Pump Short Courses

PT1 - Vibration Problems and Solutions in Pumps and Turbomachinery”, By: William Marscher, Eric J. Olson, Maki M. Onari, Paul Boyadjis (Mechanical Solutions, Inc.)

P2 - Mechanical Seal Fundamentals”, By: Henri Azibert (A.W. Chesterton Company), John Merrill (EagleBurgmann), Brian Kalfrin (John Crane), Chris Riche (Flowserve)

P3 - Pumps 101, By: Daniel Wood (The Chemours Company), John P. Joseph, II (Rotating Equipment Systems, LLC)

P4 - Fundamentals of Centrifugal Pump and System Interaction, By: Mike Volk (Volk & Associates)

P5 - Pump Cavitation – Physics, Prediction, Control, Troubleshooting”, By: Bruno Schiavello, Frank C. Visser (Flowserve)

P6 - Key Differences in the Design of Piping Systems for Reciprocating and Centrifugal Pumps”, By: Kelly Eberle, Mena Ghattas (Wood Group) Tom Newman (SPX Flow)

Introducer: Hemanth Satish

P7 - Optimizing Pumping Systems with Proven Engineering Assessment Processes and Methodologies”, By: Mark Sullivan, Peter Gaydon (Hydraulic Institute)

Introducer: Simon Bradshaw

B1 - Bonus Short Course - Role of Mechanical Integrity Program in Design, Installation and Operation of Turbomachinery and Pumps

Introducer: Dag Calafell
Monday – Short Courses
12/11/2017, 8:30:00 AM

Turbo Short Courses

PT1 - Vibration Problems and Solutions in Pumps and Turbomachinery”, By: William Marscher, Eric J. Olson, Maki M. Onari, Paul Boyadjis (Mechanical Solutions, Inc.)

T2 - Steam Turbine 101/201 Combined, Basic Knowledge of Steam Turbine,” By: Matt Walton, Kyoichi Ikeno, William Poppe (Mitsubishi Heavy Industries Compressor Corporation)
Introducer: Satoshi Hata

T3 - Centrifugal Compressors 101 By: Mark Kuzdzal (Siemens business, Siemens Power and Gas Division), Jay M. Koch (Siemens)

T4 - Centrifugal Compressors 201 By: Jeffrey Moore (Southwest Research Institute), James M. Sorokes (Siemens), Nate Keim (Siemens), James Hardin (Elliott Group), Rainer Kurz (Solar Turbines)

T5 - An Introduction to Hydrodynamic Bearings as used in Industrial Turbomachinery By: John Whalen (TCE), Scan DeCamillo (Kingsbury Bearings), Barry Blair (Waukesha Bearings)
Introducer: Hans Weyermann

T6 - Lateral Rotordynamics of Petrochemical Equipment - Review, Examples and Problems By: John Kocur (ExxonMobil Research & Engineering), C. Hunter Cloud (BRG Machinery Consulting LLC)
Introducer: Kazim Akhtar

T7 - LNG Liquefaction Plants - Overview, Design and Operation By: Cyrus B. Meher-Homji, Pradeep Pillai (Bechtel Corporation), Rainer Kurz (Solar Turbines, Inc.), Pete Rasmussen (Rasmussen Machinery Cons. LLC)
Introducer: Mark Sandberg

T8 - Gas Turbines – Fundamentals of Design, Operation and Maintenance By: Meherwan Boyce (The Boyce Consultancy), Francisco Gonzalez (Cheniere)

B1 - Bonus Short Course - Role of Mechanical Integrity Program in Design, Installation and Operation of Turbomachinery and Pumps
TURBO SCHEDULE

Tuesday: 12/12/2017, 8:45:00 AM

Lectures
Lecture 1, “Torsional Modal Damping Of A LCI Driven Geared Moto-Compressor Train: Evaluation, Optimization Criteria And Active Control” by: Paolo Calore, Gaspare Maragioglio, Daniele Sgrò, Lorenzo Failla (GE Oil & Gas), Pierluigi Tenca (GE Global Research Center)
Introducer: Malcolm Leader

Lecture 2, “Forced Response Analysis in a Full-Scale Multistage Centrifugal Compressor: Impeller Vibration Prediction and Validation” by: Lorenzo Toni, Alberto Guglielmo, François Moyroud, Giuseppe Gatta, Tommaso Rubino, Giacomo Scarabello (GE Oil & Gas)
Introducer: Luis San Andres

Tutorials
Tutorial 1, “Optimizing Component Selection in Synchronous Motor Compressor Trains Based On Technical And Financial Considerations” by: Martin Maier, Garry Studley (Siemens Business, Part Of Siemens Power and Gas)
Introducer: Ken Atkins

Discussion Groups
Discussion Group T09 - Dry Gas Seals for Compressors by: Hans Weyermann (ConocoPhillips), Bernard Quoix (Total E&P), Leonardo Baldassarre (GE Oil & Gas), Joe Delrahim (John Crane), Emery Johnson (Flowserve) and Chris Auzenne (EagleBurgmann)

Discussion Group T10 - Integrally Geared Compressors by: Bradley Addison (DuPont), Stanley Stevenson (Siemens), Kevin Kisor (MAN Diesel & Turbo), Terryl Matthews (Shell), Carl Schwarz (Praxair)

Discussion Group PT04 – Lubrication by: Leslie Thilagan (S&B Engineers and Constructors, Ltd.), Brian Pettinato (Elliott Group), Jeff Haught (Anadarko Petroleum), Jeff Buck (Shell Projects and Technology), Alex Schaefer (Elliott Group), Ken Shifflett (Motiva)
PUMP SCHEDULE

Tuesday: 12/12/2017, 8:45:00 AM

Lectures
Lecture 1, “Pump Cavitation Severity Evaluation Using Accelerometers and Dynamic Pressure Transducers after Installation” by: William D. Marscher, Maki Onari, Juan Gamarra (Mechanical Solutions Inc.)
Introducer: Bill Marscher

Lecture 2, “Transient Events in Pump Piping Systems” by: Sarah Simons, Frank Fierro, Augusto Garcia (Southwest Research Institute)
Introducer: Kristo Naude

Tutorials
Introducer: Michael Huebner

Discussion Groups
Discussion Group P08 - Vertical Pump Problems and Solutions by: Howard Wright (Goulds Pumps), Jim Kilgore (Consultant), Eric Vanhie (EagleBurgmann), Mike Smith (Flowserve), Clint Zentic (Sulzer), Justin Hollingsworth (Southwest Research Institute), Hemanth Satish (Trans Canada Corp.)

Discussion Group P10 - Pipeline Applications by: Bill Litton (Magellan Midstream Partners LP), Bruce Weber (Champion), George Maddox (Best Pumpworks), Morg Bruck (HMIC, LLC), Ralph Dickau (ROD Engineering Ltd.)

Discussion Group PT04 – Lubrication by: Leslie Thilagan (S&B Engineers and Constructors, Ltd.), Brian Pettinato (Elliott Group), Jeff Haught (Anadarko Petroleum), Jeff Buck (Shell Projects and Technology), Alex Schaefer (Elliott Group), Ken Shifflett (Motiva)
TURBO SCHEDULE

Tuesday: 12/12/2017, 10:30:00 AM

Lectures
Introductor: Bernard Quoix

Lecture 4, “Improving LNG Facility Reliability And Operability Via OEM Integrated Compressor Controls” by: Daniele Galeotti, Antonio Baldassarre, Leonardo Baldassarre (GE Oil&Gas), Dave Ramlakhan, Hans Weyermann, Paul Broadway (ConocoPhillips)
Introductor: Bernard Quoix

Tutorials
Tutorial 3, “Torsional Excitation Upon Short-Circuit in Induction Motors - In Conventional and High-Speed Trains” by: Tuomo Aho, Christopher Baum (MAN Diesel & Turbo Schweiz AG), Janne Nerg (Lappeenranta University of Technology)
Introductor: Luis San Andrés

Tutorial 4, “Turbomachinery Overview For Supercritical CO₂ Power Cycles” by: Tim Allison, Jeff Moore, Jason Wilkes, Klaus Brun (Southwest Research Institute)
Introductor: Kevin Kisor

Discussion Groups
Discussion Group PT03 – Gears by: Joseph Silvaggio, Jr. (Siemens), Robert Eisenmann (BP), Mark Brooker (LynodellBasell)

Discussion Group T14 - Gas Turbine Operation and Maintenance by: Meherwan Boyce (The Boyce Consultancy), Rainer Kurz (Solar Turbines, Inc.), Francisco Gonzalez (Cheniere), Jeff Haught (Anadarko)

Discussion Group T15 - Steam Turbine Design, Operation, and Maintenance by: Vinod Patel (KBR), Stanley Stevenson, Gerry DiOrio (Siemens), Gampa Bhat (Mitsubishi Compressor International), Arun Kumar (HPCL - Mittal Energy Ltd., India), Joe Moreno (LyondellBasell)
PUMP SCHEDULE

Tuesday: 12/12/2017, 10:30:00 AM

Lectures
Lecture 3, “Bearing wear in electric motors and rotating equipment under the aspect of VSD converter operation” by: Hans Tischmacher (Siemens AG)

_Introducer: Morg Bruck_

Lecture 4, “Fiber Optical Sensing Of Bearing Performance And Pump Conditions” by: Lars Kahlman (SKF), Eric van Genuchten (SKF B.V.)

_Introducer: Simon Bradshaw_

Tutorials

Discussion Groups
Discussion Group PT03 – Gears by: Joseph Silvaggio, Jr. (Siemens), Robert Eisenmann (BP), Mark Brooker (LynodellBasell)

Discussion Group P06 - Mechanical Seals by: Michael Huebner (Flowserve), Henri Azibert (Fluid Sealing Association), Shifeng Wu (A.W. Chesterton Company), Eric Vanhie (EagleBurgmann), Brian Kalfrin (John Crane), Todd Monroe (LyondellBasell), Judy Hodgson (Hodgson Consulting)
Tuesday: 12/12/2017, 2:00:00 PM

Lectures
Lecture 5, “High Frequency Vibrations on Gears” by: Dietmar Sterns (RENK), Michael Elbs (ISMB Dautermann)
Introductor: Robert Eisenmann

Lecture 6, “Experimental Evaluation Of Mechanical Reliability Of The Impeller Blade For Large Integrally Geared Compressors” by: Takuya Iwata, Yoshitaka Baba, Keiichi Saeki, Yuki Kameyama (Kobe Steel, Ltd.), Tsukasa Shiga (Kobelco Compressors America, Inc.)
Introductor: John Kocur

Tutorials
Tutorial 5, “Tutorial On Large Steam Turbine Systems In Oil & Gas Applications” by: Mounir Mossolly, Emmanuel Bustos, Guillaume Herve (TechnipFMC)
Introductor: Patrick Smith

Tutorials 6, “Assessing and Computing the Safety Integrity Level (SIL) for Turbo Machinery Protection” by: Curtis Miller (SIS SILverstone LLC), Justin Kassie (Tesoro), Daniel Poston (LyondellBasell)
Introductor: Stephen Locke

Discussion Groups
Discussion Group PT02 - Couplings and Alignment by: Jeff Haught (Anadarko Petroleum Company), Chris Rackham (John Crane Flexibox -- Retired), Mike LeBlanc (John Crane), Mark Oneil (Altra Couplings), Thomas Davidson (Consultant), Michael Johnson (NRG Energy)

Discussion Group PT01 - Monitoring Vibration and Other Critical Machine Conditions by: William Marscher (Mechanical Solutions, Inc.), Ron Adams (Sulzer Pumps), Dag Calafell (ExxonMobil), Simon Bradshaw (ITT Goulds Pumps), Jack Claxton (Patterson Pump Company), Juan Gamarra, Maki Onari (Mechanical Solutions, Ltd.), Monroe Voyles (ITT Goulds Pumps), Morg Bruck (HMIC), Ken Atkins (Engineering Dynamics Incorporated), Hemanth Satish (TransCanada Corp.)

Discussion Group T06 - Reciprocating Compressors by: Bruce Bayless (Valero), Bruce McCain (Oxy Oil & Gas Corporation), Ben White (Southwest Research Institute)

Discussion Group T07 - Advanced Topics in Centrifugal Compressor Design by: Mark Sandberg (Chevron), Leonardo Baldassarre (GE Oil & Gas), Urs Baumann (MAN Diesel & Turbo Schweiz AG), Mark Kuzdzal (Siemens), Jeffrey Moore (Southwest Research Institute), Brian Pettinato (Elliott Group), Jim Sorokes (Siemens)
PUMP SCHEDULE

Tuesday: 12/12/2017, 2:00:00 PM

Lectures
Lecture 5, “Development Of A Single Mechanical Seal Equipped With API Piping Plan 11/66a For Large Mainline Crude Oil Pipeline Pumps” by: Andreas Pehl (EagleBurgmann Germany), Hemanth Satish, Michael Szwarc (TransCanada Corp.), Eric Vanhie (EagleBurgmann USA)
Introductor: Morgan Bruck

Lecture 6, “Challenges With A Large High Pressure Water Injection Pump” by: Ed Wilcox (Chevron), Martin Uere (Sulzer)
Introductor: Ronald Adams

Tutorials
Tutorial 3, “Precision Grouting: Skid-Mounted Equipment” by: Dan Termunde, Fred Goodwin, Rick First (BASF Construction Chemicals)
Introductor: Todd Monroe

Discussion Groups
Discussion Group PT02 - Couplings and Alignment by: Jeff Haught (Anadarko Petroleum Company), Chris Rackham (John Crane Flexibox -- Retired), Mike LeBlanc (John Crane), Mark Oneil (Altra Couplings), Thomas Davidson (Consultant), Michael Johnson (NRG Energy)

Discussion Group PT01 - Monitoring Vibration and Other Critical Machine Conditions by: William Marscher (Mechanical Solutions, Inc.), Ron Adams (Sulzer Pumps), Dag Calafell (ExxonMobil), Simon Bradshaw (ITT Goulds Pumps), Jack Claxton (Patterson Pump Company), Juan Gamarra, Maki Onari (Mechanical Solutions, Ltd.), Monroe Voyles (ITT Goulds Pumps), Morg Bruck (HMIC), Ken Atkins (Engineering Dynamics Incorporated), Hemanth Satish (TransCanada Corp.)

Discussion Group P05 - Centrifugal Pump Operation, Maintenance, and Reliability by: David DePaolis (Flowserve), Richard Donley (PBF Energy), Adam Gottlieb (Celanese Clear Lake Plant), Calvin Stevenson, Paul Pairmore, Nick Krauel (Flint Hills Resources), Arun Kumar (HPCL - Mittal Energy Ltd.), Katie Strautman (Machinery Engineer)
TURBO SCHEDULE

Wednesday: 12/13/2017, 8:30:00 AM

Lectures
Lecture 7, “Design And Testing Of A High-Pressure-Ratio Centrifugal Stage Probing The Aerodynamic Mechanical Limits” by: Jim Sorokes, Mark Kuzdzal, Dave Peer, Kirk Lupkes, Silvano Saretto, Ravi Srinivasan (Siemens – a Siemens Business)
Introducer: Mark Sandberg

Lecture 8, “Advancing Compressor Dynamic Simulation Fidelity With Use Of Field Data” by: George Talabisco (Siemens/Siemens), Jon VanBuskirk (Siemens a Siemens Business)
Introducer: Bradley Addison

Tutorials
Tutorial 7, “Electric-Motor-Driven Gas Compressor Packages: Starting Methods for Large Electrical Motors and Torsional Integrity” by: Rainer Kurz, Balaji Venkataraman (Solar Turbines Incorporated), Ge Juan Cole (Williams Gas Pipeline), Michael Glasbrenner (Voith)
Introducer: Marybeth McBain

Tutorial 8, “Turbomachinery Control Valves - Sizing and selection” by: Medhat Zaghloul, Wayne Jacobson (Compressor Controls Corporation)
Introducer: Jeff Haught

Discussion Groups
Discussion Group T08 - Turbo Expanders & PRTs by: Lil Kassie (BP), Bob Kranz (Valero), Justin Kassie (Enterprise Products LLC), Don Shafer (Rotating Machinery Services), Dave Linden (D.H. Linden Associates, Inc.), Nick Vachon (Siemens), George Seamon

Discussion Group T11 - Turbomachinery Bearings and Annular Seals by: John Whalen, Chris Stewart (John Crane), Malcolm Leader (Applied Machinery Dynamics), Thomas Davidson (Linde, LLC), Alan Mathis and Michelle Guedry (Dow)
PUMP SCHEDULE

Wednesday: 12/13/2017, 8:30:00 AM

Lectures
Lecture 7, “Atypical Results from Improperly Sized & Charged Pulsation Dampeners” by: Nathan Poerner, Eugene Broerman (Southwest Research Institute), Tappan Souther (Liberty Resources LLC), Trenton Cook (Southwest Research Institute)
Introducer: Bruce Weber

Lecture 8, “A Study on the Operation of Pitot Tube Pumps” by: Bryce Neilson (Weir Specialty Pumps)
Introducer: Bruno Schiavello

Tutorials

Discussion Groups
Discussion Group P07 - Improving Mean Time Between Pump Failures by: John P. Joseph, II (Rotating Equipment Systems, LLC), Bill Litton (Magellan Midstream Partners LP), Dave Depaolis (Flowserve), Morg Bruck (HMIC)
TURBO SCHEDULE

Wednesday: 12/13/2017, 10:30:00 AM

Lectures
Lecture 9, “Electrical Damping Of VFD Induced Torsional Torque Pulsations In A LCI Driven Compressor Drive Train” by: Max Beuermann, Peter Kalbfleisch, Martin Hilscher, Vijay Antham Ganesan (Siemens AG)

Introducer: Hans Weyermann

Lecture 10, “Subsynchronous Shaft Vibration in an Integrally Geared Expander-Compressor due to Vortex Flow in an Expander” by: Daisuke Hirata (Mitsubishi Heavy Industries Compressor Corporation (MCO)), Hirotaka Higashimori (MHI Solution Technologies CO., Ltd.), Naoyuki Nagai (Mitsubishi Heavy Industries, Ltd.)

Introducer: Luis San Andres

Tutorials
Tutorial 9, “A CFD Primer: What Do All Those Colors Really Mean?” by: Jim Sorokes (Siemens), James Hardin (The Elliott Group), Brad Hutchinson (Ansys, Inc. (Retired))

Introducer: Bradley Addison

Tutorial 10, “Strategies To Prevent Sudden Catastrophic Compressor Failures During Transient Operating Conditions” by: Patrick Smith (Air Products & Chemicals)

Introducer: Bruce Bayless

Discussion Groups
Discussion Group T13 - Screw Compressors by: Terryl Matthews (Shell), Kenneth Atkins (Engineering Dynamics Incorporated), Kevin Kisor (MAN Diesel & Turbo), Bruce McCain (Oxy Oil & Gas)

Discussion Group T16 - Compressor Controls, by: Mark Sandberg (Sandberg Turbomachinery Consulting), Rainer Kurz (Solar Turbines), Henry Borchard (Chevron), Jeff McWhirter (Siemens), Meera Day (SwRI), David Downing (Elliott Group)
PUMP SCHEDULE

Wednesday 12/13/2017, 10:30:00 AM

**Lectures**
Lecture 9, “Superimposing Planetary Gears As Variable Speed Drives For Rotating Equipment” by: Martin Tilscher, Bernd Lauter, Jochen Lindenmaier (Voith Digital Solutions GmbH)

*Introducer: Ravi Balasubramanian*

Lecture 10, “Pump Affinity Laws Modified To Include Viscosity And Gas Effects” by: Gerald Morrison, Abhay Patil (Texas A&M University)

*Introducer: Gerry Morrison*

**Tutorials**
Tutorial 5, “Field Troubleshooting Common Mechanical Seal Piping Plans” by: Michael Huebner, Ronald Hurst (Flowserve Corporation)

*Introducer: Michael Huebner*

**Discussion Groups**
Discussion Group P09 - Sealless Pumps by: Daniel Wood (The Chemours Company), Denny Fegan (Powerdyne), Gene Baker (LyondellBasell), Keith Yutzy (Teikoku), Matt Moy (Flowserve), Judy Hodgson (Hodgson Consulting)

Discussion Group P11 – Cryogenic Fluid Pumping Applications by: Dag Calafell (Technical Opus Solutions, LLC), Vinod Patel (KBR), Lonn Hall (Ebara Intl), Bill Bailey, David Loughman, Yousef Jarrah (Nikkiso Cryo Inc.)
TURBO SCHEDULE

Wednesday: 12/13/2017, 2:00:00 PM

Lectures
Lecture 11, “Rotordynamic Test Results From a High Flexibility Ratio - High Pressure Fully Instrumented Centrifugal Compressor Test Vehicle” by: Giuseppe Vannini, Antonio Pelagotti, Emanuele Rizzo, Carmine Carmicino (GE Oil&Gas)

Introducer: John Kocur

Tutorials
Tutorial 11, “Centrifugal Compressor Performance Making Enlightened Analysis Decisions” by: Fred Evans, Spencer Huble (Chiyoda International Corp.)

Introducer: Mark Sandberg

Tutorial 12, “Range v. Efficiency -- Striking the Proper Balance” by: Jim Sorokes (Siemens)

Introducer: Hans Weyermann

Discussion Groups
Discussion Group T05 - Overspeed Trip Systems by: Bruce Bayless (Valero), Kevin Yates, Scott Shane (Dow)

Discussion Group T12 - Protection Systems Integrity by: Lil Kassie (BP), Steve Locke (DuPont), Robert Kranz (Valero), Stanley Stevenson (Siemens), Ed Watson (DuPont), Justin Kassie (Enterprise Products LLC), Curt Miller (Exida), George Seamon

Discussion Group PT01 - Monitoring Vibration and Other Critical Machine Conditions by: William Marscher (Mechanical Solutions, Inc.), Ron Adams (Sulzer Pumps), Dag Calafell (ExxonMobil), Simon Bradshaw (ITT Goulds Pumps), Jack Claxton (Patterson Pump Company), Juan Gamarra, Maki Onari (Mechanical Solutions, Ltd.), Monroe Voyles (ITT Goulds Pumps), Morg Bruck (HMIC), Ken Atkins (Engineering Dynamics Incorporated), Hemanth Satish (TransCanada Corp.)

Discussion Group PT04 – Lubrication by: Leslie Thilagan (S&B Engineers and Constructors, Ltd.), Brian Pettinato (Elliott Group), Jeff Haught (Anadarko Petroleum), Jeff Buck (Shell Projects and Technology), Alex Schaefer (Elliott Group), Ken Shifflett (Motiva)
PUMP SCHEDULE

Wednesday: 12/13/2017, 2:00:00 PM

Lectures
Lecture 11, “Sub-Synchronous Vibrations On A Vertical Electrical Motor During Factory Testing – Observed Phenomenon, Interpretation And Resolution” by: Bernard Quoix, Alain Gelin (TOTAL), C. Hunter Cloud, Minhui He (BRG)
Introducer: Dara Childs

Introducer: Gerry Morrison

Tutorials
Tutorial 6, “Evaluation of Various Methods for Manufacturing One Piece, Small Tip Opening Impellers” by: Scot Laney (Elliott Group), Derrick Bauer, Akiyoshi Ando (Elliott Group), Takashi Yamakawa (Ebara Corporation) WITHDRAWN

Discussion Groups
Discussion Group PT01 - Monitoring Vibration and Other Critical Machine Conditions by: William Marscher (Mechanical Solutions, Inc.), Ron Adams (Sulzer Pumps), Dag Calafell (ExxonMobil), Simon Bradshaw (ITT Goulds Pumps), Jack Claxton (Patterson Pump Company), Juan Gamarra, Maki Onari (Mechanical Solutions, Ltd.), Monroe Voyles (ITT Goulds Pumps), Morg Bruck (HMIC), Ken Atkins (Engineering Dynamics Incorporated), Hemanth Satish (TransCanada Corp.)

Discussion Group PT04 – Lubrication by: Leslie Thilagan (S&B Engineers and Constructors, Ltd.), Brian Pettinato (Elliott Group), Jeff Haught (Anadarko Petroleum), Jeff Buck (Shell Projects and Technology), Alex Schaefer (Elliott Group), Ken Shifflett (Motiva)
TURBO SCHEDULE

Thursday: 12/14/2017, 8:30:00 AM

Session 1a - Introducer: Patrick Smith
Case Study 1, “Torsional Failure on Reciprocating Compressor Package” by: Ken Atkins, James Clark (Engineering Dynamics, Inc.)

Case Study 2, “Pelletizer Motor Bearing Damage Detection Based on Vibration Data” by: John Yu, Nicolas Peton, Haibo Lin, Jun Quan (GE), Carl Feng Wang, Tony Wei Zhou (Shanghai SECCO Petrochemical Co)

Case Study 3, “Prediction and mitigation of high radial vibrations during hot restart of centrifugal compressors” by: Michele Fontana (GE Oil & Gas), Leonardo Baldassarre, Andrea Bernocchi, Gianluca Conte, Mirko Libraschi (GE Oil & Gas)

Session 1b – Introducer: Joe Moreno
Case Study 4, “Thrust Balance Line Bolts Failure” by: Felix A. Cestari (Siemens Energy, Inc.), Robert Briggs (Mount Vernon Pipeliner), Regis Fowler (MTO), Ge Jiangang (PWPC PetroChine)

Case Study 5, “Reliability Improvement for Booster Reciprocating Compressor in CCR Reformer” by: Sang Uk Lee, Bumsu Kim, Sangjoo Lee, Sangsuk Lee (SK energy)

Case Study 6, “Reciprocating Compressor Optimization” by: Bruce McCain (Oxy Oil and Gas Corporation), Kelsy Holmes, Pablo Castillo (Oxy Permian)

Case Study 7, “Severe corrosion on rotor blades of back pressure type Steam Turbine due to unique reason”. What Went Wrong?” by: Arun Kumar, Anurag Chopra (HPCL-Mittal Energy Ltd., India)
PUMP SCHEDULE

Thursday: 12/14/2017, 8:30:00 AM

Session 1a – Introducer: Joe Silvaggio
Case Study 1, “Vertical Seawater Lift Pump Reversible Performance Deterioration” by: Ameer Khader, Luis Rojas (ExxonMobil), Alessia Sonzogni, Eligio Lo Cascio (Adriatic LNG)

Case Study 2, “Elevated Epoxy Grout Pumping” by: Kermit Palmer (Five Star Products, Inc.), Gene Baker (Lyondell Chemical Company)

Case Study 3, “Mitigating Unstable Condensate Process Conditions” by: Jason Jakubiak (Peroni Pumps America), Luigi Mascherpa (Peroni Pompe)

Session 1b – Introducer: Simon Bradshaw

Case Study 5, “Predictive Diagnostics for Pump Seals: Field Trial Learnings” by: Matthew Miller, Brad Lewis (John Crane)

Case Study 6, “Benefits of Installing Restrictive Orifice Plates on the Suction of Reciprocating Pumps: 1D Pulsation and CFD Studies” by: Zixiang Chen, Cajetan Ijeomah, Jordan Grose, Kelly Eberle (Wood Group Vibration, Dynamics & Noise (formerly BETA Machinery Analysis))
TURBO SCHEDULE

Thursday: 12/14/2017, 10:30:00 AM

**Session 2a – Introducer: Dag Calafell**

Case Study 8, “Damaged Compressor Stator Parts Resulting from Operation in Deep Choke” by: Urs Baumann, Jean-Claude Pradetto (MAN Diesel & Turbo Schweiz AG)

Case Study 9, “Compander Vibration Troubleshooting” by: Sébastien Jaouen, Alain Gueraud (Cryostar), Stéphane Berger (Flender Graffenstaden), Cliff Bower (MOL)

Case Study 10, “Eliminating a Rotordynamic Instability of a 12 MW Overhung, Radial Inflow Expander” by Joseph Lillard (Atlas Copco Gas and Process), J. Jeffrey Moore (Southwest Research Institute), Grant Nordwall (Atlas Copco Mafi-Trench Company), Greg Elliott (GE Oil & Gas), Tom Shoup (GE Lufkin)

Case Study 11, “Gas Turbine With Rotor Crack - Vibration Diagnostics” by: Peter Popaleny, Nicolas Peton (GE Bently Nevada)
PUMP SCHEDULE

Thursday: 12/14/2017, 10:30:00 AM

**Session 2a – Introducer: Joe Silvaggio**

Case Study 7, “Plunger Pump Station - Vibration-Induced Cracks in Piping” by: Kelly Eberle, Mena Ghattas (Wood Group - Vibration, Dynamics & Noise)

Case Study 8, “Material Challenges and Suggestions for Pumps in Hot Napthenic Acid Containing Crude Oil Services” by: Aaron Burton (Sulzer Pumps Services (US) Inc.), Ricky Trahan (Motiva Enterprises)


**Session 2b – Introducer: Jarosz Jacek**

Case Study 10, “Resolving Structural Vibration on a Pump” by: Sankar Ganesh, Nicolas Peton (GE Bently Nevada)