# Vibration Institute Annual Training Conference 2012

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## Wednesday, June 20

#### 10:30a.m. - Noon:

THE INFLUENCE OF BEARING ASYMMETRY ON ROTOR STABILITY HANDER Edgar J. Gunter, Ph.D., RODYN Vibration Analysis, Inc.

#### 1:00 - 3:00 p.m.:

UNDERSTANDING JOURNAL BEARINGSÄMF
Malcolm Leader, P.E., Applied Machinery Dynamics

ON THE DEVELOPMENT OF PEAKVUE™ ÄÄÄ Ï James C. Robinson. Ph.D.

THE POWER OF PEAKVUE™ AND AUTOCORRELATION ÂÂÎ Î Jim Crowe, Jim Crowe Vibration Technologies

USING CAUSE AND EFFECT DIAGRAMS TO RECTIFY HIGH VIBRATION PROBLEMS AND Dr. Engr. Nabil Rashwan, Saudi Electric Company

## 3:30 - 5:30 p.m.:

ELECTROSTATIC DISCHARGE IN A CONDENSING STEAM TURBINE DRIVING A PROPYLENE COMPRESSOR TRAINÄÄ Ï

Jonathan Cardell, DuPont Sabine River Works

<u>Stephen E. Plaisance</u>, GE Energy Services

# Thursday, June 21

#### 8:00 - 10:00a.m.:

THE PRACTICAL APPLICATION OF SIGNAL PROCESSING MAF€ Nelson L. Baxter, P.E., ABM Technical Services

BASIC VIBRATION ANALYSIS MITG Kevin R. Guy, Delaware Analysis Services, Inc.

#### Academic Presentations:

VIBRATION DATA ACQUISITION AND ANALYSIS FOR A SMALL RESIDENTIALWIND TURBINE MIT I Shannon Sweeney. Penn State Erie, TheBehrend College
Robert Michael, Penn State Erie, TheBehrend College

DESIGN AND ANALYSIS OF NON-LINEAR SPRING BASED PASSIVE SUSPENSION USING B-SPLINE COLLOCATION METHOD AFT I

Rahul A. Jhaveri, Rochester Institute of Technology

Hany Ghoneim, Rochester Institute of Technology

DESIGN AND IMPLEMENTATION OF PASSIVE AND MULTI-CHANNEL ACTIVE NOISE TREATMENT OF A 2kW DIESEL GENERATOR ATTEMPT (

<u>Cory M. Papenfuss</u>, Virginia Polytechnic Institute and State University Tom-Davy W. Saux, Virginia Polytechnic Institute and State University Chris R. Fuller, Virginia Polytechnic Institute and State University

A STUDY ON EFFECT OF FOAM ON THE VIBRATION QUALITY OF ALUMINIUM STRUCTURE UNDER COMBINED LOADING AT I Masud Nawaz, Georgia Southern University

Aniruddha Mitra, Georgia Southern University

## Thursday, June 21

### 10:30 a.m. - 12:30 p.m.:

TIME WAVEFORM ANALYSIS (IN THE BEGINNING) ANT FWIIII THE BEGINNING) THE WILLIAM TO PROVIDE THE BEGINNING OF THE BEGINNING OF

#### Academic Presentations:

AN EXPERIMENTAL STUDY OF THE CURVE VEERING PHENOMENON AFFJJ Phillip D. Rodenbeck, Rose-Hulman Institute of Technology Stephen S. Sakai, University of Wisconsin-Madison

COMPENSATION FOR BOUNDARY CONDITION EFFECTS OF A HELICOPTER BLADE DROOP STOP USING FREQUENCY DOMAIN IMPEDANCE MODELING MGEJ Douglas Adams, Ph.D., Purdue University

<u>Blake Hylton</u>, Purdue University

Andrew Crandall, Purdue University

THE EFFECT OF THE CONTACT MODEL ON IMPACT-VIBRATION RESPONSE MATTHEW R. Brake, Sandia National Laboratories

STATIC AND DYNAMIC BEHAVIOR OF OPEN CELL METALLIC FOAM STRUCTURES AND SWAMIN SWAMI

#### 1:30 - 3:00 p.m.:

VIBRATION DIAGNOSTICS SIGNAL ANALYSIS USING GNU OCTAVE TO CALCULATE ANALYSIS USING GNU OCTAVE TO

### 3:30 - 5:30 p.m.:

RELIABILITY IMPROVEMENT PROTECT MULTI-STAGE FABRICATED CENTRIFUGAL BLOWERS AGÉ Í Ken Singleton, KSC Consulting LLC Steve Quillen, Eastman Chemical Company

HIGH FREQUENCY DATA ACQUISITION, ANALYSIS, AND SENSOR MOUNTING MG Í Dave Corelli, IMI Sensors

POOR COMMITMENT TO RELIABILITY CAN CONTRIBUTE TO ACCIDENTS ANGJE John Martin. Martin Safety Solutions

# Friday, June 22

#### 8:00 - 10:00a.m.:

MACHINE VIBRATION STANDARDS – GOOD, BETTER AND BESTÄLLEJ Barry T. Cease. Cease Industrial Consulting

MOTOR CIRCUIT EVALUATION AND MOTOR CURRENT ANALYSIS AND Joe Oliver, JOA, Inc.

#### 10:30 a.m. - 12:30 p.m.:

VARIOUS TECHNIQUES USED IN FIELD BALANCING OF ROTATING MACHINERY(WITH AND WITHOUT RUBS)

Thomas B. Lantrip, P.E., Southern Company Services

TIPS AND TRICKS FOR FIELD BALANCING TO INDUSTRY STANDARDS AND INDUSTRY STANDARDS AND TRICKS FOR FIELD BALANCING TO INDUSTRY STANDARD BALANCING T

DETECTING AND PREVENTING ELECTRICAL BEARING DAMAGE IN VFD DRIVEN MOTORS THROUGH SHAFT VOLTAGE MEASUREMENT AND ANALYSISAMI Í Andy Kressbach, Electro Static Technology, An ITW Company Adam Willwerth, Electro Static Technology, An ITW Company