2019 IOPC INVITATION

Dear Colleague,

This is an invitation to you and your colleagues to participate in the upcoming 2019 International Olefin and Polyolefin Conference (IOPC) in Ningbo, China, March 19-22, 2019. The IOPC was designed to exchange innovative ideas and new information among experts, gathering researchers from industry, scientists and academicians, as well as polyolefin industry leaders where research findings are presented. In just three years, IOPC has established a reputation as a premier international polyolefin conference with over 300 participants in each year. The global conference is jointly organized by Townsend Solutions (TS) Houston, USA, and Chemical Industry and Engineering Society of China (CIESC) Beijing, China.

The theme of the 2019 conference is "Sustainability of Polyolefin Industry–Technology Developments". The term "sustainable development" was first defined in a 1987 report entitled "Our Common Future" by the United Nations. Subsequent to the Paris Agreement and China's decision to stop buying plastics recycles, the sustainability movement is sweeping across all industries and all over the globe. While "sustainability" frequently addresses energy and environment, it is actually far more encompassing. It is also intertwined with circular economy and business growth. The agenda is broad, and the context profound.

For the polyolefin industry, technology is central to its sustainability. The 2019 IOPC conference will address the technological advancements on three fronts: feedstock, polymerization, and fabricated products. For example,



PO Technology Sustainability Development

- 1. Research is advancing in providing economical and clean feedstocks;
- 2. New and efficient catalysts are being developed to provide exceptional physical properties

allowing the light-weighting of fabricated structures, and,

3. Development of improved fabricating methods for easy, lower-energy processing and the use of recyclable products.

The first day March 20 is the general session, where industry leaders will address key issues, including a "new order" that is emerging. The second day has three concurrent tracks; namely, feedstock, polymerization, and products/applications. The third day is a visit to an operation in the Ningbo Industrial complexes – among the largest and the most advanced in China.

Topics covered will include: conversion of methane to ethylene, methanol-to-olefins (MTO), propylene dehydrogenation (PDH), alpha-olefin catalysts, polyolefin catalysts, catalysts business, new polymerization process developments, specialty product development, and bioplastics.

2019 IOPC Speaker Affiliations							
W.R. Grace and	Univation	Tsinghua	Townsend	SINOPEC (SRICI)			
Company	Technologies	University	Solutions				
SINOPEC (BRICI)	SIBUR	Shenhua Group	Shanghai Institute	Samsung Chemical			
SINOP LC (BRICI)		Sherinda Group	of Org. Chem.	Company			
SABIC	PetroChina	NICE ENERGY	Mitsui Chemicals	Mitsubishi Chemical Corporation			
LyondellBasell	ondellBasell Lummus Novolen		Honeywell UOP	Japan Polypropylene			
Industries N.V.	Technology GmbH	LG Chem	Honeywell OOP	Corporation			
DowDupont Dalian Institute of Chemical Physics		Clariant Specialty Chemicals	Wellman Plastics	Beijing University of Chemical Technology (BUCT)			

Our speakers are internationally-renowned experts from both academia and the petrochemical industry, hailing from domestic and overseas locations. It is a sterling cast. (See the table below.)

Please do not miss this great opportunity. We look forward to seeing you in Ningbo.

CONTACT

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2019 International Olefin and Polyolefin Conference

19-22th March , 2019 Pan Pacific Ningbo Hotel, Zhejiang, China

Hosts The Chemical Industry and Engineering Society of China (CIESC) Townsend Solutions Ningbo science and Technology Association

> **Organizer** Ningbo University of Technology

Arrangement

(updated to Jan.31)

DATE	TIME	DETAIL	VENUE	
TUESDAY	10:00-22:00	Conference Registration	Pan Pacific Ningbo	
MARCH 19	10.00-22.00	Conference Registration	Hotel	
WEDNESDAY	08:30-18:00	Dianary Soccion	Pan Pacific Ningbo	
MARCH 20	08.30-18.00	Plenary Session	Hotel	
THURSDAY	08.20 18.00	3 Parallel Technical	Pan Pacific Ningbo	
MARCH 21	08:30-18:00	Sessions	Hotel	
FRIDAY	08.20 12.00	Corporate Visit Ningbo	Ningho	
MARCH 22	08:30-12:00	Petrochemical Company	Ningbo	

HOTEL

Pan Pacific Ningbo Hotel Website: https://www.panpacific.com/en/hotels-and-resorts/pp-ningbo.html Address: 99 East Min' an Road (Min' an Dong Lu) Hotel phone: +86 -574-89118888 Email: reserve.ppngb@panpacific.com Traffic (by car): In Ningbo city center; Ningbo Lishe International Airport 22 kilometers (about 30 minutes);

Ningbo Railway Station 14 kilometers (about 30 minutes);

DAY 1 -WEDNESDAY, MARCH 20, 2019

PLENARY SESSION

Moderator: Prof. HUA Wei, Executive Vice President and Secretary General of CIESC

1. High-efficiency Methanol to Olefins Process Technology

Prof. Zaiku XIE, Director of science and technology of Sinopec Group, Academician of Chinese Academy of Sciences

2. New Technology for Petrochemical Waste Olefin Utilization - self-stabilizing Precipitation Polymerization

Prof. Wantai YANG, Professor of Tsinghua University, Academician of Chinese Academy of Sciences

3. Progress in Ethylene Industry

Prof. WANG Zizong, Deputy Chief Engineer of Sinopec Group

4. Domestic and Foreign Olefins and Polyolefin Industry Layout and New Changes in Market Competition

Prof. Yi BAI, Vice President of China National Petroleum and Chemical Planning Institute

5. To be determined

Shanghai Research Institute of Petrochemical Technology

6. Research and Development Path of Sinopec High Performance Polyolefin New Materials

Prof. Jinliang QIAO, Chief Scientist of SINOPEC Group

7. Enhance the Value Chain of Olefins and Polyolefins Through Technological Innovation

Dr. Wei CHEN , Director of Clariant China

8. Analysis of Polyolefin Downstream Products Application

Prof. Jie HU, Vice President of CNPC Petrochemical Research Institute

9. Controllable Polymerization of Olefins and Macromolecular Engineering

Prof. Yixian WU, State Key Laboratory of Chemical Resource Engineering

10. Characterization of New Technologies in the Development Of Specialty Polyolefins

Polymer Char

11. Plastics Recycling Technologies

Dr. Deen Chundury, Chief Technology Officer, Plastics Compounding, LLC, USA

12. New development in Olefinic Elastomers

Dr. Wu Chang, Director of Packaging and Specialty Plastics, Dow Asia Pacific, Shanghai, China

13. Sustainability and Technology Development

Dr. Clifford Lee, Townsend Solutions, VP

DAY 2-THURSDAY, MARCH 21, 2019

3 PARALLEL TECHNICAL SESSIONS

Session 1: Olefin and Polyolefin Feedstock and Petrochemical

1. Progress in the Development and Application of High Value-added Polyolefin Products

Prof. Shijun ZHANG, Deputy Chief Engineer, Sinopec Beijing Research Institute of Chemical Industry

2. Olefins Catalytic Cracking to Produce Propylene and Ethylene and Its Applications

Prof. Jiawei TENG, Professorate Senior Engineer, Director of Shanghai Research Institute of Petrochemical Technology

3. KBR Propane Dehydrogenation Technology (K-PRO) in line with Market-driven Propylene Production

Jeff Caton, Olefin Technology Director, KBR

4. α -Olefin Synthesis Technology and Product Application

Prof. Libo WANG, CNPC Petrochemical Research Institute

5. Wison MTO Olefin Separation Technology

Ms. Ganhong Ding, Deputy General Manager of Technology Development Center, Wison Engineering Ltd.

Session 2: Polyolefin Products and Applications

1. ExxonMobil Polyolefins in Asia

Dr. Saifudin Abubakar, ExxonMobil AP R&D Manager Shanghai

2. Synchronous Crosslinked Olefin Polymerization Technology

Prof. Jinyong DONG, Key Laboratory of Engineering Plastics, Institute of Chemistry, Chinese Academy of Sciences

3. State-of-the-art and research progress of polyolefin-based elastomer

Prof. LI Bo-Geng, Zhejiang University

4. Polyolefin Technology Sustainability Development-Enhanced Products for

Durable and 3R (Recycle, Reduce, and Reuse) Applications

Dr. Shih-Yaw Lai, President of Shenhua Nice Energy Institute, Beijing

5. Biobased Elastomers

Dr. Kevin Wang and Zhang LC, Professors of BUCT

6. Plastics Compounding Technology

Dr. Deen Chundury, Chief Technology Officer of Plastics Compounding, LLC USA

Session 3: Polyolefin Polymerization and Catalysts

1. Polypropylene Catalyst Technology for the 2020 Decade

Dr. Manu Rego, W.R. Grace, Manager of Products and Analytical Services

2. China Polyolefin Research and Development Progress

of Catalyst Technology

Jianjun YI, Professor level senior engineer, CNPC Research Institute of Petroleum and Petrochemical Industry

3. Gas Phase PE Polymerizations -New development

Ms. Feng Yu, Licensing Director China, Univation Technologies

4. LYB New Polyolefin Technologies

Mr. Chris Chen, LYB Licensing Manager China

5. Maximizing Performance of Non-Phthalate Catalysts

Dr. CP Cheng, Clariant Technology Manager

6. Polymerization Catalysts for Multi-modal Polyethylene

Dr. LinFeng Chen, Dow Chemical R&D Leader

7. Development of Novel Silica Supported Bimetallic Catalysts for a one-pot

Synthesis of Value-Added Bimodal Polyethylene Products

Dr. Boping Liu, Professor of South China Agricultural University

8. Developments in Metallocene and Post-Metallocene Catalysts

Dr. Clifford Lee, Townsend Solutions, VP

DAY 3-FRIDAY, MARCH 22, 2019

Corporate Visit

Corporate Visit Ningbo Petrochemical Company

CONTACT

Ms. Wang Yanli Chemical Industry Engineering Society of China (CIESC) Email: wangyl@ciesc.cn Office: 86-10-6441-0497

REGISTRATION

Note: All participants need to sign up by online registration.

Registration Website: <u>http://www.ciesc.cn/meeting/en/2019IOPC/home/signup.php</u>

REGISTRATION FEE

Time	Charge			
By Jan. 31	US\$1,200			
From Feb. 1	US\$1,500			

Note:

1. Registration fees include: delegates payment, conference materials and caterings. Travel and accommodation expenses are not included in the registration fee.

2. Different countries have different remittance routes.

Remittance Account Information:

Please refer to the foreign currency remittance path, you can click to download from website.

For credit to

Industrial and Commercial Bank of China

Beijing Municipal Branch, Beijing, PRC

SWIFT Address: ICBKCNBJBJM

For further credit to Beneficiary

Account Number: 0200253809014450629

Name: The Chemical Industry and Engineering Society of China

Address: Andingmen Wai, 53 Xiaoguanjie, Beijing 100029, China

Telephone: +86-10-64438491 / 64440548

Please mark "2019 IOPC" in the remittance form.

ROOM RESERVATION

You could book the room by yourself by follow way: Please fill in the Room Reservation Form below and send to the email boxes: reserve.ppngb@panpacific.com

2019 International Olefin and Polyolefin Conference

Room Reservation Form						
Company Name		Hotel			Pan Pacific Ningbo Hotel	
Guest Name		Ro	Room Reservation		Reservation	
Tel No.		Tel	Tel No.		0574-89118888 -预订部	
Email Address		Em	Email Address		reserve.ppngb@panpacific.com	
Arrival Date	(YY/MM/	/DD) De	eparture Date		(YY/MM/DD)	
Room Type	SUPERIO	R KING BED R	D ROOM		SUPERIOR TWIN BED ROOM	
	APARTMENT	EXQUISITE BE	E BED ROOM APA		ARTMENT EXQUISITE TWIN ROOM	
No. of RM						
Breakfast	1/2 份			1/2 份		
Room Rate	SUPERIOR KING BED ROOM: RMB500net Per Room /Night SUPERIOR TWIN BED ROOM: RMB550net Per Room /Night APARTMENT EXQUISITE BED ROOM: RMB400net Per Room /Night APARTMENT EXQUISITE TWIN ROOM: RMB450net Per Room /Night					
Confirmation Lett						
(,			email address			
Please download "Hotel Bank Information", and remark "2019IOPC" when you remittance to hotel reservation.						

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Review of 2018 International Olefin and Polyolefin Conference

Conference Overview

2018 International Olefin and Polyolefin Conference was held in Ningbo on March 20-23, 2018. It was the third time that it be held. The conference was hosted by Chemical Industry and Engineering Society of China and Townsend Solutions. More than 300 people from the United States, Japan, Korea, Switzerland, Netherlands, Belgium, Brazil, China and other domestic and foreign institutions of higher learning, research institutes and large enterprises attended the meeting.

Conference Focus

Technology Convergence of Feedstock, Polymerization, and Fabrication

Participating Composition

- Participating composition structure : Enterprise 72%; Universities and research institutes 16%; Government, associations and industry organizations 12%
- Participating enterprise structure: state-owned enterprises 48%; private enterprises 41%; foreign enterprises 11%
- Service type structure: Production type enterprises 70%; Technology / product suppliers 18%; Engineering service providers s10%, Matching equipment enterprises 5%; trading company 5%; Consulting research service providers 2%
- Participant structure: R & D technical personne60%; Marketing personnel 11%; managerial staff 12%; Others17% (Vice president and above level accounted for 45%)

Industry in Ningbo:

Ningbo is China's national petrochemical industry base and the petrochemical industry is an important pillar industry in Ningbo. Ningbo olefin industry realized a total profit of nearly 7 billion RMB in 2015. Ningbo will become an important growth center in the domestic and bal production of olefins.



