

Celebration of IAMS 30th anniversary

Workshop on Carbohydrate Research from quantum chemistry and analytical chemistry to glycobiology

Dr. Poe Lecture Hall,
Institute of Atomic and Molecular Sciences, Academia Sinica, Taipei, Taiwan



Program

April 28, 2025

13:00-14:00 Registration

Chair : Chi Kung Ni

14:00-14:10 Opening Remark

Chair : Jer Lai Kuo

14:10-15:00 **Carlito B. Lebrilla** (UC Davis, USA)
Glycomics Methods for probing the cell membrane

15:00-15:50 **Hyun Joo An** (Chungnam University, Korea)
Glycome Characterization of Advanced Biotherapeutics for Optimal Quality and Efficacy

15:50-16:20 Coffee Break

16:20-17:10 **Chun-Hung Lin** (Institute of Biochemistry, AS, Taiwan)
Unusual glycolipids in Helicobacter pylori: Everything concerning the host-microbe interplay

17:10-17:20 Photo

18:00-20:00 Welcome dinner (invited speakers)



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ACADEMIA SINICA



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Chair : Chun-Hung Lin

9:00-9:50	Isabelle Compagnon (Institut Lumière Matière – CNR, France) TBA
9:50-10:40	Jer Lai Kuo (Institute of Atomic and Molecular Sciences, AS, Taiwan) Using Neural Network Potential to assist the exploration of the chemical and physical space of carbohydrates with first-principle accuracy
10:40-11:10	Coffee Break
Chair : Shang-Ting Tsai	
11:10-12:00	Chi Kung Ni (Institute of Atomic and Molecular Sciences, AS, Taiwan) Carbohydrate structure determination using logically derived sequence tandem mass spectrometry
12:00-13:00	Lunch (lunch box at IAMS, all attendees)
Chair : Jer Lai Kuo	
13:00-13:50	Hyun Joo An (Chungnam University, Korea) Glycosylation Dynamics in Brain Function and Disease
13:50-14:40	Chun-Hung Lin (Institute of Biochemistry, AS, Taiwan) Glycolipids in pathogenic microbes: Studies on structure and immuno-modulatory activity relationship
14:40-15:00	Coffee Break
15:00-15:50	Carlito B. Lebrilla (UC Davis, USA) Tools for advancing the glycomics of food
Chair : Chi Kung Ni	
15:50-16:30	Short talks by poster presenters
16:30-18:00	Poster
18:00-20:00	Buffet at IAMS (all attendees)



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Chair : Jer Lai Kuo

9:00-9:50	Kay-Hooi Khoo (Institute of Biochemistry, AS, Taiwan) Sulfoglycomics: Technical Challenges and Biological Insights
9:50-10:30	Chi Kung Ni (Institute of Atomic and Molecular Sciences, AS, Taiwan) Unusual structures of milk free oligosaccharides and N-glycans
10:30-10:50	Coffee Break
Chair : Chi-Kung Ni	
10:50-11:30	Isabelle Compagnon (Institut Lumière Matière – CNR, France) TBA
11:30-12:10	Jer Lai Kuo (Institute of Atomic and Molecular Sciences, AS, Taiwan) Role of Anharmonicity in the vibrational signature of organic functional groups related to carbohydrates
12:10-12:15	Closing Remark
12:15-13:00	Lunch (lunch box at IAMS, all attendees)
13:00-17:30	Excursion
18:00-20:00	Banquet (Invited Speakers)



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