SAECCE | CHINA SAE 中国汽车工程学会 China Society of Automotive Engineers

SAECCE 2021 | 中国汽车工程学会年会暨展览会 CHINA-SAE CONGRESS & EXHIBITION

Oct.19th-21st, 2021

Post-Show Report

SAECCE 2021 中国汽车工程学会年会暨展览会 CHINA-SAE CONGRESS & EXHIBITION

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Overview of SAECCE

SAECCE 2021

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Overview of SAECCE 2021

SAECCE 2021 中国汽车工程学会年会暨展览会 CHINA-SAE CONGRESS & EXHIBITION

Congress Scale

- 1 Plenary Session
- 1 Automobile Developers Conference
- 1 Young Scientists Forum
- 42 Special Sessions
- 23 Technical Sessions
- 4 Parallel Meetings
- 523 Reports from Industry Experts
- 3501 Delegates

Call for Papers

- 1471 papers received
- 735 papers admitted and published
- 122 papers presented onsite
- 316 industry experts participated in the review

Exhibition Scale

- 10000㎡ of exhibition area
- 112 exhibitors
- 10 Technical Speeches
- 1 Purchase Matching activity
- 15000+ Visitors

Parallel Events

- 2021 C-V2X Cross-industry & Large-scale Pilot Plugfest (Shanghai & Suzhou & Wuxi)
- Rao Bin Medal of Automobile Industry-Li Shufu
- FISITA Award Ceremony-Fu Yuwu
- China Automotive S&T Award Ceremony
- 2022 China Automotive Technology Trend Released
- 2021 China Automotive Chief Technology Officer (CTO) Closed-door Summit

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Review of the Congress

Congress Overview

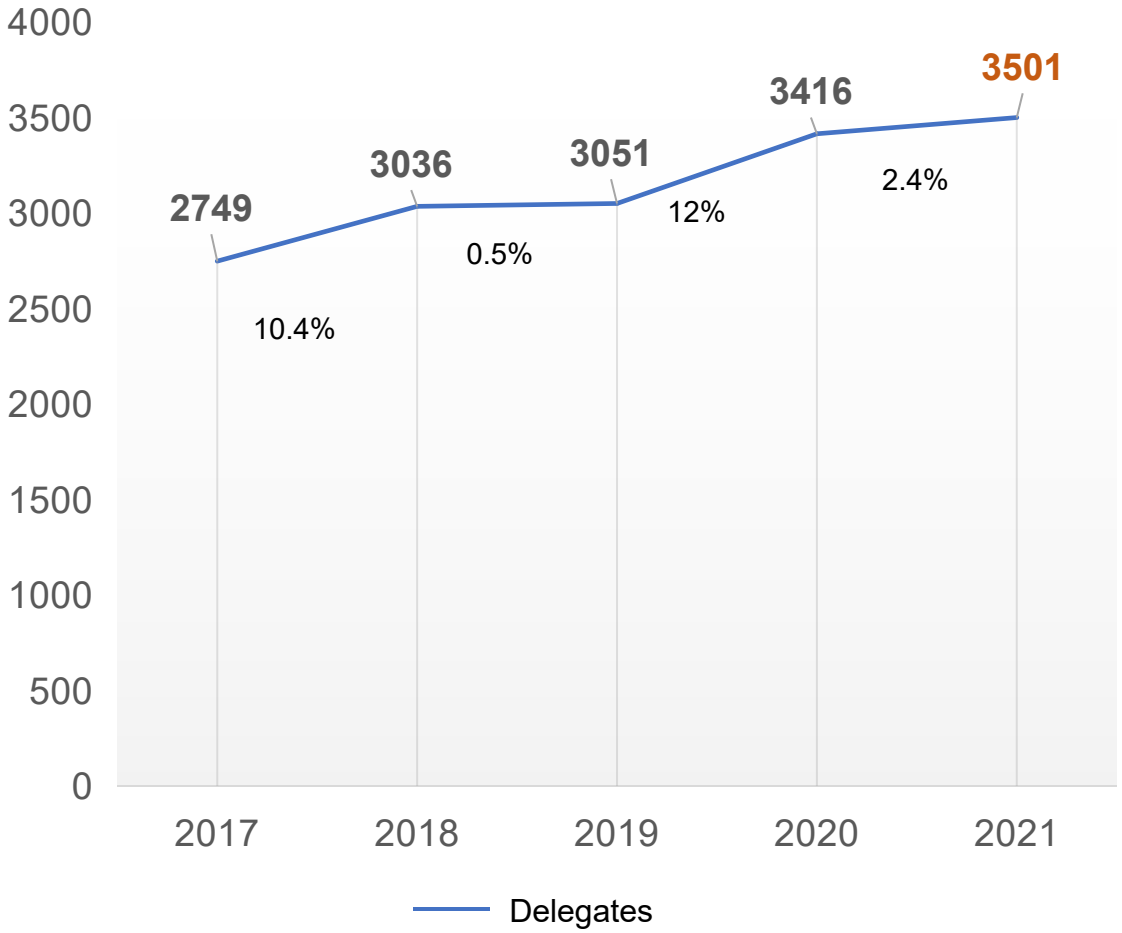
At the SAECCE 2021 annual meeting, 1 plenary session, 42 special sessions, 23 technical sessions (paper exchange), 1 developer conference, 1 global young scientists forum and 4 parallel meetings were organized, with 523 wonderful reports. Both the conference scale and the attendance increased compared with 2020, attracting 3,501 delegates from more than 500 units.

Both representatives of vehicle companies and representatives of universities and research institutes accounted for about 30% of the participants respectively.

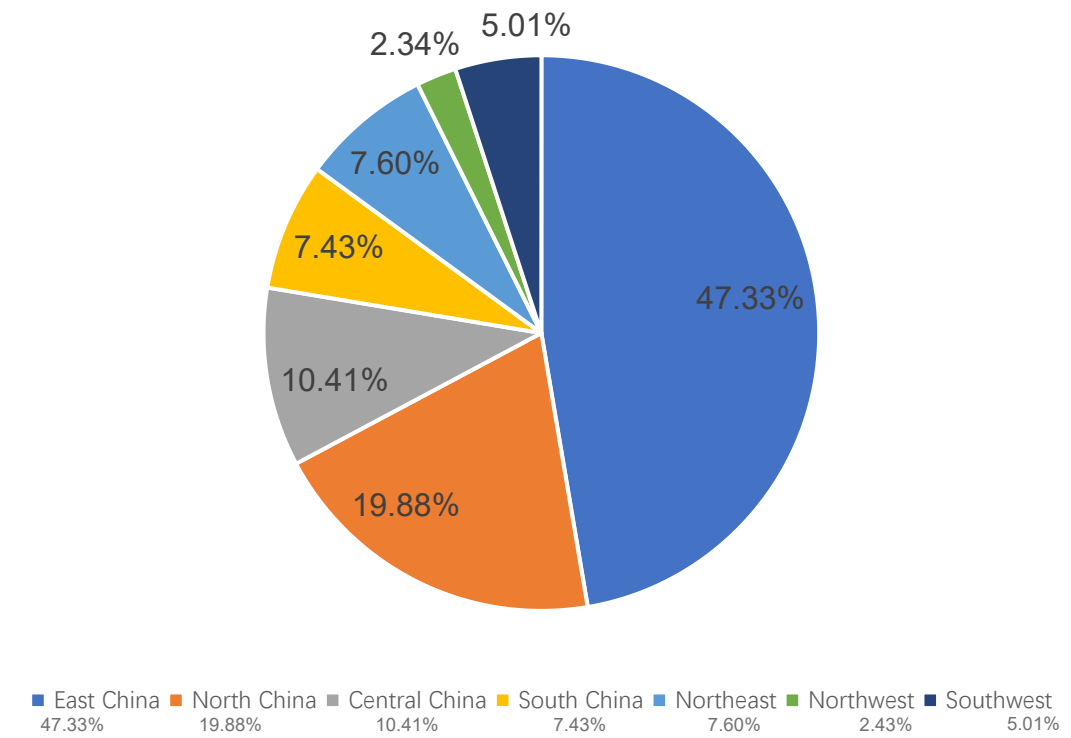
Among the participants, management personnel and researchers accounted for about 18% and 53.5% respectively.

Participants' data analysis

Number of SAECCE Delegates from 2017 to 2021

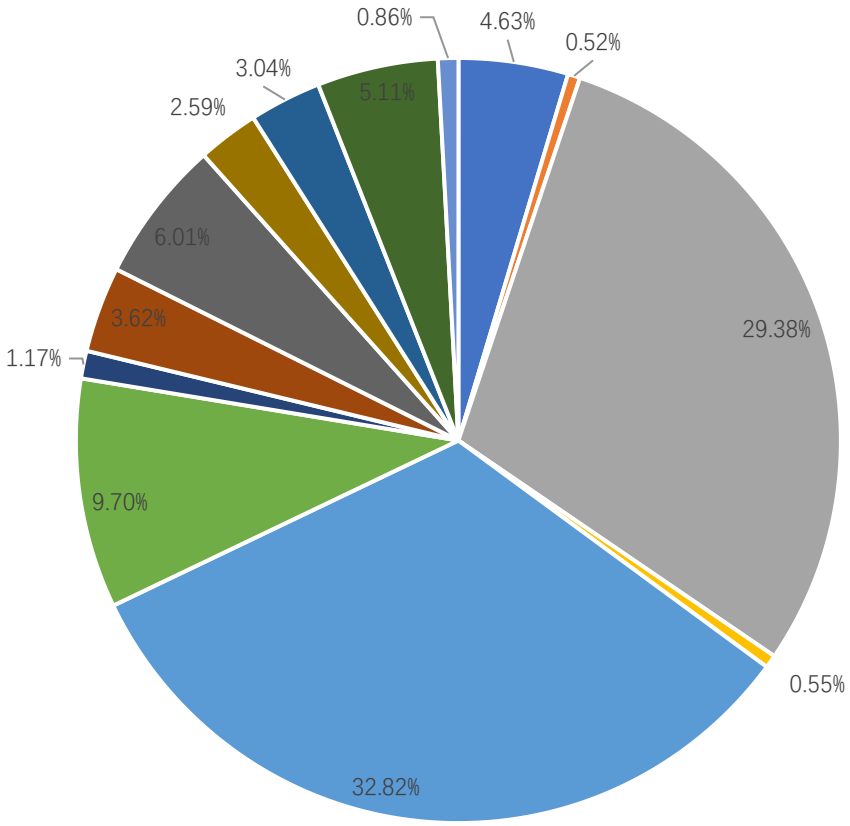


Regional Distribution of Delegates



Participants' data analysis

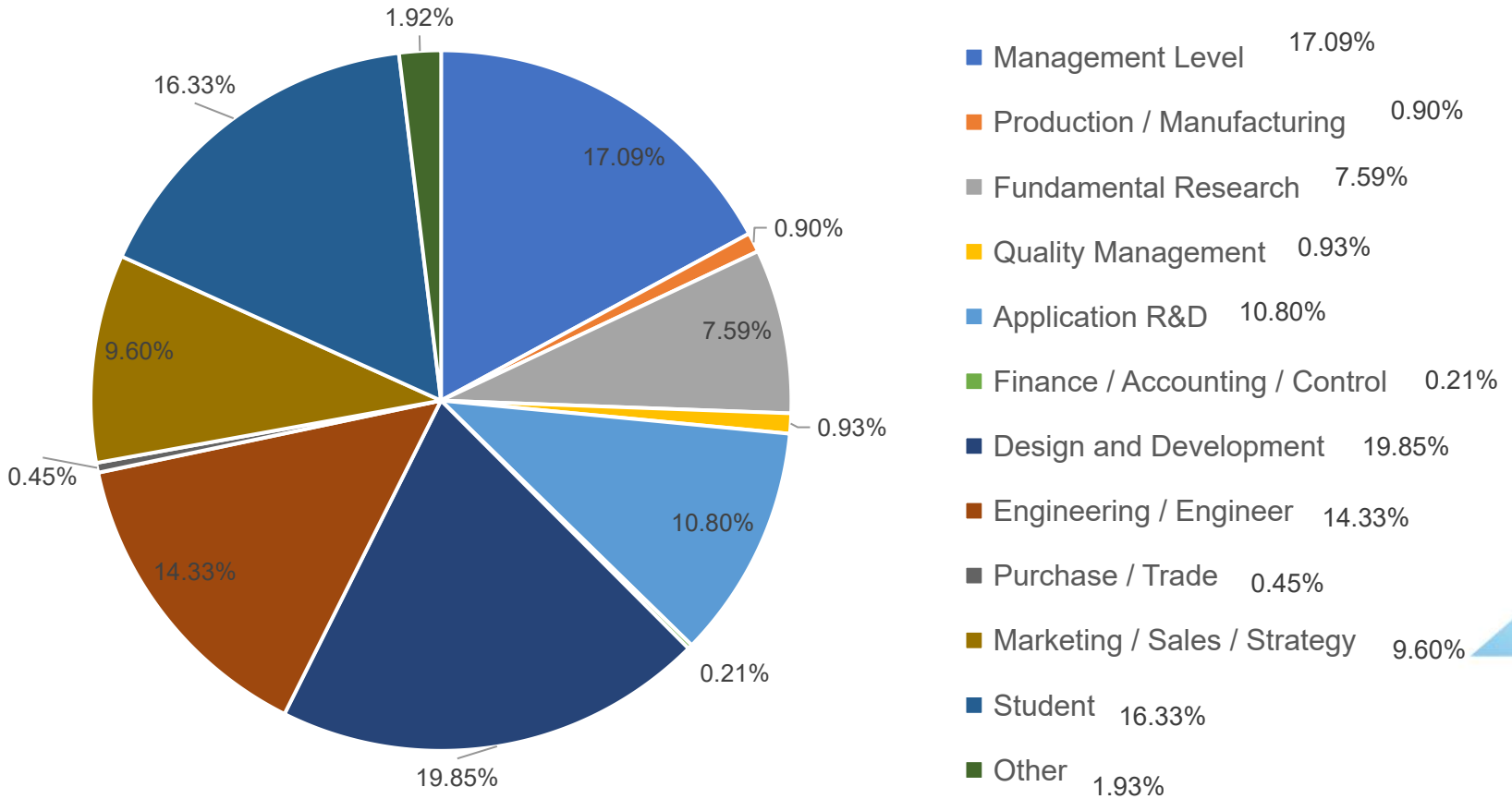
Which industries do they come from?



- The Government / Industry Association(Laws, regulations and standard system) 4.63%
- Media 0.52%
- Universities / Research Institutes 29.38%
- Production, Urban Planning and Design Institute 0.55%
- OEMs or R&D Center 30.82%
- System Solution Supplier(Software + Hardware) 9.7%
- Consulting Firm 1.17%
- Software Algorithms Technology Company (Partial software) 3.62%
- Component supplier(Partial hardware) 6.01%
- Test & Testing Facilities and Equipment 2.59%
- Product Certification and Testing 3.04%
- Automotive Manufacturing Equipment Supplier 5.11%
- Materials Company 0.86%

Participants' data analysis

Who are the delegates?



Plenary Session

- Under the theme of "Automotive plus X, Technological Innovation under Dual-Carbon Goals", the development trend of electrification, intelligence, Connected and sharing of automobiles was profoundly discussed in the opening ceremony & keynote report of the congress. Cross-industry synergy was deeply explored to promote the deep integration of automobiles with energy, transportation, information, communication and other industries. Experts and technical elites from the world automobile industry gathered in Shanghai to share industry views focusing on development trends and technical information.
- Six senior speakers from domestic and foreign automotive fields were invited during the keynote report session.

Moderator

Li Kaiguo, Vice President of China SAE; Chairman and Secretary of the Party Committee,

China Automobile Engineering Research Institute Co., Ltd.

Speakers

Li Jun, President of China SAE; Academician of China Engineering Academy; Professor of Tsinghua University

Li Keqiang, Executive Member of the Council of China SAE; Academician of China Engineering Academy; Chief Scientist of National Innovation Center of Intelligent and Connected Vehicles; Professor of School of Vehicle and Mobility, Tsinghua University

Lu Fang, CEO&CTO, VOYAH

Li Wei, Executive Vice President, Chongqing Changan Automobile Co., Ltd.

Zhao Shuyan, Vice President, Cross-Domain Computing Solutions China, R&D Responsible for Smart Driving Solution, Bosch

Qu Tao, Technical General Manager, Castrol (Shanghai) Management Co.,Ltd.

Overview of Sessions

SAECCE 2021 annual meeting got the utmost out of industry resources in terms of its conference organization, holding 71 parallel sessions. There were 8,816 attendees in total, with each one attending 3 sub-forums on average. The number of participants increased by 28.50% compared with 6859 in 2020.

ICV & Automotive Electronics

20 sessions

The meeting basically covers the key technical areas of the "Three Vertical and Two Horizontal" technical architecture of intelligent & connected vehicles (hereinafter referred to as ICVs), and the keynote speech covers all key technologies of ICVs.

Focused Sessions

E01: Fusion-based Perception Technique of Intelligent Connected Vehicles

E04: Electronic and Electrical Information Architecture

Automobile Developers Conference

E11: Control for Intelligent and Connected Vehicles

E05: The Innovation and Development of Functional Unmanned Ground Vehicle

E12: Automatic Driving Test and Evaluation Technology

E06: SOTIF of Intelligent and Connected Vehicle

E07: Human-computer Interaction Technology for Avs

E14: Autonomous Driving and Artificial Intelligence

New Energy Vehicles

16 sessions

It covers the common technology level of the whole vehicle, electric drive, fuel cell, power battery, charging and battery swapping technology. Fuel cells and power batteries are hot topics.

Focused Sessions

N04: Conference on Power Battery Utilization and Testing Technology

N05: Key Technology of Energy Saving and New Energy Vehicle Drive System

N02: Brake-by-wire and Chassis Intelligent Control Technology

N01: New Energy Vehicle Smart Charging Technology

P02: Hub Motor and Distributed Driving Technology & 3nd Forum on In-wheel Motor Driving Technology for Automobiles

N11: Power Battery Thermal Runaway and Safety Early Warning Technology Seminar

N10: Low-consumption Techniques of Intelligent Electric Vehicles under the Policy of Carbon Neutral and Carbon Integral

N07: Fuel Cell Test & Evaluation Technology

N06: Conference on Vehicle Integrated Thermal Management

Key Common Technologies

35 sessions

It covers commercial vehicles, internal combustion engines and emission control, dynamics, power systems, NVH, testing and simulation, lightweight, manufacturing, regulations, technical management and other related fields. Among them, "dual carbon" goal-driven hybrid power systems and their control technologies, commercial vehicles and automobile dynamics are hot topics.

Focused Sessions

C02: Hybrid Powertrain System and its Control Technology

P03: China Trunk Technology Conference

O04/OT4: Vehicle Dynamics and Control

Y01: Global Young Automotive Talents Forum

P04: 2021 China SAE Electromagnetic Compatibility Committee & 3rd EMC Technology Seminar

L01: Smart Design to Drive Lightweight for New Energy Vehicles

C01: High Efficiency Combustion Engine of Automobile and Carbon Neutral Fuel for Dual Carbon Target

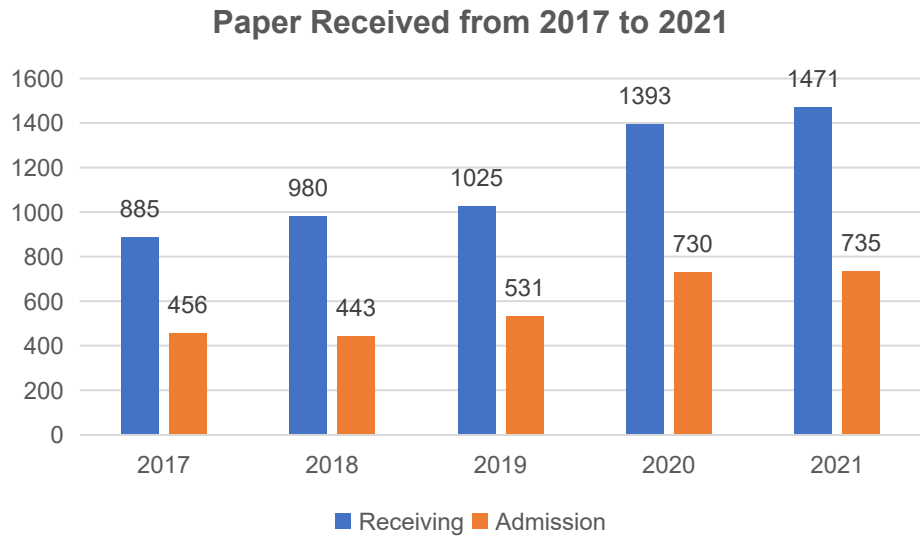
O02: China-Sweden Forum: Safety, Smart and Intelligent Transport

L02: Automotive Lightweight Key Technology Development and Application

Call For Papers

General submission situation and submission sources

- A total of 1471 paper contributions were received, and 735 papers were accepted at the annual meeting, with an acceptance rate of 50%.
- Eleven papers were selected in *Automotive Engineering*.
- Six papers were selected in *Automobile Technology*.
- Fourteen papers were selected in *Automobile Technology & Material*.
- Two papers were selected in *Chinese Journal of Automotive Engineering*.
- 105 papers were selected in EI retrieval of *Selected Papers of 2021 Annual Meeting of China Society of Automotive Engineers*.
- 596 papers were selected in the *Collected Papers of the 2021 Annual Meeting of China Society of Automotive Engineers*.



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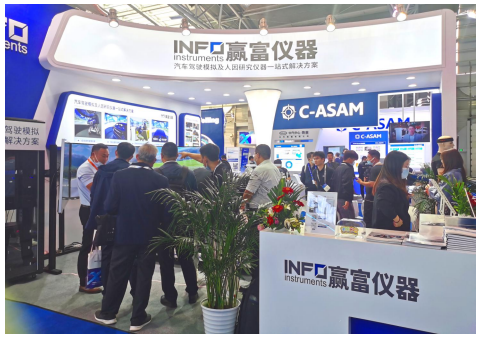
Review of the Exhibition

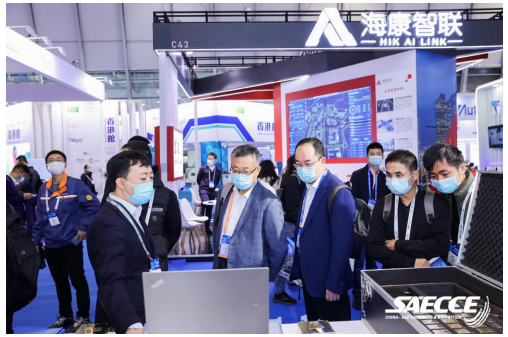
Overview of the Exhibition

At the 2021 SAECCE annual meeting, the technology exhibition covers an area of 10,000㎡, attracting 112 enterprises to participate in the exhibition and 15,000 visitors. SAIC Motor, Bosch, Hitachi Astemo, UAES, Hong Kong Productivity Council, Genvict, Gohigh, VanJee, Nebula Link, LeiShen Intelligent System, HUALUYIYUN, MAXIEYE, Rohde & Schwarz, Keysight Technologies, ANSYS, Boshilong Technology and Castrol were all present; Exhibits covered cutting-edge technologies and solutions in the field of intelligent connected/new energy/lightweight/simulation testing.

A total of 10 enterprises participated in the speech and presentation of the on-site "Technical Theater". In addition, a half-day automotive supply chain procurement matching meeting was added, attracting 8 purchasers, including SAIC Volkswagen, IM, Valeo, CSSC SMDERI, etc.

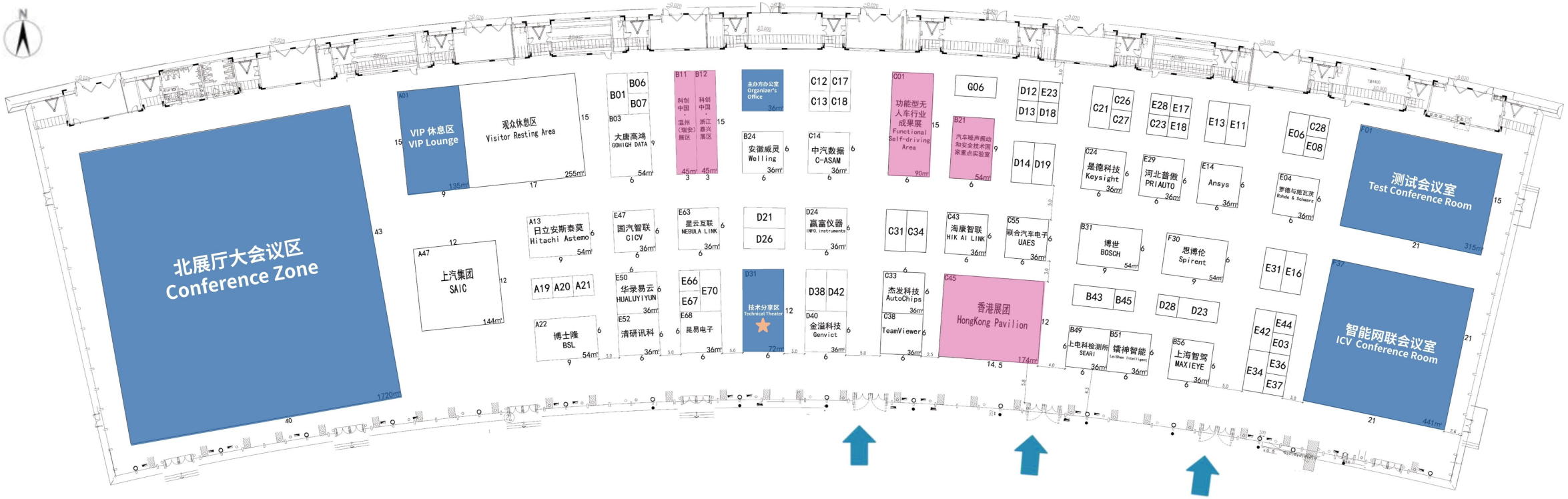
The latest technologies of the automobile industry were demonstrated in the 3-day technology exhibition, which effectively contributed to exchanges and cooperation between the upstream and downstream of the automobile industry and became one of the most recognized international technology exchange and exhibition platforms in the automobile industry.





SAECCE 2021

Onsite Map of the Exhibition



Exhibitors Data and Feedback

Exhibitor data

112 Exhibitors

10,000 ㎡ of exhibition area

95% of exhibitors are satisfied with the performance of the exhibition onsite.

88% of exhibitors are highly satisfied with the professionalism of the audience.

80% of exhibitors are satisfied with the number of visitors onsite.

85% of exhibitors are willing to participate again.

80% of exhibitors will give priority to SAECCE/CICV as a platform for new product release/new technology sharing.

99% of exhibitors found key targeted customers at SAECCE.

Comments from exhibitors

"SAECCE has left a deep impression on us both in terms of efficient organization, professional and extensive visitors, and technical forums that meet the most important needs of the industry. Rohde & Schwarz is a leading supplier of testing solutions in the Internet of Vehicles industry. This year's SAECCE was held with CICV. We are very happy to participate in the event, and we also hope to see more and more new friends and new Internet of Vehicles product schemes to give full play to China's new infrastructure construction, thus promoting the development of the Internet of Vehicles industry. The intelligent and connected vehicles will promote future development. We hope the event will be better and better.

Rohde & Schwarz China

The exhibition is a wind vane for the development of the industry and a window for enterprises to know the frontier development. At SAECCE, relevant enterprises in the field of intelligent transportation will show their unique abilities. We hope SAECCE will be better in the future!

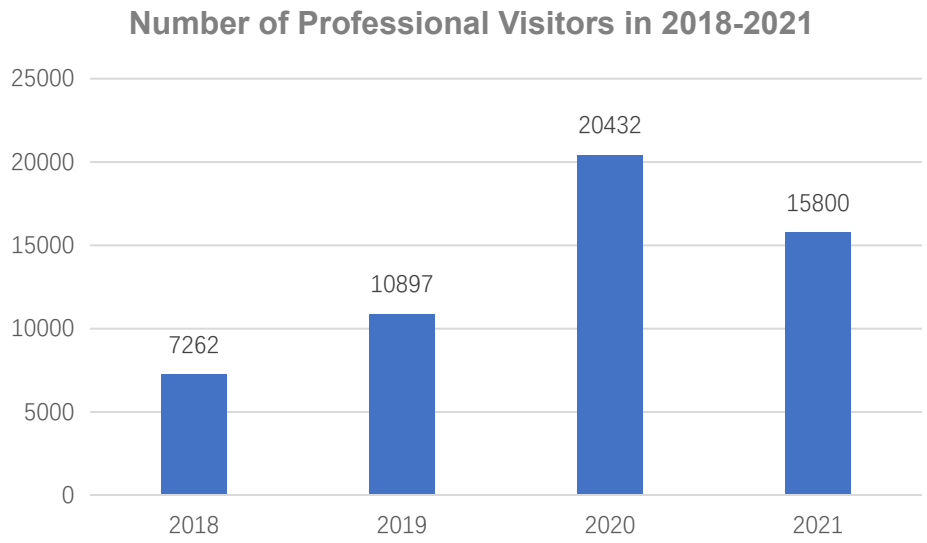
Genvict

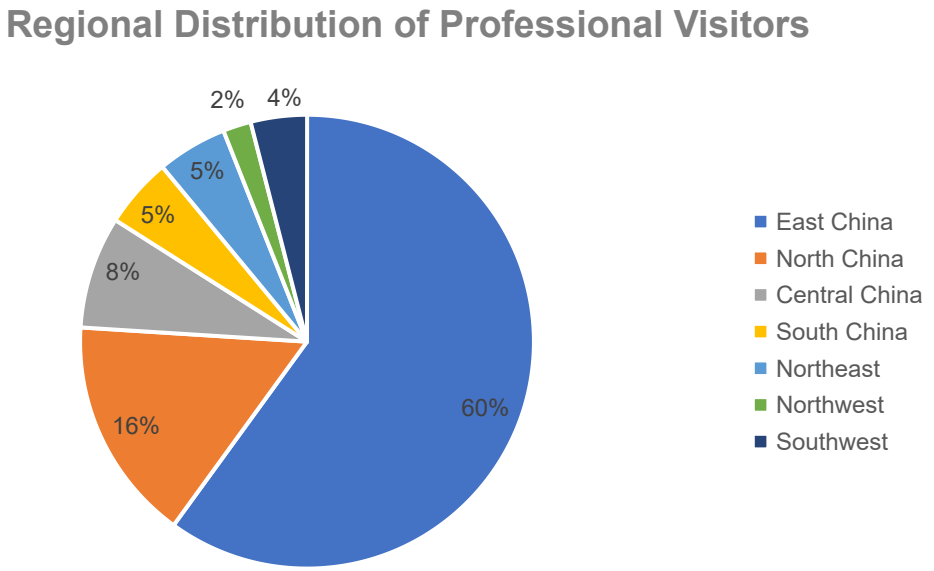
Through SAECCE, people can get to know Bosch Group's products and technologies. At the same time, the theme of the conference can be closely combined with the exhibition. I met many old friends from vehicle enterprises onsite. It is a professional congress in the current automobile industry.

Bosch Group

Analysis of Exhibition Visitor Data

15,800 professional visitors attended this exhibition in 2021, mostly coming from several automobile industry clusters in Shanghai, Beijing, Jiangsu, Hubei, Guangdong and Jilin.



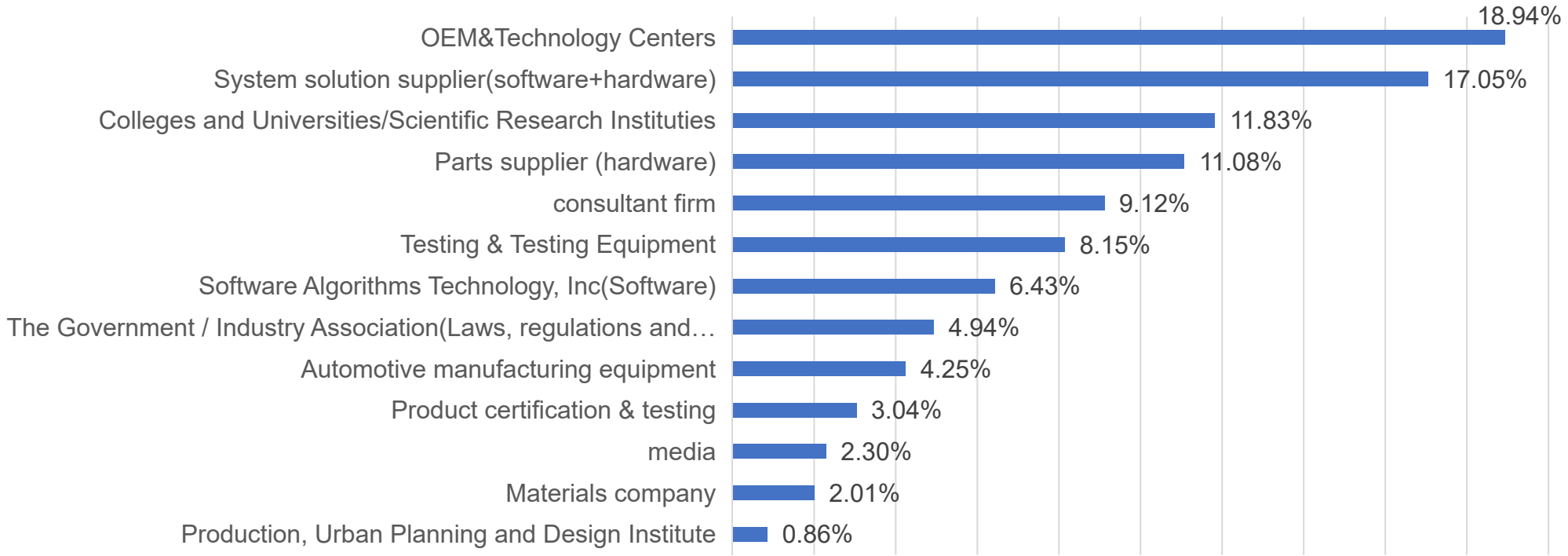


Analysis of Exhibition Visitor Data

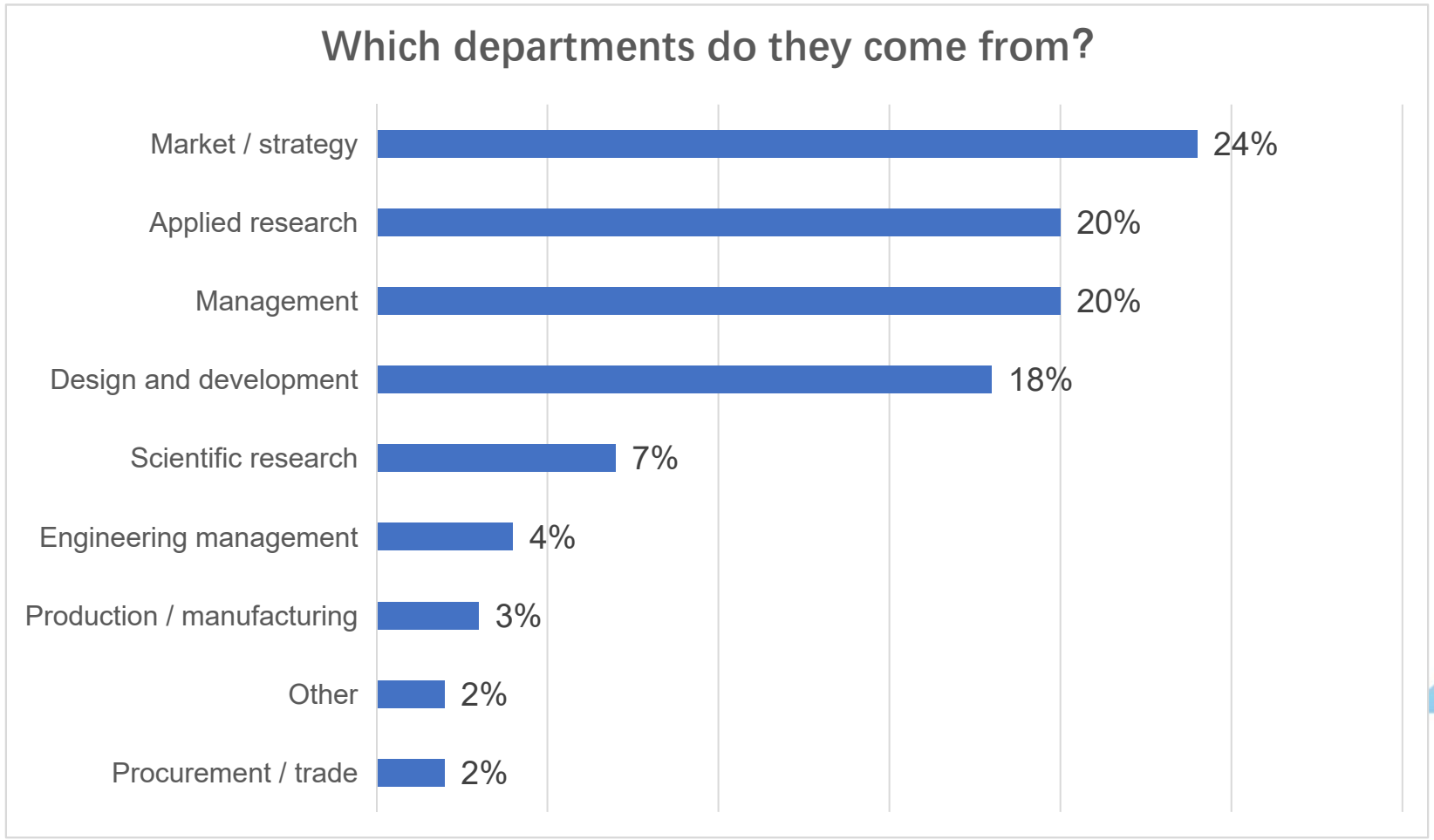
The technical exhibition of SAECCE annual meeting attracted professional visitors from different fields, industries and functions in the global automotive industry.

- 50% of the visitors came from technology research and development positions;
- 56% of the visitors were entitled to purchase suggestion and final decision.

Which industries do they come from?



Analysis of Exhibition Visitor Data

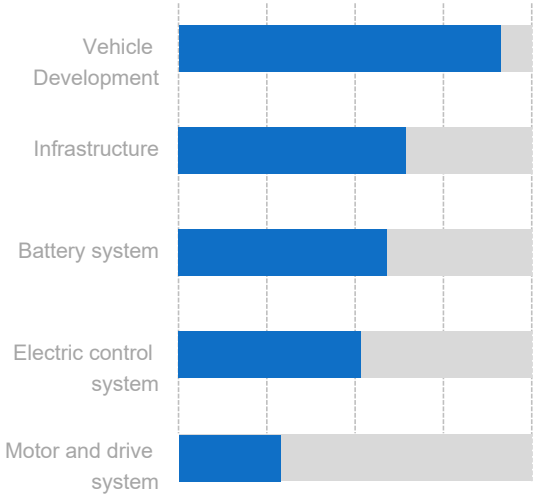


Analysis Data of Exhibition Visitors

The visitors of the technical exhibition were interested in the whole industrial chain technology and products of automobiles from design to final manufacture, and placed emphasis on the products and solutions related to the fields of new energy automobile technology, ICV technology, common automobile technology and testing technology!

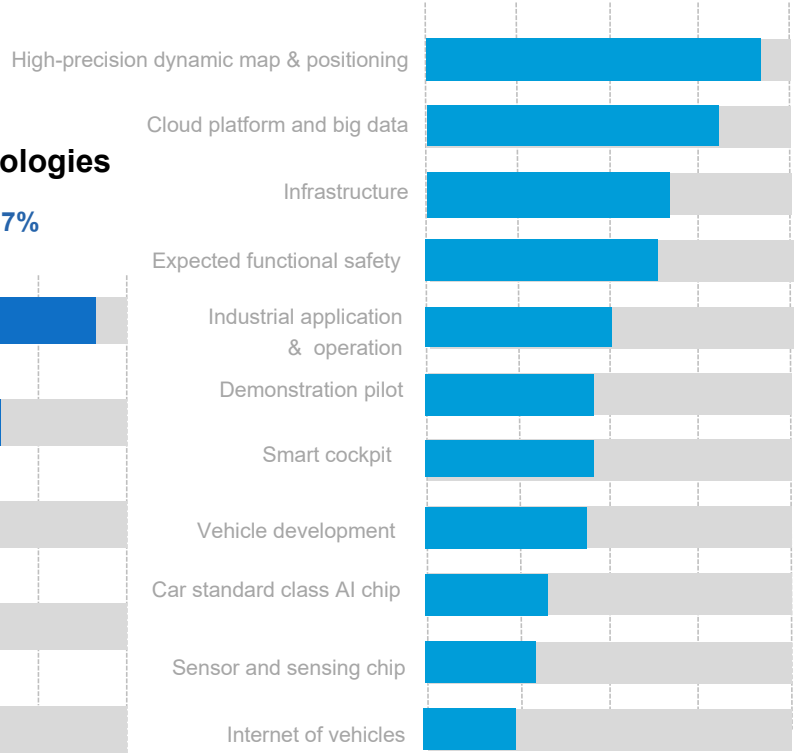
Focus on New Energy Vehicle Technologies

Vistors accounted for 14.17%



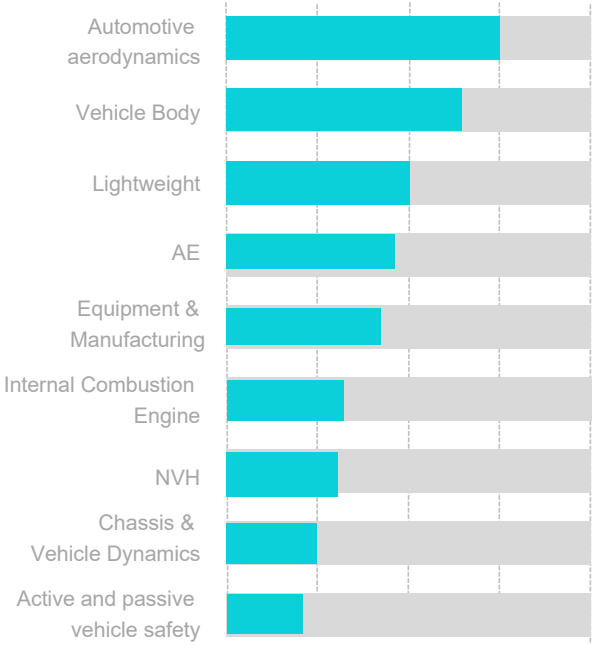
Focus on ICV Technologies

Vistors accounted for 61.88%



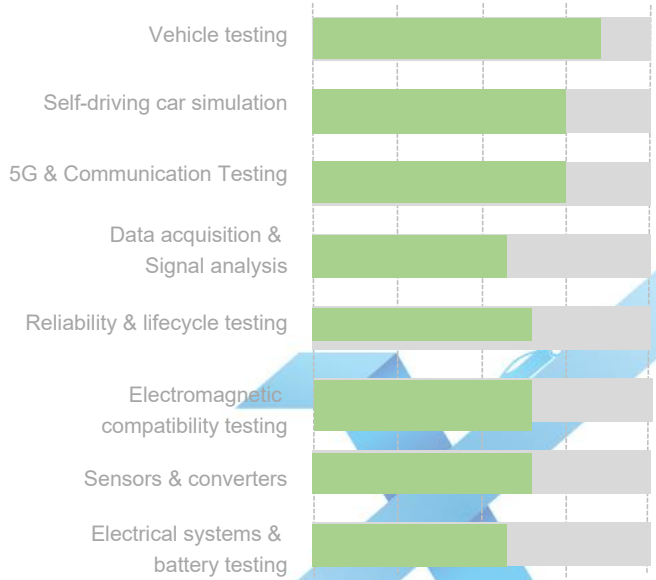
Focus on Common Technologies

Vistors accounted for 9.03%



Focus on Automotive Testing Technologies

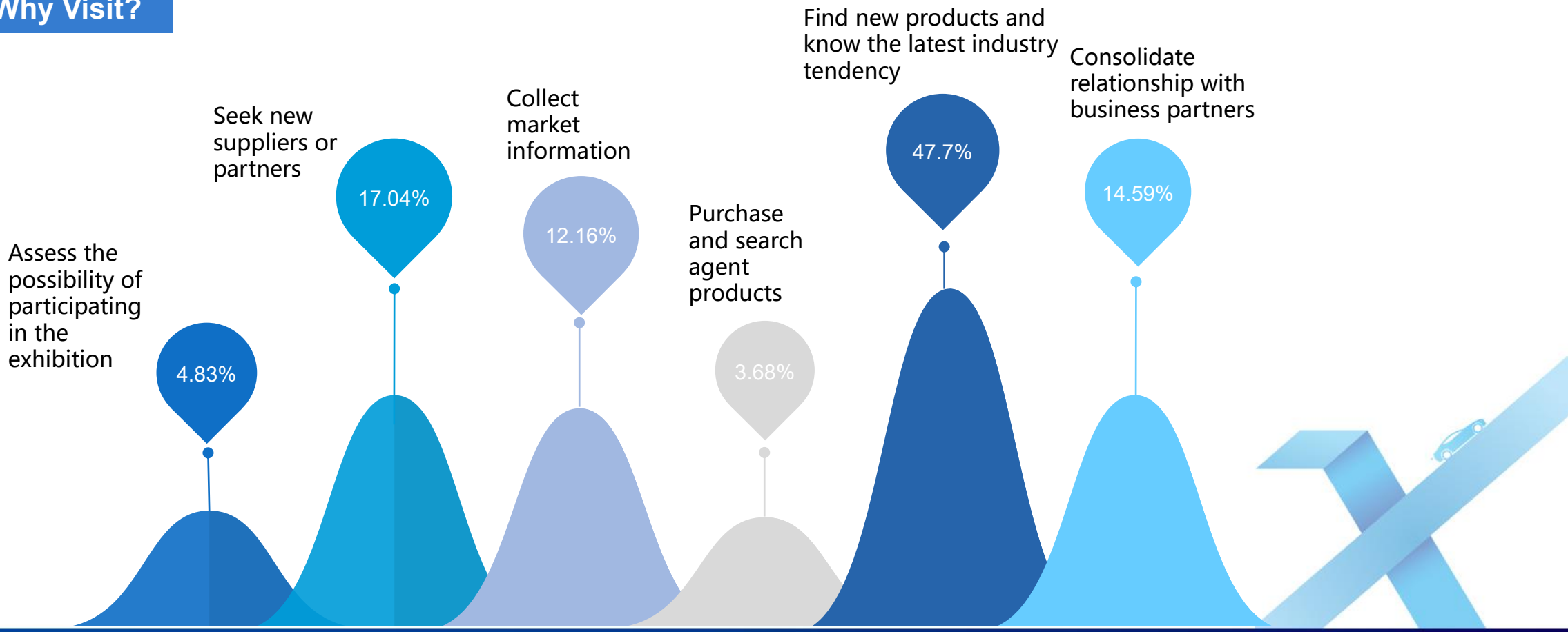
Vistors accounted for 14.92%



Analysis of Exhibition Visitor Data

The technical exhibition at SAECCE annual meeting attracted visitors from various fields of the automobile industry worldwide, including intelligent networking, motor & electronic controls, testing technology, software solutions and vehicle manufacturing and other related markets.

Why Visit?



Visiting Groups of Technology Exhibition

The exhibition attracted 7 professional visiting groups from enterprises and organizations including **Geely Auto**、**Stellantis**、**NEWRIZON**、**SANY**、**HUAWEI**、**Shanghai University of Engineering Science** and **Shanghai University**.

- **Exhibition group highlights:**

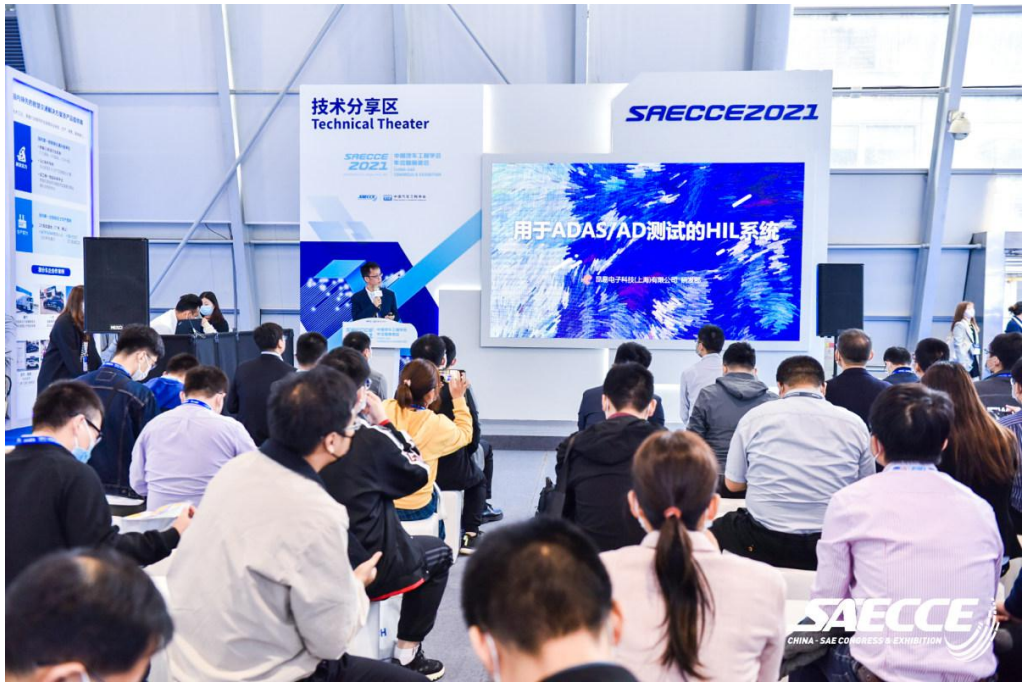
Hong Kong and local exhibition groups. **20** enterprises participated in the Hong Kong exhibition group and **14** the local exhibition groups.

- **Highlights of the exhibition area:**

the intelligent & connected exhibition area and the testing exhibition began to take shape, accounting for **38%** and **27%** of the total exhibition area respectively.

Technology Sharing Area

At the "Technical Theater", the highlight of the technical exhibition at SAECCE annual meeting in 2021, the latest ICV technologies were shared and related speeches given. A total of 10 technology sharing sessions in 3 days produced favorable comment from enterprises and further promoted the exchange and interaction between exhibitors and visitors. Besides, additional half-day supply chain procurement and distribution meeting of 2021 SAECCE attracted 8 purchasers, including SAIC Volkswagen, IM, Valeo, CSSC SMDERI, etc. It gave the technical exhibition greater public appeal.



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Parallel Events

2021 China Automotive Chief Technology Officer (CTO) Closed-door Summit

On October 19, 2021, the 2021 Closed-door Chinese Automotive CTO Summit was successfully held during the annual meeting.

With the theme of "Science and Technology Innovation Boosting Industrial Development", this summit aimed to discuss how automobile and parts enterprises, in the current new round of science and technology revolution and industrial transformation in the global automotive industry, reshape the influence and leadership of automotive technology innovation through science and technology innovation, acceleration of innovative application and integration of new products and technologies, and professional, comprehensive and diversified cross-border upgrading.

44 CTOs and technical directors from more than 30 enterprises were invited at the summit, including Dongfeng, Changan, SAIC, BAIC, GAC, BYD, Geely, Xiaopeng, JMC, NIO, Nissan, CICV, Bosch, ZF, Huawei, Valeo, Cummins, Schaeffler, Faurecia, Neusoft Reach, Powered by AliOS, Baidu, Tencent and Horizon Robotics.

Mr. Hou Fushen, Vice Secretary General of China SAE, Executive Dean of International Automotive Engineering Science and Technological Innovation and Strategy Research Institute, Mr. Zhou Xin, Executive Vice President of Shanghai NIO Automobile Co., Ltd., and Dr. Jiang Hong, General Manager of AVL China, respectively delivered guidance speeches on China's automotive technology trends in 2022, intelligent electric vehicle technology innovation-NIO's thinking and practice, expected functional security and network security.

2021 C-V2X Cross-industry & Large-scale Pilot Plugfest (Shanghai & Suzhou & Wuxi)

To further facilitate the commercialization of C-V2X of the Internet of Vehicles (hereinafter referred to as IOV) and promote the large-scale demonstration application of city/region-based "vehicle-road-network-cloud", on October 19-22, 2021, IMT-2020 (5G) promotion team C-V2X work team, China Industry Innovation Alliance for the Intelligent and Connected Vehicles (hereinafter referred to as CAICV) and other units opened test roads in Jiading District of Shanghai City, Xiangcheng District of Suzhou City, and Xishan District of Wuxi City to jointly carry out the 2021 C-V2X "Four Spans" (Shanghai, Suzhou and Wuxi) pilot application practice activities.

These activities fully implemented technology development based on the domestic IOV standard system, focused on the deployment and demonstration of C-V2X's support for the collaborative application of urban intelligent transportation vehicles and roads, and push forward with the establishment of efficient and safe urban intelligent transportation with comprehensive "vehicle-road-people-cloud" connection. The pilot application practice activities includes the application practice of "cross-chip module, cross-terminal, cross-vehicle, cross-security platform"IOV C-V2X "Four Spans" interconnection, and 5G-driven intelligent driving.

2022 China Automotive Technology Trend Released

Focusing on the "nine areas" of Energy-saving and New Energy Vehicle Technology Roadmap and "three types" of technology trends in 2022, we carried out investigation and research on enterprise CTOs, expert scholars, technical backbones, etc., and 4 rounds of expert investigation and discussion with Delphi method. Finally the 2022 annual technology trends in the top ten automotive technologies and subdivisions were achieved.

To be specific:

- Computing chips of automotive-grade above100TOPS will be mass-produced and assembled in 2022.
- The third generation semiconductor motor controller will achieve multi-manufacturer mass production and application in 2022
- Improvement in safety technology will boost the application of 300Wh/kg high specific energy battery
- Long-life fuel cell system will achieve multi-scenario application in commercial vehicles in 2022
- The market share of BEV passenger vehicles based on special platforms will exceed 65%.
- 800V voltage platform will be adopted for high-performance BEV passenger vehicles in 2022.
- Intelligent thermal management technology will substantially increase the low-temperature adaptability of power batteries and accelerate multi-vehicle application
- Technological breakthrough will be made in domain controllers, a transition from single domain control to cross-domain fusion
- The vehicle information security protection technology will leap to active defense-in-depth system from border defense system.
- DHT hybrid power system applications will reach 1.5 million in 2022.

China SAE Fellowship Conferring Ceremony

The fellow of China-SAE is the highest level of individual members and also the highest honor given by the Society to individual members. Fellow titles are awarded to experts with significant academic achievements and outstanding contributions to industry development.

Upon review, a total of 7 experts were awarded the fellow of the China-SAE in 2021, including:

- Ding Rongjun, Academician of Chinese Academy of Engineering; Dean, Wuxi Intelligent Control Research Institute of Hunan University
- Chen Hong, Dean and Professor, College of Electronic and Information Engineering of Tongji University
- Chen Shanghua, Vice President of R&D, Beijing New Energy Vehicle CO.,Ltd.
- Li Wei, Executive Vice President, Chongqing Changan Automobile Co., Ltd.
- Wang Jianqiang, Secretary of the Party Committee and Professor, School of Vehicle and Mobility of Tsinghua University
- Wang Zhang, Secretary of the Party Committee, General Manager and Professor-Level Senior Engineer, Off-road Vehicles Co.,Ltd., Beijing Automobile Group
- Wang Zhenpo, Professor, School of Mechanical Engineering of Beijing Institute of Technology; Director, The National Engineering Laboratory of Electric Vehicles

2021 China Automotive S&T Award Ceremony

Sponsored by China Society of Automotive Engineers, the "China Automotive Industry Science and Technology Award" is established to give full play to the guiding role of science and technology awards, mobilize the enthusiasm and creativity of scientific and technological workers, and push forward scientific and technological innovation and technological progress of the automotive industry.

Based on the evaluation of the evaluation committee of "China Automotive Industry Science and Technology Award", 41 projects won the award this year, including 1 special prize, 9 first prizes, 9 second prizes and 22 third prizes. Four people won the "China Automotive Industry Excellent Science and Technology Talent Award" and four the "China Automotive Industry Excellent Young Science and Technology Talent Award".

Rao Bin Medal of Automobile Industry

The Rao Bin Award for China's Automobile Industry is a highly regarded Chinese automobile industry entrepreneur award. It aims to reward excellent talents who have made outstanding contributions to the development of the Chinese automotive industry since its establishment.

"Rao Bin Medal" is hosted by China SAE, with special support of Beijing China Automobile Culture Foundation.

Upon deliberation on the opinions solicited from the senior leaders of China Mechanical Engineering, China-SAE, China Association of Automobile Manufacturers, China Automotive Technology & Research Center, Automotive Industry Committee of CCPIT, China Automotive News, China Automotive Talents Society, industry experts and scholars, it was decided the medal was awarded to Mr. Li Shufu, Chairman of Geely Holding Group in 2021.

FISITA Award Ceremony

The FISITA Outstanding Contribution Award is awarded every two years in recognition of the industry leaders who have made outstanding contributions to the automobile industry worldwide.

Zhao Fuquan, honorary lifetime chairman of FISITA and professor of Tsinghua University, read out a congratulatory letter from FISITA on behalf of Mr. Chris Mason, CEO of the FISITA. Academician Li Jun, Secretary-General Zhang Jinhua and Professor Zhao Fuquan presented the award to Director-general Fu Yuwu, the winner of FISITA Outstanding Contribution Award.

FISITA

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Mr. Yuwu Fu
Honorary President of China SAE
Honorary President of CATS (China Auto Talents Society)

October 2021

Dear Mr Fu

On behalf of the FISITA Executive Board, Council and international community, please accept our sincere congratulations for being the recipient of the FISITA Medal in 2021.

To receive such a unique recognition is a wonderful achievement and to have done so via the acknowledgement of your peers makes your contribution towards the international FISITA community even more special.

Your leadership, vision and encouragement of colleagues in China and around the world has been a positive influence on the international automotive and mobility systems engineering community for many years, with your presence and contribution ensuring that present and subsequent generations of students, engineers, strategists and leaders within our industry continue to benefit from your influence.

To have gained the support and recognition of the international community of FISITA is a significant achievement which is aspired to by many but only achieved by the few, and your place within the International Connected Community of FISITA is now rightfully recognised forevermore with your award of the FISITA Medal.

We recognise your contribution and influence, and thank you for your leadership and friendship, all of which will be valued by many as they go on to deliver their contribution to the international automotive and mobility systems industry, and the wonderful community of FISITA.

Yours

Chris Mason

Chief Executive Officer
FISITA

Excellent PhD Papers for China-SAE Congress in 2021

Automotive Innovation 2020 Best Paper Award

Two outstanding papers were, upon rounds of strict review, namely, nomination by editorial department, extensive peer review and final evaluation by review committee, selected for *Automotive Innovation* in a bid to increase the dissemination of outstanding scientific research achievements and commend outstanding paper authors.

- Li Guofa Team, Shenzhen University

Deep Reinforcement Learning Enabled Decision-Making for Autonomous Driving at Intersections

- Jediah Richard Clark Team, University of Southampton

Automated Vehicle Handover Interface Design Focus Groups with Learner, Intermediate and Advanced Drivers

Excellent Paper Award in 2020《Automotive Engineering》

Four outstanding papers were, upon three rounds of strict review, namely, nomination by editorial department, extensive peer review and final evaluation by review committee, selected for *Automotive Engineering* in a bid to increase the dissemination of outstanding scientific research achievements and commend outstanding paper authors.

Paper Title	Paper Author
Cloud Control System for Intelligent and Connected Vehicles and Its Application	Li Keqiang, Chang Xueyang, Li Jiawen, Xu Qing, Gao Bolin, Pan Jian
Weight Allocation Strategy Between Human and MachineBased on the Preview Distance to Lane Center	Chen Wuwei, Wang Qidong, Ding Yukang, Zhao Linfeng, Wang Huiran , Xie Youhao
Engine Start-up H∞ Robust Optimal Control of the Compound Power-Split System	Zhao Zhiguo, Fan Jiaqi, Jiang Lanxing, Tang Xuhui, Fu Jing
Effect of Injection Ratio on Combustion and Emission ofCombined Injection Gasoline Engine During Warm-up Process	Sun Ping, Liu Ze, Liu Shaozhen, Yu Xiumin, Cao Zhi, Yang Song

Excellent Paper Award for China-SAE Congress in 2021

No.	Paper Title	First Author Unit	Paper Author
2021CSAETTC-041	Study on Endurance Test Method for Hydrogen Fuel Cell Engine	GAC Automotive Research & Development Center	Guo Wenwen, Li Jianzheng
SAECCE2021-ART-038	on Reliability Condition Characteristics of Electronic Brake Booster Based on User Big Data	University of Shanghai for Science and Technology	Zhao Lihui, Zhou Chi, Xu Kanfeng, Wang Zhen, Zheng Songlin
SAECCE2021-CIT-050	Development and Verification of Steering by Wire System Based on the Function Safety Requirement	General Research and Development Institute China FAW Corporation Limited	Chang Xiuyan, Gao Shang, Jiang Tinglong, Hou Huixian, Zhang Jianwei
SAECCE2021-EE-015	Research on On-line Temperature Estimation Algorithm of SCR System	Shandong University of Technology	Guangzhao, Sun Zhenmao, Tian Guangdong
SAECCE2021-ICV-093	Review of Interaction between Autonomous Vehicles and Pedestrians	State Key Laboratory of Automobile Simulation and Control, Jilin University	Hongyu, Diao Xiaoju, Gao Fei, Gao Zhenhai
SAECCE2021-ICV-101	Research on Longitudinal Acceleration Control Algorithm of Autonomous Vehicle Based on Linear Active Disturbance Rejection Control	State Key Laboratory of Automobile Simulation and Control, Jilin University	Guoying, Zhao Xuanming, Wen Lianghu, Zheng Xiulei
SAECCE2021-NVH-052	Study on Braking Noise Optimization in Low Frequency Range Based on a Pure Electric Vehicle	BYD Auto Industry Co.,Ltd.	Zhu Danhui, Yang Le, Charles Zhang
SAECCE2021-NVH-072	Modeling and Simulation of Driveline Clunk in Vehicle with Dual Clutch Transmission	Changan Auto R&D Center	Zhang Zhijun, Tang Yu, Yang Xianwu, Tian Xiong, Xu Jianchun

Outstanding Youth Paper Award for China-SAE Congress in 2021

No.	Paper Title	First Author Unit	Paper Author
SAECCE2021-CIT-021	Research on ABS Slip Ratio Control of Vehicle Based on Linear Active Disturbance Rejection Control	School of Automobile and Traffic Engineering, Jiangsu University	Yuan Lei, He Ren
SAECCE2021-EV-104	A Study of Body Structure Based on 25% Small Offset Collision	BYD Auto Industry Co.,Ltd.	Cui Yingying, Yi Bengang, Tian Hongsheng, Mao Lizhong, Yan Junfei
SAECCE2021-ICV-068	A Motion Planning Method Based on Reinforced Learning for Automatic Parllel Parking in Small Grarage	Tongji University	Sun Hongwei, Chen Hui, Song Shaoyu
SAECCE2021-ICV-092	Research on Personalized Lane Change Triggering Based on Traffic Risk Assessment	Jilin University	Zhu Naixuan, Gao Zhenhai, Hu Hongyu, Lv Ying, Zhao Weiguang
SAECCE2021-IEE-039	Study on Combustion and Emission Characteristics of High Compression Ratio Gasoline Engine Based on Two-Stage High Energy Ignition and Passive Pre-chamber	Tongji University	Shi Jiaye, Wang Jinqiu, Deng Jun, Miao Xinke, Liu Yihui, Li Liguang
SAECCE2021-NVH-081	Master Slave Control Method for Torsional Vibration of Electromechanical Transmission System	School of Mechanical Engineering, Beijing Institute of Technology	Zhang Wei, Liu Hui, Zhang Xun, Zhang Wannian, Wang Zhen, Yan Pengfei
SAECCE2021-TM-013	Research on Technical and Economic Evaluation System of Intelligent Connected Vehicles Based on Patent Analysis	School of Automotive, Chang'an University	Chen Yisong, Xing Yunxiang, Xiong Xiaoqin, Lan Libo, Cao Ying, Liu Yongtao
SAECCE2021-TM-053	Blockchain Technology and Its Application in the Automotive Field	State of Laboratory of Automotive Safety and Energy, Tsinghua University; Tsinghua Automotive Strategy Research Institute, Tsinghua University	Zhu Guangyu, Zhao Fuquan, Hao Han, Liu Zongwei
SAECCE2021-VE-033	Research on AEB Control Strategy of a Heavy Tractor-Semitrailer Combination Based on BP Neural Network Algorithm Prediction	Research on AEB Control Strategy of a Heavy Tractor-Semitrailer Combination Based on BP Neural Network Algorithm Prediction	Dongfeng Commercial Vehicle Technology Center

Automobile Developers Conference

Automobile Developers Conference, co-sponsored by the National Intelligent and Connected Vehicle Innovation Center and China-SAE, aims to gather authoritative experts of the ICV industry, leading enterprises, universities and scientific research institutes to build an industrial ecosystem with developers.

With the theme of "China Chip · China Software Casting Soul of China Automobiles", the frontier fields of science with developers from all over the country were explored and ICV new technologies, new models, new ecosystems were discussed at this conference, with the focus on innovation and intelligence-driven future. A total of more than 70 enterprises and more than 400 developers attended the conference, and 10+ authoritative media such as China Media Group Mobile. Focusing on the common technologies in the current industrial chain, such as automatic driving algorithm, vehicle technology platform, operating system, vehicle specification chip, etc., industry leading experts and enterprise technology leaders were invited at the conference to offer their insights on the ecological development and construction of industrial innovation in the focus areas. Academician Ni Guangnan, Professor Yin Chengliang and other experts were also invited to share their expertises in the ICV industry. Eleven honored guests from Huawei HiSilicon, Tencent, iSoft Infrastructure Software, and BDStar Navigation gave keynote speeches. Taking this conference as an opportunity, the automobile developer ecology is officially launched, and the Innovation Center will join hands with all parties in the industry to gather the wisdom of Chinese developers, promote the change to China's automobile industry in a century and become a power nation of automobile.

SAECCE 中国汽车工程学会 China Society of Automotive Engineers

SAECCE 2021 中国汽车工程学会年会暨展览会 CHINA-SAE CONGRESS & EXHIBITION

Publicity and promotion

Press Execution Situation-Overview of Media Cooperation

Media channels

- **Sound volume statistics:** Sound volume statistics: 150 million network exposure, 62 million+ reading
- The number of media: 70+, covering CCTV, party media, central media, comprehensive authoritative media, media platforms of financial field and automobile industry. They followed up and timely reported on the annual meeting during the whole process.
- **Special thanks to:**
  - The number of supportive media to which special thanks are expressed: 6
  - The number of official publicity platform: 3
  - The number of special media partner: 1; The number of strategic media partner: 1
  - The number of in-depth media partner: 3
  - The number of media partner specially invited at the conference:50+

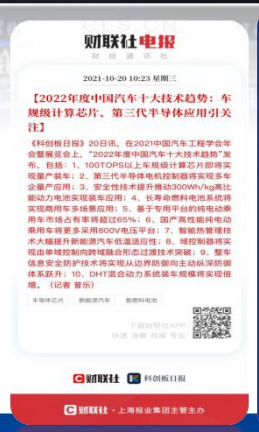
Live channels

- Network-wide view: 5 million+ online viewers
- 14 media and live-broadcasting platforms simultaneously push the opening ceremony of the plenary session of the annual meeting and the automobile developers conference.

China Media Group Mobile, Innovation China, Home of Science and Technology Workers, CNKI, Autohome, Sohu Auto, Sina Auto, Dongchedi, EVLOOK, Evpartner, AUTOR, Bilibili, Deep tech, China-SAE WeChat Video Channel

National Media Department Reports

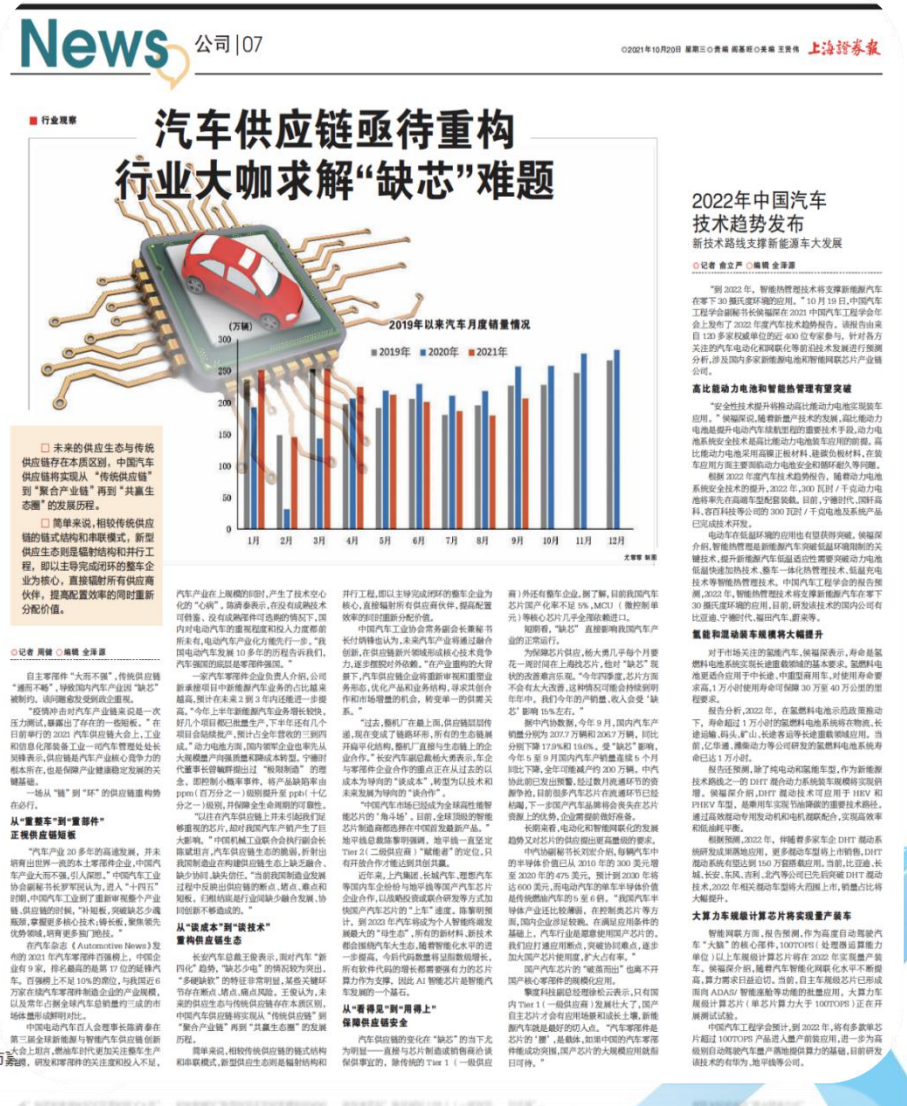
10月20日， CCTV—13新闻频道朝闻天下节目播出
2022年汽车技术新趋势发布 聚焦新能源和智能网联



Portal Websites and Special Reports

SAECCE 2021

Screenshots of Media Report



The 2022 Events are Even More Exciting

CICV 2022, May, 2022, Yizhuang,Beijing

Presentation and Exhibition application: Dec.,2021-May, 2022

Registration: Mar.-May, 2022

Website：www.cicv.org.cn

TMC 2022,Jul., 2022

Presentation and Exhibition application: Dec.,2021-May, 2022

Registration: Apr.-Jul., 2022

Website：www.transmission-china.org

China-SAE, Congress & Exibition, Nov., 2022

January 10th-April 25th,2022, Paper collection and submission stage. 50% Admission rate, 10% EI retrieval rate, Some of the papers will be published in journals such as *Automotive Engineering*, *Automotive Technology, Automotive Engineering, Automotive Technology and Materials* and other journals.

Presentation and Exhibition application: Dec. 2021-Sept. 2022

Registration: May-Oct., 2022

Website：www.saecce.org.cn

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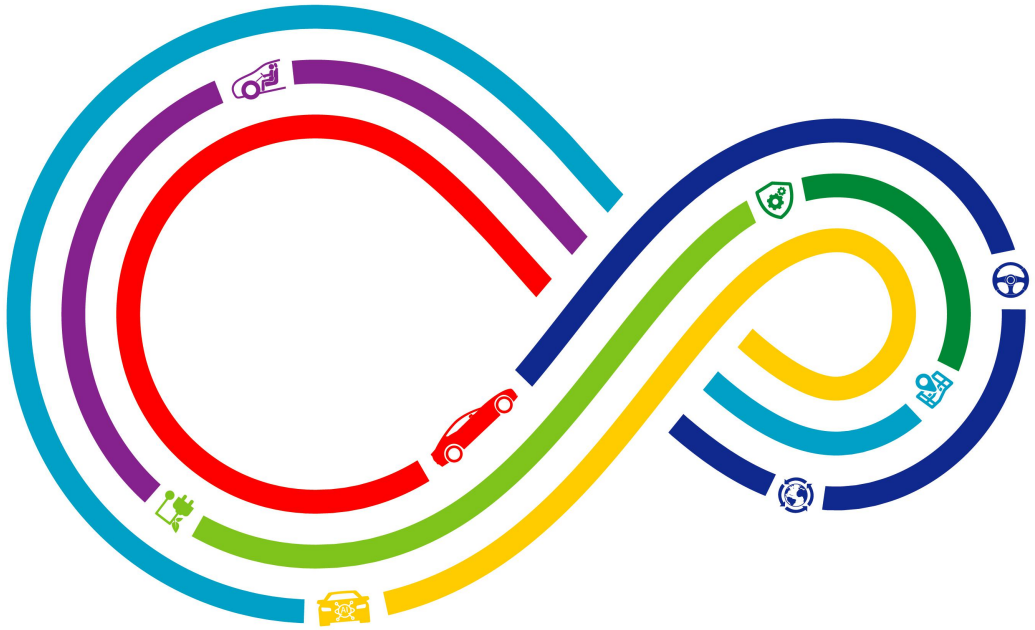

明年再见!
See You Next Year