

2019年度 BCOJ年次大会プログラム

開催日時 : 2019年11月 14日(木) 13:00～ 年次大会 (受付時間12:00～15:20)
(17:30～懇親会)

11月 15日(金) 9:30～ 年次大会 (受付時間 9:10～11:40)

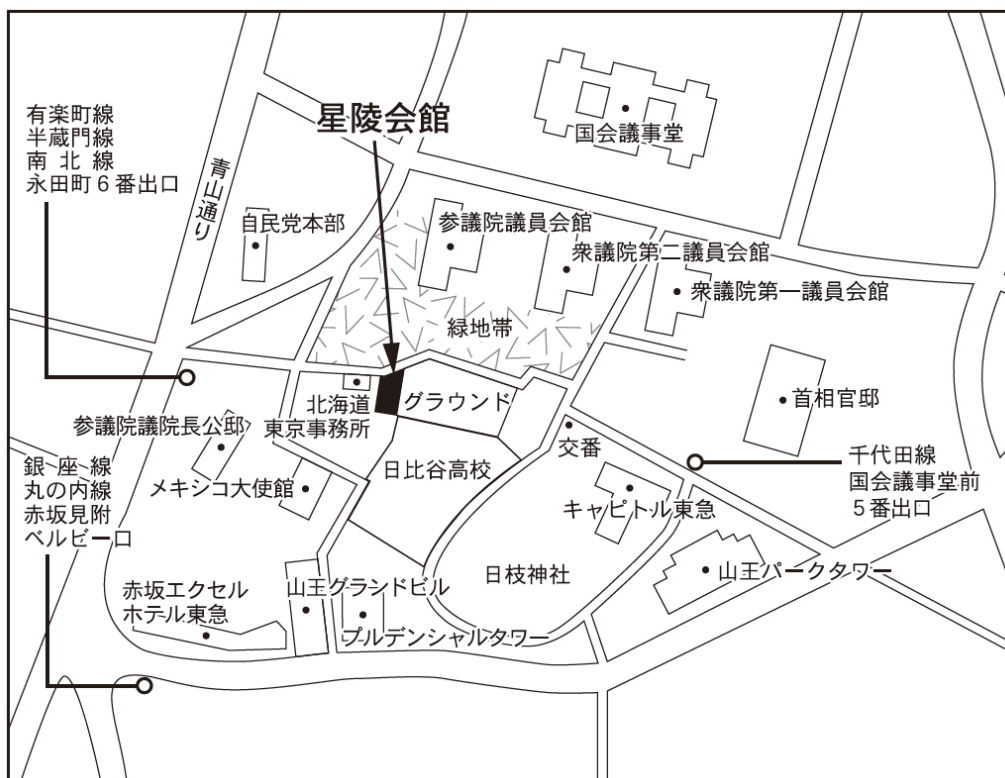
大会会場 : 星陵会館 (東京都千代田区永田町2-16-2 都立日比谷高等学校隣)
電話 03-3581-5650

懇親会会場 : 『ホテルルポール麹町』 (東京都千代田区平河町2-4-3)
電話 03-3265-5361

交通 :

- | | | |
|-----------------------|--------------------------|------|
| (1)東京メトロ有楽町線・半蔵門線・南北線 | 永田町駅下車(出口6) | 徒歩3分 |
| (2)東京メトロ千代田線 | 国会議事堂前駅下車(出口5) | 徒歩5分 |
| (3)東京メトロ南北線 | 溜池山王駅下車
(国会議事堂前駅5番出口) | 徒歩5分 |
| (4)東京メトロ銀座線・丸の内線 | 赤坂見附駅下車 | 徒歩7分 |

* 赤坂見附駅からは急な上り坂があるため、永田町又は国会議事堂前駅出口がお勧めです。



ビール酒造組合国際技術委員会
(Brewery Convention of Japan)
東京都中央区銀座1-16-7
TEL 03 (3561) 8386

懇親会会場までの地図

星陵会館から徒歩約10分



The 29th Annual Meeting

Brewery Convention of Japan 2019

Date and time : Thursday 14 November 2018, 13:00~ Meeting (Registration 12:00-15:20)
(17:30 ~ Mixer)

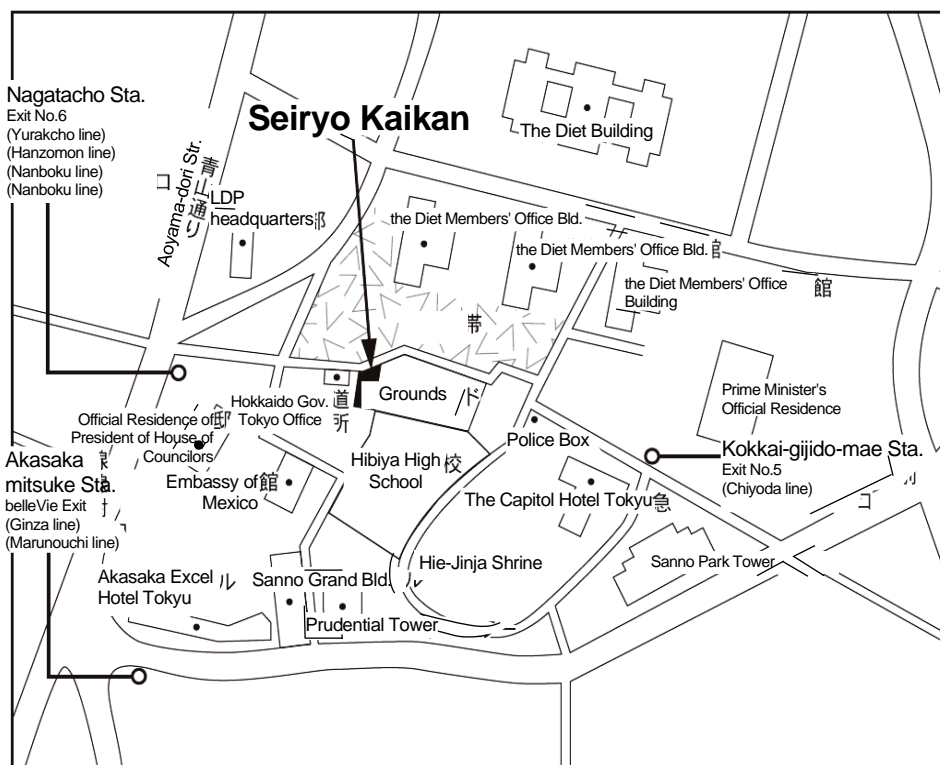
Friday 15 November 2018, 9:30~ Meeting (Registration 9:10-11:40)

Congress Venue : Seiryō-Kaikan (2-16-2, Nagata-cho, Chiyoda-ku, Tokyo) TEL 03(3581)5650

- Reception Desk : Entrance Area (1F)
- Oral Presentation : Hall
- Poster Presentation : Meeting Room on 3F & 4F

Travel Information :

<Subway>	<Station>	<On foot>
Yurakucho-Line	Nagata-cho (Exit No.6)	3min
Hanzomon-Line	Nagata-cho (Exit No.6)	3min
Nanboku-Line	Nagata-cho (Exit No.6)	3min
Nanboku-Line	Tameike-sanno (Kokkaigijidou-mae Exit No.5)	5min
Chiyoda-Line	Kokkaigijidou-mae (Exit No.5)	5min
Ginza-Line	Akasaka-mitsuke	7min
Marunouchi-Line	Akasaka-mitsuke	7min



Brewery Convention of Japan
1-16-7 Ginza, Chuo-ku, Tokyo
TEL 03 (3561) 8386

プログラム (Program)

< 1日目 ・ November 14 >

13:00～

◆ オープニングセッション (Opening Section)

座長: 脇平委員 (Moderator: T. Wakihira, Asahi Breweries, Limited)

◇ 開会の辞 (Opening Address)

井戸田議長 (Y. Idota, President of BCOJ, KIRIN Company, Limited)

◇ 活動報告 (Annual Activities)

井戸田議長 (Y. Idota, President of BCOJ, KIRIN Company, Limited)

鈴木分析委員長 (K. Suzuki, Chairman of Analysis Committee of BCOJ, Asahi Breweries, Limited)

熊谷プログラム委員長 (T. Kumagai, Chairman of Program Committee of BCOJ, SUNTORY BEER LIMITED)

13:30～14:00

◇ ASBC議長挨拶 (President of ASBC)

『 Secondary Refermentation: The Often Forgotten Fountain of Youth. 』
(Mr. Scott J. Britton, President of ASBC)

14:00～14:10

< 休憩 (Break) >

14:10～

◆ セッション 1 (Oral Presentation Section 1)

座長: 朝田委員 (Moderator: K. Asada, Sapporo Breweries Ltd.)

14:10～14:40

(O-1) Effect of harvest time on polyphenol profiles of Saaz hops and beer taste.

Takeshi Kumagai, Takako Inui, Takamasa Hasegawa, Taichi Maruhashi, Akira Kogin and Seisuke Takaoka

Beer Development Department, SUNTORY BEER LIMITED

14:40～15:05

(O-2) Behavior of hop-derived volatile thiols during the harvest period in European and American flavor hops

Mitsuhiro Uemoto¹, Kiyoshi Takoi², Koji Takazumi³, Kensuke Ogushi¹ and Narushi Suda¹

¹ Bioresources Research & Development Department, ² Product & Technology Innovation Department, SAPPORO BREWERIES LTD. ³ Frontier Laboratories for Value Creation, SAPPORO HOLDINGS LTD.

15:05～15:20

< 休憩 (Break) >

15:20～15:45

◆ BCOJ功績賞授賞式 (BCOJ Contribution Award Ceremony)

15:45～17:05

◆ 招待講演 (Invited Lecture)

座長: 竹村委員 (Moderator: H. Takemura, Kirin Company, Limited)

『僕はミドリムシで世界を救うことに決めました。』

Mitsuru Izumo

CEO, euglena Co., Ltd

出雲 充 株式会社 ユーグレナ 代表取締役社長

17:30～19:00

◆ 懇親会 (Mixer)

< 2日目 ・ November 15 >

9:30～ ◆ **ポスター紹介・発表 (Poster introduction and presentation)**
座長: 竹村委員 (Moderator: H. Takemura, Kirin Company, Limited)

9:30～10:15 ◆ **ポスター紹介 (Poster Introduction)**

Section 1: Microorganisms (P1~P3)

Section 2: Ingredients and sensory evaluation (P4~P9)

Section 3: Hop (P10~14)

Section 4: Brewing and production technology (P15~19)

Section 5: Analysis technology (P20~23)

10:15～11:40 ◆ **ポスター発表 (Poster Presentation)**

Section 1: Microorganisms (P-1~P-3) Room : E (4th floor)

(P-1) Study of beer-spoilage *Lactobacillus nagelii* harboring hop resistance gene *horA*

Minami Umegatani, Nobuchika Takesue, Shizuka Asano, Hideyo Tadami and Kazuhiko Uemura
Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.

(P-2) Growth characteristics of beer spoilage *Lactobacillus curtus* and development of its detection medium

Ken-ichi Okumura, Minami Umegatani, Nobuchika Takesue, Shizuka Asano, Hideyo Tadami and Kazuhiko Uemura
Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.

(P-3) Optimized methods for testing brewery hygiene using EZ-Fluo™ Rapid Detection System

Maika Kitazawa, Ken-ichi Okumura, Minami Umegatani, Nobuchika Takesue, Shizuka Asano, Hideyo Tadami and Kazuhiko Uemura
Research Laboratories for Alcoholic Beverages, Asahi Breweries, Ltd.

Section 2: Ingredients and sensory evaluation (P-4~P-9) Room : 4A/4B (4th floor)

(P-4) A new methodology for dynamic "easiness to drink" with Temporal Dominance of Sensations (TDS) - good *kire* (crispness) of beer leading to easiness of drinking

Seiko Miyashita, Takahiro Wakihira, Minoru Kobayashi and Kazuhiko Uemura
Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.

(P-5) Taste properties affecting beer of polyphenols derived from herbs and spices

Shunji Fujioka and Takako Inui
Beer Development Department, SUNTORY BEER LIMITED

(P-6) Sensory impact of ester-rich special beer via retronasal aroma analysis

Kazuki Maruyama¹, Atsushi Tanigawa², Shigeki Araki¹ and Takashi Inoue¹

¹Foodtechnology Laboratories for Value Creation, SAPPORO HOLDINGS LTD. ²Product & Technology Innovation Department, SAPPORO BREWERIES LTD.

(P-7) Development of a “peptide” modification technology for improving the mouthfeel of beer

Masaru Kato¹, Aiko Hiromasa¹, Mayura Mochizuki¹, Takumi Sugiyama¹, Toshihiro Kamada¹, Naho Takemura¹, Satoshi Ikeda³, Takashi Suda³, Toshinori Sasaki², Yuko Fukushima² and Takeo Imai¹

¹Research Laboratories for Alcoholic Beverage Technologies, ²Central Laboratories for Key Technologies, Kirin Co., Ltd., ³Laboratory for New Product Development, Kirin Brewery Co., Ltd.

(P-8) Modification of beer aftertaste by controlling maltodextrin branch level

Mayura Mochizuki, Takumi Sugiyama, Aiko Hiromasa, Kei Sudo, Naho Takemura and Masaru Kato
Research Laboratories for Alcoholic Beverage Technologies, Kirin holdings Co., Ltd.

(P-9) Suppression of citrus deterioration odor by ingredients contained in a lemon liqueur

Naoya Chiba¹, Kentaro Iwasaki², Makiko Nakashima¹ and Hiroyuki Moriki¹

¹Research Laboratories for Alcoholic Beverage Technologies, Kirin holdings Co., Ltd. ²Research & Development Planning Department, Kirin holdings Co., Ltd.

Section 3: Hop (P-10~P-14) Room : F (4th floor)

(P-10) Comprehensive analysis of polyfunctional thiols in a new flavor hop Mosaic by thiol-specific extraction with selectable 1D/2D/3D GC-SCD/Q-TOF-MS.

Koji Takazumi¹, Kikuo Sasamoto², Nobuo Ochiai², Takeshi Kaneko¹ and Youichi Tsuchiya¹

¹Frontier Laboratories for Value Creation, SAPPORO HOLDINGS LTD. ²GERSTEL K.K.

(P-11) Unique varietal aroma of the ‘SORACHI ACE’ hop

~Effects of the coexistence of geranic acid and other hop-derived compounds on the varietal aromas~

Ayako Sanekata¹, Atsushi Tanigawa², Kiyoshi Takoi², Mitsuhiro Uemoto³, Takeshi Kaneko¹, Youichi Tsuchiya¹

¹Frontier Laboratories for Value Creation, SAPPORO HOLDINGS LTD. ²Product & Technology Innovation Department, SAPPORO BREWERIES LTD., ³Bioresources Research & Development Department, SAPPORO BREWERIES LTD.

(P-12) Analysis of hop aroma components after fermentation based on close genetic background

Tetsu Sugimura¹, Klaus Kammhuber², Anton Lutz², Elisabeth Seigner², Martina Gastl³ and Thomas Becker³

¹Research Laboratories for Alcoholic Beverage Technologies, Kirin Co., Ltd. ²LfL Bavarian State Research Center for Agriculture, Germany ³Technical University of Munich, Germany

(P-13) Development of novel, matured hop bitter acids that improve cognitive function

Takafumi Fukuda¹, Tatsuhiro Ayabe¹, Kuniaki Obara¹, Satoshi Umeda² and Yasuhisa Ano¹

¹Research Laboratories for Health Science & Food Technologies, Kirin Holdings Co. Ltd., ²Department of Psychology, Keio University

(P-14) Difference in aroma components of Lupulin powder and pellets using Japanese new hop variety of MURAKAMI SEVEN.

Moe Kura, Tetsu Sugimura, Yumiko Kawasaki, Hideharu Odai, Hironori Inadome, Atsushi Murakami
Research Laboratories for Alcoholic Beverage Technologies, Kirin holdings Co., Ltd.

Section 4: Brewing and production technology (P15~19) Room : 3B (3th floor)

(P-15) Malt Quality Analysis and Novel Enzyme Utilization Technology to Control the Carbohydrate Content of Beer

Maiko Hinode, Keisuke Okada, Minoru Kobayashi and Kazuhiko Uemura
Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.

(P-16) Raw materials including anthocyanins could change the concentration of diacetyl in brewing

Atsushi Tanigawa¹, Takahito Takase², Ayako Sanekata², Kei Asada³, Ichiro Matsumoto¹ and Masahiro Nomura¹

¹Product & Technology Innovation Department, SAPPORO BREWERIES LTD. ²Frontier Laboratories for Value Creation, SAPPORO HOLDINGS LTD. ³Research and Development Institute for Alcoholic Beverages, SAPPORO BREWERIES LTD.

(P-17) Novel ceramic membrane for crossflow filtration of beer

Kohei Watanabe, Takeyuki Fujiwara and Makoto Wakaura
Production Technology Center, Asahi Breweries, Ltd.

(P-18) Efforts to reduce the risk of aromatizing brewing equipment during beer production using fruits and spices

Shota Inoue¹, Shuhei Fukuzawa¹, Yuji Tamaki¹, Takashi Ikeda² and Hitoshi Takemura¹

¹Research Laboratories for Alcoholic Beverage Technologies, Kirin Holdings Co., Ltd. ²Toste Co., Ltd.

(P-19) Process Innovation at Asahi Breweries

-The pursuit of ultimate consistency of quality in Asahi Super Dry -

Yoshinori Ito¹, Shigekuni Noba², Minoru Kobayashi² and Kazuhiko Uemura²

¹Innovation Headquarters, Asahi Breweries, Ltd. ²Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.

Section 5: Analysis technology (P20~23) Room : 3A (3th floor)

(P-20) New insights into indicators for selecting malts which improve beer foam stability

Keisuke Okada, Kumiko Inomoto, Nami Matsumura, Minoru Kobayashi and Kazuhiko Uemura
Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.

(P-21) Investigation of factors affecting beer foam color applying a novel technique using two dimensional colorimeter

Azusa Asai¹, Atsushi Tanigawa², Kiyoshi Takoi², Ryouta Aritomo², Takashi Imure¹, Yoichi Kozaki¹, Masahiro Nomura² and Fumito Ishida¹

¹Research and Development Institute for Alcoholic Beverages, ²Product & Technology Innovation Department, SAPPORO BREWERIES LTD.

(P-22) Relationship between beer foam and surface molecules investigated using sum-frequency spectroscopy

Takayuki Miyamae¹, Haruhito Kato² and Masaru Kato²

¹National Institute of Advanced Industrial Science and Technology, ²Research Laboratories for Alcoholic Beverage Technologies, Kirin Holdings Co. Ltd.

(P-23) Simultaneous determination of hop aroma compounds in Beer Using SPME-GC/MS: 2019 BCOJ Collaborative Work

Miho Sawada¹, Kenya Morita², Koji Suzuki³, Masahito Muro⁴, Toshiaki Aikawa⁵, Takayuki Watanabe⁶ and Yoshitaka Azuma⁷

¹Suntory Beer, Ltd. ²SAPPORO BREWERIES LTD. ³Asahi Quality & Innovations, Ltd. ⁴Kirin Holdings Company, Limited, ⁵Asahi Breweries, Ltd. ⁶SAPPORO HOLDINGS LTD. ⁷Orion Breweries, Ltd.

- 12:40～ ◆ セッション 2 (Oral Presentation Section 2)
座長: 朝田委員 (Moderator: K. Asada, SAPPORO BREWERIES LTD.)
- 12:40～13:05 (O-3) Development of detection medium for genus *Pectinatus* and identification of factors affecting its beer spoilage risks
Nobuchika Takesue, Shizuka Asano, Koji Suzuki, Hideyo Tadami and Kazuhiko Uemura
Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.
- 13:05～13:30 (O-4) Rapid and accurate identification of beer-spoilage microorganisms using nanopore-based sequencing technology that potentially revolutionize the microbiology QC tests in breweries
Yohanes Novi Kurniawan, Yuji Shinohara, Hiroaki Sakai and Koji Suzuki
Food Safety Laboratories, Asahi Quality and Innovations, Ltd.
- 13:30～13:55 (O-5) Factorial Analysis of Variance of the Inhibiting Effects of Iso-Alpha Acid, Alpha Acid, and Sulfur Dioxide on the Growth of Beer-Spoilage Bacteria in Beer
Nobuyuki Hayashi, Ritsuko Arai, Toshiko Minato and Yasuhiro Fujita
Food Safety and Quality Assurance Center, Quality Assurance Department, Kirin Holdings Company, Limited
- 13:55～14:10 < 休憩 (Break) >
- 14:10～ ◆ セッション 2(Oral Presentation Section 2)
座長: 熊谷委員 (Moderator: T. Kumagai, SUNTORY BEER LIMITED)
- 14:10～14:35 (O-6) Copy number change of bottom fermenting yeast contribution to brewing characteristics
Tomoko Takahashi, Tomoko Koyano, Keizou Kusunoki, Taku Kato, Hideyo Tadami and Kazuhiko Uemura
Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd.
- 14:35～15:00 (O-7) Flavor control of nonalcoholic beer using components that affect aftertaste sharpness
Kyosuke Kojima, Kentaro Iwasaki, Yuri Tsutiya, Reko Ota and Hiroyuki Moriki
Research Laboratories for Alcoholic Beverage Technologies, Kirin Holdings Co., Ltd.
- 15:00～15:30 (O-8) Temporal Dominance of Sensations (TDS) paired with dynamic wanting: a new method of sensory evaluation with consumers for a better understanding of beer drinkability
Takahiro Wakihira¹, Seiko Miyashita¹, Minoru Kobayashi¹, Kazuhiko Uemura¹ and Pascal Schlich²
¹Research Laboratories for Alcohol Beverages, Asahi Breweries, Ltd. ²Centre des Sciences du Goût et de l'Alimentation, AgroSup Dijon, CNRS, INRA, Univ. Bourgogne Franche-Comté, F-21000 Dijon, France
- 15:30～ ◆ 閉会の辞 (Closing Address)
熊谷委員長 (T. Kumagai, Chairman of Program Committee of BCOJ, SUNTORY BEER LIMITED)