13th International Symposium and accompanying Exhibition on Sophisticated Car Safety Systems

Mannheim, Germany
Congress Center »Rosengarten«

2016, November 28-30
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Karlsruhe Institute of Technology KIT, D
Welcome

Road safety is still a key concern for all the sectors involved, including car manufacturers, suppliers and regulators. Developments in vehicle and road user safety emphasize integral safety through the fusion of active and passive safety systems. Although the benefits are well known to experts, there is clearly a need for close cooperation between all interested parties. The 13th AIRBAG 2000+ Symposium in 2016 will again be a meeting place for engineers, scientists, legislators, managers and marketing experts to exchange information, to make and improve contacts, to stimulate further progress and to promote integral safety for road users on an impartial platform.

The Fraunhofer Institute for Chemical Technology ICT is the leading independent research and development facility for airbag technology and testing. As a division of Fraunhofer, Europe’s largest organization for applied and contract research, the Fraunhofer ICT offers a unique event for the automobile industry, suppliers and public authorities.

Welcome to Mannheim, Germany, and the world of Airbag 2016.

Dr. Jochen Neutz
Chairman of the Symposium
Registration

Please return the enclosed registration form or Online:
www.ict.fraunhofer.de/airbag2016

You will then receive an invoice.

Registration fees (including proceedings, coffee breaks, lunch, evening receptions), depending on date of arrival of registration form at Fraunhofer ICT
* up to November 11, 2016
  EURO 950,– (incl. 19 % VAT)
* up to November 21, 2016
  EURO 1.050,– (incl. 19 % VAT)

Participation cannot be guaranteed for registrations arriving after November 21, 2016. A fee of EURO 500,– will be charged for cancellations after November 21, 2016. No-shows will be charged the complete fee.

Accommodation

www.ict.fraunhofer.de/airbag2016accommodation

Conference Office

is located in the foyer of the Conference hall and may be reached from November 28 to November 30 by

Phone +49 (0)621-4106-5030

Check In / Welcome Reception

Please check in at the conference office on Monday, November 28 between 13.00 and 20.00 h. All participants are cordially invited to the Welcome Reception in the foyer of the Conference hall on Monday, November 28, 18.00 – 21.00 h.

Conference Languages

English, German – Simultaneous Interpretation

Proceedings

One copy of the proceedings is included in the registration fee. Additional copies EURO 100,–.
Altran Concept Tech GmbH
Gratkorn, A

Alt Technologies BV
Utrecht, NL

Autoliv Inc.
Stockholm, SE

Bluestar Silicones France SAS
Lyon, F

Continental Automotive GmbH
Regensburg, D

Daicel Safety Systems Europe Sp. z o.o.
Żarów, PL

Daimler AG
Sindelfingen, D

Delphi Connection Systems
Guyancourt, F

Dow Corning
Seneffe, B

Electrovac Hacht & Huber GmbH
Salzwed, D

Hirtenberger Automotive Safety GmbH & Co KG
Hirtenberg, A

INDET Safety Systems a.s.
Vsetin, CZ

INVISTA Textiles
Gloucester, UK

IPG Automotive GmbH
Karlsruhe, D

iSi Automotive Berlin GmbH
Berlin, D

Jinzhou Jinheng Automotive Safety System Co., Ltd.
Jinzhou, PRC

Key Safety Systems Deutschland GmbH
Raunheim, D

Lectra Deutschland GmbH
Ismaning, D

Mikron SA Boudry
Boudry, CH

Dürkopp Adler Aktiengesellschaft
Bielefeld, D

PFAFF Industriesysteme und Maschinen GmbH
Kaiserslautern, D mit Zweigniederlassung KSL, Lorsch D

Gütermann GmbH, Tech Tex / Automotive Zwicky
Gutach im Breisgau, D

Robert Bosch GmbH
Stuttgart, D

Rogers Corporation
Gent, B

SCHOTT AG
Landshut, D

Schreiner Group, Pro Tech
Oberschleissheim, D

Taihang Changqing Automobile Safety System (Suzhou) Co., Ltd
Suzhou, CN

Takata AG
Aschaffenburg, D

voestalpine Rotec GmbH & Co. KG
Annweiler, D

ZF Friedrichshafen AG
Friedrichshafen, D
Monday, November 28

Workshop (in GERMAN only)
begrenzte Teilnehmerzahl, Anmeldung formlos an manuela.wolff@ict.fraunhofer.de

Teilnahmegebühr: EURO 119,- inkl. MWSt. Frei für Teilnehmer des airbag-Symposiums

13.30 – 18.00

Workshop “Retten ohne Risiko!” für Rettungskräfte mit “Airbag-Update”, Einsatzberichten und Erfahrungsaustausch
POC: Rolf.Erbe@berliner-feuerwehr.de

18.00 – 21.00

Welcome Reception for all participants (Symposium, Workshop, Exhibition)

Tuesday, November 29

08.00 – 08.15

WELCOME AND OPENING
J. Neutz
Chairman of the Symposium
B. Hefer
Moderator of “airbag 2016”
Fraunhofer ICT, Pfinztal, D

08.15 – 9.00

V1 THE ROLE OF PASSIVE SAFETY IN THE CURRENT AND FUTURE ACCIDENT SCENARIO
L. Hannawald, H. Liers
Verkehrsunfallforschung an der TU Dresden (VUFO) GmbH, Dresden, D

1st Session: Global Trends and Requirements
Session Responsible: Michael Fehring
Daimler AG, Sindelfingen, D

9.00 – 9.25

V2 NHTSA’S FUTURE STRATEGIES FOR OCCUPANT SAFETY
S. Ridella
National Highway Traffic Safety Administration, Washington, USA

9.25 – 9.50

V3 C-NCAP: TODAY AND TOMORROW
H. Zhu
China Automotive Technology Research Centre, Tianjin, PRC
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<td>9.50 – 10.15</td>
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<td>LOOKING AHEAD: THE NEXT STEPS IN EURO NCAP’S SAFETY RATING</td>
<td>M. van Ratingen</td>
<td>Euro NCAP, Brussels, B</td>
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<td>10.45 – 11.10</td>
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<td>OBLIQUE IMPACT – A NEW FOCUS FOR PASSIVE RESTRAINT SYSTEMS</td>
<td>M. Wendt, B. Cyliax, H. Hofmann</td>
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<td>PROTECTION SYSTEMS FOR SENIORS</td>
<td>B. Pipkorn, C. Sunnevang</td>
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<td>12.00 – 12.45</td>
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<td>Hans Spies, Ingenieurbüro Spies, Hohenwarth, D</td>
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<td>SMALL OVERLAP TEST SLED FOR VEHICLE DEVELOPMENT STRATEGIES</td>
<td>A. Sprick, A. Fornells, N. Parera</td>
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14.50 – 15.15  V10  A DATA-DRIVEN APPROACH TO DISTRIBUTED STRUCTURE AND RESTRAINT SYSTEM DESIGN IN FRONT CRASH
V. Lange
BMW Group, München, D

15.15 – 15.40  V11  APPLICATION OF A NEW METHOD FOR RECORDING RAPID MOVING SURFACES OF AIRBAGS DURING DEPLOYMENT
M. Lich
Volkswagen AG, Wolfsburg, D

15.40 – 16.15  Coffee Break

4th Session: Simulation
Session Responsible: Heiko Ruck
Takata AG, Aschaffenburg, D

16.15 – 16.40  V12  PYROMECHANISMS FUNCTIONING SIMULATIONS BY THE USE OF A PYRO COMBUSTION-STRUCTURE COUPLING
H. Fresnel, N. Daviot
Autoliv – Livbag, Pont-de-Buis, F

16.40 – 17.05  V13  IMPROVEMENT OF GAS FLOW IN AIRBAG DEPLOYMENT SIMULATION FOR LOW RISK DEPLOYMENT TESTS
A. Diederich
Toyoda Gosei Europe NV, Saarbrücken, D
M. Asaoka, M. Aoki, H. Ida
Toyoda Gosei Co. Ltd., Aichi, JAP

17.05 – 17.30  V14  THUMS USER COMMUNITY – STANDARDISING THE APPLICATION OF HUMAN BODY MODELS
T. Fuchs, S. Peldschus, Ludwig-Maximilians-Universität, München, D
M. Erzgräber, Adam Opel AG, Rüsselsheim, D
F. Fürst, Audi AG, Ingolstadt, D
C. Mayer, Daimler AG, Sindelfingen, D
B. Pipkorn, Autoliv, Dachau, D
J. Weber, Volkswagen AG, Wolfsburg, D
P. Wernicke, BMW AG, München, D
T. Yasuki, Toyota Motor Corporation, JAP

17.30 – 17.45  AWARDS

18.00 – 21.30  Evening Reception (in the foyer of the Conference Hall) with entertainment by “Balanced Action”
Wednesday, November 30

5th Session: Integrated Safety
Session Responsible: Dirk Schultz
ZF TRW, Alfdorf, D

8.00 – 8.25 V15 INTEGRATED SAFETY OF THE NEW MERCEDES-BENZ E-CLASS
M. Struck, R. Schöneburg
Daimler AG, Sindelfingen, D

8.25 – 8.50 V16 FUNCTION BUNDLE INTEGRATED SAFETY – PORTFOLIO OF FUNCTIONS FROM PASSIVE TO COOPERATIVE SAFETY
C. Kuhrt, R. Schnupp, E. Futterlieb, K. Rink, B. Peters, M. Feser
Continental, Regensburg, D

6th Session: Autonomous Driving
Session Responsible: Ralf Schnupp
Continental, Regensburg, D

8.50 – 9.15 V17 INTEGRATED SAFETY – PASSIVE AND ACTIVE SAFETY INTEGRATION TO ENHANCE OCCUPANT PERFORMANCE
M. Shkoukani, M. Elias
Key Safety Systems, Sterling Heights, USA

9.15 – 9.40 V18 DRIVER MONITORING SYSTEM AS ROAD FOCUS REMINDER; CASES FROM A FIELD STUDY
J. Karlsson
Autoliv Research, Vargarda, SE

9.40 – 10.05 V19 SAFE TRANSITIONS TO AND FROM AUTOMATED DRIVING
A. Larsson
Autoliv Research, Vargarda, SE

10.05 – 10.40 Coffee Break

7th Session: Sensors
Session Responsible: Clemens Willke
Robert Bosch GmbH, Stuttgart, D

10.40 – 11.05 V20 SENSORS FOR AUTONOMOUS DRIVING
H. Spies
Ingenieurbüro Spies, Hohenwarth, D
11.05 – 11.30  V21  INTERIOR SENSING FOR OCCUPANT PROTECTION  
A. Köhler, B. Reckziegel, K. Shiozawa, A. Schulz  
Robert Bosch GmbH, Abstatt, D

11.30 – 11.55  V22  ENHANCING THE VEHICLE SAFETY ROADMAP BY V2X SENSING  
K. Rink, U. Stählin, G. Jürgens  
Continental, Frankfurt/Main, D

11.55 – 13.15  LUNCH BREAK

13.15 – 13.40  V23  ENGINEERED OMEGA-Z FOLDING FOR DRIVER AIRBAGS  
S. Sapountzis, M. Poyant  
ZF TRW, Aschaffenburg, D

13.40 – 14.05  V24  DEVELOPMENT OF NEW SEATBELT SYSTEM TECHNOLOGIES TO REDUCE INJURY RISKS  
A. Huf  
BMW Group, München, D  
B. Eickhoff  
Autoliv, Dachau, D

14.05 – 14.30  V25  A DEVELOPMENT OF CENTER SIDE-AIRBAG  
Jiwoon Song, Hae Kwon Park, Kyu Sang Lee,  
Hwangbo Sang Won, Bae Young Kim,  
Hyo Bae Lee  
Hyundai MOBIS, Gyeonggi-do, KOR

P.-F. Tissot, V. Honore  
In&Motion, Chavanod, F

14.55  Closing Remarks
Posters will be presented in the Foyer of the Conference Hall during the Symposium. A special POSTER SESSION will be held on Tuesday, November 29, 12.00 - 12.45 h. During this time authors should be present for discussion at their posters.

P27 RESEARCH OF MICROMORPHOLOGY’S IMPACT ON THE PROPERTIES OF GAS GENERATING AGENT
Chen Fan, Li Xuming, Liu Wei, Yao Jun
Hubei Institute of Aerospace Chemotechnology, Xiangyang, PRC

P28 RESEARCH ON LASER WELDING DEFECTS IN THE IGNITION TUBE OF INFLATOR
Liu Wei, Chen Fan, Yao Jun
The 42nd Institute of the Forth Academy of CASC / Hubei Institute of Aerospace Chemotechnology, Xiangyang, PRC

P29 PAST & FUTURE OF THE FUNCTIONAL SILICONE COATINGS FOR AIRBAGS
M. Slaviero, P. Defaux, D. Djian
Bluestar Silicones, Saint-Fons, F

P30 COMPUTATIONAL SIMULATION OF AIRBAG INFLATORS AND SYSTEMS
I. Hoffman
Autoliv North America, Ogden, USA

P31 AN EFFICIENT QUICK-STARTER APPLICATION FOR INTEGRATED SAFETY ANALYSIS
M.G.A. Tijssens
TASS International, Rijswijk, NL

P32 FULLY AUTOMATED APPLICATION MEASUREMENT ENVIRONMENT FOR AIRBAG SYSTEM ON CHIP (SOC)
F.-C. Filipovici, A. Pirker-Fruenhauf
Infineon Technologies AG, Villach, A

P33 DUAL CHAMBERED PASSENGER AIRBAG PERFORMANCE IN PROTECTION OF VARIOUS OCCUPANTS IN POSITION AND OUT OF POSITION
M.H. Rajani
Andisheh Industrial Group, Babolsar, IRN

P34 TARGET ZERO
A. Charles
ACE Consultancy, Winsford, GB
P35  THE IMPACT OF MEGATRENDS ON PASSIVE SAFETY
M. Seyffert, U. Class
ZF TRW, Alfdorf, D

P36  STUDY OF USING COLD GAS SYSTEM SIMULATING PYRO-
TECHNIC INFLATOR WITH ENERGY INJECTION METHOD
D. Wang, C. Williams
Microsys Technologies Inc., Mississauga, CAN

P37  IONIC COMPRESSORS AS A COMMERCIALISED PRODUCT
M. Stefan
Linde Gas GmbH, Wien, A

P38  GUANIDINE NITRATE GRANULA PROCESS ON INFLUENCE OF
AUTOIGNITION MATERIAL
Luo Yun-Qiang, Ruan Jia-Sheng, Zhang Ling, Fen Tao,
Yang Zhi-Xiong
Hubei Hangpeng Chemical Power Technology Co. Ltd.,
Xiangyang, PRC

P39  GRANULA MANUFACTURE PROCESS ON INFLUENCE OF GAS
GENERANT BURNING PERFORMANCE AT COLD TEMPERATURE
Luo Yun-Qiang, Xia Qiang, Ruan Jia-Sheng, Zhang Ling, Fen Tao,
Zhang Jun
Hubei Hangpeng Chemical Power Technology Co. Ltd.,
Xiangyang, PRC
HOW TO FIND THE VENUE

Travelling by car
From the A6 or A5 at the Mannheim or Heidelberg motorway intersection, continue towards “Mannheim-Mitte”. You will reach the Rosengarten and the Dorint Congress Hotel via the Augustaanlage.

Travelling by train, urban train or bus
Mannheim is an ICE/IC junction station. There is a direct ICE connection from Mannheim to Basel, Berlin, Cologne, Düsseldorf, Frankfurt am Main, Frankfurt am Main Airport, Freiburg, Hamburg, Munich, Paris, Stuttgart, and many other cities.

You can reach the Rosengarten by taking the following tram routes:
- Route 3, travelling towards Sandhofen, “Wasserturm” stop
- Route 4, travelling towards Käfertal / Heddesheim, “Wasserturm” stop
- Route 5, OEG travelling towards Viernheim-Weinheim, “Rosengarten” stop

You can reach the Rosengarten by taking the following bus routes:
- Route 60, travelling towards Mannheim, Lanzvilla, “Wasserturm” stop
- Route 63, travelling towards Lindenhof, Pfalzplatz, “Wasserturm” stop
- Route 64, travelling towards Käfertal, OEG Station, “Wasserturm” stop

Travelling by plane
From Frankfurt Airport, a Lufthansa bus runs every hour to the Lufthansa Terminal.

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The Rosengarten is a five minute walk (walking towards the city centre) from the main railway station. Rhein-Neckar – Air offers several daily round-trip flights between Mannheim and Berlin. Free parking and short distances within Mannheim city makes your arrival relaxed and easy.

Contact
m:con – mannheim:congress GmbH
Rosengartenplatz 2
D-68161 Mannheim
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Fax:+49 (0)621 4106--80123/-80125
contact@mcon-mannheim.de
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- VIERNHEIM
- WEINHEIM
- MAINZ
- KAISERSLAUTERN
- WEIßENBURG
- ALZEY
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Rhein
Main
Neckar
WALLDORF
LUDWIGSHAFEN
MUTTERSTADT
SPEYER
WORMS
FRANKENTHAL
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13th International Symposium and Exhibition on Sophisticated Car Occupant Safety Systems

November 28-30, 2016
Mannheim, Germany

Company / Authority / Complete Address

Last name

First name

Title / Position

I will pay the registration fee upon receipt of the invoice.

It is agreed that pictures taken during this event may be published.

E-mail

Phone no.

Signature

Fax no.

Participation (please tick)
Welcome Reception*

☐ Monday, November 28, 6.00 p.m.

* included in the registration fee
CONFERENCE MANAGEMENT

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