The 14th Japan-Korea-China
Joint Symposium on Rumen Metabolism and Physiology

October 16-18, 2025

Tokachi Plaza, Obihiro, Japan

Organizers

Japanese Society for Rumen Metabolism and Physiology

Korean Society of Rumen Function Studies

Chinese Society of Animal Nutrition

Scientific Committee

Hiroki Matsui, *Mie University, Japan*

Sangsuk Lee, *Sunchon National University, Korea*

Jiakun Wang, *Zhejiang University, China*

Local Organizing Committee

Chair:

Naoki Fukuma, *Obihiro University of Agriculture and Veterinary Medicine*

Members:

Rintaro Yano, *Obihiro University of Agriculture and Veterinary Medicine*

Takehiro Nishida, *Obihiro University of Agriculture and Veterinary Medicine*

Masaaki Hanada, *Obihiro University of Agriculture and Veterinary Medicine*

Yutaka Uyeno, *Shinshu University*

Satoshi Koike, *Hokkaido University*

SPONSORS

Platinum

- ACE-CLEAN Co., Ltd.
  （株式会社エース・クリーン）

Gold

- SDS Biotech K.K.
  （エス・ディー・エス バイオテック株式会社）
- dsm-firmenich
  （DSM 株式会社）

Silver

- frontier science Co., Ltd.
  （株式会社フロンティア・サイエンス）

Bronze

- MEIJI FEED CO., LTD.
  （明治飼糧株式会社）
- Sasaki cattle & meat suppliers co. Ltd.
  （佐々木畜産株式会社）
- SEIWACOGEN CO., LTD. (VITACOGEN)
  （清和酵源株式会社）

PROGRAM

Thursday, 16 October

Time	*Events*
15:00-21:00	**Registration** (*Assembly Hall, 1st floor*)
18:00-20:00	**Welcome Mixer** (*Assembly Hall, 1st floor*)

Friday, 17 October

Time	*Events*			*Pages*
9:00-	All Conference Venues Open			
9:15-9:45	**Opening Ceremony** (*Rainbow Hall, 2nd floor*) Chairperson: Rintaro Yano (*Japan*)			
	- Opening Remarks by Dr. Naoki Fukuma, *Conference Chair* - Welcome Address by Prof. Hideyuki Nagasawa, *President of Obihiro University of Agriculture and Veterinary Medicine* - Congratulatory Speeches by Prof. Weiyun Zhu, *Nanjing Agricultural University, China* Prof. Sangsuk Lee, *Sunchon National University, Korea* Prof. Hiroki Matsui, *Mie University, Japan*			
9:45-10:55	**Session I** (*Rainbow Hall, 2nd floor*) Chairperson: Jakyeom Seo (*Korea*) and Dengke Hua (*China*)			
9:45-10:25		I-1	***- Invited Lecture -*** **Novel microbiome solutions to mitigate methane emission in cattle** - Leluo Guan, *the University of British Columbia, Canada*	1
10:25-10:40		O-1	**Breed-specific rumen microbiome analysis: comparative study of beef cattle breeds and construction of breed-specific taxonomic classifier** - Ryukseok Kang, *Chung-Ang University, Korea*	6
10:40-10:55		O-2	**Key rumen microbes in sheep facilitate growth by regulating host health homeostasis and rumen fermentation** - Ximei Xie, *China Agricultural University, China*	7

15:00-15:15	O-8	**Subacute Ruminal Acidosis Promotes Virulent LPS Synthesis and Causes Systemic Inflammation in Dairy Cows** - Wen Jiang, *Xinjiang Agricultural University, China*	13
15:15-15:30	O-9	**Characterization of a potential probiotic for young ruminants isolated from the goat rumen and its in vitro ruminal fermentation properties** - Yushu Zhang, *Shinshu University, Japan*	14
15:30-15:45	O-10	**The circadian clock of ruminal polyamine metabolism and its regulation on the aging injury of mammary gland** - Yongkang Zhen, *Yangzhou University, China*	15
15:45-16:45	**Poster Session 1** (*Assembly Hall, 1st floor*) *Core time for odd-numbered posters		
16:45-18:00	**Session IV** (*Rainbow Hall, 2nd floor*) Chairperson: Junhua Liu (*China*) and Hiroto Miura (*Japan*)		
16:45-17:00	O-11	**Impact of Rumen-Protected Soybean Meal on Growth, Rumen Fermentation, and Nitrogen Utilization in Growing Hanwoo Heifers** - Daekyum Yoo, *Pusan National University, Korea*	16
17:00-17:15	O-12	**Utilization of Spent Mushroom Substrate as a Sustainable Roughage Source for Goats** - Jane Camille Crisostomo, *Mie University, Japan*	17
17:15-17:30	O-13	**The Effects of Guanidinoacetic Acid Supplementation in Hanwoo Cows and Bovine Skeletal Muscle-derived Cells Under Heat Stress** - Xue-Cheng Jin, *Konkuk University, Korea*	18
17:30-17:45	O-14	**Maternal beta-hydroxybutyrate during dry period in reprogramming adipose tissue development and metabolic health in offspring-calves** - Rui Wang, *Nanjing Agricultural University, China*	19
17:45-18:00	O-15	**A comparative study on the effects of stimulation strategies for rumen development in lambs** - Tianrong Chen, *Zhejiang University, China*	20
18:30	All Conference Venues Close		
19:00-21:00	**Gala Dinner** (*Hotel Nikko Northland Obihiro*)		

Saturday, 18 October

15:20-17:30	**Special Session for Methane Mitigation** (*Rainbow Hall, 2nd floor*) Chairperson: Satoshi Koike (*Japan*) and Mengzhi Wang (*China*)		
15:20-15:30		**Introduction of the Special Session** - Satoshi Koike, *Hokkaido University, Japan*	
15:30-16:10	S-1	**Cashew Nut Shell Liquid as a Feed Additive Solution for Reducing Methane Emissions** - Masayuki Kishimoto, *SDS Biotech K.K., Japan*	60
16:10-16:50	S-2	**The novel methane mitigating feed additive Bovaer® (3-nitrooxypropanol, 3-NOP) and its use in achieving sustainable ruminant production** - Nicola Walker, *dsm-firmenich, Switzerland*	61
16:50-17:30	S-3	**Development of Steam-Treated Wood-Derived Feed for Sustainable Livestock Production** - Kazuaki Ito, *Obihiro University of Agriculture and Veterinary Medicine, Japan*	62
17:30-17:45	**Closing Ceremony** (*Rainbow Hall, 2nd floor*)		
17:45	Group Photo		
18:30	Shuttle Bus to the farewell party		
19:00-21:00	**Farewell Party** (*Obihiro University of Agriculture and Veterinary Medicine*)		

Poster Presentation List