials Science, JAIST)
- P-026 **Hydration Structures and Solubility of α -, β - and γ -Cyclodextrins**
Yutaka Maruyama, Fumio Hirata (Institute for Molecular Science)
- P-027 **Thermodynamic and Structural Analysis of a 13 Degree Stabilization in BPTI Variants Originating from the Interplay between the Backbone and Sidechain Structural Flexibilities**
Mohammad Monirul Islam¹, Shihori Sohya¹, Keiichi Noguchi¹, Shunichi Kidokoro², Masafumi Yohda¹, Yutaka Kuroda¹ (¹Tokyo University of Agriculture and Technology and, ²Nagaoka University of Technology)
- P-028 **Theoretical Analysis of the Relation between the Structure and the Function of Nova-RNA Complex System: Fragment Molecular Orbital Method Based Quantum Chemical Simulation for Inter- and Intra-molecular Interactions**
Ikuo Kurisaki¹, Kaori Fukuzawa², Tatsuya Nakano³, Yuji Mochizuki⁴, Hirofumi Watanabe⁵, Shigenori Tanaka⁵ (¹Graduate School of Science and Technology, Kobe University, ²Mizuho Information & Research Institute, Inc., ³Division of Safety Information on Drug, Food and Chemicals, National Institute of Health Sciences, ⁴Department of Chemistry, Faculty of Science, Rikkyo, ⁵Graduate School of Human Development and Environment, Kobe University)

- P-029 **Quantum Mechanical and Molecular Mechanical Method Combined with Reference Interaction Site Model Theory to investigate the electronic structure and solvation structure of proteins.**
Norio Yoshida, Fumio Hirata (Institute for Molecular Science)
- P-030 **Distribution and Potential of Means Force of CO₂, NO and NH₃ in Aquaporins Channel Investigated by 3D-RISM**
Saree Phongphananee, Norio Yoshida, Fumio Hirata (Institute for Molecular Science)
- P-031 **Theoretical Study of Carbon Mono-Oxide Escaping Pathway in Myoglobin with 3D-RISM Theory**
Yasuomi Kiyota¹, Norio Yoshida², Fumio Hirata² (¹Graduate University of Advanced Science, ²Institute for Molecular Science)
- P-032 **Hydration Water Dynamics in Biomaterials Studied by Simulation Analysis of Deuterium Solid-State NMR**
Motohiro Mizuno, Takashi Araya, Tatsuya Miyato (Kanazawa Univ.)
- P-033 **3D RISM Theory for the Solvent Response to Changes in a Solute Structure**
Ryosuke Ishizuka, Fumio Hirata (Institute for Molecular Science)
- P-034 **MOPAC Calculation of Low Barrier Hydrogen Bonds and Their Application to Molecular Design of Enzyme**
Takashi Tamura (Grad.Sch.Nat. Sci. and Tech)
- P-035 **Folding of Villin Head Piece Subdomain HP36 by Multicanonical Replica-Exchange Molecular Dynamics Simulations**
Takao Yoda¹, Yuji Sugita², Yuko Okamoto³ (¹Nagahama Inst. Bio-Sci. Tech., ²RIKEN, ³Nagoya Univ.)
- P-036 **Structure and Dynamics of the Protein Hydration Water at the Protein Dynamical Transition**
Hiroshi Nakagawa¹, Yasumasa Joti², Akio Kitao², Mikio Kataoka^{1,3} (¹JAEA, ²IMCB, Univ. Tokyo, ³NAIST)
- P-037 **A Highly Parallelizable Integral Equation Theory for Three-Dimensional Solvent Distribution Function: Application to Biomolecules**

Daisuke Yokogawa¹, Hirofumi Sato¹, Takashi Imai², Shigeyoshi Sakaki¹ (¹Kyoto University, ²RIKEN)

P-038 **Theoretical Treatment on Structural Fluctuation: Based on Classical Density Functional Theory**

Daisuke Yokogawa, Hirofumi Sato, Shigeyoshi Sakaki (Kyoto University)

P-039 **A First Principle Theory for pK_a Prediction at Molecular Level: pH Effects Based on Explicit Solvent Model**

Kentaro Kido, Hirofumi Sato, Shigeyoshi Sakaki (Kyoto University)

P-040 **Calculation of Coordination Number from 3D Solvation Structure**

Kenji Hirano, Daisuke Yokogawa, Hirofumi Sato, Shigeyoshi Sakaki (Kyoto University)

P-041 **Enzyme Inhibitors and Activators Found by in Silico Screen for Lysozyme**

Hironori K. Nakamura, Kazuo Kuwata (CEID, Gifu Univ.)

P-042 **Characteristics of Atomic Packing and Mechanism of Structural Fluctuations Common to Globular Proteins**

Kunitsugu Soda, Yasutaka Seki, Yudai Shimbo, Jumpei Fujii (Dept. Bioeng., Nagaoka Univ. Technol.)

P-043 **Variation of Structures and Energies of Hydration Water Molecules Around a Nonpolar Molecule**

Yudai Shimbo, Jumpei Fujii, Yasutaka Seki, Kunitsugu Soda (Dept. Bioeng., Nagaoka Univ. Technol.)

P-044 **Thermodynamic Integration Method Based on Molecular Dynamics Simulation Combined with 3D-RISM Theory**

Tatsuhiko Miyata, Yasuhiro Ikuta, Fumio Hirata (Institute for Molecular Science)

P-045 **Computational Modeling of Ligand Recognition Process in Selectin**

Toyokazu Ishida (National Institute of Advanced Industrial Science and Technology (AIST) Research Institute for Computational Sciences (RICS))

P-046 **Denaturant - Induced Helix-Coil Transition of Oligopeptides**

Fumiaki Kano¹, Hiroshi Kihara²(¹Showa Univ., Dept. of Physics, ²Kansai medical Univ., Dept. of Physics)

P-047 **Generalized-Ensemble Simulations of Small Protein Systems**

Ayori Mitsutake (Keio Univ., Dept. of Physics)

P-048 **Structural Studies of Internal Water Molecules in Proton Pump Proteins**

Hideki Kandori¹, Yuji Furutani² (¹Nagoya Inst. Tech., ²Nitech & IMS)

P-049 **Modulation of Helix-Helix Interaction in Membranes by Local Fluctuations of Lipid Composition: A Thermodynamic Basis**

Yoshiaki Yano, Katsumi Matsuzaki (Kyoto Univ.)

P-050 **Binding of α 1-Acid Glycoprotein, a Member of the Lipocalin Family, to Membrane Results in a Unique Structural Change and Ligand Release**

Toru Maruyama¹, Hiroshi Watanabe¹, Koji Nishi², Masaki Otagiri³ (¹School of Pharmacy, Kumamoto Univ., ²Yokohama College of Pharmacy, ³Medical and Pharmaceutical Sciences, Kumamoto Univ.)

P-051 **Drug Binding and Mobility Relating to the Thermal Fluctuation in Membranes: A Dynamic NMR Study**

Emiko Okamura, Noriyuki Yoshii (Himeji Dokkyo Univ., Dept. of Pharm. Sci.)

P-052 **The Catalytic Susceptibility of Cephalosporins are Correlated to the Thermal Stabilities of their β -Lactamase Acyl-Intermediates**

Yasushi Nitana¹, Tatsuro Shimamura¹, Takuro Uchiyama¹, Yoshikazu Ishii², Michiyo Takehira¹, Katsuhide Yutani¹, Hiroshi Matsuzawa³, Masashi Miyahi¹ (¹RIKEN SPring-8 Center, ²Toho Univ., ³Aomori Univ., Faculty of Pharmaceutical Sciences)

P-053 **Development of a Novel Analytical Method of Amino Acid Solubilities Using Uncharged Flexible Peptides.**

Hiromi Shimada, Tetsuya Kamioka, Tomohiro Shimono, Yutaka Kuroda (TUAT)

P-054 **Mobility of Water Molecules into GFP Interior and Their Effects on the Fluorescence Activity**

Saori Akiyama¹, Takayuki Kobayashi¹, Tetsuya Kamioka¹, Atsushi Suenaga², Makoto Taiji², Yutaka Kuroda¹ (¹TUAT, ²RIKEN)

- P-055 **Inhibitory Effects of Hybrid Liposomes on the Growth of Gastric Tumor Cells along with Fluctuation of Membranes**
Yusuke Matsuoka, Yuji Komizu, Hideaki Ichihara, Yoko Matsumoto, Ryuichi Ueoka (Division of Applied Life Science, Graduate School of Engineering, Sojo University)
- P-056 **Inhibitory Effects of Ca²⁺ on the Growth of Tumor Cells *in vitro***
Kazuki Tatsumi, Yuji Komizu, Koichi Goto, Ryuichi Ueoka (Division of Applied Life Science, Graduate School of Engineering, Sojo University)
- P-057 **Coherent Fluorescence Control Using Phase-Locked Pulse Pair**
Jun Miyazaki, Shuichi Kinoshita (Frontier Biosciences, Osaka University)
- P-058 **IR Study of the Water on the Folding of β -Lactoglobulin in 3,3,3-Trifluoroethanol/Water**
Kazuko Mizuno, Satie Nakajima (Univ. of Fukui)
- P-059 **Observation and Evaluation of Fluctuations in Biological Systems by Advanced EPR Techniques**
Seigo Yamauchi¹, Hideto Matsuoka¹, Yasunori Ohba¹, Toshiaki Arata² (¹Tagen, Tohoku Univ., ²Graduate School of Science, Osaka Univ.)
- P-060 **Molecular Dynamics of Photo-Excited Halorhodopsin in the Monomer and Trimer States**
Takashi Tsukamoto, Takashi Kikukawa, Masakatsu Kamiya, Tomoyasu Aizawa, Keiichi Kawano, Makoto Demura (Hokkaido Univ.)
- P-061 **ATR-FTIR Spectroscopy for Detecting Interaction Changes upon Binding of Ions to Transmembrane Proteins**
Yuji Furutani, Hideki Kandori (Nagoya Institute of Technology)
- P-062 **Crowding Effect on Reaction Dynamics of Blue Light Sensor Protein; Phototropin**
Tsuguyoshi Toyooka¹, Yusuke Nakasone¹, Kazunori Zikihara², Satoru Tokutomi², Masahide Terazima¹ (¹Kyoto Univ., ²Osaka Prefecture Univ.)
- P-063 **Dielectric Spectra of Hydrated Water in the Terahertz Range**

Mariko Yamaguchi¹, Kohji Yamamoto², Masahiko Tani², Masanori Hangyo²,
Mikio Kataoka¹ (¹Nara Institute of Science and Technology, ²Institute of Laser
Engineering, Osaka University)

P-064 **Microsecond-resolved Single-molecule Time Traces by a Line-illuminated Confocal Detection**

Hiroyuki Oikawa¹, Kiyoto Kamagata¹, Yuji Goto², Satoshi Takahashi¹ (¹Inst.
Protein Res., Osaka Univ., CREST JST, ²Inst. Protein Res., Osaka Univ.)

P-065 **FRET Analysis of Protein Structural Changes by Double Incorporation of Nonnatural Amino Acids**

Issei Iijima, Takahiro Hohsaka (School of Materials Science, JAIST)

P-066 **The Development of IR Super-Resolution Microscope Based on Vibrational Sum-frequency Generation and Its Application to Cells**

Keiichi Inoue, Satoshi Kogure, Ken Uehara, Masaaki Fujii, Makoto Sakai (Tokyo
Inst. Tech. Chem. Resources Lab.)

P-067 **Time-resolved Detection of Enzyme-substrate Interaction during the Light Induced DNA Repair Reaction**

Masato Kondoh¹, Junpei Yamamoto², Kenichi Hitomi³, Shigenori Iwai², Elizabeth Getzoff³, Masahide Terazima¹ (¹Kyoto University. Science, ²Osaka University, ³Scripps)

P-068 **Light Induced Conformational Changes of Bacteriophytochrome *RpBphP2* and *RpBphP3***

Takeshi Matsuoka¹, Stojkovic Emina², Moffat Keith², Masahide Terazima¹
(¹Kyoto university, Science, ²Chicago university)

P-069 **Fluorescence Quenching in Model Biomembrane Systems**

Makoto Takezaki, Toshihiro Tominaga (Dep. App. Chem., Okayama Univ. Sci.)

P-070 **Site-specific Incorporation of Fluorescent Nonnatural Amino Acids into C-terminus of Proteins**

Yasunori Tokuda, Kaori Shiraga, Takahiro Hohsaka (School of Materials Science,
JAIST)

P-071 **Photo-induced Reaction Dynamics of LOV Domains from Arabidopsis**

Yusuke Nakasone¹, Takeshi Eitoku², Kazunori Zikihara³, Daisuke Matsuoka⁴, Satoru Tokutomi³, Masahide Terazima¹ (¹Kyoto Univ., ²Chuo Univ., ³Osaka Prefecture Univ., ⁴Kobe Univ.)

P-072 **Light-induced Reaction Dynamics of a BLUF Protein; PixD**

Keisuke Tanaka¹, Yusuke Nakasone¹, Koji Okajima², Masahiko Ikeuchi³, Satoru Tokutomi⁴, Masahide Terazima¹ (¹Kyoto Univ., ²The Univ. of Tokyo, Osaka Pref. Univ., ³The Univ. of Tokyo, ⁴Osaka Pref. Univ.)

P-073 **Structural Fluctuation in Protein Detected by the High Pressure Spectroscopies**

Takeshi Uchida, Koichiro Ishimori (Hokkaido Univ.)

P-074 **Propagation and Destruction of Amyloid Fibrils Induced by Laser Irradiation**

Hisashi Yagi¹, Daisaku Ozawa¹, Tadato Ban², Toru Kawakami¹, Hiroki Kuyama¹, Hironobu Naiki³, Yuji Goto¹ (¹IPR, Osaka Univ., ²Broad Center for the Biological Sciences, California Institute of Technology, ³Med., Fukui Univ.)

P-075 **On the Solvent Role in Dissolution of Amyloid-like Fibrils of Fragment GNNQQNY from Sup-35 in DMSO-Water Mixtures**

Tadashi Kai¹, Kousei Nakaya¹, Koji Yoshida¹, Setsuko Ando¹, Sannum Lee¹, Toshio Yamaguchi¹, Yasutaka Seki², Kunitsugu Soda² (¹Fukuoka Univ., ²Nagaoka Univ. Tech.)

P-076 **Identification of a Variety of Anti-prion Compounds that Act as Chemical Chaperons**

Yuji Kamatari, Junji Hosokawa-Muto, Hironori Nakamura, Yosuke Hayano, Kazuo Kuwata (Gifu Univ. Center for Emerging Infectious Diseases)

P-077 **Structures of β -Sheet Self-Assembly Mimics**

Koki Makabe¹, Shohei Koide², Kunihiro Kuwajima¹ (¹Okazaki Inst. Integr. Biosci., ²Univ. Chicago)

P-078 **Up-and-down Topological Mode of Amyloid β -Peptide Lying on Hydrophilic/Hydrophobic Interface of GM1 Micelles**

Maho Yagi-utsumi^{1,2,3}, Yoshiki Yamaguchi^{1,4}, Hiroaki Sasakawa^{1,2}, Naoki Yamamoto⁵, Katsuhiko Yanagisawa⁶, Koichi Kato^{1,2,3} (¹Nagoya City Univ., ²Inst. Mol. Sci., ³Okazaki Inst. Integr. Biosci., ⁴RIKEN, ⁵Ritsumeikan Univ., ⁶Nat. Inst.

Longevity Sci.)

- P-079 **Development of β -Structure Parallels with the Decrease in Molecular Voids in Amyloid-like Fibrillation**
Ryohei Kono¹, Takeshi Takizawa², Kazuyuki Akasaka^{1,3}, Hideki Tachibana^{1,3}
(¹Kinki Univ., ²Kobe Univ., ³Kinki Univ. HPPRC)
- P-080 **Detection of the Kinetic Intermediate on the Amyloid Fibrillation of β 2-Microglobulin by NMR Combined with H/D Exchange**
Tsuyoshi Konuma¹, Eri Chatani², Reina Onishi¹, Kazumasa Sakurai¹, Takahisa Ikegami¹, Hironobu Naiki³, Yuji Goto¹ (¹Inst. Prot. Res., Osaka Univ., ²Fac. Pharm. Sci., Ritsumeikan Univ., ³Fac. Med. Sci., Univ. of Fukui)
- P-081 **Analysis of the Amyloid Fibril Extension Mechanism Using H/D Exchange**
Kotaro Yanagi¹, Kazumasa Sakurai¹, Lee Yong-ho¹, Takahisa Ikegami¹, Hironobu Naiki², Yuji Goto¹ (¹Inst. Protein Res., Osaka Univ, ²Fac. Med. Sci., Univ. of Fukui)
- P-082 **Detection of Amyloid β -peptide ($A\beta$) Aggregation Using Fluorescent Proteins Having Pseudo- $A\beta$ Surfaces**
Tsuyoshi Takahashi, Hisakazu Mihara (Tokyo Tech.)
- P-083 **Molecular Dissection of SOD1 Fibrillation - Insights into Pathological Diversity in Familial Form of ALS**
Yoshiaki Furukawa, Kumi Kaneko, Nobuyuki Nukina (RIKEN, Lab. for Structural Neuropathology)
- P-084 **A Comprehensive Model for Packing and Hydration for Amyloid Fibrils of β 2-Microglobulin**
Young-Ho Lee¹, Eri Chatani¹, Kenji Sasahra¹, hironobu Naiki², Yuji Goto¹
(¹Institute for Protein Research, Osaka Univ., ²Fukui Univ.)
- P-085 **Characterization of the Dynamics of β 2-Microglobulin Amyloid Fibrils Using Solution NMR**
Yuichi Yoshimura¹, Kazumasa Sakurai¹, Eri Chatani², Atsushi Kameda¹, Takahisa Ikegami¹, Hironobu Naiki³, Yuji Goto¹ (¹Inst. Prot. Res., Osaka Univ., ²Fac. Pharm. Sci., Ritsumeikan Univ., ³Fac. Med. Sci., Univ. of Fukui)

- P-086 **Conformational Fluctuations for Redox Dependent Electron-Transfer between Ferredoxin and Ferredoxin:NADP⁺ Reductase**
Keizo Teshima¹, Toshinao Seno¹, Takahisa Ikegami² (¹Grad. Sch. Biosphere Sci., Hiroshima Univ., ²Int. Prot. Res., Osaka Univ.)
- P-087 **Shape Transformation and Phase Separation of Supported Lipid Bilayers on Oxide Surfaces**
Ryugo Tero¹, Toru Ujihara², Tsuneo Urisu¹ (¹Inst. Molec. Sci. , ²Nagoya Univ.)
- P-088 **Structural Bases for Heme and Ligand Bindings in Heme Oxygenase**
Masakazu Sugishima¹, Kenji Sugase², Yasuhisa Mizutani³, Keiichi Fukuyama³
(¹Kurume Univ. Sch. of Med., ²Suntory Inst. for Bioorg. Res., ³Osaka Univ.)
- P-089 **Detection of Protein Fluctuations in Solution with Quasielastic Neutron Scattering and Inelastic X-ray Scattering Measurements**
Koji Yoshida, Toshio Yamaguchi (Fukuoka Univ.)