

第五届国际汽车关键技术论坛

2019 International Auto Key Tech Forum

2019年4月17日 • April 17, 2019

国家会展中心（上海） National Exhibition and Convention Center (Shanghai)

主办单位 Organizers

中国汽车工程学会 China SAE

上海市国际展览有限公司 SIEC

日程概要 SUMMARY

会议编码 Code	K				
时段 Time	上午 AM				
2019年4月17日 Wednesday, April 17, 2019	主旨演讲和技术趋势发布 Keynote Speeches & Technology Roadmap Discussion				
会场 Room	国家会议中心（上海）平行会场 A（原 4.2H） Parallel Forums A (Former 4.2H), National Convention Center (Shanghai)				
会议编码 Code	K1A & K1B	K2A & K2B	K3		
时段 Time	下午 PM				
2019年4月17日 Wednesday, April 17, 2019	新能源汽车技术 New Energy Vehicle Technology	智能汽车技术 Intelligent Vehicle Technology	新材料与轻量化技术 New Materials & Light Weight Technology		
会场 Room	国家会展中心（上海）中心圆楼 6 楼 悦影绘 WEIN, 6F, NECC PLAZA, National Exhibition and Convention Center (Shanghai)				
	H1 限 150 人	H2 限 150 人	H3 限 150 人	H4 限 150 人	H5 限 100 人

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2019年4月17日 Wednesday, April 17, 2019

主论坛 Main Forum

K. 主旨演讲和技术趋势发布

Keynote Speeches & Technology Roadmap Discussion

上午
AM

汽车发展百多年来, 已经成为多种技术成果的载体, 用户对其环保性、安全性和趣味性的要求, 使汽车制造商不断研发新产品, 而技术创新是未来造车的核心竞争力。主旨论坛将从宏观领域和国际视角, 就汽车技术发展现状, 汽车政策解读和未来关键技术方向进行解读。

The automobile, birthed more than 100 years ago, has become the complexes of various technological achievements. Automakers have been developing innovative products and solutions to meet users' demands for eco-friendly, safety and driving pleasure, where technological innovation is the core competency. From an overall and global perspective, this session will analyze the current status of automotive technology, interpret industrial policies and discuss the road map of auto key tech development.

会议主席 Chairmen



张进华 先生 Mr. Zhang Jinhua

中国汽车工程学会 常务副理事长兼秘书长
Executive Vice President, Secretary General,
China SAE



顾春霆 先生 Mr. Gu Chunting

中国国际贸易促进委员会上海市分会 副会长
Vice Chairman
CCPIT SHANGHAI SUB-COUNCIL
上海市国际展览有限公司 董事长
Chairman of the Board
Shanghai International Exhibition Co., Ltd.

大会日程 AGENDA

09:00 现场注册及交流
On-site Registration, Networking

09:30 嘉宾介绍 VIP introduction



主持人 Moderator: 张旭明 先生 Mr. Zhang Xuming
中国汽车工程学会副秘书长 Vice Secretary General, China SAE

09:35-09:40 会议主席致辞 Opening Address



顾春霆 先生 Mr. Gu Chunting
中国国际贸易促进委员会上海市分会 副会长
Vice Chairman, CCPIT SHANGHAI SUB-COUNCIL
上海市国际展览有限公司 董事长
Chairman of the Board, Shanghai International Exhibition Co., Ltd.

09:40-11:55 K. 主旨演讲和技术趋势发布
Keynote Speeches

09:40 K001 中国《节能与新能源汽车技术路线图》实施进展
The Implementation of China Technology Roadmap for Energy Saving and New Energy Vehicles



- 1、主要目标回顾 The Review of Roadmap Version 1.0
- 2、七大专题领域的进展情况 The Implementation of 7 fields in Roadmap V1.0
- 3、《路线图》2.0 版修订工作进展 Work Plan of Roadmap Version 2.0

侯福深 先生 Mr. Hou Fushen
中国汽车工程学会副秘书长 Vice Secretary General, China SAE

10:00 K002 华为对未来汽车变化的理解和价值（暂定）



徐直军 先生 Mr. Xu Zhijun (Eric Xu)
华为轮值董事长 Rotating Chairman of Huawei

10:20 茶歇 Coffee Break

10:35 K003 面向未来 50%以上效率及零排放的氩气循环车用发动机
Argon Power Cycle Engine with Over 50% Efficiency & Zero Emissions for Future Vehicle



针对未来车用汽油机的节能和减排需求，面向 2030 的车用汽油机技术，在分析当前热效率提高技术的途径基础上，特别对汽油机效率达到 50% 以上的技术路线和途径进行了介绍，并重点介绍了氩气循环氢燃料内燃机实现 50% 以上效率的可行性和技术挑战。

To meet the strict fuel consumption and emission regulation for the future, and the request of

gasoline technologies for 2030, the high thermal efficiency technology for next generation gasoline engine, especially for the super high efficiency engine technologies are presented. The possibility and challenge for over 50% efficiency of a novel Argon Power Cycle Engine with fuel of Hydrogen is analyzed in simulation and specially introduced.

李理光 教授 Prof. Liguang Li

同济大学特聘教授，中国汽车工程学会会士，SAE Fellow

Privileged Professor Tongji University, China SAE Fellow, SAE Fellow

10:55 K004 迈向混动和电力驱动方案 —— 活跃的技术市场为客户提供更多的价值



Compelling Hybrid and Electric Solutions – dynamic technology market with added value to end customers

1、推进系统进化的趋势及驱动力

Trends and drivers for propulsion system evolution

2、Growing hybrid and EV architectures from an industry perspective

业界角度看混动和电力驱动架构的增长

3、BorgWarner e-propulsion product highlights

博格华纳电力推进系统产品线及亮点

Mr. Hakan Yilmaz

博格华纳首席技术官 Chief Technology Officer, BorgWarner

11:15 K005 新交互，智服务 – 智能网联升级的 OS 之道



Smart Fusion and Service, the Platform Way of AliOS Towards the Next Generation Intelligent and Connected Vehicle

王恺 先生 Mr. Kai WANG

AliOS 技术总监 Director of Engineering, AliOS, Alibaba Group

11:35 K006 边缘 AI 芯片赋能汽车智能化



Empower Vehicles by Edge AI Chip

1、汽车智能化的趋势：车内交互+车外安全

Smart mobility trends: vehicles interaction inside+vehicle safety outside

2、计算能力是汽车智能化应用落地的关键瓶颈

Computing power is the key bottleneck for smart mobility application

3、边缘 AI 芯片，全面赋能车内车外智能化

Edge AI chip empower vehicles with intelligence

余轶南 博士 Dr. Yinan Yu

地平线智能驾驶产品总经理

General Manager, Smarting Driving Product, Horizon Robotics

11:55 上午时段结束，午餐

Session Closed, Luncheon

主论坛每位演讲人：演讲时间 20 分钟

Please note: each speaker of main forum has 20 minutes for speech

2019年4月17日 Wednesday, April 17, 2019

分论坛 Sub Forum

K1A & K1B · 新能源汽车技术分论坛 New Energy Vehicle Technology

下午
PM

2018年，我国新能源汽车产销量均突破百万大关，全球许多国家和地区公布了燃油车禁售时间表。各大汽车制造商积极求变，新能源汽车产品愈加丰富，新技术层出不穷。新能源汽车三级模块体系和平台架构中的核心技术有什么新突破，整车的动力性、经济性、可靠性和安全性有什么新技术，这将是此分论坛探讨的话题。

In 2018, sales and production of China's New Energy Vehicle have both exceeded one million. Meanwhile, countries and regions around the world are racing to phase out vehicles powered by fossil fuels. As a result, automakers are proactively adapting to the trend by diversifying NEV's product line-up and fostering technological innovation. This session will focus on core technology breakthroughs in NEV modular systems and architecture platforms, as well as innovations in vehicle dynamics, reduce manufacturing cost, reliability and safety.

K2A & K2B · 智能汽车技术分论坛 Intelligent Vehicle Technology

下午
PM

在全球人工智能、大数据高速发展的背景下，汽车产品在不断融合其他行业新技术。智能化、网联化、共享化等等因素叠加扩展了汽车的属性，推动产品开发变革，将会成为未来技术的制高点。传统供应商和新兴企业将在此场为听众带来多角度技术分享。

With the rapid development of big data and AI technology, the automobile has been integrating with cutting-edge technologies from many other industries. The integration of technologies such as intelligence, connectivity, sharing, etc. has redefined the automobile and driven innovations in automotive R&D. In this session, OEMs and emerging suppliers will share their view on innovative technologies from various perspectives.

K3 · 新材料与轻量化技术分论坛 New Materials & Light Weight Technology

下午
PM

汽车用材料需要满足环保、节能、安全、舒适、低成本这5个方面考量，在全球环境对节能减排的迫切要求下，轻量化造车成为实现节能降耗的必经之路。本场次将聚集材料供应商介绍新材料特性，同时邀请一级供应商为整车制造商提供可操作的解决方案。

Being eco-friendly, energy saving, safe, comfortable and cost-effective are key factors that should be considered when choosing materials for the automobile. For the sake of global environment, lightweight technology has become the sure way to energy conservation and emission reduction. In this session, raw material suppliers will elaborate on the characteristics of lightweight materials, while Tier 1 suppliers will also be invited to present tangible lightweight solutions for OEMs.

K1A. 新能源汽车技术分论坛

New Energy Vehicle Technology Forum

会议日程 Agenda

13:15 现场注册及交流
On-site Registration, Networking

13:25 嘉宾介绍 VIP Introduction



主持人 Moderator: 赵立金 先生 Mr. Zhao Lijin

中国汽车工程学会 技术标准部 部长
Director, Technology Standard Dept., China SAE

13:30 K1A1 伟巴斯特针对纯电动化出行的高效、模块化系统集成解决方案
“The Full Charge” – Efficient & modular Solutions for E-Mobility



电动化出行将是未来常见的场景。整车厂和供应商都在开发基于市场需求的高效科技。作为创新和技术的领先者，伟巴斯特对此推出了先进的解决方案。本演讲将着重于针对汽车行业电气化解决方案的高效、模块化系统集成方案。

Vehicles with electric powertrains will have an impact on the streetscape in future. Automobile manufacturers and their suppliers are actively shaping this change by developing more efficient and needs-driven technologies. As the innovation and technology leader, Webasto offers advanced solutions in this field. The presentation underlines the complexity of efficient & modular system integration for electric solutions in the automotive industry.

方剑飞 先生 Mr. Jason Fang
伟巴斯特中国新能源总经理
Managing Director E-Solutions & Services, Webasto China

14:00 K1A2 未来驱动系统电动化之路的不确定性与解决方案
Uncertainty and solutions for the future of the drive system electrification



1、市场及环境给新能源汽车市场带来了怎样的挑战
What kind of challenge brought by the market trend and environment will be for the new-energy vehicle market

2、中国特殊的地理环境对新能源汽车提出了怎样的差异性需求
What kind of difference demand brought by China's special geographical conditions will be for the new-energy vehicle

3、应对这些挑战和需求蜂巢易创都有哪些解决方案
What solutions does HYCET E-Chuang have to meet these challenges?

陈晓峰 先生 Mr. Chen Xiaofeng
蜂巢易创科技有限公司副总工程师
Deputy Chief Engineer, HYCET E-Chuang Technology Co.,Ltd

14:30 K1A3 未来个性化乘客热舒适
Personalized Passenger Thermal Comfort of the Future



Ms. Jaymi Wilson
捷温集团战略及市场部副总裁
Vice President, Strategy and Marketing, Gentherm Inc.

15:00 K1A4 无线：下一代电池管理系统
Wireless: the Next Generation Battery Management System



电池管理系统 (BMS) 的稳步发展有助于提高用于电动车辆的锂离子电池组的安全性, 续航里程和使用寿命。当今采用分布式架构的 BMS 需要实施主控制模块和从控制模块之间的隔离通信总线。连接器, 线束的潜在机械故障以及对高 EMI 环境的敏感性给有线 BMS 实现高度可靠的数据通信带来了挑战。此外, 汽车制造商正在寻求进一步提高空间效率, 能源密度, 模块化和制造效率。作为下一代电池管理系统, Sensata 的无线 BMS 解决方案不仅提供业界领先的高可靠性, 功能安全性和网络安全性的无线通信技术, 同时解决了一些制约电动汽车行业可持续性和可扩展性发展的设计和制造挑战。

Steady advancements in Battery Management System (BMS) have contributed to increased safety, driving range and usable life of Li-ion battery packs used in electrified vehicles. Today's BMS' with distributed architecture require an isolated communication bus between the master and slave control modules. Potential mechanical failure of connectors, wiring harnesses as well as susceptibility to high EMI environment impose a threat to the wired BMS designs of achieving highly reliable data communication. Additionally, automakers are looking for further improvement in space efficiency, energy density, modularity and manufacturing efficiency. As the next generation battery management system, the Sensata's wireless BMS solution offers industry leading wireless communication technology that is highly reliable, functionally safe and cyber secure while addressing some of the design and manufacturing challenges for achieving sustainability and scalability of growing electrified vehicle industry.

杨洪 博士 Dr. Yang Hong
森萨塔科技电池管理工程总监
Director of Engineering Battery Management, Sensata Technologies

15:30-15:45 茶歇 Coffee Break

15:45 K1A5 法雷奥全系列动力电气化解决方案
Valeo's full range of powertrain electrification solutions



- 1、12 伏系统 12V system
- 2、48 伏技术 (轻混/纯电动) 48V technologies (mild hybrid/BEV)
- 3、法雷奥西门子高压技术 High voltage technologies by VSeA

顾剑民 博士 Dr. Jianmin GU
法雷奥集团中国区首席技术官 China CTO, Valeo Group

16:15 K1A6 从 Tier1 的角度看中国市场电动化产品解决方案
Electronics product solutions for e-mobility in China from Tier 1 perspective

- 1、中国市场法规和新能源发展 China market regulation and market development for e-mobility
- 2、聚焦 48V 架构的电气化传动解决方案



Electrical powertrain solutions with focus on 48V architecture

3、海拉为 48V 电动汽车提供的系统和驱动电子解决方案

HELLA's System and Power Electronics solutions for 48V electrified vehicles

4、海拉为高压电池电动车提供的电池系统，驱动电子和机电一体化解决方案

HELLA's Battery System, Power Electronics and mechatronics solutions for HV Battery Electric Vehicles

丹尼斯 先生 Mr. Dennis Reichenberg

上海海拉电子有限公司南京研发分公司总监

Director, Hella Shanghai Electronics Co., Ltd Nanjing Technical Center

16:45 K1A7 优化轮毂电机动力系统 NVH 性能的整体分析



A Holistic Approach to Optimization Of In-Wheel Powertrain NVH Performance

1、轮毂电机设计的 NVH 要求 NVH requirements for in-wheel motor design

2、轮毂电机 NVH 各方面 In-wheel motor NVH aspects

3、轮毂电机结构优化 In-wheel motor structure optimization

4、控制优化和高级电子设备 Control optimization and advanced electronics

5、系统层面优化 System level optimization

Mr. BLAZ STEFE

杭州亚太依拉菲动力技术有限公司总经理

General Manager, APG-ELAPHE PROPULSION TECHNOLOGIES CO.,LTD

17:15 K1A8 Electrification and E-mobility solution by Isabellenhütte



Mr. Ladislav Varga

General Manger China, VP of Sales ASIA

ISABELLENHUETTE (Shanghai) Electronic Technology Trading Co.,Ltd.

17:45 结束 Session Closed

分论坛每位演讲人：演讲时间 25 分钟，提问 5 分钟

Please note: each speaker of sub forum has 25 minutes for speech and 5 minutes for Q&A

K1B. 新能源汽车技术分论坛

New Energy Vehicle Technology Forum

会议日程 Agenda

13:15 现场注册及交流
On-site Registration, Networking

13:55 嘉宾介绍 VIP Introduction



主持人 Moderator: 韩永杰 先生 Mr. Han Yongjie

深圳威迈斯新能源股份有限公司 副总裁/高级工程师
Vice President/Senior Engineer, Shenzhen VMAX New Energy Co., Ltd.

14:00 K1B2 纯电动乘用车高压“电控”总成技术的全球发展趋势
Global Development Trend of High Voltage Charging & Distribution Solutions for Pure Electric Passenger Vehicles



1、全球主机厂高压“电控”布置方式

High Voltage Charging & Distribution Arrangement in Global Main Engine Plant

2、高压“电控”总成技术的全球发展趋势

Global Development Trend of High Voltage Charging & Distribution Assembly Technology

3、SHINRY 高压“电控”解决方案

SHINRY High Voltage Charging & Distribution Solutions

吴壬华 博士 Dr. Renhua WU

深圳欣锐科技股份有限公司董事长

Chairman of the Board, SHINRY TECHNOLOGIES.,LTD.

14:30 K1B3 新能源汽车驱动电机用无取向硅钢产品及应用技术
Non-oriented silicon steel products and applications for new energy vehicle drive motors



1、新能源汽车驱动电机用材需求 The demand for new energy vehicle drive motor materials

2、铁心材料选材与使用问题探讨 The selection and use of core materials

3、宝钢新能源汽车驱动电机用钢发展 Development of Baosteel Non-oriented silicon steel products and applications for new energy vehicle drive motors

王波 博士 Dr. Wang Bo

宝钢股份产品研发首席研究员

Chief researcher, Baoshan Iron & Steel Co., Ltd.

15:00 K1B4 HyperHybrid – The Smarter EV



1、HyperHybrid - Low-Cost Electrification

2、HyperHybrid - Series Hybrid Powertrain Solution

3、HyperHybrid - Tomorrow's Sustainable Mobility

Mr. Frank Wolf

CEO, OBRIST POWERTRAIN

15:30-15:45 茶歇 Coffee Break

15:45 K1B5 Fuel Cell or Battery

刘甘南
佛吉亚

16:15 K1B6 扁线电机的研发与市场应用
Flat Wire motor development and market application



- 1、扁线电机与圆线电机对比优势
- 2、发卡电机定子主要工艺流程
- 3、扁线电机主要应用

霍从崇 先生 Mr. Congchong Huo
天津市松正电动汽车技术股份有限公司研发中心总工
R&D chief engineer, Tianjin Santroll Electric Automobile Technology Co., Ltd.

16:45 K1B7 Battery Box for new electric vehicles



- 1、Innovative Solutions
- 2、New Technologies
- 3、Innovations Breakthrough

Mr. Sérgio Faria
海斯坦普电池盒全球开发经理
Global Battery Box Development Leader, Gestamp

17:15 K1B8 本特勒电动汽车驱动系统 - 为纯电动汽车提供结构上的新可能性
BENTELER electric drive system - Potentials of a new vehicle architecture for battery electric vehicles



Mr. Marco Kollmeier
Vice President Unit E-Mobility, BENTELER Automobiltechnik GmbH

17:45 结束 Session Closed

分论坛每位演讲人：演讲时间 25 分钟，提问 5 分钟

Please note: each speaker of sub forum has 25 minutes for speech and 5 minutes for Q&A

K2A. 智能汽车技术分论坛

Intelligent Vehicle Technology Forum

会议日程 Agenda

13:15 现场注册及交流
On-site Registration, Networking

13:25 嘉宾介绍 VIP Introduction
主持人 Moderator: 陈超卓 先生 Mr. Chen Chaozhuo



纵目科技 副总裁
VP, Zongmu Technology

13:30 K2A1 微软赋能汽车行业 Microsoft Empowers Automotive Industry



Mr. Jonas Nicholson
微软全球汽车行业首席技术官 CTO Automotive Industry, Microsoft Corp.

14:00 K2A2 通往未来出行之路— 自动驾驶



蒋京芳 女士 Ms. Jiang Jingfang
博世汽车部件（苏州）有限公司底盘控制系统中国区驾驶员辅助业务单元副总裁
Vice President, Business Unit Driver Assistance,
Bosch Chassis Systems Control China

14:30 K2A3 新型自动驾驶智能化测评服务



The intelligent testing & evaluation service for autonomous driving

- 1、自动驾驶行业发展现状和量产面临的问题
The status of the autonomus driving industry and the key questions faced by mass production
- 2、新型自动驾驶智能化测评服务概述
Brief introduction about the intelligent testing & evaluation service for autonomous driving
- 3、亮道智能的技术主线和主打产品
LiangDao Intelligence Technical Roadmaps & Main Products

剧学铭 博士 Dr. Xueming JU
亮道智能首席执行官 CEO, LiangDao Intelligence

15:00 K2A4 安波福自动驾驶平台开发— 技术难点及解决方案



Aptiv's Development of Autonomous Driving – What did we learned from the AMoD development & experience

- 1、自动驾驶技术的开发及商业应用开发 Automated Mobility on Demand
- 2、用户体验 User Experience
- 3、技术难点及解决方案 Technical challenges & accomplishment

韦峻青 博士 Dr. Wei Junqing
安波福无人驾驶工程副总裁

15:30-15:45 茶歇 Coffee Break

15:4 K2A5 从数字驾驶舱到 AI 驾驶舱
From digital cockpit to AI cockpit



刘欣 先生 Mr. Liu Xin
AliOS 产品总监 Product Director, AliOS, Alibaba Group

5

16:15 K2A6 New requirements from the automotive industry about EE architecture for 2023 and beyond Impact on next Gen SmartCore

Mr. Marcus Waermer
Director of SmartCore™ Platform, Visteon

16:45 K2A7 Faurecia view on intelligent cockpit

陶立 产品先期开发牵头人
佛吉亚

17:15 K2A8 驾驶舱里的“江湖”
“Social life” in the Smart Cabin



- 1、驾驶舱去驾驶化 Cabin with Weakened Driving Characteristics
- 2、驾驶舱社交化 Cabin with Strengthened Social Characteristics
- 3、驾驶舱未来的挑战与机遇 Challenges & Opportunities of Future Cabin

甄铖 先生 Mr. Zhen Cheng
惠州市德赛西威汽车电子股份有限公司智能驾驶舱产品策划总监
Intelligent Cabin Product Strategy Director,
Huizhou Desay SV Automotive Co., Ltd.

17:45 结束 Session Closed

分论坛每位演讲人：演讲时间 25 分钟，提问 5 分钟

Please note: each speaker of sub forum has 25 minutes for speech and 5 minutes for Q&A

K2B. 智能汽车技术分论坛

Intelligent Vehicle Technology Forum

会议日程 Agenda

13:15 现场注册及交流
On-site Registration, Networking

13:25 嘉宾介绍 VIP Introduction
主持人 Moderator: 季方胜 博士 Dr. Fangsheng Ji



上海绿驰汽车集团 副总裁兼工程研究总院院长
Vice President & Head of R & D Center, Shanghai Reech Auto Group

13:30 K2B1 面向商用车量产的从辅助驾驶到自动驾驶技术的开发
The Evolution from Assistance Systems to Autonomous Systems in the CV industry



Mr. Ivan Brajdic
威伯科亚太区产品研发总监
Engineering Director, WABCO APAC

14:00 K2B2 边缘计算 Edge Computing



- 1、博世中国的车联网定位
- 2、边缘计算在博世车联网中的独特价值
- 3、博世中国的边缘计算总体架构

郑心航 先生 Mr. Zheng Xinhang
博世中国智能网联事业部首席架构师
Chief Solution Architect, Connected Mobility Solutions, Bosch (China)

14:30 K2B3 浅析传统传感器供应商在中国自动驾驶市场角色的转变
Changing role of a "Sensor Tier1" in AD market in China



- 1、Automated Driving Market Development specific situation in China
- 2、Product Demand Towards Traditional Sensor Supplier
- 3、Emergence of cross OEMs and TIER platforms and its impact
- 4、Summary (Risk / Opportunities / Outlook)

夏敬初 先生 Mr. Xia Jingchu
海拉中国区自动驾驶产品总监 AD Segment Head, Hella China

15:00 K2B4 用机器的视角去感知世界
Perceive the world from the perspective of machine



- 1、机器的视角 Perspective of machine
- 2、超眼-DVS Super eyes-DVS
- 3、处理算法 Processing algorithm

李威 博士 Dr. Billy Li

上海保隆汽车科技股份有限公司总裁助理、汽车电子单元总监

Assistant President, Director of Auto Electronics Business Unit

Shanghai Baolong Automotive Corporation

15:30-15:45 茶歇 Coffee Break

15:45 K2B5 伟巴斯特车顶传感器集成解决方案打造未来自动驾驶乘优越体验



Webasto's Integrated Sensor Roof for the Autonomous Driving Experience of the Future

多传感器监测车辆环境对自动驾驶非常重要。同时，目前的自动驾驶车辆缺乏有吸引力的设计元素，并且缺乏保证安全和可靠的集成功能。作为全球领先的车顶系统供应商，伟巴斯特可以运用丰富的集成经验能力来解决这个问题。伟巴斯特开发了车顶传感器集成解决方案，全方面集成，在保证传感器功能的同时，还能通过车顶带来非凡的驾乘体验。

In autonomous driving it is important to monitor the vehicle environment with multiple sensors. At the same time self-driving vehicles are still lacking design features that are attractive to customers and missing functional integration that enable secure and reliable autonomous driving. Webasto as the world leading automotive supplier of roof systems is using its profound integration competencies to close this gap. Webasto develops sensor roof solutions that are fully-integrated and are capable to assure sensor availability and functionality while maintaining the great customer experience through attractive roofs.

Dr. Michael Huelsen

Strategic Product Manager, Webasto Europe

16:15 K2B6 安全可靠的线控驱动系统- 自动驾驶的基石

Fail-Safe Drive-by-Wire Systems – mandatory for autonomous Driving

当前，汽车正朝着越来越高的自动化程度方向发展。同时，城市交通亟需全新的共享经济模式和自动驾驶交通概念。在此背景下，人工智能和传感器等新兴技术得到了迅猛的发展，但是在车辆底盘层面上具有故障安全机制的解决方案还没有引起足够的重视。而缺乏具有故障安全功能的转向和制动系统，自动驾驶的安全性无法得到保障。舍弗勒帕拉万公司可为这一技术空白提供安全可靠的线控驱动系统“弗勒帕拉万公司可为这一技，为未来自动驾驶解决方案提供基础。Space Drive 系统已经在市场上应用了 17 年，主要用于残疾人车。该系统拥有 10 亿公里公共道路上无事故行驶记录，是一款可投入市场应用的成熟技术，帮助实现安全可靠的自动驾驶。

The Automotive Industry is evolving further to higher levels of automation and urban mobility is requiring new shared economy business models and autonomous traffic concepts. As a result we recognize a strong rush for new technologies on AI and Sensors, while fail-safe solutions on vehicle-chassis level didn't get the required attention, so far. But without fail-safe steering and braking systems there will be no safe autonomous driving possible. Schaeffler Paravan has recognized this gap and is providing the fail-safe "Drive-by-Wire" system "Space Drive" for the industry as a base for future autonomous driving solutions. This system is already in the market for about 17 years, applied in the niche market of mobility solutions for people with disabilities. With more than 1 bn driven kilometers on public roads without any accidents this system is mature and ready to be used as a base for autonomous driving.

Mr. Erich Nickel

舍弗勒帕拉万技术股份有限公司首席销售官兼首席财务官

CSO&CFO, Schaeffler Paravan Technologie GmbH & Co. KG

16:45 K2B7 车规级激光雷达量产之路

Mass production of automotive LiDAR



- 1、激光雷达量产因素
- 2、激光雷达量产——可能会停在哪里？
- 3、量产共性问题讨论-信号处理，供应链，数据处理
- 4、北科天绘的量产计划

张珂殊 先生 Mr. Darsi Zhang

北京北科天绘科技有限公司首席技术官

CTO, SureStar Technology Co., Ltd.

17:15 K2B8 解决智能驾驶后顾之忧的智能汽车健康管理技术

The integrated vehicle health management system for intelligent vehicle



- 1、网联汽车尤其是智能驾驶场景对车辆健康管理的新要求
- 2、从飞机系统借鉴智能健康管理的算法模型，盖瑞特根据航空航天及汽车行业丰富经验，结合人工智能技术开发车辆智能健康管理技术
- 3、盖瑞特全球和中国领先 OEM 的应用介绍
- 4、智能车辆健康管理技术的下一步发展

吴军 先生 Mr. Wu Jun

盖瑞特智能网联软件亚太区高级总监

Sr Director, Connected Vehicle Software Asia Pacific, Garrett

17:45 结束 Session Closed

分论坛每位演讲人：演讲时间 25 分钟，提问 5 分钟

Please note: each speaker of sub forum has 25 minutes for speech and 5 minutes for Q&A

K3. 新材料与轻量化技术分论坛
New Materials & Light Weight Technology Forum

会议日程 Agenda

13:45 现场注册及交流
On-site Registration, Networking

13:55 嘉宾介绍 VIP Introduction



主持人 Moderator: 杨洁 先生 Mr. Yang Jie

中国汽车工程学会 轻量化研究部 部长
Director, Dept. of Light-Weight Research, China SAE

14:00 K301 从铝在车门和电池中的应用看车身轻量化发展



刘清 先生 Mr. James Liu
诺贝丽斯亚洲区汽车业务副总裁兼中国区董事总经理
Managing Director, Novelis China
Vice President, Automotive, Novelis Asia

14:30 K302 下一代高性能车用铸造铝合金材料的开发及其应用
Development and implementation of next-Gen high performance casting Aluminum alloys



- 1、探索低成本汽车轻量化材料与技术
Pursuing economic lightweight materials and technologies for vehicles
- 2、高性能铝合金部件颠覆了传统汽车设计理念
High performance Al casting components disrupted Auto design
- 3、新一代高性能铸件在汽车 2.0 (轻量化/智能化/互联化/电气化) 中大有作为
Opportunities of next-Gen structural castings in future lightweight/smart/connected/electric vehicles

胡斌 博士 Dr. Hu Bin
通用汽车中国科学研究院高级研究员
Senior Researcher, General Motors China Science Lab

15:00 K303 典型汽车轻量化技术难点探讨
The Discussion of the Key Issue about Typical Lightweight Technology in Automobile



刘波 先生 Mr. Liu Bo
新能源汽车研发专项总体组专家
重庆长安汽车股份有限公司 长安欧尚汽车研究院 材料与轻量化技术总工
Chief Engineer, Material & Lightweight Technology
ChangAn Oshang Automobile R&D, Chongqing ChangAn Automobile Co., Ltd

15:30-15:45 茶歇 Coffee Break

15:45 **K304 宝钢汽车板轻量化新进展**
Latest Progress of Baosteel Autosteel Lightweight



- 1、中国汽车发展解读及宝钢展望
Interpretation of Chinese Automotive Industry And Baosteel Strategy of Auto Sheet
- 2、宝钢汽车板轻量化新材料与工艺
Baosteel Auto Sheets lightweight Materials And Advanced Forming Process
- 3、宝钢先进高强钢及轻量化实践——超轻型白车身 (BCB1.0plus)介绍
Baosteel AHSS and the Lightweight Practice-Ultra Lightweight BIW BCB1.0 plus
- 4、宝钢汽车板轻量化 EVI 分享
Baosteel Auto Sheets lightweight EVI Strategy

鲍平 先生 Mr. Bao Ping
宝钢股份汽车板首席工程师
Chief Engineer of Automobile Steel Sheet, Baoshan Iron & Steel Co., Ltd.

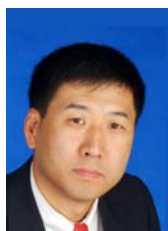
16:15 **K305 高强钢超高强钢的发展及冲压模具制造与实践**
Development of High Strength Steel and Ultra High Strength Steel and Stamping Die Manufacturing and Practice



- 1、高强钢的运用与发展
- 2、高强钢的产品特性、冲压工艺特性
- 3、高强钢的模具设计与制造实践
- 4、高强钢的制造案例
- 5、热冲压超高强钢的发展及冲压模具制造与实践

高宪臣 先生 Mr. Xianchen Gao
天津汽车模具股份有限公司副总经理
Vice General Manager, Tianjin Motor Dies CO.,LTD

16:45 **K306 内外饰轻量化机遇与挑战**
The Opportunity and Challenges for Lightweight Interior and Exterior



- 1、内饰轻量化 Lightweight Interior
- 2、外饰轻量化 Lightweight Exterior
- 3、座椅轻量化 Lightweight Seating Systems

赵丹 博士 Dr. ZHAO, DAN
诺博汽车系统有限公司研发副总裁
Vice President, R & D, Nobo Automotive System Co., Ltd.

17:15 **K307 汽车内饰显示屏系统中的创新材料和工艺解决方案**
Innovative Material and Processing Solutions in Automotive Interior Display System



- 1、汽车内饰发展趋势 Development Trend of Automotive Interior
- 2、塑料显示屏的优势 Advantage of Plastic Display Cover
- 3、科思创解决方案 Covestro solutions

邱卫辉 先生 Mr. Terence Yau

科思创聚合物(中国)有限公司聚碳酸酯事业部中国区副总裁

PCS China Vice President, Covestro Polymers (China) Co., Ltd.

17:45 结束 Session Closed

分论坛每位演讲人: 演讲时间 25 分钟, 提问 5 分钟

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