

# Integrate with Future Tech!

新技術との融合で、モビリティの未来へ

**EXHIBITION INFORMATION** 

7/16 17 18 Aichi Sky Expo
Aichi International Exhibition Center
10 AM-5 PM

ONLINE STAGE 2 7/91-7/301



Procedure for visitors to the Exposition



**Total Exhibition Space** 

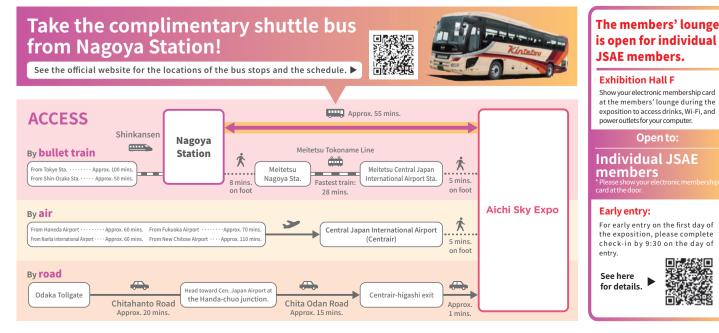
**Number of Exhibitors** 

Number of Booths

Approx. 26,000 m<sup>2</sup> Over 350 companies Over 970 Booths

\*The numbers of exhibition booths and exhibitors are forecasts based on the latest information as of Wednesday, April 2





**JSAE Special Exhibits** 

# The future of cars and mobility created by the fusion of new technologies

## - The horizons of automotive technology broadened by digital transformation -

The automotive industry is experiencing a digital transformation (DX) based on technological innovations driven by artificial intelligence and big data, which have advanced services utilizing automated driving and

Thanks to creative collaborations with new technical fields, automotive technologies are poised to see an even greater leap forward as automakers work to build the future of cars

telematics to a point unimaginable ten years ago.

This exposition features exhibits and presentations focusing on three perspectives: the evolution of cars driven by DX, the evolution of society and services involving cars, and the evolution of manufacturing (monozukuri).

Join us in creating the ideal forum for considering the

#### Exhibit Collaborators and organizations (in order of the Japanese alphabet)

JSAE Special Presentations

the future

AIOI · SYSTEMS CO.,LTD., Aisin Corporation, eve autonomy, Inc., NTT Docomo Inc, Omron Corporation, SUBARU Corporation, Tier IV, Inc., Denso Wave Incorporated, Tokio Marine & Nichido Fire Insurance Co., Ltd., TOPPAN Inc., Toyota Motor Corporation, Dolby Japan K.K., Nissan Motor Corporation, Panasonic Automotive Systems Co., Ltd., East Nippon Expressway Company Limited, Honda Motor Co., Ltd., Microsoft Research Asia, Mazda Motor Corporation, Mapbox Japan G.K.

The following presentations are scheduled to be held based on the exposition theme set by the JSAE.

Integrate with Future Tech! Integrate with Future Tech!

Conference rooms L3 and L4 (capacity: approx. 300)

#### Friday, July 18 11:00-12:00 **The Art of Open Source**

### - Reimagine Intelligent Vehicles

Around nine years has passed since the advent of Autoware, the world's first open-source autonomous driving OS. Autoware features the full suite of technologies necessary for realizing safe autonomous driving, and is open for development by a wide range of organizations and individuals. This presentation describes the democratization of autonomous driving through the adoption of



TIER IV, Inc.

### Friday, July 18 13:30-14:30

#### **Relationship between Undisclosed Vulnerabilities Discovered in Security Contests and the Latest Security**

The widespread adoption of autonomous driving technologies in society is likely to continue further underlining the importance of vehicle cybersecurity. VicOne Inc. holds security contests in which people compete to discover undisclosed (zero-day) vulnerabilities affecting vehicles. This presentation uses the details of VicOne's vehicle cybersecurity threat reports to discuss vulnerabilities discovered through these events.



**VicOne Corporation** Vice President Head of Japan Region

Head of Sales and Business Development

#### **Special Presentations about** Technological Development

These are special presentations focusing on the passion and dedication that engineers apply to development.

**Tuesday, July 15** 10:00 -Friday, July 18 23:59

#### Online only streaming

#### **Taking on the Challenge of Motor Sports in** the Era of Decarbonization

Development of the Z NISMO GT4 -

This presentation focuses on the NISSAN Z NISMO GT4 race car that is currently in development. It describes the relationship between the base vehicle and the GT4 category race car as well the environmental consciousness of the development, while tracing the history of motor sports activities at Nissan and



NISSAN MOTORSPORTS & CUSTOMIZING CO., LTD.

**Exhibition Hall E** 

Senior Vice President

Shinichi Kiga



See the official website for detailed information about this presentation.

**MITSUO HITOMI** 

Wednesday, July 16 11:00-12:00

Facing Up to an Era of Transformation - Using Digital Technologies for Change -

As we face up to an era of transformation, traditional automakers

have no choice but to use digital technologies to boost the

efficiency of their current operations and shift their resources

toward the creation of unique value. Since this approach applies

equally to small and medium sized businesses, this presentation

presents a proposal for how to address this issue as we move into

Mazda Motor Corporation

Wednesday, July 16 13:30-14:30

DX Driven by QR Code and RFID Technologies

Quick response (QR) codes and radio frequency identification

(RFID) technologies have been widely adopted as ways of linking

objects and data. In addition to their roles as data carriers, new

ideas that use the characteristics of QR code and RFID

technologies are starting to drive digital transformation (DX) in

various fields. This presentation introduces some technical

trends with potential applications for vehicles and monozukuri.

**DENSO WAVE INCORPORATED** 

General Maneger

**Latest Global Trends** 

BMW and Bosch outside Japan.

PLM Consultant

Maker YouTuber

SEMICON Japan Ambassador

Monozukuritarou

Stand-Off

Wednesday, July 16 16:00-17:00

Engineering Division 2 Edge Products BU

Japan's Struggle to Respond to Drastic Changes in

Vehicle Processing Technologies and the U.S.-China

This presentation shares the latest technical trends obtained

from the perspective of machine tools and based on visits to

**Boostech.inc Representative director** 

#### Thursday, July 17 13:30-14:30

Nagoya University

Hiroaki TAKADA

Thursday, July 17 11:00-12:00

**Open-Source SDVs** 

**Initiatives for Creating Value through** 

Software defined vehicles (SDVs) that can be equipped with

third-party- developed apps are known as open-source SDVs.

This presentation describes how open-source SDVs can

accelerate mobility-related innovation and create new value. It

also introduces some initiatives to help realize open-source SDVs.

lobal Research Institute for Mobility in Society

#### **Autonomous Last-Mile Shuttle Services Implemented by Mutual Regional Support**

In February 2023, a partnership involving Nagoya University and KDDI started operating autonomous shuttle services to help local residents move around more easily. This presentation introduces an initiative that addresses mobility-related issues in regions with many hilly roads and aging populations.



**Kasugai City** Planning Administration Section Assistant Section Chief

### Thursday, July 17 16:00-17:00

#### **Designing DX for Monozukuri Enterprises**

In the digital transformation (DX) process for monozukuri enterprises, the switch from a conventional approach of competing based on quality, cost, and delivery (QCD) to competing based on the creation of new value is becoming even more important. This presentation uses actual case studies to discuss the fundamental essence of DX and how to nurture human resources capable of promoting DX.



Osaka University FORESIGHT inc

HAJIME TAKEBAYASHI

All presentations will be held in-person at the venue and will be archived for later viewing. People wishing to see these presentations live and in person must make a reservation in advance through the official website. Archive streaming will be available from Wednesday, July 23 to Wednesday, July 30.

\* Streaming will be available for JSAE members from Thursday, July 31 to Friday, August 8.

WED. July 16	10:00-13:00	14:00-17:00	
	Progress of activities aimed at popularizing fuel cell vehicles and realizing a hydrogen society  Organized by: Fuel Cell Technology Committee	Initiatives and proposals aimed at creating a people-friendly "sound environment around roads"  Organized by: Exterior Noise Management Committee	
тни. <b>July</b> <b>17</b>	10:00-13:00	14:00-17:00	
	Towards road safety measures that take into account the diversity of vulnerable road users  Organized by: Traffic Safety Technical Committee Impact Biomechanics Technical Committee	Thinking about the future of mobility from a design perspective  Organized by: Design Committee	
FRI. July	10:00-13:00	14:00-17:00	
	Application and Demonstration of CAE (MBD) to Heat and Electronic Circuits in EV Models, Carbon Neutrality, and Mass Production Design	What is a meaningful digital transformation?	

Conference Room L1 (capacity: approx. 250)

**Forum NAGOYA** Live and in-person presentations describing the latest trends and future prospects affecting automotive technology, the automotive industry, and related fields.

based on International Standard Description

Organized by: Model Development Technology Technical Committee Organized by: Advanced Manufacturing Technology Committee **Exhibitors Seminar** 

This exhibition showcases a collection of vehicles equipped with the latest technologies. Come and learn about the technologies adopted by each of these vehicles.



Fuel cell electric heavy-duty truck



may differ from those shown in the photograph ISUZU GIGA LNG



N-MOBI



INFINITI OX80



MITSUBISHI MOTORS OUTLANDER



LAND CRUISER "250" "First Edition



**CROWN ESTATE** 

"THE LIMITED-MATTE METAL"



HONDA NC750X CUV e:



HONDA X-ADV



**HONDA** FORZA 750

JSAE Chubu Branch Research Report Sessions

Conference Room L5 · L6

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Conference room L5 < capacity: approx. 90 > / Venue 1						
Powertrain / Environment	10:15 - 10:35	Aichi Institute of Technology	Ryosei Takeda	An Analysis of Diesel Fuel Spray Characteristics with Higher Injection Pressure		
	10:40 - 11:00	Aichi Institute of Technology	Takafumi Kato	A study of exhaust performance improvement with higher injection pressure on diesel engine		
Technology 1	11:05 - 11:25	Aichi Institute of Technology	Kanta Kasugai	A Study on thermal efficiency improvement by Hydrogen Oxygen Gas in Diesel Engines.		
Powertrain /	11:35 - 11:55	NGK Insulators, LTD.	Kengo Okai	After-treatment System Technical Solutions for HDV Euro7 Regulation (DPF/SCR)		
Environment Technology 2	12:00 - 12:20	Daido University Graduate School	Shinnosuke Nagase	Real-time treatment of emissions in diesel exhaust gas using titanium oxide thermal catalyst		
Safety /	13:05 - 13:25	DENSO CORPORATION	Atsushi Baba	Social Acceptance of Autonomous Driving Based on Safety Assurance		
Social	13:30 - 13:50	TOYOTA TECHNICAL DEVELOPMENT CORPORATION	Taiki Kawabe	AI-based Simulation Scenario Generation from Dashcam Video		
implementation	13:55 - 14:15	Suzuki Motor Corporation	Eisuke Minakawa	Development of swappable Battery-Powered Electric Motorcycle. (Subtitle: Technical Overview Derived from Demonstration Tests.)		
Conference room L6 (capacity: approx. 90 ) / Venue 2						

Research report sessions organized by engineers in JSAE Chubu region

	13:55 - 14:15	Suzuki Motor Corporation	Eisuke Minakawa	Development of swappable Battery-Powered Electric Motorcycle. (Subtitle: Technical Overview Derived from Demonstration Tests.)			
Conference room L6 (capacity: approx. 90 ) / Venue 2							
Materials	10:15 - 10:35	TAIHO KOGYO CO.,LTD.	Shu Kamiya	Development of Damage Evaluation Procedure for Various Materials Using MSE Method			
	10:40 - 11:00	JTEKT Corporation	Funahashi Kazumasa	Improved accuracy of theoretical prediction of drive shaft strength			
	11:05 - 11:25	DAIDO METAL CO., LTD.	Makoto Kondo	Study of the Effects on Plain Bearings in Corrosion Tests Simulated Next-generation Fuel Combustion Environments			
Materials Carbon neutrality/ Circular economy	11:35 - 11:55	Toyota Auto Body Co., Ltd.	Shiho Mizuno	Development of a new resin material with excellent flexibility using plant fibers.			
	12:00 - 12:20	TOYODA GOSEI CO., LTD.	Tatsuya Ao	The development of the novel rubber regeneration technology for effective rubber recycling			
	13:05 - 13:20	Shizuoka Institute of Science and Technology Graduate School	Kaito Shimizu	$A study on the {\it effect} of vertical asymmetric {\it vibrations} on {\it ride} comfort and physiological responses during automobile driving}$			
Free topics Ergonomics Fluid Noise	13:25 - 13:40	TOYOTA BOSHOKU CORPORATION	Satoru Ohira	Noise analysis and improvement verification in seat ventilation			
	13:45 - 14:00	Toyama Prefectural University	Toya Makino	On the noise and drag reduction technique using porous material			
	14:05 - 14:20	ADVICS CO., LTD	Takumi Inoue	Consideration Regarding Drag Torque Reduction of Disc Brakes (2nd Report)			
	14:25 - 14:40	Toyota Motor Corporation	Daiki Ikeuchi	The Role of Explainability in Shape Generative Models for Aerodynamic Car Design			
14:50 - 16:00 Q&A (free topic block, etc.), workshop, venue: Conference room L6							

### Fully Immersive Interior Exhibition Hall F **Sound Experience**

Event held with support from: Dolby Japan

As the widespread adoption of autonomous driving technologies in society focuses even further attention on the enhancement of mobile spaces, the unprecedented immersive and exhilaratingly realistic nature of the stereophonic sound provided by the Dolby Atmos for Cars technology transforms the vehicle interior into the ultimate entertainment space. Com-

and experience the next-generation of interior sound for yourself.





### **Hands-on VR Driving Simulator Experience**

Event held with support from: Toyota Central R&D Labs., Inc. Come and test drive a VR\*1 system developed to provide a mobility experience that immerses the driver into a world of stories. Drive the vehicle in real space while wearing an HMD\*2 and feel the impacts from striking balls in the VR space via the brakes and steering wheel





Through 30-minute presentations, exhibitors will provide detailed information on topics including product technology, companies, and industry,

Wednesda	ay, July 16	Thursday	y, July 17	Frida	y, July 18
10:20-10:50	DG Technologies	10:20-10:50	UL Japan Inc.	10:20-10:50	SOLIZE Corporation
Cybersecurity and Diagno with SAE J2534 API and IS	ostic Reprogramming Tool SO 13400 DoIP Features	Testing Requirements Automotive Application	of Plastic Materials for	Roboze's 3D Printer Speci Plastics – Product Conce Metals –	ially Designed for Super Engineerin pt and Examples of Replacement o
<b>11:00-11:30</b> Japan A	utomobile Research Institute	11:00-11:30	ARKEMA	11:00-11:30	SCSK Corporation
nitiatives for Building an /ehicle Simulation Platfo		Arkema's Specialty Mater From 'Bio-based' to 'More	rials with a Focus on PA11: e Sustainable Materials'	Introduction of Data-Driven Approaches in Water Electrolysis and Fuel Cell Development – Realization of Research DX Using Simulations and AI –	
11:40-12:10	DeepL Japan G.K.	11:40-12:10	HORIBA, Ltd.	11:40-12:10	Prometech Software Inc
How to leverage Language industry and the manufac	e AI "DeepL" in Automotive turing sector?	Smart regulatory testing! efficiency and labor savin		Introduction of Lates	t Particleworks Trends
<b>12:20-12:50</b> Japan Nove	osense Microelectronics Co., Ltd.	12:20-12:50	Vicor	12:20-12:50	Leaner Technologie
An In-Depth Overview of Semiconductor Solutions &	NOVOSENSE's Automotive Latest Technologies	Vicor's power solutions fo	or advanced EVs and SDVs	AI-Powered Procuren Procurement through	nent AX: Transforming n Digital Transformation
13:00-13:30	Ono Sokki Co., Ltd.	13:00-13:30	SCSK Corporation	13:00-13:30	Witzenmann Japan K.K
Supporting Data Governa Speedometer in Type App	ance with Ono Sokki's GPS proval Testing	Cost reduction is enough? CO2 trade-off analysis by			stablished German Technology: Ne d Vehicle Batteries Using Thin-She
<b>13:50-14:20</b> Mi	tsubishi Chemical Corp.	<b>13:50-14:20</b> MUS	ASHI ENGINEERING, Inc.	13:50-14:20	HORIBA, Ltd
Sustainable Vehicle Sol Chemical Group	lutions of the Mitsubishi	Dispensing technology ar SDGs	nd liquid materials for		al Burden of Power Consumptio eneration Equipment Solutions tha abor-Saving Tests
14:30-15:00	SCSK Corporation	14:30-15:00	SmartUQ	14:30-15:00	Vector Japan Co., Ltd
Initiatives in Manufact Utilizing AI Agents	uring Data Engineering	Accelerating DX with Un Technology for Bridging V	ncertainty Quantification /irtual and Real Worlds	Vector Strategy for Ro Actual Projects	ealizing SDVs and Initiatives i
15:10-15:40	TECHMATRIX Corp.	15:10-15:40	S&P Global Mobility	15:10-15:40	tracetronic K.K
he Efficiency of Onboarding/Er	or Resolving Issues in and Raising mbedding Development Projects s of Interruption Interference –	The Impact of the Trum Global Automotive Indust	np Administration on the try	shifting left - efficient for complex autonom	t, automated software testin ous vehicles
<b>15:50-16:20</b> Fur	ukawa Electric Co., Ltd.	15:50-16:20	AIZOTH Inc.	15:50-16:20	Carl Zeiss Co., Ltd
_aser processing solution	on for xEV with the latest	No-Code AI Analysis Pla Efficient Automotive Rese	atform, Multi-Sigma, for		echnology for Internal Defeduced Gigacasting Components





### **Special Exhibition Areas** \*Listed in Japanese alphabetical order (as of Wednesday, April 2, 2025, not including joint exhibitors).

#### **JSAE Chubu Branch Area**

Fujian Cyclone Technology Co., Ltd.

Fujikura Printed Circuits Ltd.

This special area showcases the activities of companies from the Chubu area! A wide range of prominent technologies from various companies will be on display.

Gifu Prefecture Sanshu Electric Wire Co., Ltd. Sanwa Electronic Circuit Co., Ltd.

Shigeru Co., Ltd.

SHIMADZU CORPORATION

JSAE Chubu Branch Tsuruga Electric Corp. Tokai Kogyo Co., Ltd.

NODA PLASTIC SEIKOU Co., Ltd. MATSUO SANGYO Co., Ltd.

#### **Korean Next-Generation Mobility Technology Networking Area**

METALART Corp.

MICRO FASTENERS Co., Ltd.

The Korean automotive part industry is increasing its presence in the global market thanks to rapid growth in the fields of electrification, autonomous driving, and the like. This year's exposition has attracted 50 companies with advanced global technologies related to batteries, lightweight materials, sensor technologies, connected technologies, and more who are looking to partner with companies in Japan.

2025 marks the 60th anniversary of the normalization of Japan-Korea relations, and there is an increasing necessity for industrial cooperation between the two countries. Come to the Korean Next-Generation Mobility Technology Networking Area run by the Korea Trade-Investment Promotion Agency (KOTRA) and find a partner to share your journey as leaders of the next-generation mobility industry.



#### **Startup Academia Area**

This area features exhibitions and presentations from the start-up companies that will lead the industry in the future as well as universities and academic institutions aiming to implement the results of their research in society.

Corpy Co., Ltd. Compredict SandBox Inc. Appen Japan K.K. Japan Novosense Microelectronics Co., Ltd. Emuni Inc. KIMITSU PROJECTION Inc. Things Inc.

SUPWAT Inc. Nagoya Institute of Technology Patsnap LLC

SUGINO EICHI Corp.

Photonic Edge Inc. Braid Technologies Inc. Polymerize pte Ltd. LEAN PATH Inc. RENATA MECHATRONICS PRIVATE LIMITED