# Moldex3D Technology Conference 2019

18-19 June, 2019
InterContinental Hotels & Resorts | SHANGHA , CHINA

More Info



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## **MTC 2019**

### THE WORLD'S LEADING PLASTICS EXPERT CONFERENCE

#### Welcome

Moldex3D Technology Conference (MTC) is held in order to strengthen Moldex3D worldwide users' alliance and working relationship between industries, research institutes, and academia. This international forum provides unique opportunity for discussion on technical and practical solutions, lead by experts and professionals in the area of engineering design, analysis and simulation.

It is our pleasures to welcome you to the MTC 2019 and we hope you will participate actively, with the many invited, leading professionals. We are sure you will find this event both enjoyable and rewarding.



## **ABOUT MTC**

Moldex3D Technology Conference (MTC) is the world's leading conference for plastic manufacturing and engineering experts. It's a forum where the latest development, technology and trends are presented and discussed.

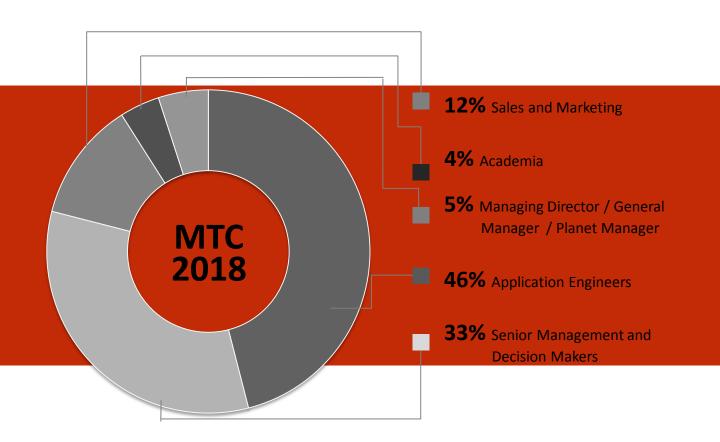
As the top communication platform, MTC focuses on the real issues that drive the day to day lives of plastic technology professionals, providing the attendees access to valuable insider knowledge and establish useful contacts in the plastics industry.



# **MTC 2018 ATTENDEE PROFILE**

MTC aims at professional audiences.

Conference attendees come from over 25 different countries, and over half of attendees have engineer or management background.



## WHY SHOULD ATTEND?

- Hear from the technological advancements and innovative numerical simulation methods adopted by top-notch experts from leading companies
- Keep pace with the ever-changing market trends, customer demands and technological landscape
- Be the first to see and experience Moldex3D's next-gen plastics simulation solutions
- Discover new best practices and strategies to help you accelerate product innovations
- Network with more than 200 of the best minds in the plastics industry around the globe, including key decision makers, product engineers and designers, process engineers, mold makers, and more









































## **AGENDA**

## **DAY 1: TUESDAY, 18 JUN, 2019**

Time	Session	Presenter
08:20 - 08:50	Registration	
08:50 - 09:00	Opening	
09:00 - 09:40	Improve warpage prediction due to cooling conditions	Samsung Joonsung Tae
09:40 - 10:20	Automatic quick flow for part optimization based on Moldex3D API tools	BASF Jin Jing
10:20 - 11:00	2K-ICM Simulation Framework to Enable Design Optimization for Surface Aesthetics	SABIC Raghavendra Janiwarad
11:00 - 11:10	Award Ceremony	
11:10 - 11:30	Coffee Break / MTC Exhibition	
11:30 – 12:00	Process Transfer with Moldex3D Simulation for Smart Manufacturing	RJG, Inc Doug Espinoza
12:00 – 12:30	Flow-fiber coupled viscosity induced mold filling imbalance	Dr.Schneider Przemyslaw Narowski
12:30 – 13:30	Lunch / MTC Exhibition	
13:30 - 14:00	Use the Carbon-Fiber Orientation Stress analysis on Hammer Tacker	StanleyBlack&Decker William Lai
14:00 – 14:30	Flow pattern analysis & Warpage verification of automotive connectors using Moldex3D	Hirose YongSoo Jung
14:30 – 15:00	Approach to high accuracy in Moldex3D	Asahi Kasei Vietnam Inaba Hideyuki
15:00 – 15:30	Improvement of anti-vibration product G BUSH quality through analysis of Moldex3D	Pyung Hwa Industry DongHyung Lee
15:30 – 15:50	Coffee Break / MTC Exhibition	
15:50 – 16:20	Application of Molding Analysis to Improve Corner Effects Caused by Valve Gate Hot Runner Systems	Free-Free Industrial Young Lu
16:20 – 16:50	Comparison of CAE and parts using moldex3d foaming analysis	Kolon Plastics TaeCheal Kim
16:50-17:00	GITA Award Ceremony	
17:00-18:00	Aperitif / MTC Exhibition	

## **AGENDA**

## **DAY 2: WEDNESDAY, 19 JUN, 2019**

Time	Session	Presenter
08:50 - 09:00	Opening	
09:00 - 09:40	Injection moulding simulation at LEGO System A/S in 2025	LEGO Brian Keith Sørensen Patrick Guerrier
09:40 - 10:20	Simulation for Vehicle display part with ICM and IML technology	LG Electronics HyunGyu Lee
10:20 - 10:30	Award Ceremony	
10:30 - 10:50	Coffee Break / MTC Exhibition	
10:50 - 11:20	Investigation on Effect of Tear Seam Angle and Injection Direction on the Properties of Tear Seam based on A Square Plate	Autoliv Yanhua Li
11:20 - 11:50	Improving warpage prediction for engineering plastics	DSM Shelly Chen
11:50 – 12:20	Welding Lines location and conditions: how to account for their weakening effect in CAE	Radici Group Carlo Grassini
12:20 - 13:30	Lunch / MTC Exhibition	
13:30 - 14:00	Simulation with thermosets – some important remarks	Schwarz Plastic Solutions Ingo Schwarz
14:00 - 14:30	Car side window Encapsulation process	Dura Automotive Bhargav Nadinla
14:30 - 15:00	Numerical analysis on the warpage of shell products for optimization via Moldex3D	TE Connectivity Hubert Chen
15:00 - 15:30	A robust, fast and easy way to integrate manufacturing effects into FEA	MSC Software Weizhuo Du
15:30 - 16:00	Moldex3d R17 & Future Development	Moldex3D David Hsu
16:00 – 16:30	Farewell & Tea Break	



### **Bhargav Nadinla**

Dura Automotive Systems / Senior Analyst

Bhargav Nadinla has 8 years' experience of Advanced CAE plastic injection molding process, conducted virtual validation for over 300 tools with different types of technologies like conformal cooling ,RHCM, MUCELL, GAS assisted ,2k injection molding, In-mold decoration and In-mold electronics.





### **Brian Keith Sørensen & Patrick Guerrier**

LEGO / Senior CAE Manager

About LEGO

The name "LEGO" is an abbreviation of two Danish words "leg godt", meaning "play well". It's our name and our ideal. The LEGO Group was founded in 1932 by Ole Kirk Kristiansen. It has come a long way over the past 80 years - from a small carpenter's workshop to a modern, global enterprise that is now one of the world's largest manufacturers of toys.

Our products have undergone extensive development over the years, but the foundation remains the traditional LEGO brick. The interlocking principle with its tubes makes it unique and offers unlimited building possibilities. It's just a matter of getting the imagination going and letting a wealth of creative ideas emerge through play.

LEGO





#### Carlo Grassini

RadiciGroup / CAE Leader Engineer

- •M.E., Materials Engineering, University of Brescia, Italy
- •Since 2010, working in RadiciGroup in Technical Service and Market Development sector. Caring for application development projects with key customers, following all the technical aspects from material selection to problem solving.
- •In charge of the CAE support service, which RadiciGroup provides to customers in support of strategic projects



### **Dong Hyung Lee**

Pyung Hwa Industry / Assistant Manager

He is currently working as a researcher in the mold design team of R & D headquarters. He joined Peace Industry in 2010 and worked for 9 years. He is engaged in various tasks such as analysis, mold design, and automation mold.





### **Doug Espinoza**

RJG, Inc / TZERO® Manager

Doug Espinoza is the TZERO® Manager for RJG, Inc. His varied career includes service in the U.S. Marine Corps, engineering, management, business development, and strategic planning.

Doug has spent more than 25 years in the plastics industry. He holds a B.S. in Plastics Engineering Technology from Ferris State University and a M.B.A with an emphasis in International Business from Loyola University Chicago.



### **Hubert Chen**

TE Conectivity/ CAE & CAD Analyst

- •M.E., Nuclear Engineering and Nuclear Technology, University of Manchester
- Dual bachelor's degree, North China Electric Power University and Grenoble University of Technology
- •Currently working for TE, in charge of simulation support in APAC
- Researcher of nuclear engineering and physics for 3 years at National Institute of Slovenia
- •Simulation engineer for 3 years at United Automotive Electronics







### **Hyun Gyu Lee**

LG Electronics / Plastic Forming Technology Team

- •2007 2013, B.S Kyungbook National Univ., Korea
- •2013 2016, M.S Kyungbook National Univ., Korea
- •2016 2019, Researcher, Production Engineering Research Institute, LG Electronics





### Inaba Hideyuki

Asahi Kasei Plastics Vietnam / President

Graduated from Department of Materials Engineering, Yokohama National University, in 1990. After joining Asahi Kasei, engaged in developing applications for engineering plastic. Currently, the global CAE manager of Asahi Kasei and President of Asahi Kasei Plastics Vietnam (Asahi Kasei CAR global Center).

Asahi **KASEI** 



**Ingo Schwarz** 

Schwarz Plastic Solutions GmbH / Managing Director

- More than 35 years of molding experience
- •Using Moldex3D for thermosets since about 8 years
- Now consulting activity for design optimization of products, molds and processes – especially for thermosetting molding compounds





### **Dr. Joonsung Tae**

Samsung Electronics / Mold & Die Technology Team

- Ph.D., Mechanical Engineering, Ajou University, Korea
- Specialized in monitoring system of injection molding such as Built-In Sensor System for micro lens mold
- Member of unmanned injection molding system development project and CAE automation project in Samsung Electronics in International Business from Loyola University Chicago.

SAMSUNG



## Jin Jing

BASF(China) Co., Ltd / CAE Manager

- Bachelor of Mechanical Engineering from Shanghai University
- •Simulation engineering specialized in integrative simulaion of plastic part with consieration of fiber orientation
- •More than 15 years' simulation experience for automotive light weight part design and simulation





### **Przemyslaw Narowski**

Dr. Schneider / CAE Engineer

- Over 10 years of experience in injection molding industry
- More than 5 years of making injection molding simulations
- •Moldex3D user since 2015
- Active researcher and lecturer at Warsaw University of Technology







### Raghavendra Janiwarad

SABIC Research & Technology / Scientist

- •Over 12 years of industrial experience
- Scientist in the Global Applications Team of SABIC Petrochemicals
- Specializes in injection molding, blow molding, and thermoforming.
- Familiar with mold design, machine selection, and molding process optimization in the field of automotive and industrial application development.
- Focused on the principles of systematic injection molding and its correlation with CAE.





### **Shelly Chen**

DSM Engineering Plastics / CAE Engineer

- •M.E., Structure Mechanics of Civil Engineering, Chung-Hsing University(Taiwan)
- More than 5 years of experience in connector industry as a CAE engineer
- Since 2007, working at DSM Engineer Plastics as a CAE Specialist to deliver valued technical support for application development with key customers
- Experienced at Computer Aided Engineering tools combining Structure Analysis and Injection Molding Simulation
- Specialized in rheological behavior, injection molding processes and problem solving





### Tae Cheal Kim KOLON PLASTIC INC / General Manager Abstract

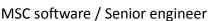
Foaming process is applied to ensure the light weighting and rigidity of vehicle components.

Our company has verified reliability of MOLDEX3D foaming analysis using comparison of CAE result and experiment.

automotive light weight part design and simulation



### Weizhuo Du



Has many years of experience in CAE simulation. Extensive experience in multiphysics coupling and multiscale modeling of composite materials.

Good at analyzing the prediction of mechanical properties of various composite forming processes. Also skilled in nonlinear, dynamic, and other field simulation of composite structures.







#### William Lai

Stanley Black & Decker / Lead Project Engineer

- Stanley Black & Decker, Lead Project Engineer (Leader),
   Design to Value Department(Now)
- •Charder Electronic, Project Manager
- Pou Yuen Tech, Mechanical Engineer
- Abundant teaching experience
- -Chaoyang University of Technology, Assistant professor
- -National Chin-Yi University of Technology, Lecturer

StanleyBlack&Decker

ng Chia University, Lecturer



#### Dr. Yanhua Li

Autoliv China Technical Center / Senior Simulation Engineer

- Ph.D, Mechanical Engineering, Tongji University
- Familiar with multiple CAE softwares (Moldex3D, Flow3D, Digimat-RP, Dyna)
- Specializes in providing solutions of injection molding, diecasting molding, and stamping simulation
- •Intergrative simulation of mold filling and structure analysis





### **Yong Soo Jung** HIROSE KOREA / Principal Engineer Abstract Excellent performance of Moldex 3D

- -Verification of flow patterns and warpage
- -Comparison of Short-Shot Test & simulation result



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### **Young Lu**

Free-Free Industrial Corp / Manager

- •M.E., Mold Engineering, Kaohsiung University of Applied Sciences
- Technical director of injection molding field at Chinelee Ltd.
- Molding analysis import and system establishment at Min Hsiang Ltd.
- Mold design and molding verification for OEM lamps at Juoku Technology.
- Acting as FAE manager at Free-Free Industrial corp. System integration and control of mold, injection molding and assembly.



Moldex3D

#### Dr. David Hsu

Moldex3D (CoreTech System) / President

- PhD, Chemical Engineering, Taiwan Tsing-Hua University
- President of Product Development. Leading the R&D team of more than 100 Moldex3D developers to deliver the leadingedge solutions to industries
- Has been working on the backbone of Moldex3D since early
- •Specialties in software engineering, software development, process simulation, optimization, scientific visualization, and computational intelligence

## **SPONSORS**

## **Platinum Sponsor**



### **Platinum Sponsor**







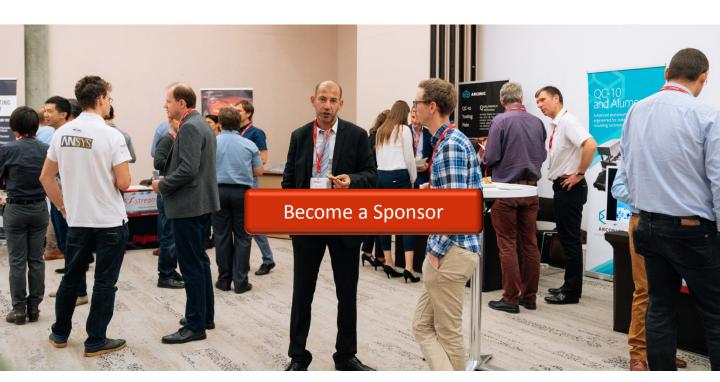






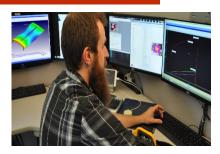






# **Platinum Sponsor**





#### **RJG: Helping Molders Succeed**

RJG<sup>®</sup> has been a global pioneer in the injection molding industry for the past 34 years. In the 80's, we were at the center of creation and adaptation of Scientific Molding across our industry. In the 90's, we transformed the implementation of incavity sensors with the development of digital sensor technology. In the 2000's, we released the plastics industry's first digital data acquisition platform.

In addition, RJG provides both general interest and specialized training for injection molding professionals at all levels. Support and training are provided world-wide at RJG regional sales offices throughout the world and online.

#### We Offer:

- Cavity pressure sensors and process control systems
- Comprehensive training and application assistance
- Plant analysis and consultation services
- Proven injection molding strategies
- Professional customer support

#### We Do Things Differently

RJG® focuses on the scientific molding principles that look at molding from the plastic's point of view. We work closely with every customer to identify problems and develop strategies for lasting solutions that guarantee absolute quality of plastic parts.

Our goal? To help our customers be the most sought-after molders in their segment.

### **RJG TZERO® Program: Decrease Cost & Time During Tool Launch**

Making changes down the line in the tool launch process is time consuming, expensive, and has less of an impact. RJG's TZERO® program helps world-class companies cut the cost and time wasted on adjustments during a tool launch. Our unique approach provides a framework for collaboration between engineering and manufacturing in review of part design and the mold development process to avoid molding uncertainties.

#### **Our TZERO Services:**

- **Simulation:** Injection molding simulation in a virtual environment using Moldex3D® software
- Optimization: Hands-on optimization of the mold design, part design, and injection molding process
- Evaluation: Evaluation of polymer and resin selections, in-mold sensors, and current process procedures
- Consultation: Real-world consultation, including process monitoring and control strategies, research and development, and training and workshops

"The work with TZERO provided significant improvements in all areas that will save the company an estimated \$4 million per year in piece price." - Jeremy Williams, Principal Engineer at Access Business Group, LLC.

Find out more: www.rjginc.com

# **Gold Sponsor**



#### Micro Injection Molding

The injection molding machine we utilize is world-renowned for its small size, for consuming the least resin and for its ability to produce small components.

We assist our customers in developing injection molding technology and help integrate this technology into their mass production process for the following products: Medical components, precision electronic parts, connectors, small gears, optical elements, wearable devices, and so on.

## **CYBERNET**

CYBERNET SYSTEMS (SHANGHAI) CO., LTD. is a foreign-owned enterprise to provide local customers and multinational companies with CAE technology service, the providing products and services include integrated process and multidisciplinary optimization design, optical design and testing, scientific computing and system-level modeling, tolerance analysis and optimization, general simulation tools, and related industry professional technical advice, technical services and training.

CYBERNET providescustomers with process related tools and services from the product conceptual design, physical design, the simulation optimization, design validation to product performance testing.

CYBERNET group is Japan's largest CAE technology services company, established in 1985 in Tokyo, Japan, the level of listed companies.

# **Gold Sponsor**



Development and manufacture of high-quality equipment for the production of silicone and rubber components has been the focus of activities of the founders of ELMET from the very outset. Constant advancement of the range of products and of technologies has now turned ELMET into the FULL SYSTEM SUPPLIER.

As a small and committed team with a lot of experience in the areas of tool-making and the automation of the LIM (liquid injection molding) process, the founders' dreams of being one day independent have come true. ELMET customers were thrilled from the beginning by their open and direct communication, extensive know-how, and the tireless drive to expand the existing knowledge and try out new things.

The knowledge that could be gained on striking an increasing number of new paths has currently materialized in the form of sophisticated and high-quality products that are implemented on a daily basis by very well trained and motivated staff. Due to the permanent development cycle that is constantly applied to products, production processes, and staff, ELMET assures its global customers now and in the future to meet the highest demands of full system solutions in the production of silicone and rubber components.



Founded in 2015, Minnotec Technology Consulting Co., Ltd. specializes in the service of [Plastic Tooling and Molding I industry. It provides solutions for members to meet the needs of ACMT technology platform, and assists the industry to carry out complete technology transfer and provide professional technical consulting services.

### AloM (Al and Internet of Molding)

Providing advisory services for building intelligent Internet of Things, the core of the AloM solution adopts the K-Plat-form specification, integrating intelligent mold design, intelligent Moldex3D analysis, tool manufacturing management, Molding injection management, scientific test molding management, mold warranty management. Analyze and identify the customer's undetected problems, create supporting services, and assist the industry to expand the value of the company.

### AMT (Advanced Molding Technology)

Solutions for the mold and molding industry to provide enhanced core technology, including: conformal cooling design and manufacturing, MuCell molding technology, diffusion bonding, electron beam polishing, cooling channel cleaning solutions, CT Scan inspection, multi-cavity melting Technology...etc.

#### **Molding Training Certification**

Provide talent development plan combining theory and practice for mold and molding industry

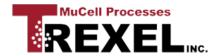


# **Gold Sponsor**

# **NETZSCH**

As the leading manufacturers of thermal analysis instruments, NETZSCH offers the broadest range of products for thermal analysis including the instruments for Differential Scanning Calorimetry, Thermogravimetry, Simultaneous Thermal Analysis, Dilatometry, Dynamic Mechanical Analysis, Thermomechanical Analysis, Coupling techniques, Thermal conductivity testing, Dielectric Cure Monitoring And Dielectic Analysis, Refractories Testing and Adiabatic Reaction Calorimeter.

The working temperature of the instruments can be in the range from - 260 to 2800°C. Beginning from 1996, NETZSCH China has set up 4 branch offices in Beijing, Shanghai.



#### **About Trexel**

MuCell® Microcellular foaming technology was originally conceptualized and invented at the Massachusetts Institute of Technology (MIT) and in 1995 Trexel was granted an exclusive worldwide license for the further development and commercialization of the technology. Today, Trexel is the exclusive provider of the MuCell® microcellular foam technology and maintains an extensive global patent portfolio. Trexel provides world-class engineering support, training and other design and processing services, as well as the equipment and components integral to the MuCell® process.

From the global headquarters in Boston, Massachusetts, Trexel operates a state of the art plastics processing development laboratory, supporting plastics processors with the definition and implementation of leading and differentiating plastic molding technologies.

In support of a global client base, Trexel operates subsidiaries in Europe, Japan and Southeast Asia with competent plastics processing engineering capabilities. Trexel's worldwide subsidiaries are augmented by a network of competent independent representatives and distributors.

## **VENUE**

## **InterContinental Shanghai Pudong** Second Floor, Tomson Ballroom

No.777 Zhangyang Road, Pudong New Area: Shanghai, China









# RECOMMENDED **ACCOMMODATIONS**

### Click on the map below for further information to plan your trip:



HOTEL NAME	WALKING DISTANCE FROM THE EVENT VENUE
上海錦江湯臣洲際大酒店 InterContinental Shanghai Pudong	Event Venue
紫金山大酒店宴會廳 Grand Trustel Purple Mountain Shanghai	6 mins
全季酒店(上海陸家嘴八佰伴店) All Seasons Hotels	4 mins
上海陸家嘴八佰伴亞朵酒店 Yatour Hoel Pudong	9 mins
明城花苑酒店健身中心 Supreme Tower	9 mins
上海中電大酒店 Zhongdian Hotel	9 mins
<u>上海宝安大酒店</u> <u>Shanghai Baoan Hotel</u>	8 mins
<u>上海齊魯萬怡大酒店</u> Courtyard by Marriott Shanghai Pudong	11 mins

# **CONTACT INFORMATION**

### Moldex3D

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### MTC 2019 Venue

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