

Hotel Del Sol

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<https://www.desolspahotel.com/santorini-five-star-hotel-conference/>



De Sol Santorini 5 Star Spa Hotel | Spa Hotel Santorini Fira

Operating all-year-round, De Sol Hotel & Spa boasts 38 luxury rooms and 7 exclusive suites with private heated pools. Just a breath from Fira town, this is a splendid accommodation option for those who seek to combine easy and smooth connectivity alongside high class services and facilities.

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Coffee Breaks, Lunches and Dinners

Coffee and Tea Breaks at the conference venue (morning and afternoon).

Lunches will be provided in cooperation with [Ladocola Restaurant](http://www.ladokolla-santorini.gr/)



<https://www.ladokolla-santorini.gr/>

Dinners will be provided in cooperation with [Kaliya Restaurant](http://www.kaliya-restaurant.com/)



<https://www.kaliya-restaurant.com/>



Biennial Symposium
on Measuring Techniques
in Turbomachinery

Santorini, Greece
21 – 22 September 2020



Sunday 20 September 2020

19:00 Welcome Event at Kaliya
www.kaliya-restaurant.com

Monday 21 September 2020

9:00 Registration
9:15 MTTXXV Opening Ceremony

Session A1 09:30 - 11:00 / Chair: A.I.Kalfas

9:30 ON DIRECTIONAL SENSITIVITY OF THERMO-ANEMOMETER SPLIT-FIBER PROBES

Jan Lepicovsky

Institute of Thermomechanics, Czech Academy of Sciences, Prague, Czech Republic

10:00 DIRECT INDUCER CAVITATION INSTABILITY IDENTIFICATION USING HIGH SPEED VISUALIZATION

Youngkuk Yoon, Seung Jin Song

Department of Mechanical Engineering, Seoul National University, South Korea

10:30 INFLUENCE OF EMITTER-RECEIVER NUMBER ON MEASUREMENT ACCURACY IN ACOUSTIC PYROMETRY

L. Ferrari, G. Caposciutti, G. Pasini, G. F. Frate, U. Desideri

University of Pisa (DESTeC), Pisa, Italy

11:00 **Coffee Break**

Session A2 11:15 - 12:45 / Chair: J.Lepikovsky

11:15 FIVE HOLE PROBE ERRORS CAUSED BY FLUCTUATING INCIDENCE

John Coull, Tony Dickens, Henry Ng, José Serna

University of Oxford, University of Cambridge, University of Liverpool, Universidad Politécnica de Cartagena

11:45 IMPROVING GAS TURBINE EXPERIMENTS THROUGH ADDITIVELY MANUFACTURED INSTRUMENTATION

Tamara Guimarães

Vectoflow GmbH, Penn State University, Germany

12:15 OPTICAL AND HOT-FILM MEASUREMENTS OF THE BOUNDARY LAYER TRANSITION ON A NACA AIRFOIL

David Šimurda, Jindřich Hála, Martin Luxa, Tomáš Radnic

Institute of Thermomechanics of the Czech Academy of Sciences, CR

12:45 **Lunch Break at Ladokolla**

Session A3 14:15 - 15:45 / Chair: X.Ottavy

14:15 ON TURBULENCE MEASUREMENTS WITH MULTI-SENSOR FAST RESPONSE AERODYNAMIC PROBES IN A HIGH-PRESSURE TURBINE

A.C. Chasoglou, P. Tsirikoglou, A.I. Kalfas, R.S. Abhari

Limmat Scientific AG, Zürich, Switzerland

Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

14:45 BIOMASS WOODCHIP TRACKING BY IMAGE ANALYSIS IN A MODEL OF A FIXED BED COMBUSTOR

Lorenzo Ferrari, Gianluca Caposciutti, Martin Higl, Bernhard Müller

University of Pisa (DESTeC), Italy

Kempton University of Applied Sciences, Germany

15:15 ACCURACY IMPROVEMENT OF THE TRANSIENT HEATER FOIL TECHNIQUE FOR HEAT TRANSFER TESTS: PRELIMINARY RESULTS

Julian Schmid, Michele Gaffuri, Alexandros Terzis, Peter Ott, Jens von Wolfersdorf

Group of Thermal Turbomachinery (GTT)EPFL, Lausanne, Switzerland

Department of Mechanical Engineering, Stanford University, USA

Institute of Aerospace Thermodynamics, University of Stuttgart, Germany

15:45 **Tea Break**

Session A4 16:00 - 17:45 / Chair: P.Tsirikoglou

16:00 EFFECT OF HEATING ON THE STABILITY OF THE THREE-DIMENSIONAL BOUNDARY LAYER FLOW OVER A ROTATING DISK

Stefan aus der Wiesche; Christian Helcig

Muenster University of Applied Sciences Department of Mechanical Engineering, Technical University of Munich Department of Aerospace and Geodesy

16:30 BOUNDARY LAYER STREAKS CONTROL IN BYPASS TRANSITION UTILISING PLASMA ACTUATORS

Konstantinos D. Eleftheriou, Kevin Gouder, Jonathan Morrison

Department of Aeronautics, Imperial College London, UK

17:00 A WIND TUNNEL TO ACCESS THE PERFORMANCE OF INERTIAL PARTICLE SEPARATION FOR TURBO-PROP AND TURBOSHAFT ENGINES

Stefano Castegnaro

Von Karman Institute for Fluid Dynamics, Belgium

19:00 **Gala Dinner at Kaliya**

Tuesday 22 September 2020

Session B5 09:00 - 10:30 / Chair: L.Ferrari

9:00 POD-BASED ANALYTICS AND PREDICTION IN SUPPORT OF THE CALIBRATION PROCESS OF FAST-RESPONSE AERODYNAMIC PROBES

P. Tsirikoglou, A. C. Chasoglou, A. I. Kalfas, R. S. Abhari

Limmat Scientific AG, Zurich, Switzerland

Laboratory for Energy Conversion, ETH Zurich, Switzerland

Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

9:30 DESIGN OPTIMIZATION OF A NOVEL ORIFICE CONTROL VALVE FOR TURBOMACHINERY TESTING FACILITIES

Alexandros Peteinaris, Anestis Kalfas

Laboratory of Fluid Mechanics & Turbomachinery, Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

10:00 INTERPRETATION OF STALL PRECURSOR SIGNATURES – STABLE INSTABILITIES

Christoph Brandstetter, Xavier Ottavy, Sina Stapelfeldt

Université de Lyon, Ecole Centrale de Lyon, CNRS, LMFA, ECULLY, France

Imperial College, Department of Mechanical Engineering, London, UK

10:30 **Coffee Break**

Session B6 10:45 - 12:15 / Chair: D. Šimurda

10:45 NON-INVASIVE LEAKAGE DETECTION AND LOCALISATION TECHNIQUE IN NOISY INDUSTRIAL ENVIRONMENT

Theofilos G. Efstathiadis, Anestis I. Kalfas, Georgios P. Kousiopoulos, Georgios N. Papastavrou, Spiros Nikolaidis

Department of Mechanical Engineering, Laboratory of Fluid Mechanics and Turbomachinery, Aristotle University of Thessaloniki, Greece

Department of Electronics and Computers, School of Physics, Faculty of Sciences, Aristotle University of Thessaloniki, Greece

11:15 CONDUCTION AND INERTIA CORRECTION FOR TRANSIENT THERMOCOUPLE MEASUREMENTS. PART I: ANALYTICAL AND NUMERICAL MODELLING

Florian Seibold, Andreas Schwab, Victor Dubois, Rico Poser, Bernhard Weigand, Jens von Wolfersdorf

Institute of Aerospace Thermodynamics (ITLR), University of Stuttgart, Germany

11:45 CONDUCTION AND INERTIA CORRECTION FOR TRANSIENT THERMOCOUPLE MEASUREMENTS. PART II: EXPERIMENTAL VALIDATION AND APPLICATION

Tobias Krille, Rico Poser, Markus Diel, Jens von Wolfersdorf

University of Stuttgart, Germany

12:15 **Lunch Break at Ladokolla**

Session B7 13:45 - 15:15 / Chair: A.Terzis

13:45 COOLED PRESSURE PROBES DESIGN METHODOLOGY FOR HARSH ENVIRONMENT APPLICATIONS

Julien lickemaille

Von Karman Institute for Fluid Dynamics, Belgium

14:15 BLADE OSCILLATION MECHANISM FOR AERODYNAMIC DAMPING MEASUREMENTS AT HIGH REDUCED FREQUENCIES

Nenad Glodic, Carlos Tavera Guerrero, Mauricio Gutierrez Salas

KTH Royal Institute of Technology, Sweden

14:45 ON THE APPLICATION OF BAYESIAN INTERFERENCE FOR TURBINE COMPONENTS ASSESSMENT

Gonçalo Cruz

Von Karman Institute for Fluid Dynamics, Belgium

15:30 **MTTXXV Awards and Closing Ceremony**