

# INTERNATIONAL COLLABORATIVE RESEARCH AND DEVELOPMENT ON BIOMASS ENERGY AT THE UNIVERSITY OF BRITISH COLUMBIA

X. Tony Bi

China-Canada Joint Centre for  
BioEnergy Research and Innovation (C-CJCBERI)



**BIOCLEANTECH**  
FORUM

NOVEMBER 1-3, 2016 | OTTAWA, CANADA

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# UBC Biomass Energy Research Leaders



**Jack Saddler**

- Professor, Wood Science
- NSERC Industrial Chair
- Task Leader, IEA
- Fellow of RSC



**John Grace**

- Professor Emeritus, Chemical and Biological Engineering
- Fellow of RSC, CAE
- Order of Canada



**Roland Clift**

- Adjunct Professor, Chemical and biological Engineering
- Fellow of RAE
- CBE



**Tony Bi**

- Professor, Chemical and Biological Engineering
- Director, China-Canada Joint Bioenergy Centre
- Fellow of CAE



**Kevin Smith**

- Professor, Chemical and Biological Engineering
- Coordinator, KIST-UBC Joint Research Program



**Shahab Sokhansanj**

- Adjunct Professor, Chemical and Biological Engineering
- Distinguished Scientist Oakridge National Lab



# ICONIC UBC STRENGTH – INFRASTRUCTURE INVESTMENT

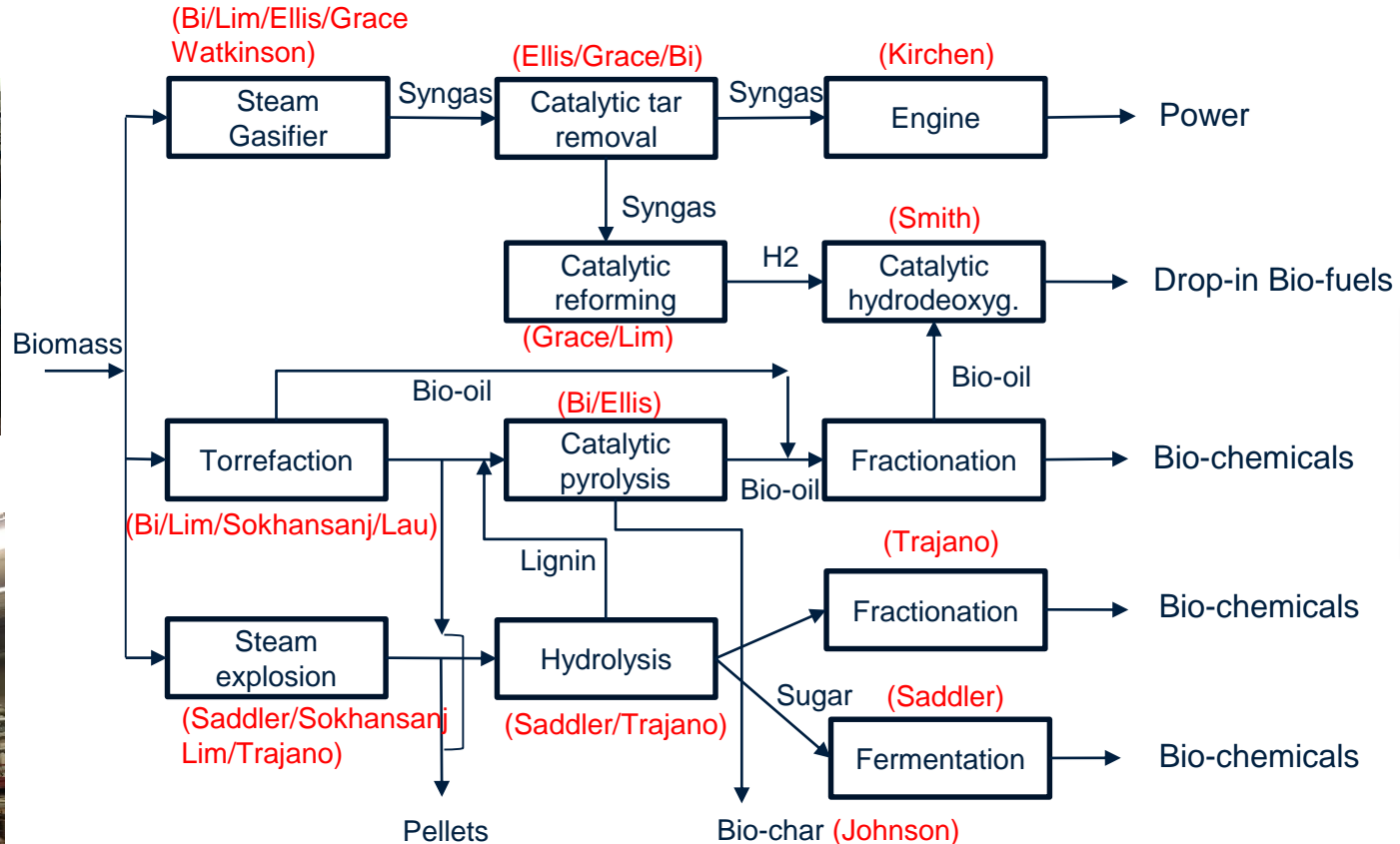




# GLOBAL RESEARCH PARTNERSHIPS



# Key research projects on bioenergy conversion at UBC



# UBC Bioenergy Research Collaboration



- **A hub of bioenergy research**
  - Clean Energy Research Centre
  - Institute of Forest Bioproducts
  - Michael Smith Biotechnology Laboratory
  - Bioenergy Research and Demonstration Facility
  - FPInnovations
  - National Research Council
  - BC Bioenergy Network
  - NSERC BioFuel Network
- **A centre for international bioenergy collaboration**
  - UBC-Fraunhofer Institute (Germany) collaboration
  - UBC-Boeing (USA) collaboration
  - UBC-KIST (Korea) collaboration
  - UBC-Univ. of Tokyo (Japan) collaboration
  - UBC-Chinese universities and Institutes





# China-Canada Joint Centre for BioEnergy Research and Innovation (C-CJCBERI)

## MISSION

**To promote China-Canada collaboration on bioenergy research and innovation by providing a platform to foster scientific research, technology development, maturation, demonstration and commercialization in both countries.**

- **jointly tackle scientific and engineering challenges;**
- **capture a bilateral relationship;**
- **create trade opportunities.**



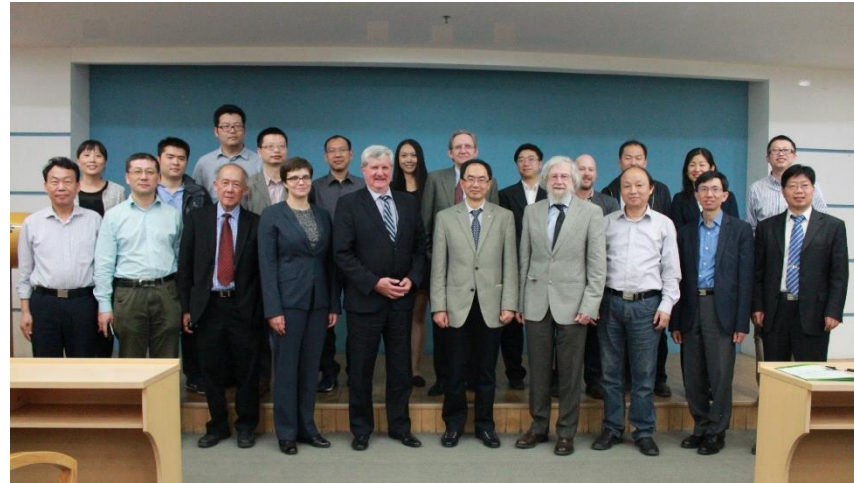
# China-Canada Joint Centre for BioEnergy Research and Innovation (C-CJCBERI)

## PARTNERS

**11 Universities and Research Institutions**

**4 Companies**

**41 Faculty and Researchers**





# China-Canada Joint Centre for BioEnergy Research and Innovation (C-CJCBERI)

State Key Laboratory of Biochemical Engineering  
National R&D Centre of Non-Food Biomass  
National R&D Centre of Biorefinery  
Sino-Brazil Centre on Climate Change

- Beijing University of Chemical Technology
- Institute of Process Engineering, Chinese Academy of Sciences
- China Agriculture University
- Tsinghua University

• Tianjin University

• Nanjing Technical University

• Huazhong University of Science & Technology

• East China University of Science & Technology

• Hunan Academy of Forestry

State Key Laboratory for Coal Combustion  
Sino-US Clean Energy Research Centre

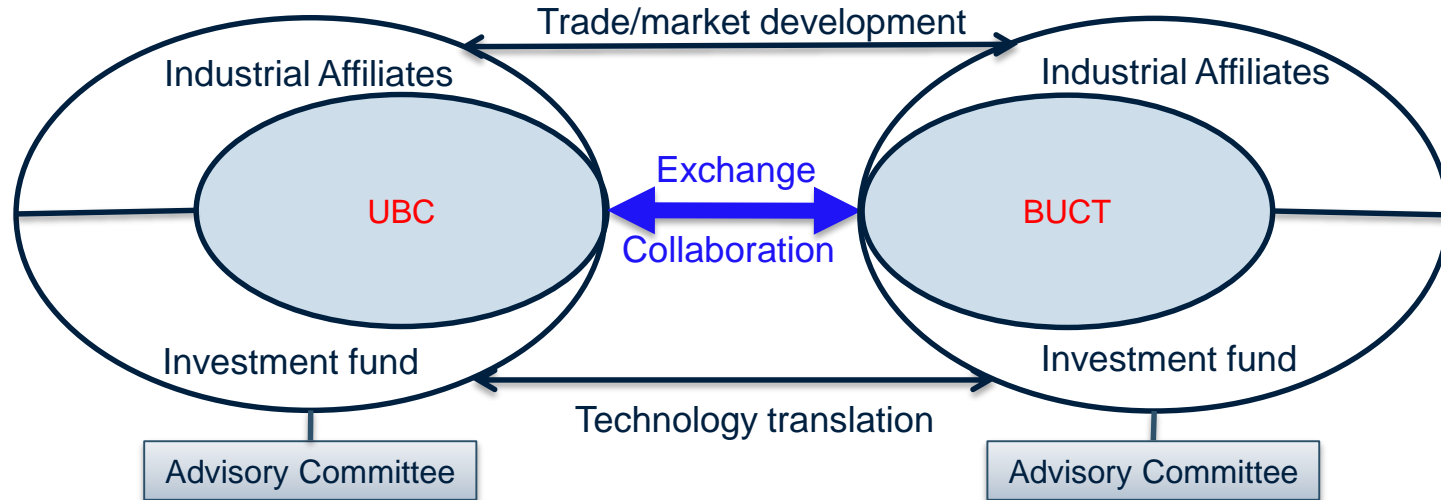
• Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences

National R&D Centre of Liquid Biofuels



# China-Canada Joint Centre for BioEnergy Research and Innovation (C-CJCBERI)

- Hosted by UBC in Canada and Beijing University of Chemical Technology in China
- Consists of major research institutions, companies, not-for-profit organizations and stakeholders.



# China-Canada Joint Centre for BioEnergy Research and Innovation (C-CJCBERI)

## JOINT FUNDING SINCE 2015

1. UBC-Beijing University of Chemical Technology, Valorization of municipal and industrial sludge
2. UBC-Hunan Academy of Forestry, Biochar for remediation of contaminated soil
3. UBC-Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, Biomass pelletization





# STRENGTHENING CHINA-CANADA RELATIONSHIP



JUSTIN TRUDEAU, PRIME MINISTER OF CANADA

NEWS

PHOTOS & VIDEOS

JUSTIN TRUDEAU

## Joint Press Release between Canada and the People's Republic of China

News » Backgrounders » Joint Press Release between Canada and the People's Republic of China



Beijing, China - September 1, 2016

7. Agreeing that China will authorize Canada to open seven additional visa application centres in China;
8. Establishing a working group under the Canada-China Joint Declaration on Clean Technology;
9. Signing the Statement of Cooperation between the Parks Canada Agency and the National Development and Reform Commission of China on the Establishment, Conservation, and Management of National Park Systems;
10. Announcing Canada's commitment to Phase VI of the China Council for International Cooperation on Environment and Development;



# LONG-TERM GOAL OF THE CENTRE

## To establish a special China-Canada Networks of Centres of Excellences (C-C NCE)



JUSTIN TRUDEAU, PRIME MINISTER OF CANADA

NEWS      PHOTOS & VIDEOS      JUSTIN TRUDEAU

Joint Statement Between Canada and the People's Republic of China

News » Joint Statement Between Canada and the People's Republic of China

Ottawa, Ontario - September 23, 2016

29. Agreeing to actively support relevant institutions of both countries to launch track II dialogues, including on energy and foreign policy, at an early date.





THE UNIVERSITY OF BRITISH COLUMBIA



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