



**IASH 2009, the 11th International
Conference on Stability,
Handling and Use of Liquid Fuels**

**Prague, Czech Republic
18-22 October 2009**

Preliminary Program

Theme: "Challenges for the Use of New Fuels for the 21st Century"

SPONSORS & EXHIBITORS

Fuel Quality Services, Inc.

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**IASH Supporting Members: Arabian Fuels Technology Center - Chevron Global Aviation - ECHA
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- 14.25 – 14.50 **Effect of FAME on Diesel Fuel Cold Flow Properties (ENGLAND)** – Vincent J. Denecker and Dave Coultas
- 14.50 – 15.15 **Refinery Hydrotreated Diesel Production by Organic Oils Hydroconversion (BRAZIL)**
– Nelmo F. Fernandes
- 15.15 – 15.45 **BREAK SPONSORED BY PAC**
- 15.45 – 16.10 **Investigation of the Susceptibility of FAME and Biodiesel Blends to Microbial Spoilage (UK)**
– Graham C. Hill
- 16.10 – 16.35 **Possibilities for the Production of Motor Fuels Containing Biocomponents in Lukoil Neftohim (BULGARIA)** – D. Dobrev, S. K. Ivanov, D. Stratiev, At. Ivanov, K. Kirilov, Zl. Peicheva, R. Dinkos, St. Nikolova, Zh. Indjov, T. Tsingo, G. Argirov, J. Shihskova, J. Petrova (Bulgaria)
- 16.35 – 17.00 **Hydrotreated Renewable Jet Fuels – A Comparison of Various Alternative Fuels with JP-8 (USA)**
– Robert J. Allen
- 17.00 – 17.25 **Applicability of Test Methods for Filter Plugging Tendency (Pumpability) for Evaluation of the Fossil Diesel and Biodiesel Fuels Blends (SLOVENIA)** – Dr. M. Svoljjsak Jerman
- 18.30 – 20.00 **POSTER RECEPTION IN HELENA I-III & DIANA ROOMS**
SPONSORED BY: US DEFENSE ENERGY SUPPORT CENTER

Tuesday 20th October 2009
Congress Hall A&B

- 08.30 – 08.40 Announcements
- 08.40 – 09.10 Keynote Address: Automotive Fuels in the Czech Republic – Production, Distribution, Quality and Quality Assessment Systems – Vladimir Matejovsky, Independent Advisor to The Institute of Fuels and Lubricants, Czech Republic**
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- 09.10 Session 3. CHALLENGES IN FUEL DISTRIBUTION & STORAGE**
Anthony Kitson-Smith, Session Chair
- *****
- 09.15 – 09.40 **Cross-Country Pipelines Interfaced Cut Procedures (SAUDI ARABIA)**
– Ayed F. Al-Shammari
- 09.40 – 10.05 **Effect of Development of On-Site Risk Management Strategy on the Quality of Biodiesel Fuels (BULGARIA)** – Zh.D. Kalitchin and S.K. Ivanov
- 10.05 – 10.30 **BREAK**
- 10.30 – 10.55 **Logistical Challenges Associated with the Implementation of Alternative Fuels (USA)** – Pamela Serino
- 10.55 – 11.20 **Utilizing Colorimeter/Haze Analyzers for Online Quality Control and Interface Detection with Specialty Fuels (USA)** – Kam Mohajer
- 11.20 – 11.45 **Fit for Purpose Implications for Fuel Suppliers, Handlers and Users (USA)** – George R. Wilson, III and Steven R. Westbrook
- 11.45 – 13.15 **LUNCH IN RESTAURANT PRIMATOR - SPONSORED BY: PRATT & WHITNEY**

10.00 – 10.25 **Initial Evaluation of Chemical, Thermal Stability and Emissions Characteristics of Jet Fuels from Alternative Sources (USA)** – *E. Corporan, L. Shafer, M.J. DeWitt, C. Klingshim, S. Zabarnick, Z. West, R. Striebich, and J. Klein*

10.25 – 11.00 **BREAK**

11.00 Session 7. SYNTHETIC & ALTERNATIVE FUELS II
Steve Anderson, Session Chair

11.05 – 11.30 **Thermal Stability of Alternative Jet Fuels (FRANCE)** – *Mickaël Sicard, Bruno Raepsaet, Frédéric Ser, Jacques Ancelle, Laurie Starck, and Nicolas Jeuland*

11.30 – 11.55 **Potential of Alternative Fuels for Aircraft: Focus on Thermal and Oxidation Stability (FRANCE)** – *Laurie Starck, Mickaël Sicard, Frédéric Ser, and Nicolas Jeuland*

11.55 – 12.20 **Effect of Chemistry and Boiling-Point Distribution on the Properties and Characteristics of Synthetic Paraffinic Kerosene and Blends with Jet A (USA/REP. OF SOUTH AFRICA)** – *Dr. Clifford A. Moses, Petrus N.J. Roets, Carl L. Viljoen and George R. Wilson, III*

12.20 – 13.45 **LUNCH IN RESTAURANT PRIMÀTOR - SPONSORED BY: SHELL AVIATION**

13.45 Session 8. MIDDLE DISTILLATE FUELS AND HEAVY OILS
Richard Kamin, Session Chair

13.50 – 14.15 **Analysis of Issues Concerning the Production and Distribution of Low Sulphur Diesel – One Brazilian's Refinery Experience (BRAZIL)** – *Nelmo F. Fernandes and Paulo Sergio de Souza Rego*

14.15 – 14.40 **Predicting the Impact of ULSD Stability on Modern Engines (USA)** – *Jack Burqazli and Stephen Cook*

14.40 – 15.15 **Thermal Stressing of Ultra-Low Sulfur Diesel and Low Sulfur F-76 Diesel Fuels (AUSTRALIA)** – *David J. Evans, Chris K.J. Hulston, Lance C. Kelly, Michael G. O'Connell, Paul Rawson and Christy-Anne Stansfield*

15.15 – 15.45 **BREAK**

15.45 – 16.10 **Oxidative Desulphurization of Diesel Fuel (CANADA)** – *Michio Ikura*

16.10 – 16.35 **Asphaltenes Stability in Diluted Bitumen and Heavy Oils (CANADA/USA)** – *Parviz M. Rahimi, Teclemariam Alem, Zhiming Fan and Irwin Wiehe*

17.45 – 18.00 Meet in the Lobby to board buses to Zbiroh Chateau for Gala Dinner

18.00 – 23.00 **GALA DINNER AT ZBIROH CHATEAU - SPONSORED BY: FUEL QUALITY SERVICES, INC.**

Thursday 22nd October 2009
Congress Hall A&B

08.30 – 08.40 Announcements

08.40 Session 9. MICROBIOLOGICAL CONTAMINATION & BIODEGRADATION
Graham Hill, Session Chair

- 08.45 - 09.10 **Microbial Contamination in Diesel Fuel – Are New Problems Arising from Biodiesel Blends? (GERMANY) - Wolfgang Siegert**
- 09.10 – 09.35 **Biocontamination Diversity in JP-8 and Jet-A (USA) – Marlin Vangsness, Susan Mueller, Loryn Bowen, Lisa Brown, Lori Balster, Capt. Jerrod McComb and Ellen Strobel**
- 09.35 – 10.00 **Effect of FSII on Microbial Contamination: DIEGME and TRIEGME (USA) – Lori Balster, Ellen Strobel, Marlin Vangsness, Loryn Bowen, Susan Mueller, Lisa Brown, Daniel Pike and Diana Dalrymple**
- 10.00 – 10.30 **BREAK**
- 10.30 – 10.55 **Effect of Ethanol on Microbial Proliferation in Unleaded Gasoline Microcosms (USA) – Frederick J. Passman, Russel P. Lewis, James L. Palmer and Harlan Reid**
- 10.55 – 11.20 **Strategies for Resolving Problems Caused by Microbial Growth in Terminals and Retail Sites Handling Biodiesels (UK) – Graham C. Hill**
- 11.20 – 11.45 **Important Technical Considerations When Contemplating Bioluminescence as an Analytical Tool for The Determination of Microbial Contamination of Petroleum Fuels and Other Matrices (USA/GERMANY) – Edward W. English and Charlotte Lindhardt**
- 11.45 – 13.15 **LUNCH IN RESTAURANT PRIMÀTOR - SPONSORED BY SAYBOLT**
- 13.15 – 13.45 **Impact of Biodeterioration of Diesel Fuel Systems (Germany) – Nelly Klinksporn (Student Awardee)**

13.45 Session 10. ANALYTICAL METHODOLOGY
Matt Fielder, Session Chair

- 13.50 – 14.15 **A Rapid Laboratory Analytical Method for Detecting Low Levels of FAME in Jet Fuel: Method Development and Preliminary Industry Study Results (UK) – Scott J. Hartman, Oliver Seiler, Laura Owen and Paul Spitteler**
- 14.15 – 14.40 **The Development and Use of Flow Analysis by FTIR Spectroscopy in a Rapid Screening Test Method for Measuring Traces of Fatty Acid Methyl Esters in Aviation Turbine Fuels (UK) – Paul Spitteler, Rob Shaw, Mike Sherratt, and Scott Hartman**
- 14.40 – 15.05 **BREAK**
- 15.05 – 15.30 **Advances in Fluorescence Evaluation of Thermal Stability (USA) – Niqil Satish Jeyashekar and George R. Wilson, III**
- 15.30 – 15.55 **Further Developments in the Measurement of Liquid Phase H₂S in Marine Fuels (UK) – Wanda Fabriek, Chris Roach and Mike Sherratt**

16.30 - 17.00 PLENARY SESSION
Graham C. Hill, IASH Chairman

- 19.00 **MEET IN LOBBY TO BOARD TRAMS FOR TOUR OF PRAGUE & TRANSPORT TO UFLEKI BREWERY**
- 19.40 – 22.00 **CLOSING RECEPTION AT UFLEKI BREWERY Sponsored by: Energy Institute & Supreme Fuels Trading**
- SPONSORED BY: ENERGY INSTITUTE & SUPREME FUELS TRADING FZE

POSTER SESSION
Monday Evening, 19th October 2009
Helena I-III & Diana Rooms
18.30 – 20.00

***** SPONSORED BY: US DEFENSE ENERGY SUPPORT CENTER *****
Pam Serino, Session Chair

TECHNICAL POSTERS

- 1. Duquesne University / EMS Energy Institute (USA)**
Could Jet Fuel Thermal Oxidative Degradation be at Least Partially Responsible for a Recent Crash? A Proposed Hypothesis & Experimental Plan to Test this Hypothesis - Bruce Beaver and Chris Kabana
- 2. University of Dayton Research Institute (USA)**
Variation of JP-8 Properties in CONUS and Potential Implications During Blending with Synthetic Paraffinic Kerosene (SPK) – Erin Shafer, Richard Striebich, Matthew J. DeWitt, Timothy Edwards and William Harrison
- 3. Fuel Quality Services, Inc. / Merck KGaA (USA/GERMANY)**
Technical Issues to Consider When Evaluating Bioluminescence as an Analytical Tool – Edward English and Charlotte Lindhardt
- 4. Paulinia Refinery – Petrobras (BRAZIL)**
Flash Point Determination of Light Fractions – Leonardo Vasconcelos Fregolente and Deborah Aparecida Flores Ozaki
- 5. Compass Instruments Inc. (USA)**
FALEX 400, A New Jet Fuel Thermal Oxidation Tester, ASTM D 3241 – Jim Hepp
- 6. GS Caltex Corporation (REP. OF KOREA)**
Production of Biobutanol by Clostridia Using Various Carbon Sources – Hyohak Song, Julia Lee, Moon-Ho Eum, Sira Lee, Jaehyun Kim, Kwang Seop Jung
- 7. US Naval Research Laboratory / Nova Research, Inc. (USA)**
Near-Infrared Data Treatments for Improved Fuel Property Predictions – Jeffrey A. Cramer, Robert E. Morris, Mark H. Hammond, Braden Giordano, Christopher Von Bargen and Susan L. Rose-Pehrsson
- 8. QinetiQ (UK)**
Assessment of Methods for the Minimisation of Interference from Suspended Water Droplets in Jet Fuel During Particle Counting Analysis – Garry K. Rickard
- 9. Baker Hughes (USA)**
The Development of a Portable Instrument and Automated Data Processing Software to Predict/Control Heavy Fuel Oils Stability/Compatibility Characteristics – Corina Sandu, Huzeifa Ismail, Sebastian Csutak and Neil Ryding
- 10. University of Dayton Research Institute (USA)**
Microbial Growth on Selected Aircraft Materials – Marlin Vangsness, Lisa Brown, Loryn Bowen, Susan Mueller, Lori Balster, and Ellen Strobel.
- 11. Southwest Research Institute (USA)**
Measured Physical Chemical Properties of Model Components – Kavitha Moorthy, James E. Johnson, and George R. Wilson, III

12. Phyre Technologies, Inc. (USA)

SBIR Project – Santosh Limaye and Stuart Robertson

13. Coordinating Research Council (USA)

CRC Program Summary – *Brent Bailey (Presented by Joanna Bauldrey)*

14. PAC (USA)

Using the Cetane ID 510 for the Prediction of Derived Cetane Numbers of Aviation Turbine Fuels
– *Presented by Dr. Scott K. Berkous*

15. Dow Europe GmbH, Switzerland – Presented by Phil Keene

EXHIBITORS

CYBER CAFÉ SPONSORED BY AIR BP

Air BP – Presented by Steve Anderson

ECHA Microbiology Ltd. – Presented by Derek Collins & Graham Hill

Energy Institute – Presented by Martin Hunnybun & Andrew Sykes

ExxonMobil Aviation – Presented by Dennis Hoskin & Anthony Kitson-Smith

Facet International – Presented by Camilo Vazquez Perez

Fuel Quality Services, Inc. – Presented by Howard & Debra Chesneau, Angie Coley & Ed English

Intertek OCA – Presented by Brent Mackin, Wanda Frabiek & Craig Stone

KAM CONTROLS, INC. – Presented by Kam Mohajer & Vicky Garza

Lanxess Deutschland GmbH – Presented by Axel Ingendoh & Milan Kozeny

PAC – Presented by Scott Berkous, Larry Spino & Bertram Derr

PAMAS GmbH – Presented by Ed Bielo & Michael Schumacher

Parker Hannifin - Presented by Matt Fielder & Craig Saunders-Johnson

Saybolt – Presented by TBD

Schülke & Mayr GmbH – Presented by Mrs. Quyen Ziegann

Stanhope-Seta – Presented by Mike Sherratt

Supreme Fuels Trading FZE – Presented by Lisa de Vries & Gilbert Kearns

University of Dayton Research Institute – Presented by Steven Zabarnick

US Defense Energy Support Center – Presented by Pam Serino

US Naval Research Laboratory – Presented by Mark Hammond & Julia Wyant

8/12/09