China-Korea Joint Seminar on the Frontiers of Bioenergy Production

Oct 11-13, 2008

Dalian, China

Supported by the National Science Foundation of China (NSFC) and Korea Science and Engineering Foundation (KOSEF)

Korean Participants

1. Dr. Gi Ok Choi, Director of Research Institute, Changhae-Ethanol Co., LTD
2. Prof. Dr. Sung Ok Han, Korea University
3. Prof. Dr. Ingnyol Jin, Kyungpook National University
4. Prof. Dr. Jin-Soo Kim, Seoul National University
5. Prof. Dr. Jun Seok Kim, Kyonggi University
6. Prof. Dr. Keun Kim, the University of Suwon
7. Dr. Sangyong Kim, Korea Institute of Industrial Technology
8. Prof. Dr. Seung Wook Kim, Korea University
9. Prof. Dr. Yong Hwan Kim, Kwangwoon University
10. Prof. Dr. Jinwon Lee, Sogang University
11. Prof. Dr. Sang Yup Lee, Korea Advanced Institute of Science and Technology
12. Prof. Dr. Don-Hee Park, Chonnam National University.
13. Dr. Byoung-In Sang, Korea Institute of Science and Technology

Chinese Participants

1. Prof. Dr. Fengwu Bai, Dalian University of Technology
2, Prof. Dr. Xiaoming Bao, Shandong University.
3. Associate Prof. Dr. Xiuping He, principle research scientist, Institute of Microbiology, CAS
4. Prof. Dr. Ning Jiang, Institute of Microbiology, Chinese Academic of Sciences (CAS)
5. Prof. Dr. Yin Li, director for Center of Bioenergy and Industrial Biotechnology, Institute of Microbiology, CAS
6. Prof. Dr. Chunchao Liu, director of National Key Laboratory of Biochemical Engineering, Institute of Process Engineering, CAS
7. Prof. Dr. Dehua Liu, Tsinghua University
8. Associate Prof. Dr. Jianping Liu, Fudan University,
9, Prof. Dr. Dongzhi Wei, East China University of Science and Technology
10, Prof. Dr. Zhilong Xiu, Dalian University of Technology
11, Prof. Dr. Qing Yang, Dalian University of Technology
12. Prof. Dr. Wei Zhang, Dalian Institute of Chemical Physics, CAS
13, Associate Prof. Dr. Xinqing Zhao, Dalian University of Technology
14. Prof. Dr. Xueming Zhao, Tianjin University
15. Prof. Dr. Zhongbao Zhao, Dalian Institute of Chemical Physics, CAS.

Program

October 10, 2008

Hotel Checking-in and Registration.

October 11, 2008

9:00 am -9:15 am: Welcome Address and Introduction.

9:15 am- 5:20 pm: Invited Talks (Lunch Break, 1:00 pm -2:00 pm)

Session I : New trends and process optimization for bioenergy production

1, Prof. Dr. Dehua Liu, Integrated production for biodiesel and PDO with lipase-catalyzed transesterification and fermentation (9:15 am-9:40 am)

2, Prof. Dr. Seung Wook Kim, Biodiesel production by enzymatic process (9:40 am-10:05 am)

3, Prof. Dr. Zhilong Xiu, Integrated process of biodiesel and 1, 3-propanediol production (10:05 am to 10:30 am)

4, Dr. Sangyong Kim, Improving enzymatic biodiesel production through the prevention of enzymatic activity inhibition (10:30 am-10:55 am)

Coffee break (10:55 am-11:15 am)

5, Prof. Dr. Zongbao Zhao, BM2BD: Toward a sustainable biodiesel industry (11:15 am-11:40 am)

6, Prof. Dr. Don-Hee Park, Improving techniques of adjusting quality by blending biodiesels with different fatty acid contents (11:40 am-12:05 am)

7, Prof. Dr. Wei Zhang, Microalgal biofuel: Where are we? (12:05 am-12:30 am)

Lunch Break (12:30 am-1:50 pm)

8, Prof. Dr. Fengwu Bai, Optimization of medium and process parameters for the production of inulinase from *Kluyveromyces marxianus* Y1 (1:50 pm-2:15 pm)

9, Dr. Byoung-In Sang, Stable butanol production by immobilized *Clostridium beijerinckii* NCIMB 8052 in a membrane-extractive fermentor (2:15 pm-2:40 pm)

10, Prof. Dr. Yin Li, Proteomics tool to explore butanol production (2:40 pm-3:05 pm)

11, Prof. Dr. Yong Hwan Kim Detoxification of phenolic compounds in lignocellulosic hydrolysates with peroxidase for microbial butanol production (3:05 pm-3:30 pm)

Coffee break (3:30 pm-3:50 pm)

12, Prof. Dr. Jun Seok Kim, The characteristics of pretreatment and hydrolysis of rice straw by ammonia percolation (3:50 pm-4:15 pm)

13, Dr. Gi Ok Choi, Batch and repeated batch production of bioethanol from cassava mash by *Saccharomyces cerevisiae* CHFY0321 (4:15 pm-4:40 pm)

14, Prof. Dr. Chunzhao Liu, Sweet sorghum: A promising crop for bioethanol (4:40 pm-5:05 pm)

Short Break 5:05 pm-5:20 pm

5:20 pm: A trip will be organized to visit the labs in Dalian University of Technology and Dalian Institute of Chemistry & Physics.

Dinner (7:00 pm-9:00 pm).

October 12, 2008

9:00 am- 5:30 pm: Invited Talks (Lunch Break, 12:30-1:40 pm)

Session II: Strain improvement for biofuel production

15, Prof. Dr. Jin-Soo Kim, Strain improvement via genome-wide perturbation of gene expression using combinatorial libraries of zinc finger transcription factors (9:00 am-9:25 am)

16, Prof. Dr. Xueming Zhao, Harnessing the power of metabolic engineering and synthetic biology for biofuels (9:25 am-9:50 am)

17, Prof. Dr. Sang Yup Lee, Production of chemicals, fuels, and materials by systems metabolic engineering (9:50 am-10:15 am)

18, Assoc. Prof. Dr. Xiuping He, Systematic improvement of multiple-stress tolerance of industrial ethanologenic yeast (10:15 am-10:40 am)

Coffee Break (10:40 am-11:00 am)

19, Prof. Dr. Jin, Ingnyol, The surprising tolerance of *Saccharomyces cerevisiae* KNU5377 cells against high temperature, high concentrations of ethanol, sulfuric acid environment, and oxidatives stress (11:00 am-11:25 am)

20, Prof. Dr. Jianping Liu, The Inulinase gene of *Kluyveromyces cicerisporus* and its application in biotechnology (11:25 am-11:50 am)

21, Prof. Dr. Jinwon Lee, Metabolic effects of pyruvate decarbxylase and alcohol dehydrogenase in *Escherichia coli* (11:50 am-12: 15 am)

Lunch Break (12:15 am-1:40 pm)

22, Prof. Dr. Sung Ok Han, Utilization of lignocellulosic biomass for ethanol production by using genetically engineered cellulose complex called "mini-cellulosomes" in fermentative microbes (1:40 pm-2:05 pm)

23, Prof. Dr. Keun Kim, Construction of efficient yeast strains producing bioethanol using various genetic methods (2:05 pm-2:30 pm)

24, Prof. Dr. Xiaoming Bao, Research on developing the engineered *Saccharomyces cerevisiae* strains to convert the sugers from lignocellulosic materials to ethanol (2:30 pm-2:55 pm)

Coffee Break (2:55 pm-3:20 pm)

25, Prof. Dr. Qing Yang, Exploring novel enzymes from insects (3:20 pm-3:45 pm)

26, Prof. Dr. Xinqing Zhao, Ethanol tolerance of self-flocculating yeast: mechanisms study and development of fermentation strategy (3:45 pm-4:10 pm)

27, Prof. Dongzhi Wei, Biocatalysis and biotransformation facing bio-based chemicals and bioenergy (4:10 pm-4:35 pm)

28, Prof. Ning Jiang, Improvement of acetic acid and furfural tolerance of *Pichia stipitis* by evolution engineering (4:35 pm- 5:00 pm)

Dinner (7:00 pm-9 pm).

October 13, 2008

9:00 am-11 am: Discussion on Future Collaboration and Concluding Remarks

Hotel Checking-out and Close of the Joint Seminar