

SAE 2004 World Congress Matrix								
Key/Color Code:	Electronics - Blue; Emissions/Environmental-Green; Lightweight Materials - Gray; Propulsion - Purple; Safety & Testing - Orange							
Room/Day	Monday 9:00am March 8	Monday 1:30pm March 8	Tuesday 9:00am March 9	Tuesday 1:30pm March 9	Wednesday 9:00am March 10	Wednesday 1:30pm March 10	Thursday 9:00am March 11	Thursday 1:30pm March 11
Dana Technical Innovation Forum	AE7 Intelligent Vehicle Initiative (IVI) Technology - Advanced Controls (Part 1 of 2)	CONG99 The China Experience: Value Chain Costing (1:30 - 3:00 p.m.) AE7 Intelligent Vehicle Initiative (IVI) Technology - Advanced Controls (Part 2 of 2) (3:00 - 5:00 p.m.)	AC10 Transmission & Driveline Systems Symposium - New Transmission Systems (Part 3 of 7)	CONG10 High Performance Cars - A Passion for Performance Mini Conference: Impact of Race Development on Production Vehicles	Business Panel on Poland 9:00 - 10:30 a.m. Spotlight on Austria 10:45 a.m. - 12:45 p.m.	CONG1 High Performance Cars - A Passion for Performance Mini Conference: New Vehicle Engineering - The Ford GT	AC7 Six Sigma (Part 1 of 2)	AC7 Six Sigma (Part 2 of 2)
W1-51	CONG90 OESA Panel - Global Manufacturing Footprint 2010 (8:30 start)	CONG2 Managing Globalization of the Automotive Industry - Case Studies	AE9 Distributed Embedded Systems Engineering (Part 1 of 4)	AE9 Distributed Embedded Systems Engineering (Part 2 of 4)	AE9 Distributed Embedded Systems Engineering (Part 3 of 4)	AE9 Distributed Embedded Systems Engineering (Part 4 of 4)	MV1 Vehicle Research & Development Supporting the Army Transformation	AE3 Audio Systems
W1-52	ENV3 A Product Environmental Design: Part One - Recycling, Life Cycle Analysis and EcoDesign (Part 1 of 2)	ENV3 B Product Environmental Design: Part Two - Recycling, Life Cycle Analysis and EcoDesign (Part 2 of 2)	Honors Convocation		M5 A Sheet/Hydro/Gas Forming Technology & Modeling (Part 1 of 2)	M5 B Sheet/Hydro/Gas Forming Technology & Modeling (Part 2 of 2)	AE22 Automobile Electronics & Systems Reliability (Part 1 of 2)	AE22 Automobile Electronics & Systems Reliability (Part 2 of 2)
W1-54	AC2 Anti-Lock Braking/Traction Control (ABS/TCS) Systems (Part 1 of 2)	AC2 Anti-Lock Braking/Traction Control (ABS/TCS) Systems (Part 2 of 2)	AC3 Brake Technology and Foundation Brake NVH (Part 1 of 2)	AC3 Brake Technology and Foundation Brake NVH (Part 2 of 2)	B5 Vehicle Aerodynamics (Part 5 of 6)	B5 Vehicle Aerodynamics (Part 6 of 6)	AE21 Electrical Wiring Harnesses	
W1-55	AE24 In-Vehicle Software (Part 1 of 5)	AE24 In-Vehicle Software (Part 2 of 5)	AE24 In-Vehicle Software (Part 3 of 5)	AE24 In-Vehicle Software (Part 4 of 5)	AE24 In-Vehicle Software (Part 5 of 5)	ENV6 Implementation of End-of-Life Vehicle Programs	P13 Engine Lubrication & Bearing Systems	
W2-58	M6 A Innovations in Modeling and Testing of Steel Structures for Automotive Applications (Part 1 of 2)	M6 B Innovations in Modeling and Testing of Steel Structures for Automotive Applications (Part 2 of 2)	M22 C Advances in Plastic Components, Processes, and Technologies (Part 3 of 3) Sponsored by Messe Dusseldorf North America	B1 Corrosion Panel	M11 I Reliability & Robust Design in Automotive Engineering (Part 11 of 12)	P11 E Development in Fuel Cell Hybrid Vehicles (Part 5 of 5)	M15 A Achieving Light Weight Vehicles (Part 1 of 2)	M15 B Achieving Light Weight Vehicles (Part 2 of 2)
W2-62	B15 Safety Test Methodology (Part 1 of 3)	B15 Safety Test Methodology (Part 2 of 3)	B15 Safety Test Methodology (Part 3 of 3)	B7 Air Bags (Part 1 of 3)	B7 Air Bags (Part 2 of 3)	B7 Air Bags (Part 3 of 3)	B21 Pedestrian Protection (Part 1 of 2)	B21 Pedestrian Protection (Part 2 of 2)

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W2-63	AE17 Software/Hardware Systems (Part 1 of 3)	AE17 Software/Hardware Systems (Part 2 of 3)	AE17 Software/Hardware Systems (Part 3 of 3)	B22 Structural Crashworthiness	B13 Vehicle Aggressivity & Compatibility in Automotive Crashes (Part 1 of 2)	B13 Vehicle Aggressivity & Compatibility in Automotive Crashes (Part 2 of 2)	P9 A Vehicle & Engine System Models	AE12 Computer Methods for Vehicle Crashworthiness and Occupant Protection (Part 4 of 4)
W2-64	B2 Biomechanics (Part 1 of 2)	B2 Biomechanics (Part 2 of 2)	M16 Materials Innovation Session/Panel	M28 Failure Analysis and Creative Problem Solving	AE12 Computer Methods for Vehicle Crashworthiness and Occupant Protection (Part 1 of 4)	AE12 Computer Methods for Vehicle Crashworthiness and Occupant Protection (Part 2 of 4)	AE12 Computer Methods for Vehicle Crashworthiness and Occupant Protection (Part 3 of 4)	AE23 Electromagnetic Compatibility (EMC)
W2-65	B17 Rollover, Side and Rear Impact (Part 1 of 4)	B17 Rollover, Side and Rear Impact (Part 2 of 4)	B17 Rollover, Side and Rear Impact (Part 3 of 4)	CONG7 Career Development Session	B3 Accident Reconstruction (Part 1 of 4)	B3 Accident Reconstruction (Part 2 of 4)	B3 Accident Reconstruction (Part 3 of 4)	B3 Accident Reconstruction (Part 4 of 4)
W2-66	AC10 Transmission & Driveline Systems Symposium - CVT/IVT (Part 1 of 7)	AC10 Transmission & Driveline Systems Symposium - CVT/IVT (Part 2 of 7)	AE8 Intelligent vehicle Initiative (IVI) - Vehicle Navigation Systems	AC10 Transmission & Driveline Systems Symposium - AWD/4WD/Driveline (Part 4 of 7)	AC10 Transmission & Driveline Systems Symposium - Torque Converters & Manual Transmissions (Part 5)	AC10 Transmission & Driveline Systems Symposium - Components (Part 6 of 7)	AC10 Transmission & Driveline Systems Symposium - Controls (Part 7 of 7)	M19 Advances in Interiors
W2-67	AE19 Systems Engineering (Part 1 of 2)	AE19 Systems Engineering (Part 2 of 2)	AE15 Simulation - Electronics (Part 1 of 2)	AE15 Simulation Electronics (Part 2 of 2)	M8B Welding & Joining (Part 2 of 2)	M7 Friction Stir Welding	AC1 Accelerated Testing and Vehicle Reliability Conferenc	M25 Front & Rear Bumper Systems
W2-68	B8 Human Factors in Seating Comfort (Part 1 of 2)	B8 Human Factors in Seating Comfort (Part 2 of 2)	AE1 In-Vehicle Networks (Part 3 of 3)	M21 Elastomers Sponsored by Messe Dusseldorf North America	AE20 Testing and Instrumentation (Part 1 of 4)	AE20 Testing and Instrumentation (Part 2 of 4)	AE20 Testing and Instrumentation (Part 3 of 4)	AE20 Testing and Instrumentation (Part 4 of 4)
W2-69	B14 Design Tools (Part 1 of 2)	B14 Design Tools (Part 2 of 2)	B4 CAD/CAM Technology (Part 1 of 6)	B4 CAD/CAM Technology (Part 2 of 6)	B4 CAD/CAM Technology (Part 3 of 6)	B4 CAD/CAM Technology (Part 4 of 6)	B4 CAD/CAM Technology (Part 5 of 6)	B4 CAD/CAM Technology (Part 6 of 6)
W2-70	AC5 Noise & Vibration (Part 1 of 3)	AC5 Noise & Vibration (Part 2 of 3)	AC5 Noise & Vibration (Part 3 of 3)		CONG100 Vehicle Design and Its Effect on Traffic Management	P17 A Combustion & Flow Diagnostics (Part 1 of 3)	AE5 Safety-Critical Systems (Part 1 of 2)	AE5 Safety-Critical Systems (Part 2 of 2)
O2-33	B6 Automotive Lighting Technology - Advance Signal Lighting Technologies - LED Applications (Part 1 of 5)	B6 Automotive Lighting Technology - Advanced Forward Lighting Technologies - LED & AFS (Part 2 of 5)	B6 Automotive Lighting Technology - Automotive Lighting Engineering Analysis (Part 3 of 5)	B6 Automotive Lighting Technologies - Electronics, Light Sources, Materials & CAE for Automotive Lighting (Part 4 of 5)	B9 Human Factors in Driver Vision & Lighting	B6 Automotive Lighting Technology - Lighting System Performance & Evaluations (Part 5 of 5)	AC8 Steering & Suspension Technology Symposium - Suspensions (Part 3 of 4)	AC8 Steering & Suspension Technology Symposium - Suspensions (Part 4 of 4)

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O2-35/36	B5 Vehicle Aerodynamics (Part 1 of 6)	B5 Vehicle Aerodynamics (Part 2 of 6)	B5 Vehicle Aerodynamics (Part 3 of 6)	B5 Vehicle Aerodynamics (Part 4 of 6)	AC8 Steering & Suspension Technology Symposium - Steering (Part 1 of 4)	AC8 Steering & Suspension Technology Symposium Steering (Part 2 of 4)	M27 Crankshaft Analysis, Design, and Testing	
O2-43	B10 Human Factors in Driving and Automotive Telematics (Part 1 of 2)	B10 Human Factors in Driving and Automotive Telematics (Part 2 of 2)	AE11 Vehicle Diagnostics (Part 1 of 2)	AE11 Vehicle Diagnostics (Part 2 of 2)	AE2 Vehicle Sensors & Actuators (Part 1 of 3)	AE2 Vehicle Sensors & Actuators (Part 2 of 3)	AE2 Vehicle Sensors & Actuators (Part 3 of 3)	AE6 Advanced Automotive Electronics Packaging
O2-44	M11 A Reliability & Robust Design in Automotive Engineering (Part 1 of 12)	M11 B Reliability & Robust Design in Automotive Engineering (Part 2/4 of 12)	M11 L Reliability & Robust Design in Automotive Engineering (Part 10 of 12)	M11 C Reliability & Robust Design in Automotive Engineering (Part 3 of 12)	M11 E Reliability & Robust Design in Automotive Engineering (Part 5 of 12)	M11 F Reliability & Robust Design in Automotive Engineering (Part 6 of 12)	M11 G Reliability & Robust Design in Automotive Engineering (Part 7 of 12)	M11 H Reliability & Robust Design in Automotive Engineering (Part 8 of 12)
O3-45	M10 A Modeling of Foams, Adhesives & Honeycombs Materials for Crash Applications (Part 1 of 2)	M9 A Foam Applications for Crashworthiness	M10 B Modeling of Materials for Crash Applications (Part 2 of 2)	M8 A Welding & Joining (Part 1 of 2)	M26 A Sealing & Gaskets (Part 1 of 2) Sponsored by Messe Dusseldorf North America	M26 B Sealing & Gaskets (Part 2 of 2) Sponsored by Messe Dusseldorf North America	M11 K Reliability & Robust Design in Automotive Engineering (Part 12 of 12)	
O3-46	FL3 A Diesel Exhaust Emission Control Modeling (Part 1 of 3)	FL3 B Diesel Exhaust Emission Control Modeling (Part 2 of 3)	FL3 C Diesel Exhaust Emission Control Modeling (Part 3 of 3)	FL2 I Diesel Exhaust Emission Control - DPF Systems (Part 5 of 9)	ENV4 Environmental Challenges of Alternative Vehicle Technology Design	FL2 J Diesel Exhaust Emission Control - SCR (Part 8 of 8)	AC9 Tire & Wheel Technology	
M2-29	AE1 In-Vehicle Networks (Part 1 of 3)	AE1 In-Vehicle Networks (Part 2 of 3)	M4 A Fatigue Research & Applications (Part 1 of 2)	M4 B Fatigue Research & Applications (Part 2 of 2)	AC11 Vehicle Dynamics & Simulation (Part 1 of 4)	AC11 Vehicle Dynamics & Simulation (Part 2 of 4)	AC11 Vehicle Dynamics & Simulation (Part 3 of 4)	AC11 Vehicle Dynamics & Simulation (Part 4 of 4)
M2-30	M12 Aluminum	M11 J Reliability & Robust Design in Automotive Engineering (Part 9 of 12)	M18 A Powder Metallurgy - Net Shape Solutions (Part 1 of 2)	M18 B Powder Metallurgy - Net Shape Solutions (Part 2 of 2)	AE16 Optimization	P3 A New Diesel Engines & Components (Part 1 of 3) CONG6 Cliff Garrett Turbomachinery Engineering Lecture	M20 A Instrument Panels (Part 1 of 2) Sponsored by Messe Dusseldorf North America	M20 B Instrument Panels (Part 2 of 2) Sponsored by Messe Dusseldorf North America
M3-31	M13 A Magnesium Technologies (Part 1 of 3)	M13 B Magnesium Technologies (Part 2 of 3)	M13 C Magnesium Technologies (Part 3 of 3)	M14 A Casting (Part 1 of 3)	M14 B Castings (Part 2 of 3)	M14 C Casting (Part 3 of 3)	HX2 A Simulation for Heat Exchangers (Part 1 of 2)	HX2 B Simulation for Heat Exchangers (Part 2 of 2)
M3-32	FL5 A General Emissions (Part 1 of 5)	FL5 B General Emissions (Part 2 of 5)	FL5 C General Emissions (Part 3 of 5)	FL5 D General Emissions (Part 4 of 5)	FL5 E General Emissions (Part 5 of 5)	FL6 A Advanced Catalysts (Part 1 of 3)	FL6 B Advanced Catalysts (Part 2 of 3)	FL6 C Advanced Catalysts (Part 3 of 3)

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D2-08	M22 A Advances in Plastic Components, Processes and Technologies (Part 1 of 3) Sponsored by Messe Dusseldorf North America	M22 B Advances in Plastic Components, Processes and Technologies (Part 2 of 3) Sponsored by Messe Dusseldorf North America	M1 A Innovations in Steel Sheet Products & Processing (Part 1 of 2)	M1 B Innovations in Steel Sheet Products & Processing (Part 2 of 2)	M3 A Stainless Steels - The New Light Weight Option (Part 1 of 2)	M3 B Stainless Steels - The New Light Weight Option (Part 2 of 2)	M2 Innovations in Steel Bar Products & Processing	M23 Advances in Coating Technology
D2-09/10	HX1 Heat Exchangers	P5 A Electronic Engine Controls (Part 1 of 7)	P5 B Electronic Engine Controls (Part 2 of 7)	P5 C Electronic Engine Controls (Part 3 of 7)	P5 D Electronic Engine Controls (Part 4 of 7)	P5 E Electronic Engine Controls (Part 5 of 7) P5 Electronic Engine Controls-Panel (Part 8)	P5 F Electronic Engine Controls (Part 6 of 7)	P5 G Electronic Engine Controls (Part 7 of 7)
D2-11/12	P7 A Diesel Fuel Injection & Sprays (Part 1 of 4)	P7 B Diesel Fuel Injection & Sprays (Part 2 of 4)	P7 C Diesel Fuel Injection & Sprays (Part 3 of 4)	P7 D Diesel Fuel Injection & Sprays (Part 4 of 4)	HX4 A Climate Control (Part 1 of 4)	HX4 B Climate Control (Part 2 of 4)	HX4 C Climate Control (Part 3 of 4)	HX4 D Climate Control (Part 4 of 4)
D2-13/14	P19 A Direct Injection SI Engine Technology (Part 1 of 4)	P19 B Direct Injection SI Engine Technology (Part 2 of 4)	P19 C Direct Injection SI Engine Technology (Part 3 of 4)	P19 D Direct Injection SI Engine Technology (Part 4 of 4)	P10 A Modeling of Diesel Engines (Part 1 of 2)	P10 B Modeling of Diesel Engines (Part 2 of 2) CONG8 IMEchE Lecture (3:30 p.m.)	P17 B Combustion & Flow Diagnostics (Part 2 of 3)	P17 C Combustion & Flow Diagnostics (Part 3 of 3)
D2-15	HX3 A Thermal Management (Part 1 of 2)	HX3 B Thermal Management (Part 2 of 2)	P1 A Homogeneous Charge Compression Ignition (HCCI) Combustion (Part 1 of 4)	P1 B Homogeneous Charge Compression Ignition (HCCI) Combustion (Part 2 of 4)	P1 C Homogeneous Charge Compression Ignition (HCCI) Combustion (Part 3 of 4)	P1 D Homogeneous Charge Compression Ignition (HCCI) Combustion (Part 4 of 4)	P4 B Compression Ignition Combustion Processes (Part 1 of 2)	P4 B Compression Ignition Combustion Processes (Part 2 of 2)
D3-17/18	P21 A Advanced Hybrid Vehicle Powertrains (Part 1 of 4)	P21 B Advanced Hybrid Vehicle Powertrains (Part 2 of 4)	P21 C Advanced Hybrid Vehicle Powertrains (Part 3 of 4)	P21 D Advanced Hybrid Vehicle Powertrains (Part 4 of 4)		P14 A Variable Valve Actuation (Part 1 of 3)	P14 B Variable Valve Actuation (Part 2 of 3)	P14 C Variable Valve Actuation (Part 3 of 3)
D3-19	FL2 A Diesel Exhaust Emission Control - Durability (Part 1 of 10)	FL2 B Diesel Exhaust Emission Control - Durability (Part 2 of 9)	FL2 C Diesel Exhaust Emission Control - HC-DeNOx (Part 3 of 9)	FL2 D Diesel Exhaust Emission Control - HC-DeNOx (Part 4 of 9)	FL2 E Diesel Exhaust Emission Control - DPF Substrates (Part 6 of 9)	FL2 F Diesel Exhaust Emission Control - DPF Substrates (Part 7 of 9)	FL2 G Diesel Exhaust Emission Control - New Developments (Part 9 of 9)	ENV7 Product Environmental Design: Remanufacturing and Life Extending Technologies
D3-20/21	AC12 Virtual Engineering	FL4 A Emissions Measurement & Testing (Part 1 of 7)	FL4 B Emissions Measurement & Testing (Part 2 of 7)	FL4 C Emissions Measurement & Testing (Part 3 of 7)	FL4 D Emissions Measurement & Testing (Part 4 of 7)	FL4 E Emissions Measurement & Testing (Part 5 of 7)	FL4 F Emissions Measurement & Testing (Part 6 of 7)	FL4 G Emissions Measurement & Testing (Part 7 of 7)

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D3-22/23	P20 Developing New Technology Through Student Design	M17 Powder Metallurgy - Power Transfer Solutions (starts at 2:30pm)	P2 A CI & SI Power Cylinder Systems (Part 1 of 2)	P2 B CI & SI Power Cylinder Systems (Part 2 of 2)	P18 A SI Combustion (Part 1 of 3)	P18 B SI Combustion (Part 2 of 3)	P18 C SI Combustion (Part 3 of 3)	P9 B Fundamental Advances in Thermal & Fluid Sciences
D3-24/25	P8 A CI Engine Performance for Use with Alternate Fuels (Part 1 of 3)	P8 B CI Engine Performance for Use with Alternate Fuels (Part 2 of 3)	P8 C CI Engine Performance for Use with Alternate Fuels (Part 3 of 3)	P22 Progress of Hydrogen	P12 A New SI Engine & Component Design (Part 1 of 2)	P12 B New SI Engine & Component Design (Part 2 of 2)	P3 B New Diesel Engines & Components (Part 2 of 3)	P3 C New Diesel Engines & Components (Part 3 of 3)
D3-26/27	P16 A Multi-Dimensional Engine Modeling (Part 1 of 2)	P16 B Multi-Dimensional Engine Modeling (Part 2 of 2)	P15 A Modeling of SI Engines (Part 1 of 6)	P15 B Modeling of SI Engines (Part 2 of 6)	P15 C Modeling of SI Engines (Part 3 of 6)	P15 D Modeling of SI Engines (Part 4 of 6)	P15 E Modeling of SI Engines (Part 5 of 6)	P15 F Modeling of SI Engines (Part 6 of 6)
D3-28	P6 A In-Cylinder Diesel Particulate & Nox Control (Part 1 of 2)	P6 B In-Cylinder Diesel Particulate & Nox Control (Part 2 of 2)	ENV2 Global Climate Change and its Potential Impact on the Mobility Industry	ENV5 Sustainability in Manufacturing Environments: Can We Be Both Lean and Green?	P11 A Fuel Cell Power for Transportation (Part 1 of 5)	P11 B Fuel Cell Power for Transportation (Part 2 of 5)	P11 C Development in Fuel Cell Hybrid Vehicles (Part 3 of 5)	P11 D Development in Fuel Cell Hybrid Vehicles (Part 4 of 5)