Registration
7:00 am – 6:00 pm – Grand Salon

Speakers Breakfast
7:00 am – 8:00 am – Platinum

Education Courses
8:00 am – 5:00 pm
• Advanced Lubrication 301: Advanced Additives
• Basic Lubrication 101: Lubrication Fundamentals
• Condition Monitoring 101
• Gears 101: Fundamentals of Gears
• Metalworking Fluids 130: Metal Treatment Chemical
• NLGI Grease 101
• Synthetics 203: Non-Petroleum Fluids & Their Uses
• Nanotribology Special Session – (1:30 pm – 5:00 pm)

Events

Hoover Dam Tour – 1:00 pm – 5:00 pm (registration required)
Golf Outing – 1:00 pm – 7:00 pm (registration required)
Student Networking Event – 7:00 pm – 9:00 pm – (Location TBD)
Our focus is your focus. Join our team at STLE 2016 for these engaging technical presentations designed to address key formulating challenges and enable you to succeed in your market:

- Improving equipment reliability and fluid longevity with versatile formulation building block for gear oils
- Enabling longer life and eliminating varnish in air compressor lubricants
- Addressing varnish in gas turbine lubricants with a game-changing solution
- Lowering friction and enhancing durability in automotive and heavy duty industrial gear oil applications
- Optimizing lubricity in synthetic metalworking fluids
- Surpassing performance attributes of existing food grade greases with a novel solution

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Come talk to us at STLE 2016!

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Program At A Glance
As of Feb. 1, 2016
Subject to Change

Registration
7:00 am – 6:00 pm – Grand Salon

Speakers Breakfast
7:00 am – 8:00 am – Platinum

Technical Sessions
8:00 am – 10:00 am
1A • Commercial Marketing Forum I – Bronze 4
1B • Lubrication Fundamentals I – VII Rheology – Bronze 3
1C • Engine & Drivetrain I – Bronze 2
1D • Grease I – Gold
1E • Metalworking I – Silver
1H • Fluid Film Bearings I – Las Vegas 1
1I • Biotribology I – Las Vegas 2
1K • Ceramics & Composites I – Las Vegas 5
1M • Seal I – Las Vegas 6/7
1N • Surface Engineering I – Pacific 1
1O • Materials Tribology I – Pacific 2
1P • Nanotribology I: Nanomaterials and Nanoscale Analysis – Pacific 3

Opening General Session
10:30 am – Noon

To reserve a booth at the 2016 STLE Annual Meeting, contact Tracy Nicholas VanEe at tnicholas@stle.org, 630-922-3459.

Monday, May 16, 2016
Program At A Glance

Monday, May 16, 2016 • Las Vegas, Nevada

Keynote Address
Dr. Andrew L. Randolph, Technical Director, ECR Engines, Welcome, NC – Platinum

Lunch
Noon – 1:30 pm (on your own)

Commercial Exhibits and Student Posters
Noon – 5:00 pm – Bally’s Event Center

Technical Sessions
1:30 pm – 6:00 pm
2A • Commercial Marketing Forum II – Bronze 4
2B • Lubrication Fundamentals II- Surface Coatings – Bronze 3
2C • Engine & Drivetrain II – Bronze 2
2D • Grease/Rolling Element Bearings Joint Session I – Gold
2E • Metalworking II – Silver
2G • Gears I – Palace 4/5
2H • Fluid Film Bearings II – Las Vegas 1
2I • Biotribology II – Las Vegas 2
2J • Power Generation I: Power Gen Lubricants – Las Vegas 3
2L • Synthetics & Hydraulics I – Las Vegas 5
2M • Seals II – Las Vegas 6/7
2N • Surface Engineering II – Pacific 1
2O • Materials Tribology II – Pacific 2
2P • Nanotribology II: Nanomaterials and Nanoscale Analysis – Pacific 3

Exhibitor Appreciation Break
3:00 pm – 4:00 pm – Bally’s Event Center

Welcome Reception
6:30 pm – 8:00 pm – Platinum

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Registration
7:00 am – 6:00 pm – Grand Salon

Speakers Breakfast
7:00 am – 8:00 am – Platinum

Commercial Exhibits and Student Posters
9:30 am - Noon & 2:00 pm – 5:30 pm – Bally’s Event Center

Technical Sessions
8:00 am – Noon
3A • Commercial Marketing Forum III – Bronze 4
3B • Lubrication Fundamentals III – Elastohydrodynamic Lubrication – Bronze 3
3C • Engine & Drivetrain III – Bronze 2
3D • Rolling Element Bearings I – Gold
3E • Metalworking III – Silver
3F • Grease II – Palace 3
3G • Gears II – Palace 4/5
3H • Fluid Film Bearings III – Las Vegas 1
3I • Biotribology III – Las Vegas 2
3J • Power Generation II: Controlling Varnish – Las Vegas 3
3K • Ceramics and Composites II – Las Vegas 4
3L • Synthetics & Hydraulics III – Las Vegas 5
3M • Seals III – Las Vegas 6/7
### Program At A Glance

**Tuesday, May 17, 2016 • Las Vegas, Nevada**

### Technical Sessions

2:00 pm – 6:00 pm

- **4A** • Commercial Marketing Forum IV – Bronze 4
- **4B** • Lubrication Fundamentals IV – Computational EHL – Bronze 3
- **4C** • Engine & Drivetrain IV - Special Session - Advances in Lubricants and Automotive Tribology for Fuel Economy – Bronze 2
- **4D** • Rolling Element Bearings II – Gold
- **4E** • Metalworking IV – Silver
- **4F** • Non-Ferrous Metals I: Additives – Palace 3
- **4G** • Gears IIII – Palace 4/5
- **4H** • Fluid Film Bearings IV – Las Vegas 1
- **4I** • Biotribology IV – Las Vegas 2
- **4J** • Power Generation III: Contamination Control – Las Vegas 3
- **4K** • Wear I: Experimental Study of Wear – Las Vegas 4
- **4L** • Synthetics & Hydraulics II – Las Vegas 5
- **4M** • Seals IV – Las Vegas 6/7
- **4N** • Surface Engineering IV – Pacific 1
- **4O** • Materials Tribology IV – Pacific 2
- **4P** • Nanotribology IV: Nanoparticle Additives – Pacific 3

### Exhibitor Appreciation Break

3:00 – 4:00 pm – Bally’s Event Center

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**At A Glance**

May 15-19, 2016 • Las Vegas, Nevada (USA)
STLE 2016 Annual Meeting and Exhibition

To reserve a booth at the 2016 STLE Annual Meeting, contact Tracy Nicholas VanEe at tnicholas@stle.org, 630-922-3459.

Program At A Glance
As of Feb. 1, 2016
Subject to Change

Wednesday, May 18, 2016

Registration
7:00 am – 6:00 pm – Grand Salon

Speakers Breakfast
7:00 am – 8:00 am – Platinum

Commercial Exhibits
9:30 am - Noon – Bally’s Event Center

Education Courses
8:00 am – 5:00 pm
• Advanced Lubrication 302: Advanced Lubrication Regimes
• Automotive Lubrication 202: Gasoline
• Basic Lubrication 102: Basic Applications
• Metalworking Fluids 105: Introduction to Metal Forming Fluids
• Synthetic Lubricants 204: Fluid Formation & Application

Technical Sessions
8:00 am – Noon
5A • Commercial Marketing Forum V – Bronze 4
5B • Lubrication Fundamentals V – Additives – Bronze 3
5C • Engine & Drivetrain V – Bronze 2
5E • Rolling Element Bearings III – Gold

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Technical Sessions
8:00 am - Noon
5F • Non-Ferrous Metals II: Bio-based Lubricants – Palace 3
5G • Wind Turbine Technology I – Palace 4/5
5H • Fluid Film Bearings V – Las Vegas 1
5I • Environmentally Friendly Fluids I – Las Vegas 2
5K • Wear II: Analysis of Friction and Wear – Las Vegas 4
5L • Tribotesting I – Las Vegas 5
5M • Condition Monitoring I – Las Vegas 6/7
5N • Surface Engineering V – Pacific 1
5O • Materials Tribology V – Pacific 2
5P • Nanotribology V: Nanoscale Lubrication Mechanisms – Pacific 3

Technical Sessions
1:30 pm – 6:00 pm
6A • Commercial Marketing Forum VI – Bronze 4
6B • Lubrication Fundamentals VI - Tribofilms – Bronze 3
6C • Engine & Drivetrain VI – Bronze 2
6D • Rolling Element Bearings IV – Gold
6F • Non-Ferrous Metals III: Tribology – Palace 3
6G • Wind Turbine Technology II – Palace 4/5
6H • Fluid Film Bearings VI – Las Vegas 1
6I • Environmentally Friendly Fluids II – Las Vegas 2
6K • Wear III – Las Vegas 4
6L • Tribotesting II – Las Vegas 5
6M • Condition Monitoring II – Las Vegas 6/7
6N • Surface Engineering VI – Pacific 1
6O • Materials Tribology VI – Pacific 2
6P • Nanotribology VI: Nanoscale Lubrication Mechanisms – Pacific 3
6Q • Mechanics and Tribochemistry at the Nanoscale: Materials Tribology/ Nanotribology Joint Session I – Pacific 3
STLE 2016 Annual Meeting and Exhibition

Program At A Glance
As of Feb. 1, 2016
Subject to Change

Registration
7:00 am – 6:00 pm – Grand Salon

Speakers Breakfast
7:00 am – 8:00 am – Platinum

Certification Exams
8:30 am – 12:30 pm

Technical Sessions
8:00 am – Noon
7B • Lubrication Fundamentals VII – Lubricant Properties – Bronze 2
7C • Engine & Drivetrain VII – Bronze 3
7D • Rolling Element Bearings V – Gold
7E • Molecular Chemistry and Lubricant Rheology-Special Session I – Silver
7H • Fluid Film Bearings VII – Las Vegas 1
7K • Wear IV – Las Vegas 4
7L • Tribotesting III – Las Vegas 5
7M • Condition Monitoring III – Las Vegas 6/7
7N • Surface Engineering VII – Pacific 1
7O • Materials Tribology VII – Pacific 2
7P • Mechanics and Tribobiochemistry at the Nanoscale: Materials Tribology/ \Nanotribology Joint Session II – Pacific 3
Technical Sessions

1:30 pm - 5:30 pm

8B • Lubrication Fundamentals VIII - Modeling – Bronze 2
8D • Rolling Element Bearings VI – Gold
8E • Molecular Chemistry and Lubricant Rheology-Special Session II – Silver
8K • Wear V: Wear Mitigation – Las Vegas 4
8L • Tribotesting IV – Las Vegas 5
8M • Condition Monitoring IV – Las Vegas 6/7
8N • Surface Engineering VIII – Pacific 1
8P • Mechanics and Tribochemistry at the Nanoscale: Materials Tribology/Nanotribology Joint Session III – Pacific 3

2016 Annual Meeting Exhibition Hours

Monday, May 16 • Noon – 5 pm
*Dedicated hour of trade show time from 3-4 pm. No other annual meeting activity during this time.

Tuesday, May 17 • 9:30 am-Noon & 2-5:30 pm
*Trade show closes for two hours for the Presidents Luncheon & STLE Business Meeting from Noon to 2 pm. Also, there will be a second dedicated hour of trade show time from 3-4 pm. No other annual meeting activity during this time.

Wednesday, May 18 • 9:30 am-Noon

Beverage Breaks are scheduled at 10:00 am and 3:00 pm daily.

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Keynote Address

Monday, May 16, 2016 • 10:30 am – Noon • Platinum Room

Dr. Andrew L. Randolph
Technical Director, Earnhardt-Childress Racing (ECR) Engines
Welcome, N.C.

STLE is fortunate to have Dr. Andrew L. Randolph, technical director for Earnhardt-Childress Racing (ECR) Engines, as the keynote speaker for our 71st Annual Meeting & Exhibition. Dr. Randolph received his doctorate in chemical engineering from Northwestern University in 1985, specializing in the combustion properties of alcohol/diesel and alcohol/oil blends. During a 30-year career at General Motors and in NASCAR, Dr. Randolph’s work has ranged from fundamental engine research to mass-production engine development, including Wankel rotaries to Pro Stock drag engines.

Dr. Randolph is a strong advocate of applying scientific principles to engine development, and is widely regarded as one of the foremost applied combustion experts in the world. He has contributed to five NASCAR Cup championships with three different teams. Since 2008, he has served as technical director for ECR Engines, leading a development team that defines the engine architecture for the Chevy engines supplied by ECR to NASCAR and a variety of other racing series.

He has authored over 20 technical publications and received five oral presentation awards from the Society of Automotive Engineers (SAE).
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71st STLE Annual Meeting & Exhibition
Bally’s Las Vegas Hotel & Casino
Las Vegas, Nevada (USA)

STLE’s Annual Meeting offers so much programming that keeping track of what’s happening when and where can be a challenge. Our new mobile app lets you plan your itinerary, schedule appointments and stay on top of fast-breaking meeting updates every minute of the day. Download the app—and don’t miss a thing!

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- 90-exhibitor trade show
- Special events and networking opportunities
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