Poster Presentations

Odd Number: $13:00 \sim 14:20 \, 5^{\text{th}}$ (Sat) Even Number: $13:00 \sim 14:20 \, 6^{\text{th}}$ (Sun)

Session A: Application & Materials

PA-01 <u>Theerasak Rojanarata</u>, Samarwadee Plianwong, Thitirat Wongpitakroj, Praneet Opanasopit, Tanasait Ngawhirunpat

Improved siRNA delivery at physiological pH by the use of chitosan combined with poly-Larginine

PA-02 <u>Praneet Opanasopit</u>, Natthan Charernsriwilaiwat, Theerasak Rojanarata, Tanasait Ngawhirunpat

Development of chitosan/polyvinyl alcohol nanofiber mats for wound dressing material

PA-03 Seiji Kurozumi, Kimihiko Sato

Mass production of the chitinous oligosaccharide

PA-04 Y.-R. Chen, K.-C. Cheng, Y.-T. Hsu, M.-J. Chen and T.-H. Chuang

NIPAAm/PEGMEA copolymer hydrogels with chitosan particles

PA-05 Hung-Ju Chou, Li-Chen Chen, Hui-Huang Chen and Shih-Bin Lin

The enhancement of water solubility and antioxidative activities of chitosan hydrolysates by maillard reaction with various monosaccharides

PA-06 Tae Il Son, Kyoung Tai Park, Yun Heo, Hyung Jae Lee, Yoshihiro Ito

Photo-immobilization of bioactive molecules by chitosan derivatives for drug delivery system in medical field

PA-07 Satoshi Tanimoto, Ayaka Satoh, Shohei Ida, Yoshitsugu Hirokawa

Preparation of chitosan microparticles having inorganic shell via soft chemical process

PA-08 T. K. Lin, F. L. Mi, S. H. Yu, Y. C. Chen, W. Y. Chen, S. J. Wu

Synthesis of magnetic chitosan-citrate gel beads as a novel magnetic adsorbent

PA-09 Nungruthai Kananont, Boonthida Kositsup, Rath Pichyangura,

Supachitra Chadchawan

The effects of chitosan and chitosan solvents on 'Pathumthani1' rice (*Oryza sativa* L.) 'Pathumthani1' seedlings

PA-10 <u>Mitsumasa Osada</u>, Takumi Yaegashi, Kazushi Kikuta, Kenichi Koseki, Yuko Nakagawa, Takashi Watanabe, Mitsuru Nikaido, Kazuhide Totani

New method for β -chitin production from squid pens by high-temperature water treatment

PA-11 Keiko Shirai, Monserrat Lopez-Chavez, Miquel Gimeno, Alberto Tecante

Listeria monocytogenes inhibition in fresh cheese by an active packaging of chitosan

PA-12 <u>Kenichi Koseki</u>, Yuko Sakamoto Nakagawa, Mitsumasa Osada, Takashi Watanabe, Mitsuru Nikaido, Kazuhide Totani

Development of functional materials utilizing squid pens in Sanriku.

PA-13 Naohiro Kodama, Masanao Imai

Attractive composite layered chitosan-calcium alginate membrane involved with utilized mechanical strength and mass transfer character

PA-14 Hidemi Hattori, Toshihiko Muto, Masayuki Ishihara

Development of hemostatic using chitosan

PA-15 <u>Thitirat Chaochai</u>, Hirofumi Miyaji, Takashi Yoshida, Erika Nishida, Tetsuya Furuike, Hiroshi Tamura

Preparation of chitosan/ gelatin based biomaterial

PA-16 Chih-Hao Huang, Wen-Yen Chiu

Thermo-sensitive chitosan/poly(NIPAAm-co-NMA) composite nanofibers for adsorption of Cu(II) from aqueous solution

PA-17 <u>Tze-Hao Derrick Khor</u>, Ching-Hung Chen, Guo-Jane Tsai

Antibacterial activity of chitosan and chitooligosaccharides against *Clostridium perfringens* and applicability of chitosan on the processing of pork sausage

PA-18 <u>Yaowapha Waiprib</u>, Pramkamol Pookaew, Pongtep Wilaipun, Anan Tongta, Nontawith Areechon, Masashi Maita

Antibacterial properties of low molecular weight chitosan prepared from different sources with different range of molecular weight

PA-19 <u>Kazuya Nakata</u>, Akiko Ikuta, Hironori Izawa, Minoru Morimoto, Hiroyuki Saimoto, Shinsuke Ifuku

Preparation of polysilsesquioxane films reinforced with chitin nanofibersK

PA-20 Jae-Woon Nah, Mi-Kyeong Jang

Algicidal effect of water-soluble chitosan against harmful algal bloom

PA-21 Chien-Hui Wu, Jen-Hsin Peng, Guo-Jane Tsai

Effects of levels and distibution of N-acetyl group in chitosan residue on antibacterial activity and enzymatic susceptibility of chitosan

PA-22 Yoshihko Omura, <u>Toshikazu Yoneda</u>, Shinsuke Ifuku, Hiroyuki Saimoto

Method for replacing water in chitin nanofibers suspension with organic solvents

PA-23 <u>Nana Suzuki</u>, Akihiro Matsui, Hironori Izawa, Shinsuke Ifuku, Minoru Morimoto, Hiroyuki Saimoto

Preparation of N-phthaloylated chitin nanofibers and its characterization

Session B: Biology & Medicine

PB-01 Kazunari Igawa, Ming-Fang Xie, Hideki Ohba, Yoshihiko Hayashi

Nano-imaging analysis for the intracellular transportation of D-glucosamine using quantum dot

PB-02 <u>Takeshi Ikeda</u>, Kouhei Yamamoto, Yuu Yoshizawa, Kouji Sugimoto, Hidetaka Ishizaki, Sshizuka Yamada, Kajirou Yanagiguchi, Yoshihiko Hayashi

Properties of chitosan scaffold for pulp tissue engineering

PB-03 <u>Yoko Sawada</u>, Atsushi Sugimoto, Kazuhiro Fukuda, Takako Kurosawa, Masao Ogawa, Tomohiro Osaki, Saburo Minami

Ecdyson is active componets in *Ajuga decumbens* extract and has synergetic effect of oral administrated with glucosamine on cartilaginous injury.

PB-04 Kazuo Azuma, Tomohiro Osaki, Tomohiro Imagawa, Takeshi Tsuka, Shinsuke Ifuku, Hiroyuki Saimoto, Yoshiharu Okamoto, Saburo Minami

A comparative study between α -chitin nanofibrils and β -chitin nanofibrils using an inflammatory bowel disease mouse model

PB-05 Akimasa Someya, Koji Sakamoto, Isao Nagaoka

Glucosamine suppresses IL-8 expression through the *O*-N-acetylglucosamine modification of transcription factor Sp1 in synovial cells

PB-06 <u>Kiyohiko Seki</u>, Miyako Ishimaru, Aki Momoshima, Yuka Ohyama, Torao Suga, Toshihisa Ueda, Hiroaki Kodama, Masaru Mitsutomi

Antimicrobial and antifungal activity of a hevein-like chitin binding peptide Ac-AMP from *Amaranthus caudatus*

PB-07 Vinh Nguyen, Masayuki Ishihara, Hidemi Hattori, Takemi Matsui

Interaction of silver nanoparticles and chitin powder with various sizes and surface structures: The correlation with anti-microbial activities

- PB-08 <u>Mamoru Igarashi</u>, Kaori Suzuki, Akimasa Someya, Koji Sakamoto, Isao Nagaoka Sirtuin 1 is a target gene of glucosamine in chondrocytes.
- PB-09 Misa Ohno, Yuto Togashi, Kyoko Tsuda, Kazuaki Okawa, Minori Kamaya, Masayoshi Sakaguchi, Yasusato Sugahara, Fumitaka Oyama

 Quantitative PCR comparison of mRNA levels in human and mouse
- PB-10 Sachie Masuda, Kazuo Azuma, Tomohiro Osaki, Tomohiro Imagawa, Takeshi Tsuka, Saburo Minami, Kimihiko Sato, Yoshiharu Okamoto

Anti-tumor effects by oral administrations of oligosaccharide of chitin and chitosan in colon 26 bearing mouse model

- PB-11 Makoto Anraku, Motoko Tanaka, Ayumu Hiraga, Daisuke Iohara, Yuji Maezaki, Kaneto Uekama, Kohei Nagumo, Hiroshi Watanabe, Toru Maruyama, Masaki Otagiri Effects of chitosan on oxidative stress and renoprotective potential in hemodialysis patients
- PB-12 Yoshitaka Umezaki, Makoto Anraku, Hisao Tomida, Ayumu Hiraga, Daisuke Iohara, Nobuyuki Kobayashi, Masaki Otagiri, Kaneto Uekama, Fumitoshi Hirayama

 Preparation and functional properties of PEGylated chitosans with different molecular weights
- PB-13 Hidemi Hattori

Effect of blood aggregation and platelet activation by difference in molecular weight and degree of deacetylation of chitosan

PB-14 <u>Takuya Kato</u>, Misato Kakizaki, Tatsuo Shimizu, Sachie Nakatani, Kenji Kobata, Masahiro Wada

Glucosamine promoted the mineralization of MC3T3-E1 cells by increasing the expression of Atf4

PB-15 Noriko Watanabe, Ryo Hasuda, Sachie Nakatani, Kenji Kobata, Masahiro Wada Effect of chondroitin sulfate on dermal fibroblasts.

PB-16 Misato Kakizaki, Ai Arai, Sachie Nakatani, Kenji Kobata, Masahiro Wada

Effects of chondroitin sulfate on the proliferation and differentiation of chondrocyte precursors

PB-17 Sidhy Viha CV, Deepthi Sankar, Furuike Tetsuya, Tamura Hiroshi, Jayakumar Rangasamy

Fabrication of chitin/poly(butylene succinate)/chondroitin sulphate nanoparticles ternary composite hydrogel scaffold for skin tissue engineering

PB-18 Shu-Huei Yu, Yi-Cheng Ho, Deh-Wei Tang, Fwu-Long Mi, Shi-Tan Chen

Preparation of chitosan/hyaluronic acid self-assembled nanoparticles for targeted delivery of acriflavine to HT-29 colon carcinoma cells

PB-19 Fwu-Long Mi, Trong-Ming Don, Yu-Ru Su, Shu-Huei Yu, Deh-Wei Tang, An-Chong Chao

Intracellular hydrogen peroxide generation by chitosan-based bioreducible anoparticles

PB-20 Panonnummal Rajitha, Rangasami Jayakumar, Mangalathillam Sabitha

Skin permeating chitin nanogel for the cutaneous delivery of antipsoriatic drugs

PB-21 Yi-Cheng Ho, Shu-Huei Yu, Deh-Wei Tang, Fwu-Long Mi, Kun-Ying Lu

Evaluation of permeability enhancement of hydrophilic macromolecules by chitosan and poly(γ -glutamic acid)(γ -PGA)/poly(Itaconic acid) complex nanoparticles

PB-22 <u>Keiko Shirai</u>, Itzel Corona, Miquel Gimeno, Alberto Lopez, Nadia Vazquez, Lenin Tamay De Dios, Maria Cristina Velasquillo

Synthesis, characterization of chitosan-co-citric-collagen and evaluation as human fibroblast scaffolds.

PB-23 Tatsuki Kaneko, Satohsi Kimura, Masahisa Wada

Ultrastructure of α -chitin ejection vesicle in *Phaeocystis*

PB-24 Guo-Jane Tsai

Antioxidative and antimutagenic activities of chitosans with various molecular weights

PB-25 Shun-Hsien Chang, Guo-Jane Tsai

Factors Affect the Antibacterial Activities of Chitosans with Various Molecular Weight

PB-26 Keiji Kan

Therapeutic effect of a chitin oligosaccharide mixture on early stage human cancer by *per os* administration.

PB-27 Sukhumaporn Seang-ngam, Kampon Limruengroj, Supachitra Chadchawan, Teerapong Buaboocha

Chitosan potentially induce drought resistance in rice via calmodulin

PB-28 Kazuo Azuma, Shiori Suguro, Yoshie Yamagishi, Masamichi Yamashita, Tomohiro Osaki, Takeshi Tsuka, Tomohiro Imagawa, Ichiro Arifuku, Yoshiharu Okamoto

Pharmacokinetic study of D-glucosamine hydrochloride produced from *microbes* and N-acetyl-D-glucosamine synthesized from D-glucosamine hydrochloride after oral administrations to dogs

PB-29 Yoshihiko Hayashi, Kazunari Igawa, Atsushi Kawakubo, Naoko Ohara

Protection of cell membrane by D-glucosamine in electroporation

PB-30 Ikuko Ito, Toshikazu Yoneda, Yoshihiko Omura, Tomohiro Osaki, Shinsuke Ifuku, Hiroyuki saimoto, Kazuo Azuma, Tomohiro Imagawa, Tsuka Takeshi, Yoshihiro Okamoto, Saburo Minami

UV-protective effects of chitin nanofibers fibrillated by urocanic acid

PB-31 Masahiro Nishihara, Tomohiro Osaki, Yoshiki Itoh, Haruki Shimizu, Osamu Takashima, Hironori Izawa, Minoru Morimoto, Shinsuke Ifuku, Hiroyuki Saimoto, Kazuo Azuma, Tomohiro Imagawa, Takeshi Tsuka, Yoshiharu Okamoto, Saburo Minami

Development of biological adhesive agents by using chitin nanofibers

PB-32 **Dai-Hung Ngo, Se-Kwon Kim**

Protective effects of aminoethyl-chitooligosaccharides against oxidative stress and inflammation in murine microglial cells

PB-33 Seiji Kurozumi

Studies on Development for forming Chitinous Sponge appeared hemostatic properties

PB-34 Takashi Akiyama, Sachie Nakatani, Kenji Kobata, Masahiro Wada

Effects of two kinds of non-digestible carbohydrates on energy metabolism in mice

PB-35 Karolina Maria Nowak, Kazimiera Henryka Bodek

Formulations based on microcrystalline chitosan as a good drug carrier designed to use in alveolar osteitis

Session C: Chemistry & Physics

PC-01 Yuji Kimura

Removal of bisphenol A and its derivatives by chitosan beads through enzymatic quinone oxidation

PC-02 Kosuke Sakai

Removal of bisphenol A and its derivatives by combined use of free or immobilized polyphenol oxidase and porous chitosan beads

PC-03 Ryohei Tsuji

Removal of bisphenol compounds through quinone oxidation by *Aspergillus oryzae* tyrosinase and quinone adsorption on porous chitosan beads

PC-04 Chia-Chu Cheng, Fwu-Long Mi, Trong-Ming Don

Synthesis and Characterization of Chitosan membrane Selectively Crosslinked by Poly(ethylene glycol) Dimethacrylate

PC-05 Naoko Takeda, Jun-ichi Tamura

Synthesis of keratan sulfate oligosaccharide

PC-06 <u>Kanako Saita</u>, Shoji Nagaoka, Tetsuya Yamamoto, Kazuhiko Okuzono, Takamasa Ishibashi, Hirotaka Ihara

Preparation of high dispersion chitosan particles with antibacterial activity and the application to oral health care materials

PC-07 Pornnipa Jongmesuk

Surface modified mucoadhesive chitosan coated alginate beads by 4-carboxy benzene sulfonamide for puerarin delivery system

PC-08 Tawrong Chivangkul

Water-soluble mucoadhesive N-trimethyl-gluconate-chitosan as an alterntive mucoadhesive polymer for drug delivery

PC-09 <u>Takashi Kuroiwa</u>, Hideaki Takada, Isao Kobayashi, Kunihiko Uemura, Akihiko Kanazawa

Preparation of uniformly sized chitosan microspheres by using microchannel emulsification and cross-linking treatment and their adsorption properties for dye separation

PC-10 Kentaro Abe, Shinsuke Ifuku, Mari Kawata and Hiroyuki Yano

Preparation of tough hydrogels based on β-chitin nanofibers via NaOH treatment

PC-11 K, Omi, T, Furuike, T, Kimura and H, Tamura

Adsorption and desorption behaviors of sodium guaiazulene sulfonate on cross-linked chitosan sponge

PC-12 <u>Yoshiki Ito</u>, Haruki Shimizu, Masahiro Nishihara, Osamu Takashima, Hironori Izawa, Shinsuke Ifuku, Minoru Morimoto, Tomohiro Osaki, Yoshiharu Okamoto, Saburo Minami, Hiroyuki Saimoto

Development of tissue adhesive using carboxymethyl chitin derivatives

PC-13 <u>Chisato Matsumoto</u>, Masahiro Wada, Shinsuke Ifuku, Hironori Izawa, Minoru Morimoto, Hiroyuki Saimoto

Preparation of highly regioselective chitosan derivatives via "click chemistry"

PC-14 Thanh-Sang Vo, Se-Kwon Kim

Protective effect of chitin oligosaccharides against lipopolysaccharide-induced inflammatory response in BV-2 microglia

PC-15 Mustafa Zafer Karagozlu, Fatih Karadeniz

Anti-HIV activity of Novel Synthetic Tri-peptide Conjugated Chitosan Oligosaccharides

PC-16 Ratana Rujiravanit, <u>Seiichi Tokura</u>, Kumiko Nishizawa, Fuji Kodera and Yasumitsu Uraki

Preparation of Variously Solvated Chitins from Ethanol Solvated Chitin

Session E: Enzymology

PE-01 Norie Sonoda

Analysis of genes coding for chitinolytic enzymes in the bacterium, *Chitiniphilus shinanonensis*— Development of gene disruption byan allelic exchange system —

PE-02 Moe Nakano

Analysis of genes cording for chitinolytic enzymes in the bacterium, *Chitiniphilus Shinanonensis* — *chiG*, *chiJ*, and *chiK* coding for unique chitin-degrading enzymes —

PE-03 Satoru Nirasawa, Saori Takahashi

Characterization of the cellobiose 2-epimerase from the D-aspartic acid specific endopeptidase-producing bacteria, *Paenibacillus* sp. B38

PE-04 <u>Wataru Tsukimura</u>, Keisuke Saito, Fumiya Uni, Leilei Zhu, Norihiko Ito, Rie Yatsunami, Toshiaki Fukui, Ulrich Schwaneberg, Satoshi Nakamura

Improvement of specific activity of GH family 18 chitinase from alkaliphilic *Bacillus* sp. J813 by directed evolution

PE-05 <u>Katsushiro Miyamoto</u>, Maya Hasegawa, Ryoko Inada, Kenta Kitamura, Yutaka Yamamoto, Takahiro Tsuchiya, Hiroshi Tsujibo

Analysis of the novel proteins involved in the chitinolytic system of *Pseudoalteromonas* piscicida strain O-7

PE-06 <u>Ippei Kuwata</u>, Seiko Muraoka, Takeshi Seguchi, Hiromasa Inoue, Hirotoshi Endo, Michio Suzuki, Hiromichi Nagasawa, Shohei Sakuda

Studies on the target molecules of allosamidins in their anti-asthmatic activity

PE-07 <u>Kinuka Toyama</u>, Koichi Sakagami, Zhang Yang, An Ran, Motoaki Sato, Keita Orishimo, Yoshinobu Hatori, Rie Yatsunami, Tomonori Takashina, Toshiaki Fukui, Satoshi Nakamura

Characterization of a haloarchaeal chitinase: Effect of aspartates, glutamates and lysines on its protein surface

PE-08 Shotaro Honda, Yasusato Sugahara, Fumitaka Oyama, Masayoshi Sakaguchi

Expression in *Escherichia coli* and characterization of two chitinases from *Listeria innocua*

PE-09 Takeshi Shioyama

Cloning and heterologous expression of chitinase gene from the *Eisenia fetida*.

PE-10 Keiko Kawasaki

Cloning of CMCase from *Bellamya chinensis laeta*.

PE-11 Tamotsu Kanai, Naoya Takahashi, Ayumi Horiuchi, Haruyuki Atomi

Genetic engineering of the chitin-degradation pathway of the hyperthermophilic archaeon, *Thermococcus kodakarensis*

PE-12 <u>Kazuaki Okawa</u>, Akinori Kashimura, Kotarou Ishikawa, Yuta Kida, Kokoro Iwabuchi, Yudai Matsushima, Masayoshi Sakaguchi, Yasusato Sugahara, Fumitaka Oyama

Expression of mouse acidic mammalian chitinase in the periplasmic space fraction of *Escherichia coli*

PE-13 Akinori Kashimura, Kazuaki Okawa, Kotarou Ishikawa, Yuta Kida, Kokoro Iwabuchi, Yudai Matsushima, Masayoshi Sakaguchi, Yasusato Sugahara, Fumitaka Oyama

Characterization of *Escherichia coli*-expressed mouse acidic mammalian chitinase

PE-14 <u>Kotarou Ishikawa</u>, Akinori Kashimura, Kazuaki Okawa, Yuta Kida, Kokoro Iwabuchi, Yudai Matsushima, Masayoshi Sakaguchi, Yasusato Sugahara, Fumitaka Oyama

Mouse acidic mammalian chitinase expressed in *Escherichia coli* possesses chitinase functions comparable to CHO-expressed protein

PE-15 <u>Hayuki Sugimoto</u>, Keita Nakamura, Yuji Nishino, Akiko Fujinuma, Hiroki Watanabe, Takayuki Uchihashi, Toshio Ando, Kiyohiko Igarashi, Masahisa Wada, Masahiro Samejima, Kazushi Suzuki, Takeshi Watanabe

Studies on mechanism of crystalline chitin hydrolysis by *Serratia marcescens* chitinase B using high-speed atomic force microscopy

PE-16 Hiroaki Fukuhara, Akihiro Ito, Takao Arimori, Masami Nakazawa, Tatsuji Sakamoto, Shinichi Akazawa, Taro Tamada, Kuniyo Inouye, Mitsuhiro Ueda

Cloning and expression of endo-1,4-beta-glucanase from Eisenia fetida

PE-17 Naoyuki Umemoto, Yuka Kanda, Takayuki Ohnuma, Tomoyuki Numata, Toki Taira, Tamo Fukamizo

Structure and Function of a class V chitinase with high transglycosylation activity from cycad, *Cycas revoluta*.

PE-18 Yuya Kawaguchi, Kazunari Yoneda, Tomohiro Araki

Comparison of the amino acids with carboxylic gloup on the catalytic site of c, g, and i- type of lysozymes

PE-19 <u>Shoko Takenaka</u>, Katsuaki Hirano, Kiyohiko Seki, Masaru Mitsutomi, Takayuki Ohnuma, Tamo Fukamizo

Interaction of partially *N*-acetylated chitooligosaccharides with a family GH 19 chitinase from moss *Bryum coronatum*

PE-20 Teruhisa Suzuki, Hiromi Kakizaki, Mana Ikeda, Masahiro Matsumiya

Mlolecular cloning of a novel chitinase gene from the stomach of the blue shark *Prionace glauca* (Chondrichthyes)

PE-21 Naoya Fujitani, Hirotaka Hasegawa, Hiromi Kakizaki, Mana Ikeda,

Masahiro Matsumiya

Molecular cloning of multiple chitinase genes in swimming crab *Portunus trituberculatus*

PE-22 <u>Mana Ikeda,</u> Daisuke Shirase, Takuya Sato, Mika Ueda, Shinichi Hirabayashi, Masahiro Matsumiya

Primary structure and enzymatic properties of chitinase isozymes purified from the stomach of the Marbled rockfish *Sebastiscus marmoratus*

PE-23 Hiromi Kakizaki, Kaneyuki Hamaguchi, Mana Ikeda, Masahiro Matsumiya

cDNA cloning of a novel chitinase from the stomach of Coelacanth *Latimeria chalumnae* (Sarcopterygii)

PE-24 Tomohiro Ogino, Hirotaka Tabata, Mana Ikeda, Masahiro Matsumiya

Purification and characterization of a chitinase from the salivary gland of the common octopus *Octopus vulgaris*

PE-25 Ryo Nshino, Akiyoshi Suyama, Mana Ikeda, Hiromi Kakizaki, Masahiro Matsumiya

Purification, characterisaiton, and cDNA cloning of a chitinase from the liver of Golden cuttlefish *Sepia esculenta*

PE-26 <u>Shoko Shinya</u>, Takayuki Ohnuma, Reina Yamashiro, Padmanabhan Anbazhagan, André Juffer, Hisashi Kimoto, Hideo Kusaoke, Tamo Fukamizo

Binding mode of chitosan oligosaccharides to novel chitosan-specific carbohydrate-binding modules (CBM32) of a chitosanase from *Paenibacillus* sp. IK-5

PE-27 <u>Kaori Kondo</u>, Naoyuki Umemoto, Takayuki Ohnuma, Tomoyuki Numata, Tamo Fukamizo

Complete subsite mapping of a "loopful" GH19 chitinase from rye seeds based on the crystal structure

PE-28 Noboru Fujinami, Mana Ikeda, Kouji Miyauchi, Masahiro Matsumiya

Purification and characterization of lysozyme from Black lined limpet Cellana nigrolineata

PE-29 <u>Tomoyo Nishihira</u>, Takayuki Ohnuma, Ken Tokuyasu, Makoto Ogata, Taichi Usui, Tamo Fukamizo

A novel chitosanase inhibitor derived from 4-O-β-tri-N-acetylchitotriosyl moranoline

PE-30 Yuta Nakagawa, Ryo Ogita, Takashi Kuroiwa, Akihiko Kanazawa

Immobilization and stabilization of chitosanase using a magnetic composite gel consisting of agar and magnetite nanoparticles

PE-31 Yusuke Yamanouchi

Cloning and expression of alpha-amylase from Eisenia fetida

PE-32 <u>Yoshihito Kitaoku</u>, Takayuki Ohnuma, Toki Taira, Tamo Fukamizo

A family GH 18 chitinase containing LysM domain from *Equisetum arvense*: role of LysM domain in the enzymatic activity

PE-33 <u>Kazushi Suzuki</u>, Naomi Sasaki, Chisana Ogawa, Mari Shimizu, Shinya Takano, Hayuki Sugimoto, Takeshi Watanabe

Regulation of chitin degradation and utilization system by ChiX small RNA in *Serratia marcescens*

PE-34 Paknisa Sirimontree, Wipa Suginta

Inhibitory effects of sodium derivatives on the hydrolytic activity of family-18 chitinase A and family-20 β -N-acetyl-glucosaminidase from *Vibrio harveyi*

PE-35 **Jeng-Ywan Shih, Jeen-Kuan Chen, Yu-Sheng Hsieh, Chia-Rui Shen, <u>Chao-Lin Liu</u> Chitinasome Analysis with Cover-stainning Assay**

PE-36 <u>Akihiro Saito</u>, Masayo Tomita, Ayami Kikuchi, Mariko Kobayashi, Masashi Yamaguchi, Shinsuke Ifuku, Akikazu Ando

Characterization of antifungal activity of the GH-46 subclass III chitosanase from *Bacillus circulans* MH-K1

PE-37 Miquel Gimeno

Enzymatic grafting of gallate ester onto chitosan: evaluation of antioxidant and antibacterial activities

^{*}Titles and authors listed in this program are basically based on online application information.