



International Congress
March 26 – 27, 2025, Mannheim, Germany

VDI Initiative
Meet OEMs in Mannheim!

Top topics

- **Lightweight Design:** Innovative Materials and Manufacturing processes for CO₂ reduction and increased efficiency
- **Surface Technology:** Smart coatings and Recycling to improve material quality
- **Bio-based Materials:** Lignin and bio-based plastics for more sustainable vehicle parts
- **Electric Drives:** materials and technologies for long-lasting, high-performance Batteries and Electric drives
- **Digital Future:** AI Design and intelligent Process monitoring for resource-saving production

Your benefits

- Industry meeting-point with 70 Exhibitors
- 48 hand-picked Keynotes & Lectures
- 13 OEM Lectures
- Auto Show
- Networking Party

with friendly support of:



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PIAE 2025 | Program Overview

Wednesday, March 26, 2025 – 1st Day of Congress

Mozartsaal (Level 0)


08:50  Keynotes


10:30 Coffee Break with Visit to the Exhibition & Auto Show

Mozartsaal (Level 0)

Musensaal (Level 1)

Stamitzsaal (Level 1)

11:15  Circular Economy

 Manufacturing Processes 1

 Interior


13:15 Lunch Break with Visit to the Exhibition & Auto Show

15:00  Exterior


 Lightweight Design 1


 Plastics Electronics

16:00 Coffee Break with Visit to the Exhibition & Auto Show

17:00  Sustainability 1

 Simulation

 Lightweight Design 2

ab 18:00  PIAE Networking Party in the Trade Exhibition and the Eva and Sepp Herberger Lounge

Thursday, March 27, 2025 – 2nd Day of Congress


Mozartsaal (Level 0)

Musensaal (Level 1)


Stamitzsaal (Level 1)


09:00  Recyclates


 Materials

 Manufacturing Processes 2

11:00 Coffee Break with Visit to the Exhibition & Auto Show


11:45  Materials in Electric Drivetrain

 Sustainability 2

 Market Requirements in the Plastics Industry

12:45 Lunch Break with Visit to the Exhibition & Auto Show

Mozartsaal (Level 0)

14:00  Plenary Session

15:00 Closing Words

15:15 End of the Congress



Keynotes

Moderation: Dipl.-Ing. Thomas Drescher, Volkswagen AG

08:50 Welcoming Address by the Congress Chairman

Dipl.-Ing. Thomas Drescher, Head of Pre-development and Vehicle assessment, Body system, Volkswagen AG, Wolfsburg

09:00 After the Crisis is before the Crisis – Optimally prepared keep the Book in your Hand



- Crisis management – before, during and after a Crisis
- Types of crisis and Practical experience
- Implementing strategies consistently and identifying new Business opportunities

Dr.-Ing. Arno Rogalla, CEO, Rogalla Consulting, Bad Bramstedt

09:30 Affordable Sustainable Excellence – Frugality as a new mega trend in product development?



- Advancement through reduction?
- Frugal innovation in global markets
- Cost efficient sustainability through frugality



Timo Achtelik, M. Sc., Sustainability Manager Materials Engineering, Volkswagen AG, Wolfsburg and **Prof. Dr. habil. Rajnish Tiwari**, Professor, Department onlineplus, Hochschule Fresenius Hamburg

10:00 Between Transformation and Disruption: Current political Dynamics in the Context of the EU End-of-Life Vehicles Regulation and the Challenges they pose in Practice



- Current developments in the political context of ELV
- Availability and uncertainties of Plastic recyclates
- Approaches for solutions and opportunities to advocacy

Frank Stammer, Specialist for Circular economy, TecPart – Verband Technische Kunststoff-Produkte e. V., Frankfurt am Main

10:30 **Coffee Break with Visit to the Exhibition & Auto Show**

Mozartsaal (Level 0)



Circular Economy

Moderation: Jürgen Gugg, BMW Group

11:15 Development of Sustainable Materials for Driving System-/ Platform-Applications

- Recyclates for chassis applications
- Sustainable elastomers
- Sustainable polyamides
- Sustainable polypropylene
- Materials for highly functional applications

Dr. rer. nat. Marc Kreye, Head of Material Development Chassis, Volkswagen AG, Wolfsburg

11:45 Future Sustainable Car Materials – a contribution to a sustainable Circular economy for plastics in Automotive engineering

- The BMW Group's sustainability strategy
- Classification and prioritization of advanced recycling Technologies
- Practical examples from the Future Sustainable Car Materials project

Dr.-Ing. Martin Schneeberger, Project Manager, Materials and Methods, BMW AG, Munich

Musensaal (Level 1)



Manufacturing Processes 1

Moderation: Prof. Martin Würtele, Technische Hochschule Rosenheim

Improving Both Efficiency and Quality in Additive Manufacturing – A Reality or Still a Dream?

- Additive Manufacturing
- Laser-based Powder Bed Fusion of Plastics and Metals
- Productivity and Part Quality

Prof. Dr.-Ing. Katrin Wudy, Professor and **Jonas Grünewald, M. Sc.**, Research associate, Professorship of Laser-based Additive Manufacturing, both of Technical University of Munich, Garching near Munich

Challenges and limits of high-quality PCR regranulates in the interior and exterior according to the expensive regulations of the ELV

- Current practical application of the technology and its potential for development in the future
- Applications for the use of recycled materials in the automotive sector
- Future legislation and recycling quotas up to 2030 +
- Proven CO₂ reduction in view of upcoming legislation (CBAM)

Dipl.-Ing. Daniel Römhild, Head of Development, WIS Kunststoffe GmbH, Breitung

Stamitzsaal (Level 1)



Interior

Moderation: Dipl.-Ing. Wolfgang Möller, Volkswagen Osnabrück GmbH

Vehicle interiors from a sustainability perspective: Alternative trim materials in discussion

- Alternative surface materials for trim applications
- Usage and comfort features
- Cascade utilisation, recycling and biodegradability
- Substitution of non-renewable components

Dr. rer. nat. Sascha Dietrich, Head of accredited Testing Laboratory and **Dr. rer. nat. Anke Mondschein**, Head of Leather and Leather Processing, both of FILK Freiberg Institute gGmbH, Freiberg

Metallic Surface Design Research plus Trend Overview and Circularity Potential

- Automotive component analysis and visualization of future relevant exterior and interior component areas
- Comparison of metal deco surfaces developments from manufacturers in USA/CHINA/EU
- Identifying trends and development potential for automotive premium brands
- Outlook: View on mechanical recycling and circularity options for POP

Jörg Friedrich, CEO, Car Men GmbH, Glashütten

12:15 Pilot test successful: Physically recycled post-consumer recycle from end-of-life vehicles

- Extended plastic sorting from end-of-life vehicles
- Physical recycling as a process for sorted plastic clusters
- Compounding and component sampling
- Testing of material and component properties

Dr. Martin Schlummer, Business Development Kunststoffrecycling, Fraunhofer IVV, Freising and **Jutta Schoberer**, Development engineer, Co-author: Philipp Renner, both of AUDI AG, Ingolstadt

Compound utilizing core-back foam injection molding for automotive interior parts process simplification and recyclability improvement

- Thermoplastic elastomer for automotive interior skin parts
- Molding skin and foam layer together by core-back foam injection molding
- Recyclability improvement

Satoshi Kamimura, Technical Service Engineer, Thermoplastic Elastomer, Asahi Kasei Europe GmbH, Düsseldorf

Safety glass due to TPE!

- Exterior automotive covers made of plastics
- Weatherability, scratch resistance, durability
- Replaced with glass
- Required homologations and compliances

Dipl.-Ing. Erwin Butsch, Director Research & Development Automotive Glass, Technical development

12:45 The concepts of a holistic product sustainability and its trade-offs and a circular economy prediction model

- Trade-off assessment of certain requirements from the upcoming End of Life Vehicle Regulation
- Examples: Substances of Concern and Recycled Plastic Content
- Presentation of possible solutions to overcome these trade-offs
- Introduction of a Circular Economy prediction Model

Dipl.-Ing. Timo Unger, Senior Manager Sustainability & Environmental Affairs, Regulation, Vehicle Safety & Environment, Hyundai Motor Europe Technical Center, Rüsselsheim

New sustainable light-weight design possibilities via foam extrusion of expanded polypropylene beads (ePP)

- ePP foam extrusion process
- Investigated materials and results
- New opportunities for ePP in automotive applications
- Sustainable solutions

Alberto Ballesteros Agudo, PhD, Product Line Manager, Sales and R&D, Sulzer Chemtech AG, Winterthur, Switzerland and

Dipl.-Ing. Georg Grestenberger, Senior Application Marketing Manager – Interior, Borealis Polyolefine GmbH, Linz, Austria

Automation – One pillar of a sustainable, high quality interior

- Potential of automation in material development
- Automated material test for interior surfaces
- Challenges with the use of cobots

Hagen Meyer, M. Sc., PhD student and **Dr. Thomas Taddigs**, Subdivision Manager, both of Body system – Interior and Surface

13:15 Lunch Break with Visit to the Exhibition & Auto Show



Mozartsaal (Level 0)



Exterior

Moderation: Dr. Steffen Hölzel, Dr. Ing. h.c.F. Porsche AG

Musensaal (Level 1)



Lightweight Design 1

Moderation: Roger Kaufmann, GK Concept GmbH

Stamitzsaal (Level 1)



Plastics Electronics

Moderation: Dipl.-Ing. Thomas Drescher, Volkswagen AG

15:00 Adaptive front diffusor in the Porsche 911: From the racetrack to the road

- Motivation adaptive aerodynamics at Porsche
- Feature and design of the adaptive front diffusors using the example of:
 - Porsche 911 GT3 RS – Target: Performance on racetrack
 - Porsche 911 GTS – Target: Performance and efficiency for daily routine

Dipl.-Ing. (FH) Stephan Schoell, Development engineer, Development of Body Exterior, Rear and Attachment systems, **Dipl.-Ing. (BA) Sebastian Harter**, Development engineer, Motorsport Development Bodywork GT road vehicles and **Dipl.-Ing. (FH) Christophe Bouvatier**, Head of Front/Rear system, Motorsport development Body Super sports car, Co-author: Dipl.-Ing. (FH) Fuat Kayadere, all of Porsche AG, Weissach

Sustainable load-adapted components from nonwovens with variable basis weight and functionalization

- Lightweight construction through innovative forming technology
- Implementation of novel nonwovens in serial production
- Monomaterial sandwich structures for enhanced recyclability
- Load optimization through local basis weight reinforcements

Dipl.-Ing. Florian Tautenhain, Development engineer, Biopolymers and natural Fiber Composites Research area and

Dr.-Ing. Roman Rinberg, Head of Research Division Biopolymers and Natural Fiber Composites, Co-authors: Dipl.-Ing. Marcus Hartenstein, Prof. Dr.-Ing. habil. Lothar Kroll, all of TU Chemnitz

Innovative EMI-Shielding plastics: Functional integration enabling weight and cost reduction in the example of a DC-DC converter application

- EMI-shielding plastics as replacement for metals
- Functional integration (EMI, thermal conductivity, assembly steps)
- Light weight design and cost reduction
- EV power module, DC-DC converter

Dr.-Ing. Julian Heinisch, Application Engineer and **Steve Lee, M. Sc.**, Team Leader Application Engineering, both of LG Chem Europe GmbH, Frankfurt am Main

15:30 Use of recycled material and passive safety: Components in the bumper of the new Audi A5

- Highly stressed safety-component based on post-industrial recycled material
- Qualification of the recycled material and final part
- Concepts for an effective quality assurance
- Outlook: Demonstration component based on post-consumer recycled material

Dipl.-Ing. Frank Fischer, Material engineer, Surface/material technology, AUDI AG, Ingolstadt, **Salvatore Cannavò, B. Eng.**, Head of Product Development Exterior, SMP Deutschland GmbH, Bötzingen and **Dipl.-Ing. (DH) Andreas Benndorf**, Senior Business Development Manager/OEM-Manager, PCW GmbH, Eilenburg

Method development for Mapping the Mold Filling Process of thermoplastic molded Parts with continuous Fiber reinforcement and complex Rib structure

- Underride guard in FRP design
- Thermoplastic molding process
- Process simulation
- UD tapes and LFT-D

Dr. Julius Rausch, Development engineer, AUDI AG, Neckarsulm and **Dr. Martin Hohberg**, CEO, SIMUTENCE GmbH, Karlsruhe, Co-authors: Andreas Rau, ElringKlinger AG, Lenningen, Dr. Aaditya Suratkar, Fraunhofer ICT

From ideation to validation – Low-pressure overmolding in ADAS cameras

- Review different automotive application use cases for TMC's Vyloshot grade
- Assessment of the feasibility of low pressure overmolding for automotive ADAS cameras
- Advantages and disadvantages of using an overmolded camera design
- Visualization of the camera design with TMC low pressure molding solution implemented

Dipl.-Wirt.-Ing. Johannes Houben, Managing Director, Beyond Materials Corp., Tokyo, Japan and **Abhishek Sanap, M. Sc.**, Consultant, Co-author: Michael Reinhold, M. Sc., both of FEV Consulting GmbH, Aachen/Tokyo, Japan

16:00  **Coffee Break with Visit to the Exhibition & Auto Show**

Mozartsaal (Level 0)



Sustainability 1

Moderation: Dipl.-Journ. (FH) Daniel Schröder, Verein Deutscher Ingenieure e. V.

Musensaal (Level 1)



Simulation

Moderation: Dipl.-Ing. (FH) Hartmut Häberle, MAN Truck & Bus SE

Stamitzsaal (Level 1)



Lightweight Design 2

Moderation: Dipl.-Ing. (TH) Werner Jakobs, Ford-Werke GmbH

17:00 Uncovering the Material State: Potential of PA66 Fan Modules from End-of-Life Vehicles for Closed-Loop Recycling

- Recycling of plastics from ELV
- Engineering plastics
- Material state after aging
- PA66 fan modules

Tobias Baeyens, M. Sc., PhD student and **Dr. Daniel Kugele**, Activity Management, Applied Material and Manufacturing Technologies for Metals and Polymers, both of Robert Bosch GmbH, Renningen, Co-authors: Prof. Dr.-Ing. Iman Taha, Hochschule Aalen, Prof. Dr.-Ing. Frank Henning, Karlsruher Institut für Technologie

Enabling Reliable Virtual Prototyping with Digital Material Twins

- Virtual prototyping
- Digital material twins
- Material Appearance Capturing
- Shorten time-to-market

Dr. Tobias Rausch, Business Development Manager Digital Sampling, Global Color & Design, Covestro Deutschland AG, Leverkusen

Sustainable Innovation: Achieving Net Zero through Function-Oriented Plastic Design, Tool Design, and Process Management

- Strongly focused application of Innovation methods
- Sustainable Plastic design based on function-oriented Layout
- Appropriate technology and tools
- Iteratively part-oriented determined Process parameters

Dipl.-Ing. (FH) Bernd Trinkwalter, Head of Innovation, Innovation management, Motherson DRSC Deutschland GmbH, Kronach-Neuses and **Dr. h.c. Stefan Ostwald**, Specialist in development of Instrument panel design, Volkswagen AG, Wolfsburg

17:30 Lignin – Next generation renewable resource for sustainable plastics

- Lignin as sustainable resource
- Processing – thermoforming and injection moulding
- Physical foaming – KU-Fizz
- Environmental performance

Dr. Lars Jerpdal, Technical Manager, R&D, Scania CV AB, Södertälje, Sweden and **Dr. Christopher Carrick**, CTO, Lignin Industries AB, Knivsta, Sweden, Co-authors: Andreas Åhrlin, Autoform, Malung, Sweden, Dr. Xinfeng Wei, Royal Institute of Technology, Stockholm, Sweden

Competitive advantages through smart AI-integrated engineering

- AI-based development process for Applications in the circular economy
- Efficiency and resource conservation using examples from the automotive sector

Dipl.-Ing. Wolfgang Pelzer, CEO and **Dipl.-Ing. Ulf Seefeldt**, Business Development Manager, both of M.TEC ENGINEERING GmbH, Herzogenrath

Ultrasound based measurement of mechanical properties of continuous fiber reinforced thermoplastic laminates

- Fiber reinforced plastics/FRP
- Fiber matrix adhesion
- Non-destructive Testing
- Organo-sheets

Prof. Dr.-Ing. Elmar Moritzner, University Professor/Chair holder and **Philipp Brandes, M. Sc.**, Research associate, both of Kunststofftechnik Paderborn (KTP) – Paderborn University, Co-authors: Dr.-Ing. Leander Claes, Prof. Dr.-Ing. Bernd Henning, both of Elektronische Messtechnik (EMT) – Paderborn University

ab 18:00  **PIAE Networking Party in the Trade Exhibition and the Eva and Sepp Herberger Lounge**

All participants are cordially invited to a communicative drink with buffet. Discuss the results of the first day of the event with your professional colleagues and make new contacts. We cordially invite you to join us and look forward to welcoming you there!



Recyclates

Moderation: Robert Someschan, Ford-Werke GmbH

09:00 R5CYCLED POLYMERS – The R5VOLUTION

- How R5 fits into an overall RENAULT's ECO-DESIGN approach
- How will R5 and its successors respond to the future European regulations
- How R5 is meeting these customers' new environmental expectations

Gabrielle Gauge, Substances and recycling Specialist for polymers, Material department, RENAULT GROUP, Guyancourt, France

09:30 A contribution to sustainable development – the use of recyclates in highly loaded applications

- Recycling plastics
- Longtime Durability
- Additives and Stabilizers
- Fatigue of Polymers

Dr. rer. sust. Dominik Spancken, Research associate, Plastics processing and Component design, Co-authors: Julia Decker, M. Eng., Dr. rer. nat. Elke Metzsch-Zilligen, all of Fraunhofer LBF, Darmstadt

10:00 Risk potential use of Post-consumer recyclates – what the Automotive industry can learn from the Food and Hygiene products industry

- Contaminants in raw Materials and finished Products
- Possible sources
- Identification of critical points in production
- The GALAB SOI program of the food and hygiene industry

Hans Wunsch, CEO, GALAB Laboratories GmbH, Hamburg, Co-author: Martin Doedt, B. Sc., KIMW Prüf- und Analyse GmbH, Lüdenscheid

10:30 Reliable component quality despite PCR recycled materials

- General conditions recycling ratio/end-of-life vehicle directive
- Characterization of PCR-materials during processing
- Using KI for process control

Prof. Dr.-Ing. Sascha English, Schwarz Plastic Solutions GmbH, Gilching, Co-authors: Dr.-Ing. Alexander Chaloupka, Dr.-Ing. Natalie Rudolph, both of NETZSCH Process Intelligence GmbH, Selb



Materials

Moderation: Jochen Hardt, Covestro Deutschland AG

Tier 1 Supplier Role in Boosting PCR Integration in Automotive Injection-Molded Products for a Circular Economy

- Product Innovation/Emission stability
- Recycled Materials & Recycled Products for Automotive
- Sustainable Manufacturing/OEM's requirements/Supply Chain Performance
- Circular Economy/End of Life Vehicles/Environmental Benefits

Dipl.-Ing. Mariusz Nowak, Project Manager Research & Innovation and **Dipl.-Ing. Antonio Avides**, Key Account Manager, Sales, both of Simoldes Plastics, Wolfsburg/Barcelona, Spain

Sustainability and Circular Economy – Applying new sustainable materials into plastic parts – upscaling challenges

- Recycled content
- Biobased materials
- Carbon reduced application
- Sustainable design

Yann Schnerb, MBA, Vice President of Sales Europe, UBQ Materials Ltd., Bergen op Zoom, The Netherlands

TPE Foam: more than just a “gapfiller”

- Material properties TPE foam vs. PUR
- Acoustic requirements of Wire harness dashwall wall grommets
- Material qualification release of new Materials
- Cooperation with OEM's to establish New innovative solutions

Matthias Dietz, Director Business Development and Technology, Noise Vibration Harshness and Sealing, Woco Industrietechnik GmbH, Bad Soden-Salmünster

Reduction of greenhouse gas emissions through the use of recyclates with GSG technology

- Recyclate quantities and European framework conditions
- Material properties and characteristics
- Reducing GHG-emissions starts with design 4 Recycling
- Success stories

Frank Schockemöhle, Head of Technology Management, Pöppelmann Kunststoff Technik, Lohne



Manufacturing Processes 2

Moderation: Dipl.-Ing. (FH) Hartmut Häberle, MAN Truck & Bus SE

BIOPOLYMER PBS – the foreseeable Future of Plastics: From Vision to concrete Applications

- Introduction – bio-based and biodegradable – specifically Biopolymer PBS
- Presentation of the RUBIO project – with AR, integrated system, complete value chain
- Exipnos GmbH Biopolymer Compounding – BioCelain series
- Application examples
- Possibilities in Automotive engineering – specifically comparison of PP T20 with BioCelain A 120

Peter Putsch, CEO and **Max Putsch**, Sales Manager, both of Exipnos GmbH, Merseburg

TPE as recyclable alternative for sealings and haptic parts

- Replacement of cross-linked foams and elastomers
- Compatibility of TPE in the PP waste stream
- TPE from PCR sources

Kathrin Heilmann, B. Eng., Product Manager, Co-authors: Florian Dresel, Dr. Thomas Köppl, all of Hexpol TPE GmbH, Lichtenfels

Intelligent Process Monitoring to reduce rejects in Thermoplastic injection molding using specific, Automated anomaly detection

- Assistance systems in Injection molding
- Automated Anomaly detection
- Downtime reduction

Yannik Lockner, CTO, Co-authors: Dipl.-Ing. Mauritius Schmitz, both of OSPHIM GmbH, Aachen, Jan Wolters, Institute for Plastics Processing (IKV) in Industry and Craft at RWTH Aachen University

Closing the Loop for Automotive Plastics – Sustainable Paint-Removal Technology to Realize Car-to-Car Recycling with High-Quality PCR

- Recovery Technologies
- Mechanical treatment of Waste-plastic, paint removal
- ELV directive
- “Smart sustainability” solutions

Dipl.-Ing. Martin Klocke, Vice General Manager Automotive Business Europe and **Nicole Thormann**, Technical Marketing Manager, both of KINGFA Sci. & Tech. (Europe) GmbH, Wiesbaden/Guangzhou, China, Co-author: Li Cong, M. Sc., KINGFA Environmental Sci. & Tech. Spain



Mozartsaal (Level 0)



Materials in Electric Drivetrain
Moderation: Dipl.-Ing. Fabian Groh, AUDI AG

11:45 New Bonding Technology Opens New Technical Opportunities for Hybrid Power Electronic Housings

- Reduce costs of EV applications
- Improve Manufacturing efficiency
- Incorporate more function through new Design options

Dipl.-Ing. Andre Lambrecht, Development engineer, Application Development Engineering Team, Celanese AG, Sulzbach and **Lukas Malfatti**, Product Manager Propulsion Global, Röchling Automotive srl, Laives, Italy

12:15 Sustainable, new and useful: Plastic Battery Housing Pentatonic Green +

- Thermoplastic battery enclosure
- Mechanical and physical recycling
- Design and Manufacturing for recycled Materials

Dr.-Ing. Moritz Lipperheide, Director Research, Co-authors: Jürgen Pfaff, Sophie Louis, all of Kautex Textron GmbH & Co.KG, Bonn

Musensaal (Level 1)



Sustainability 2
Moderation: Dr. Christian Bornhorst, Volkswagen AG

Driving Sustainability with Simulation – Mercedes-Benz frontend crash absorber structure with Borealis Fibremod PP

- Simulation driven engineering and Part design
- Safety relevant crash structure with PP compounds
- Correlation of Simulation and Part test (different PP GF30)
- Sustainability with savings in weight and CO₂ emission

Tobias Epple, M. Sc., Application Marketing Manager – Automotive Under the Hood, Borealis Polymere GmbH, Burghausen and **Dipl.-Ing. (BA) Klaus Heldmaier**, Development engineer, Development Exterior, Mercedes-Benz Group, Sindelfingen, Co-author: Robert Raulf, HBPO GmbH, Lippstadt

Use of Recyclate in painted Radiator grills for the Audi A3 by implementing a “Post-industrial closed loop”-concept

- Requirements/qualification at material and component level
- Recycling concept for paint-stripped PC/PET radiator grills
- Concepts for quality assurance

Dipl.-Ing. (FH) Wolfgang Dorfner, Development engineer, Development of Exterior add-on parts, AUDI AG, Ingolstadt, **Werner Meschitz**, Development engineer, Innovation, Diepersdorf Plastic Manufacturing GmbH, Leinburg and **Christoph Metzker**, Account Manager, MOCOM Compounds GmbH & Co KG, Hamburg

Stamitzsaal (Level 1)



Market Requirements in the Plastics Industry
Moderation: Klaus Münker, Magna Exteriors GmbH

Implications of increasingly diverse markets & customer requests on a globally active automotive tier 1

- Evaluation of the different Market and Customer requirements from different perspectives using individual Examples
- Summary and Abstraction of the examples based on the VUCA concept
- Implications for globally active Companies & recommendations for Action

Konstantin Schmidt, M. Sc., Manager Advanced Development Europe, JOYSONQUIN Automotive Systems GmbH, Rutesheim

Method for determining the Cost impact of Tolerances on Plastic components – What does precision cost? How much does Precision cost in the Injection Moulding Process?

- Cost reduction through appropriate Tolerances
- Avoidable Production costs in the Injection Moulding Process
- Function-orientated tolerancing
- Mould sampling & Approval

Anja Falke, M. Sc., PhD student, Friedrich-Alexander Universität Erlangen-Nürnberg (FAU)

12:45 Lunch Break with Visit to the Exhibition & Auto Show

Mozartsaal (Level 0)



Plenary Session
Moderation: Dipl.-Ing. Thomas Drescher, Volkswagen AG

14:00 Mobile injection-molding opens up new opportunities in Cable customization and Assembly technology

- Mobile injection-molding Technology
- Automation in Cable customization
- Assembly-molding of complex hybrid profiles

Dr.-Ing. Michael Krahl, CEO/Co-Founder and **Dr.-Ing. Michael Stegelmann, MBA**, CEO/Co-Founder, both of ANYBRID GmbH, Dresden

14:30 Challenges and Assumptions in Developing Closed Loop Automotive Materials

- Sustainability
- Development of materials
- Post consumer and closed loop recyclate
- Reduction of CO₂ Footprint

Ing. Radek Havlík, Head of Management Development Body system and **Ing. Ph.D. Dalibor Kopáč**, Coordinator of Material Development, both of Škoda Auto a.s., Mladá Boleslav, Czech Republic

15:00 Closing Words

15:15 End of the Congress

Exhibition & Sponsoring

Marketplace Plastics in Automotive Engineering

The trade show accompanying our PIAE congress has become one of its highlights. More than 70 national and international exhibitors display their innovative plastics solutions. The exhibition is one of the largest in the field of automotive plastics!

Information

If you would like to exhibit or sponsor at this VDI congress please contact:

Anika Wissing

Project consultant Exhibitions & Sponsoring

Phone: +49 211 6214-8635 | Email: wissing@vdi.de

You would like to present your car model or concept study at the Autoshow during the show? Please contact:

Elena Langenfels

Project consultant Exhibitions & Sponsoring

Phone: +49 211 6214-8662 | Email: langenfels@vdi.de

Sponsors



Autoshow

Within the scope of the Autoshow, where current models and concept studies of the car manufacturers are shown, you will have the opportunity to study the plastic components directly on the following vehicles onsite:

BMW Vision neue Klasse, Porsche 911 GT3 RS, Porsche 911 GTS, Porsche Cayenne Turbo GT, MAN SZM, Audi A5 Limousine, Audi S6 Avant e-tron

Exhibitors PIAE 2025 (as at November 2024)

AKRO-PLASTIC GmbH
almaak international GmbH
ANYBRID GmbH
Asahi Kasei Europe GmbH
Aurora Kunststoffe GmbH
Borealis AG
Brain of Material AG
BYK-Chemie GmbH
Cannon Deutschland GmbH
Chemische Fabrik Budenheim KG
CONSTAB Polyofin Additives GmbH
Covestro Deutschland GmbH
Dow Europe GmbH
ELIX Polymers S.L.
ENGEL AUSTRIA GmbH
Ensinger GmbH
Envalior Deutschland GmbH
Epsan Deutschland GmbH
Evonik Industries AG
Gear Motion GmbH
Geba Kunststoffcompounds GmbH
GKG Goldmann Kunststoffe GmbH & Co. KG
GRAFE GmbH & Co. KG
hapego plastics GmbH
Hoffmann + Voss GmbH
JENOPTIK Automatisierungstechnik GmbH
Kautex Textron GmbH & Co. KG

KINGFA Sci. & Tech. (Europe) GmbH
KRAIBURG TPE GmbH & Co. KG
LG Chem Europe GmbH
LOTTE Chemical Deutschland GmbH
MF SOFTWARE GmbH
MOCOM Compounds GmbH & Co. KG
PCW GmbH
Polykemi AB
Polyram plastic industries LTD
Pöppelmann Kunststoff-Technik GmbH & Co. KG
PRET Europe GmbH
Profol Greiz GmbH
RadicGroup High Performance Polymers
Ravago Manufacturing Europe
ROMIRA GmbH
RÜHL PUROMER GmbH
SHPP Germany GmbH
Sirmax SPA
SORTCO GmbH & Co. KG
Sumika Polymer Compounds Europe
Techniplas Schwäbisch Gmünd GmbH
TechnoCompound GmbH
Toray Research Center, Inc.
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Wanhua Chemical Group., Ltd.
WIS Kunststoffe GmbH



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General information

Congress Chairman



Dipl.-Ing. Thomas Drescher, Head of Pre-development and Vehicle assessment, Body system, Volkswagen AG, Wolfsburg

Supporting panel of experts



1. L to R

Jochen Hardt, Covestro Deutschland AG, Leverkusen

Roger Kaufmann, GK Concept GmbH, Dresden

Klaus Münker, Magna Exteriors GmbH, Altbach

2. L to R

Stefan Schierl, KraussMaffei Technologies GmbH, Parsdorf

Prof. Martin Würtele, Technische Hochschule Rosenheim

Technical Sponsor

VDI Society for Materials Engineering

The VDI Society for Materials Engineering makes a point of networking experts both from business and from scientific fields close to actual applications in order to allow discussion of current questions about components and products from the point of view of materials and the corresponding technologies and also to enable engineers in this field to access via the network the approaches to solutions which have been worked out.

www.vdi.de/gme

Program committee



1. L to R

Pascal Bertens, DAF Trucks N. V., Eindhoven, The Netherlands

Dr. Christian Bornhorst, Volkswagen AG, Wolfsburg

Dipl.-Ing. Fabian Groh, AUDI AG, Neckarsulm

Jürgen Gugg, BMW AG, Munich

Dr. Steffen Hölzel, Dr. Ing. h.c.F. Porsche AG, Weissach

Dipl.-Ing. (TH) Werner Jakobs, Ford-Werke GmbH, Cologne

2. L to R

Dr. Gérard Liraut, Renault Group, Guyancourt Cedex, France

Dr. Jenni Meiners, Opel Automobile GmbH, Rüsselsheim

Dipl.-Ing. Wolfgang Möller, Volkswagen Osnabrück GmbH

Stefan Röhl, MAN Truck & Bus AG, Munich

Dipl.-Journ. (FH) Daniel Schröder, Verein Deutscher Ingenieure e. V., Düsseldorf

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