

**Automotive**  
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# INNOVATIVE SEATING

An Auto Industry Roundtable

**Presented by:**  
**Automotive Seating Innovators**  
Detroit – August 25<sup>th</sup> & 27<sup>th</sup>

## Editor's Welcome

We have a great cast of speakers presenting case studies at the 8<sup>th</sup> Annual [Automotive Seating Innovators Summit](#) in August.

To preview the workshops, discussions and case studies you'll engage in at the event, we invited two of the speakers at this year's event and two from last year to share their insights in this complimentary roundtable report.

In **Part One**, our experts discuss the latest consumer trends in vehicle seating, in **Part Two**, they share their vision on the seat of the future, and in **Part Three**, they discuss how the need to reduce vehicle weight will impact seating.

If the industry experts in this report are the type of people that you want to meet, or if the discussions are relevant for your company, than you need to attend the [Automotive Seating Innovators Summit, August 25<sup>th</sup> - 27<sup>th</sup> in Detroit](#). The insights in this report are just a small preview of the lessons they'll share in person.

Thank you for reading.

**Shawn Siegel**



## Contributors

Calvin Nichols | Automotive Seating & Interior | BASF

**2014 SPEAKER** Gregg Peterson | Senior Technology Specialist | Lotus Engineering

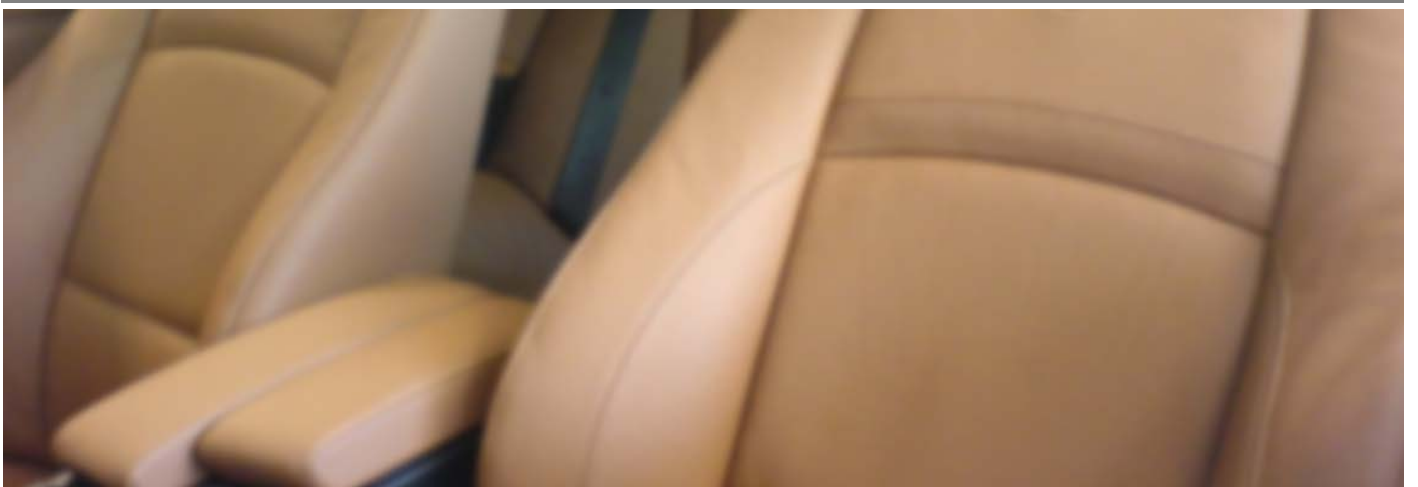
Mac Reynolds | Professor Emeritus, Michigan St | ERL LLC

**2014 SPEAKER** Scott Ziolek | Principal Engineer – Seat Engineering Team | Hyundai-Kia

*Edited by Shawn Siegel | Digital Content Editor | IQPC*

# Part One

**What are the latest consumer trends and expectations?**



## Calvin Nichols

Market Segment Manager, Automotive Seating & Interior  
BASF Corporation Performance Materials

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**What are the latest consumer trends in terms of their seating expectations?**

“Consumers will always place a high value on comfort and safety with respect to automotive seating. The key trends will therefore come from the use of alternative materials that will promote and maintain those key values.

Breathable fabrics and stronger yet, lightweight frames will lead the new trends that may not always be recognized by the consumer. Those features will contribute to a better ride experience with improved leg room in the rear seats and better overall comfort.”

## Gregg Peterson

2014 SPEAKER

Senior Technology Specialist  
Lotus Engineering

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**What are the latest consumer trends in terms of their seating expectations?**

“Consumers want a seat to be comfortable, have attractive aesthetics and durable materials. People don’t necessarily demand 12 way power adjustments, variable lumbar support or adjustable thigh bolsters for their seats. If a seat can provide geometry that properly positions the occupant so that he or she has a relaxed, fatigue and stress free driving experience for short and long trips, they will be satisfied.”

Gregg will discuss “Reducing Seat Weight and Cost While Meeting Customer Expectations” on Conference Day One of the [Automotive Seating Innovators Summit](#)

## Mac Reynolds

Professor Emeritus, Michigan St University  
Owner, ERL LLC

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**What are the latest consumer trends in terms of their seating expectations?**

“Given the use of memory and additional use of computer technology in the vehicle, the seat may have the measured sense of who is sitting by size and adjust the seat for optimal position and support of the driver. To implement features like this will require additional technology which may add weight to the seat. So, this addition will only come at the expense of weight loss in other parts of the vehicle or be available in more expensive vehicles that initially appeal to the luxury consumer.”

## Scott Ziolek

2014 SPEAKER

Principal Engineer – Seat Engineering Team  
Hyundai-Kia American Technical Center

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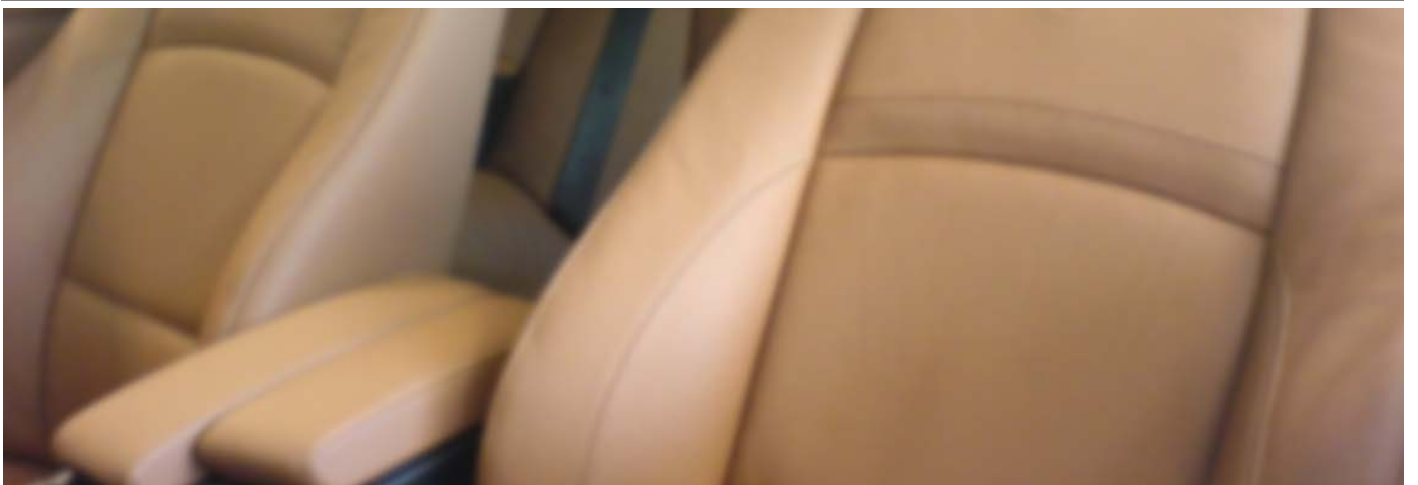
**What are the latest consumer trends in terms of their seating expectations?**

“Pleasurable materials and individualization are two of the biggest trends. Consumers want materials that look and feel nice and consumer’s want a seat that adjusts to them.”

Scott will discuss “Designing Tests to Measure Comfort: Are you Testing What You Think You’re Testing” on Conference Day Two of the [Automotive Seating Innovators Summit](#)

## Part Two

**What will the seat of the future look like?**



## Calvin Nichols

Market Segment Manager, Automotive Seating & Interior  
BASF Corporation Performance Materials

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### What will the seat of the future look like?

“With the use of newer, stronger lightweight materials, the current seat will dramatically be reduced in thickness and shape allowing for better styling flexibility. These will be key elements that will have a direct impact on what the seats of the future look like.”

## Gregg Peterson

2014 SPEAKER

Senior Technology Specialist  
Lotus Engineering

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### What will the seat of the future look like?

“The Lotus Exige/Elise ProBax seat, a decades old design that is still contemporary, offers a hint of where seats are going. This seat has been compared to a Rolls Royce seat for comfort even though the Lotus seat has only 1.5” deep foam and no adjustments other than fore-aft.

The ICON A5 Light Sport Aircraft seat is another indication of future automotive seat design direction as is the Lamborghini Aventador J concept car seat. These seats all have minimal depth foam, limit the use of material/foam to key anatomical areas and utilize composite materials for their structure. I believe the seat of the future will follow this pattern.”

Gregg will discuss “Reducing Seat Weight and Cost While Meeting Customer Expectations” on Conference Day One of the [Automotive Seating Innovators Summit](#)

## Mac Reynolds

Professor Emeritus, Michigan St University  
Owner, ERL LLC

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### What will the seat of the future look like?

“The seat of the future looks much like the seat of the present except for colors and materials. However, even if the seat of the future looks like the seat of the present, it should feel entirely different to the body of the driver.”

## Scott Ziolek

2014 SPEAKER

Principal Engineer – Seat Engineering Team  
Hyundai-Kia American Technical Center

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### What will the seat of the future look like?

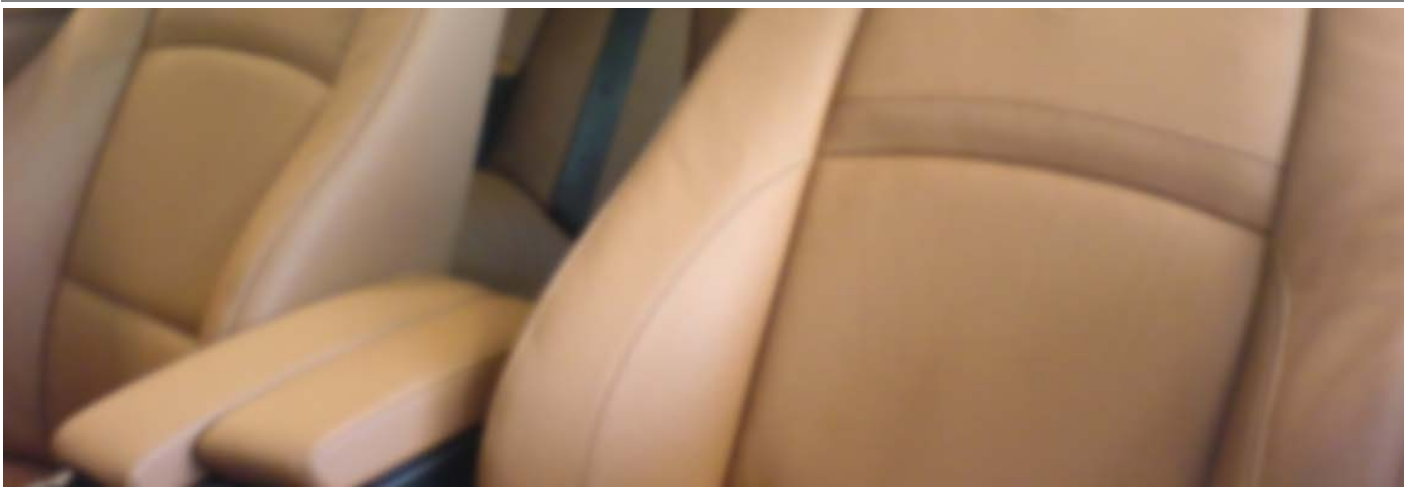
“The seat of the future will combine more customizable seating features with a variety of integrated sensors producing seats that KNOW you!”

Scott will discuss “Designing Tests to Measure Comfort: Are you Testing What You Think You’re Testing” on Conference Day Two of the [Automotive Seating Innovators Summit](#)



# Part Three

**How will the need to reduce weight impact seating?**



## Calvin Nichols

Market Segment Manager, Automotive Seating & Interior  
BASF Corporation Performance Materials

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**How will the need to reduce vehicle weight effect seating over the next few years?**

“Like many other key systems in the vehicle, seating will be dramatically impacted as a result of the strict CAFE requirements coming in 2025 and the light weighting that will take place as a result. Seating is one of the key mass drivers in the interior with the instrument panel, and while every ounce will count, significant weight loss will be necessary while not sacrificing occupant comfort and safety. As a result, emergence of new materials and combinations of existing materials not used in seating previously, will be paramount in driving success in the goal for weight loss.”

## Scott Ziolk

2014 SPEAKER

Principal Engineer – Seat Engineering Team  
Hyundai-Kia American Technical Center

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**How will the need to reduce vehicle weight effect seating over the next few years?**

“There will of course be a focus on features built with lighter materials that use less power . . .but there will also be a reprioritization of existing features. Features that don’t significantly increase consumer satisfaction or meet critical needs may be deleted or replaced.”

Scott will discuss “Designing Tests to Measure Comfort: Are you Testing What You Think You’re Testing” on Conference Day Two of the [Automotive Seating Innovators Summit](#)

# Mac Reynolds

Professor Emeritus, Michigan St University  
Owner, ERL LLC

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**How will the need to reduce vehicle weight effect seating over the next few years?**

“Weight reduction in the vehicle is managed with new materials and structures. However the seat is structurally optimized, it uses motors for adjustments and the range of adjustment (i.e. seat track) is defined primarily from legacy vehicles and compliance with FMVSS rules and regulations.

If the industry learns how to use digital human body models to design seats, then the range of movement may be reduced and the number of adjustments as well as the types of adjustments may be reduced. So, the seat could move into new, light weight materials with more limited adjustments and ranges which will add up to a reduction in the weight of the seat.”

Join These Experts and other Auto Industry Executives at:



The brochure is for the 8th Annual Automotive Seating Innovators Summit, held from August 25-27, 2014, in Detroit, Michigan. It is described as 'THE LEADING AUTOMOTIVE SEATING CONFERENCE IN AMERICA'. The main theme is 'Leaving Weight, Cost and Discomfort Behind'. The event features speakers from OEMs and seat manufacturers, as well as seating experts. The speakers listed are: Robert Huber (VP Innovation, FAURECIA), Jim Wehrle (Director of Seat Engineering, Sparco N.A., SPARCO), Gregg Peterson (Senior Technical Specialist, LOTUS), Emil Bozintan (VP Engineering Metals and Mechanisms, JOHNSON CONTROLS), Michael Kollich (Supervisor Global Seat Comfort, FORD), Scott Ziolk (Principal Seating Engineer, HYUNDAI-KIA), and Patrick Lehner (R&D Director Seating South America, FAURECIA). Seating experts include Dr. Kathleen Klinich (Assistant Research Scientist, UNIVERSITY OF MICHIGAN) and Dr. Matthew Reed (Research Professor, UNIVERSITY OF MICHIGAN). The brochure highlights key topics such as 3D body modeling, market forecast, weight reduction, comfort safety synthesis, and global vs. regional seat design. It also lists 2014 Summit Highlights, including understanding regional importance, reducing guesswork in seating comfort, and more networking. Media partners include Automotive News, AutoHarvest.org, SupplyChain, and IATF. The registration information is: REGISTER TODAY! www.SeatingInnovators.com • 1-800-882-8684 • enquiry@iqpc.com.

[Download the Brochure](#)

Email [enquiry@iqpc.com](mailto:enquiry@iqpc.com) or call 1-800-882-8674 for more information.