

5th International Summit

Next Generation

Steering Systems USA 2023 APRIL 25-26 Dearborn | MI, USA













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APRIL 25-26, 2023 in Dearborn | MI. USA



Dear colleagues.

I am very pleased and honored to invite you to the annual Next Generation Steering Systems Summit USA 2023. This is the second occurrence in the venerable Automotive Hall of Fame in Dearborn and the very first one being hosted by Bendix Commercial Vehicle Systems.

The 2022 summit, which brought together a wide range of automotive industry experts from multiple disciplines and with different backgrounds, has demonstrated in a striking way the power of real human interaction instead of mere virtual collaboration. I am really looking forward to meet all the familiar faces and many new participants in person next April in Michigan.

The veterans in our industry have seen many trends and technologies emerging and developing. Many of them succeeded, some transformed the industry and others vanished and ended up as a footnote in history books. Only one thing is for certain, that change is inevitable and needs to be actively driven or it will drive us. Software continues to grow in importance which constitutes more and more the decisive set of technical differentiators and which is a main criteria for either market success or decline and doom.

So it's obviously a must to dedicate a substantial part of the upcoming conference to focus on how to develop outstanding software in convincing quality and offering attractive features. Since Bendix and its subsidiary R.H. Sheppard are industry leaders in commercial vehicle steering systems, it's no surprise that the 2023 conference will be especially interesting for colleagues working in this segment of our industry. I don't want to give away too much, but I'm pretty positive that Bendix and its parent company Knorr-Bremse will allow you to gain first insights into a brand-new CV steering technology with true transformative power.

These are just two examples of a wide array of highly relevant topics that the Red Cabin team has prepared for us. But bottom-line it's you and your peers passion for cutting edge technology that will turn this conference into an unforgettable experience for all of us. So finally this is your chance to join the one experts and decision-maker forum that is actively shaping the future of automotive steering technology - in the US and on a global scale. Don't miss out on it!

Yours truly

Joerg Eigenmann

Conference Chairman & Global Head of Engineering Business Unit Steering, Knorr-Bremse

CONFERENCE CHAIRMAN



Joerg Eigenmann Global Head of Engineering **Business Unit** Steering Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

CONFIRMED SPEAKERS AND GUESTS



Peter Heimbrock Director R&D Steering Europe Knorr-Bremse Systeme für Nutzfahrzeuge GmbH



Nikhil Bapat Enaineerina Group Steerina Manager (Steering Systems) R.H. Sheppard Co., Inc A Bendix CVS Company - A Member of Knorr-**Bremse**



Ade Badiru Technical Expert General Motors



Joe Klesina Product Line Executive Software Nexteer **Automotive**



James Burghardt Vice President Engineering, **Chief Engineer** Robert Bosch *Automotive* Steering LLC



Rama Vijayakumar Product Owner - Steering General Motors



Joshua Dawson Principal Engineer Steering Axels and Suspensions. Steering System **Function Owner** Volvo Group Trucks Technology



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CONFIRMED SPEAKERS AND GUESTS



Christian Sperrle Director Product Management and Advanced Development Robert Bosch Automotive Steering LLC



Richard Nesbitt Vice President of Product Management Robert Bosch Chassis System LL



Hunter Poole Vehicle Dynamics Simulation Integration Engineer General Motors



Kevin Chronicle Sales & Marketing Director Automotive Steering Robert Bosch Automotive Steering LLC



Mike Puleri Global Steering Functional Lead -Product Development Ford Motor Company



Dale C. Killins Engineering Supervisor **Power Steering** Mechatronics & Hvdraulic **Applications** Ford Motor Company



Stephan Kreutz Global Head of Steering Systems Volkswagen Passenger Cars, Volkswagen Group Center Lead Engineer for Steering Systems Volkswagen AG



Daniel Moreland Sr Proiect Engineer - Vehicle Center for Performance PACCAR Technical



Alan Amici President & CEO **Automotive** Research

ADVISORY BOARD



Ade Badiru Steering Technical Expert General Motors



James Burghardt Vice President Engineering, **Chief Engineer** Robert Bosch *Automotive* Steerina LLC



Joerg Eigenmann Global Head of Engineering **Business Unit** Steering Knorr-Bremse Systeme für Nutzfahrzeuge GmbH



Joshua Dawson Principal Engineer Steering Axels and Suspensions, Steering System Function Owner Volvo Group Trucks Technology

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ATF is a family-owned business founded in 1946. We specialize in engineered fasteners, cold formed specials, formed & stamped components, and assemblies for the automotive industry.

ATF is the market leader in steering fasteners over the last 25 years. We are known throughout the industry for our engineering expertise. It's the origin of our products and solutions and what sustains our reputation for quality and precision.



Nylacast Automotive is a world-leading designer and volume producer of high-precision polymer assemblies and components.

Employing passionate and diverse teams around the world, we are committed to meeting the needs of the highly dynamic and technically challenging Automotive marketplace. Operating from strategically located sites, Nylacast

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Automotive manufacture and supply safety-critical products that go into hundreds of vehicle platforms across multiple vehicle brands world-wide. Nylacast Automotive manufacture and supply safety-critical components for:

Electronic Power Steering Electric Braking Systems Transmissions Turbocharging applications

Our unique Research and Development capability provides full engineering solutions from initial concepts and raw chemistry, through to final assemblies and components. This comprises materials development, application engineering, product testing and validation that creates real value for our customers and launches many exciting new pro- ducts every year. For more information please check out nylacast.com.



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WHAT YOU WILL EXPERIENCE ON SITE



WHO IS WHO

Get in touch with other experts before the conference starts. Take a look at the business cards and photos while enjoying your first conversational and networking experience.



AUDIENCE Q&A

Interact with conference speakers and moderators to ensure all of your questions are answered during these sessions.



SPEEDNETWORKING

Break the ice and get to know your industry peers in these fastpaced one-to-one meetings. Greet each participant in this series of brief exchanges and share your professional background.



PANEL DISCUSSION

Benefit from deeper insights by attending panel discussions. Share your ideas and thoughts with peers and receive feedback from dedicated industry experts in this interactive session.



INTERACTIVE WORKING GROUPS

Get an in-depth approach to these hands-on themes. Discuss, brainstorm, elaborate and work together in this interactive session. Tutorials and workshops are also an excellent chance to interact at this perceived as the ,go-to' place for knowledge, best practice and credible solutions.



NETWORKING RECEPTION

RedCabin invites our delegates to enjoy an informal evening gettogether with speakers and peers. Discuss the outcome of the first summit day and expand your network in a relaxed environment.

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THIS IS WHAT EXPERTS OF OUR PAST EVENTS EXPERIENCED

"Excellent conference and great networking opportunity! Thank you!"

Mitsubishi Electric Automotive America

"Great opportunity to understand difficult topics faced in the industry & network with industry members."

Toyota

"Many informative discussions and opportunities to network with key players at different tier levels."

JTEKT North America

"Excellent cross-industry discussion. Relevant presentations. Engaging Workshops."

General Motors

otors

"Well organized! Creates Collaborations! Variety of topics & formats."

Autoliv

"Topics presented & discussions were extremely relevant to todays market, questions & challenges."

Robert Bosch Automotive Steering

"I liked the presentation variety. Also the initial Meet and Greet 3 minutes speed date was a very good network strategy."

Hyundai Mobis North America

"Excellent interaction between OEM's, Tiers & Academy!"

SWOBODA

"The organization ans the location was very good."

Daimler

"Relevant topics for the industry and great networking opportunities."

















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APRIL 25-26, 2023 in Dearborn | MI, USA

Summit DAY 1 | TUESDAY, APRIL 25, 2023

08:15 am Registration



Interactive session: Who is who

08:20 am Get in touch with other experts before the conference starts. Take a look at the business cards and photos while enjoying your first conversational and networking experience.

og:oo am Welcome note by RedCabin and summit chairperson
Joerg Eigenmann - Global Head of Engineering Business Unit Steering, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

FUTURE OF STEERING SYSTEMS IN AUTOMOTIVE, COMMERCIAL AND HEAVY DUTY VEHICLES: What's new?

09:15 am KEYNOTE PRESENTATION:

The accelerated technology change in CV steering systems challenge – flexible solutions for a transitional period

Peter Heimbrock – Director R&D Steering Europe, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

09:45 am The evolving market of electric power steering in commercial vehicles

Joshua Dawson - Principal Engineer Steering Axels and Suspensions, Steering System Function Owner, *Volvo Group Trucks Technology*

Kevin Chronicle – Sales & Marketing Director Automotive Steering, *Robert Bosch Automotive Steering LLC*



Interactive session: SPEEDNETWORKING

10:15 am

Break the ice and get to know your industry peers in these fast-paced one-to-one meetings. Greet each attendee in a series of brief exchanges and share your professional background. Make sure you bring a whole stack of business cards with you!

11:00 am Networking Coffee Break



Interactive session: PANEL DISCUSSION

Benefit from deeper insights by attending panel discussions. Share your ideas and thoughts with peers and receive feedback from dedicated industry experts in this interactive session.

11:30 am Software defined vehicles - chances and risks

MODERATOR: **Ade Badiru –** Steering Technical Expert, *General Motors*

PANELISTS: **Joe Klesing -** Product Line Executive Software, *Nexteer Automotive*



APRIL 25-26, 2023 in Dearborn | MI, USA

Summit DAY 1 | TUESDAY, APRIL 25, 2023

Nikhil Bapat – Engineering Manager, *Bendix Commercial Vehicle Systems LLC*

James Burghardt – Vice President Engineering, Chief Engineer, Robert Bosch Automotive Steering LLC

Rama Vijayakumar – Product Owner – Steering, General Motors

Jeff Helner – Senior Manager – Steering, *MOBIS Technical Center North America*

12:30 pm Networking Lunch



Interactive sessions: WORKING GROUPS

The Audience will be divided into 3 Groups. Each group will attend all three interactive working groups.



WORKING GROUP - 1

02:00 pm SbW as enabler for new chassis architectures

HOSTED BY: **Joe Klesing –** Product Line Executive, *Nexteer Automotive*



WORKING GROUP - 2

02:00 pm Alternative/future steering devices and methods

HOSTED BY: **James Burghardt –** Vice President Engineering, Chief Engineer, *Robert Bosch Automotive Steering LLC*



WORKING GROUP - 3

02:00 pm End-of-life strategy for SbW and consideration of mechanical failures

HOSTED BY: **Stephan Kreutz -** Global Head of Steering Systems Volkswagen Passenger Cars, Volkswagen Group Lead Engineer for Steering Systems, *Volkswagen AG*

04:00 pm Networking Coffee Break

04:30 pm Continuing with WORKING GROUPS 1,2 and 3

05:30 pm Results of the WORKING GROUPS presented by the moderators

05:45 pm Closing remarks by the summit chairman Joerg Eigenmann



Interactive sessions: EVENING NETWORKING RECEPTION

06:00 pm Enjoy an informal evening get-together at the *Automotive Hall of Fame.*

END OF SUMMIT DAY 1



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Summit DAY 2 | WEDNESDAY, APRIL 26, 2023

08:30 am Registration

09:00 am Welcome note by RedCabin and summit chairperson

Joerg Eigenmann – Global Head of Engineering Business Unit Steering, *Knorr-Bremse Systeme für Nutzfahrzeuge GmbH*

09:10 am The Propulsion Transition Begins

Alan Amici – President & CEO, *Center for Automotive Research*

09:40 am How Software in the Loop Enables Virtualization of Steering Development

Hunter Poole – Vehicle Dynamics Simulation Integration Engineer, *General Motors*

10:10 am Future vehicle motion management – SbW and Bosch VDC2.0

Christian Sperrle – Director Product Management and Advanced Development, *Robert Bosch Automotive Steering LLC*

Richard Nesbitt – Vice President of Product Management, *Robert Bosch Chassis System LL*

10:40 am Networking Coffee Break



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Summit DAY 2 | WEDNESDAY, APRIL 26, 2023



Interactive session: PANEL DISCUSSION

Benefit from deeper insights by attending panel discussions. Share your ideas and thoughts with peers and receive feedback from dedicated industry experts in this interactive session.

11:10 pm Future of Commercial Steering Systems - Industry outlook & trends

MODERATOR: **Dale C. Killins –** Engineering Supervisor Power Steering Mechatronics & Hydraulic Applications, *Ford Motor Company*

PANELISTS: **Joshua Dawson –** Principal Engineer Steering Axels and Suspensions, Steering Systems Function Owner, *Volvo Group Trucks Technology*

Peter Heimbrock – Director R&D Steering Europe, *Knorr-Bremse Systeme für Nutzfahrzeuge GmbH*

Daniel Moreland – Sr Project Engineer – Vehicle Performance, *PACCAR Technical Center*

12:00 pm Networking Lunch



Interactive sessions: WORKING GROUPS

The Audience will be divided into 3 Groups. Each Group will attend all 3 Interactive Working Groups.



WORKING GROUP - 1

01:30 pm Best in class software solutions for advanced steering systems

HOSTED BY: **Nikhil Bapat -** Engineering Group Manager, R.H. Sheppard Co., Inc A Bendix CVS Company - A Member of Knorr-Bremse

02:30 pm Networking Coffee Break



WORKING GROUP - 2

03:00 pm Heavy Duty Truck Characteristics and Their Effect on Human, ADAS and Autonomous Steering Systems

HOSTED BY: **Daniel Moreland -** Sr Project Engineer - Vehicle Performance, *PACCAR Technical Center*

04:00 pm Results presented by the working group leaders

04:15 pm Closing remarks by summit chairman Jörg Eigenmann

04:30 pm END OF SUMMIT



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INVESTMENT PER DELEGATE

2 DAY CONFERENCE INVESTEMENT

3.195 €

For further information sponsorship or delegate registration please contact:

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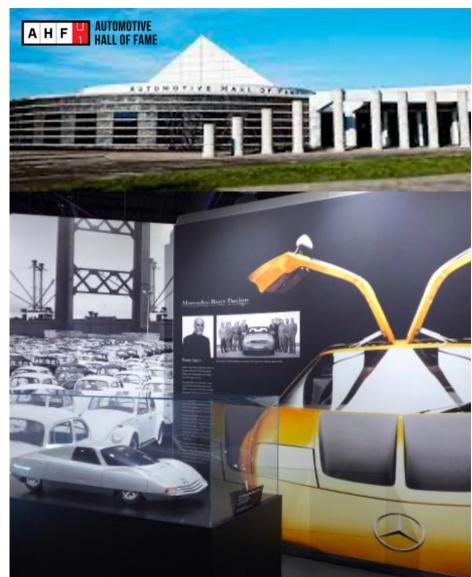
CONFERENCE VENUE

Automotive Hall of Fame 21400 Oakwood, Dearborn MI. USA

www.automotivehalloffame.org

The Automotive Hall of Fame has honored nearly 800 men and women from around the world.

The museum celebrates outstanding automotive achievements and innovations that have changed the world and revolutionized our way of life.



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