Cotober 11, 2019, 13:30–15:06 (Room 323)

Chair: Bong Hyun Sung (KRIBB)

S641 13:30-13:42

Metabolic Perturbations in Mutants of Glucose Transporters and their Applications in Metabolite Production in *Escherichia coli*

Hwi-Min JUNG¹, Dae-Kyun IM¹, Gyoo Yeol JUNG², Min-Kyu OH¹

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S642 13:42-13:54

Strategies to Improve D-Galacturonic Acid Fermentation by Engineered Saccharomyces cerevisiae

Deokyeol JEONG¹, Suji YE², Heeyoung PARK¹, Soo Rin KIM^{1,2}

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S643 13:54-14:06

Stable and Tunable Maintenance of Multi-copy Plasmid by Antibiotics-free Auxotrophic Control in *Escherichia coli*

<u>Chae Won KANG¹</u>, Hyun Gyu LIM¹, Jina YANG², Myung Hyun NOH¹, Sang Woo SEO², Gyoo Yeol JUNG^{1,3}

¹Department of Chemical Engineering, Pohang University of Science and Technology, Pohang, Korea, ²School of Chemical and Biological Engineering, Institute of Chemical Process, Seoul National University, Seoul, Korea, ³School of Interdisciplinary Bioscience and Bioengineering, Pohang University of Science and Technology, Pohang, Korea

S644 14:06-14:18

Enhanced Production of Bacterial Cellulose in Recombinant *Komagataeibacter xylinus* Using Novel Fine-tunable Expression System Dong Hoon HUR¹. Ki Jun JEONG^{1,2}

¹Department of Chemical and Biomolecular Engineering, BK21 Plus program, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea, ²Institute for the BioCentury, KAIST, Daejeon, Korea

S645 14:18-14:30

Rationally Engineered *E. coli* for GABA Production with 13C MFA <u>Daekyun IM</u>, Boncheol GU, Min-kyu OH

Department of Chemical and Biological Engineering, Korea University, Seoul, Korea

S646 14:30-14:42

Enhanced Production of Poly-3-hydroxybutyrate (PHB) by Expression of Response Regulator DR1558 in Recombinant *Escherichia coli* Sung-ho PARK, Jong-il CHOI

Department of Biotechnology and Bioengineering, Interdisciplinary Program for Bioenergy & Biomaterials, Chonnam National University, Gwangju, Korea

[S6-4] 부문위원회 및 학생세션 IV: Engineered Microorganisms for Value-Added Chemicals

S647 14:42-14:54

Biosynthesis of Poly(3-hydroxybutyrate) and Poly(3-hydroxybutyrate-*co*-lactate) in Recombinant *Escherichia coli* Strains from Sucrose

<u>Yu Jung SOHN</u>¹, Kei-Anne BARITUGO¹, Hee Taek KIM², Jeong Chan JOO², Sang Yup LEE³, Si Jae PARK¹

¹Division of Chemical Engineering and Materials Science, Ewha Womans University, Seoul, Korea, ²Center for Bio-based Chemistry, Division of Convergence Chemistry, Korea Research Institute of Chemical Technology, Daejeon, Korea, ³Metabolic and Biomolecular Engineering National Research Laboratory, Department of Chemical and Biomolecular Engineering (BK21 plus program), Institute for the BioCentury, KAIST, Daejeon, Korea

S648 14:54-15:06

Enhanced Production of 2,3-Butanediol in Recombinant *Escherichia coli* Using Response Regulator DR1558 Derived from *Deinococcus radiodurans* Seongju PARK¹, Jongil CHOI²

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