

List of Technical Papers for 2004 Annual Conference of GTSJ**The Researches on Gas Turbines at GML, MEL and AIST**

Tsutsui, K. : *National Institute of Advanced Industrial Science and Technology.*

Aero-engine Technology Development in IHI

Watanabe, Y. : *Ishikawajima-Harima Heavy Industries Co., Ltd.*

Extended Operating Range of Low-NO_x Emissions by Staged Lean Premixed Tubular Flame Combustion

Takagi, K. et al. : *Hosei University.*

Demonstration of Extended Operating Range of Ultra-Low NO_x Emissions of a Liquid-Fueled Gas Turbine Combustor by "LL2" Combustion Concept

Yamada, H. et al. : *Japan Aerospace Exploration Agency.*

Combustion Characteristics of High Temperature Water and Heavy Oil Mixture Fuel

Hayashi, A. et al. : *Hitachi, Ltd.*

Study on Low NO_x Burner for Gas/Oil Dual Fuel Firing

Hirata, Y. et al. : *Hitachi, Ltd.*

Characteristics of Diffusion Combustor with Strong Swirl Flow

Suzuki, M. et al. : *Keio University.*

Development of Premixers for Ultra-Low NO_x Emissions Combustor in ESPR Project

Hayashi, S. et al. : *Japan Aerospace Exploration Agency.*

Suppression of Combustion Noise and Combustion Oscillation by Thermo-acoustic Active Control Using Secondary Flame

Ikame, M. et al. : *National Maritime Research Institute.*

Control of Combustion Oscillations in Premixed Combustor -Application of the Resonator for Reducing Oscillations under High Pressure Condition -

Yamanaka, S. et al. : *Toshiba Corporation.*

Improvement of a Dry Low NO_x Gas Turbine Combustor with an Innovative Fuel Supply Concept

Wakabayashi, T. et al. : *Osaka Gas Co., Ltd.*

The Development of a Gas Turbine Combustor for Dual-Fuel of Liquid and Low-Calorific Gas

Koyama, M. et al. : *Niigata Power Systems Co., Ltd.*

Development of a Two-stage Combustor for MGT with Premixed Gas Injected into the Burned Gas from a Tubular Flame

Iwamoto, A. et al. : *The University of Tokyo.*

Combustion Characteristics of a Gas Turbine Combustor Fueled by Biomass Fuel

Sugiyama, R. et al. : *Keio University.*

The Influences of Down-sizing of Gas Turbine Combustor on the Combustion Performance

Nakamura, K. et al. : *Keio University.*

Exhaust Emission Characteristics of Lean Premixed Propane Micro Combustor

Awano, R. et al. : *Tokyo Metropolitan Institute of Technology.*

Combustion Characteristics of High Swirl Annular Combustor for Ultra Micro Gas Turbine

Murota, S. et al. : *Keio University.*

Research and Development on Gas Turbine Combustor Panel Utilizing Melt-Growth Composite Material (1)

Matsumoto, K. et al. : *Kawasaki Heavy Industry, Ltd.*

Development of Combustor of an Ultra-micro Gas Turbine for a Small Conveyable Generator

Araki, S. et al. : *Keio University.*

The Atomization of the Liquid Fuel by the Pressure Injector for Small Engines

Shimizu, D. et al. : *Kogakuin University.*

A Feasibility Study and Demonstration of DME as an Alternative Fuel for Micro Gas Turbines

Tsuchiya, T. et al. : *Tokyo Electric Power Co., Inc.*

Development of a Dry Low Emissions Combustor for Niigata 300kW Class Recuperated Cycles Gas Turbine Engine

Fujiwara, H. et al. : *Niigata Power Systems Co., Ltd.*

Structure Changes of Single Crystal Superalloy, CMSX-2, by High Thermal Stress

Matsushita, M. et al. : *Japan Aerospace Exploration Agency*.

Degradation and Cracking Behaviors of Stage 1 Bucket Coating in 1100C-class Gas Turbine

Yoshioka, Y. et al. : *Toshiba Corporation*.

Performance Measurement Tests of a Marine Turbocharger And "The Measurement Uncertainty (by ISO)"

Koike, T. et al. : *Ishikawajima-Mass-Produced Machinery Co., Ltd.*

Research of Non-Contact Rotating Blade Tip Displacement Measurement

Matsuda, Y. et al. : *Japan Aerospace Exploration Agency*.

The Relation between Peripheral Temperature of Bearings and Rotor Vibration of a Turbocharger Applied for Floating Bush Bearings

Iwaki, F. et al. : *Ishikawajima-Harima Heavy Industries Co., Ltd.*

Forward Sweep of Rotor Blade to Expand Throttle Margin of a Subsonic Single-stage Axial Flow Compressor

Sugiura, H. et al. : *Waseda University*.

A Research on the Improvement of Surge Limits on a Centrifugal Compressor

Uchida, H. et al. : *Toyota Central R&D Labs.*

Numerical Analysis of Flow within Ultra-Highly Loaded Turbine Cascades

Matsuoka, K. et al. : *Hosei University*.

Characteristics of Unsteady Separation of Flow around an Oscillating Airfoil in Pitching Motion - An Example of Numerical Simulation by a Vortex Method -

Ootsuka, H. et al. : *Takushoku University*.

A Reduction of Tip Mach Number in Lift Fan Rotor for Jet VTOL Aircraft

Shiratori, T. et al. : *Tokyo Metropolitan Institute of Technology*.

Numerical Analysis on Unsteady Aerodynamic Characteristics of a Compressor Cascade at Near-Stall Conditions

Watanabe, T. et al. : *The University of Tokyo*.

The Development of Centrifugal Compressor for Marine Application (Super Marine Gas Turbine)

Nishihara, A. et al. : *Yanmar Co., Ltd.*

Investigation on a Highly Loaded Diffuser Passage Compressor

Murooka, T. et al. : *Ishikawajima-Harima Heavy Industries Co., Ltd.*

The Fan Driven by the Single Rotor Blade Row with Multistage Tip Turbine (2nd Report)

Iwase, S. et al. : *Japan Aerospace Exploration Agency.*

Optimization of Steam-Injection Swirler Design Process using Genetic Algorithm

Funazaki, K. et al. : *Iwate University.*

Development of the Micro Turbine Generator

Sasaki, M. et al. : *Hitachi, Ltd.*

Development of Micro Motor-Generator for Ultra Micro Gas Turbine

Uchida, T. et al. : *Toshiba Corporation.*

Improvement of a Small Reheat Gas Turbine as a Cogeneration System

Iki, N. et al. : *National Institute of Advanced Industrial Science and Technology.*

Evaluations on the Economic Competitiveness of Micro Gas Turbine Cogeneration Systems based on Efficiency and Maintenance Cost

Tsuchiya, T. et al. : *Tokyo Electric Power Co., Inc.*

Improvement of Micro Gas Turbine Performance by Steam Injection - Verification of the Effect and Demonstration of Stable Operation -

Tsuchiya, T. et al. : *Tokyo Electric Power Co., Inc.*

Co-generation of Digestion Gas by Micro Gas Turbine

Hamano, N. et al. : *Ebara Corporation.*

Development of a Virtual Gas Turbine Systems for a 1700 Degree Class GT

Saeki, Y. et al. : *Toshiba Corporation.*

Development of a New Dynamic Simulation Tool for Thermal Power Plants

Shirakawa, M. et al. : *Toshiba Corporation.*

Performance of Desiccant Air Conditioning System using Waste Heat

Awadu, N. et al. : *Hitachi Plant Engineering & Construction Co., Ltd.*

Hybrid System of Oxygen Burnt Semi-closed Gas Turbine and MCFC

Koda, E. et al. : *Central Research Institute of Electric Power Industry.*

Studies on Compound Impingement-Cooling Structures of Turbine Blades ; Flow Field Measurement and Numerical Simulation

Funazaki, K. et al. : *Iwate University.*

Development of an Integrated Impingement and Pin-Fin Cooling Structure

Fukuyama, Y. et al. : *Japan Aerospace exploration Agency.*

Measurement of Flow and Heat Transfer in the Triangular Channel with Ribs Simulated a Cooling Pass for Leading Edge of Rotor Blade

Watanabe, K. et al. : *Central Research Institute of Electric Power Industry.*

Investigation of Heat Transfer Enhancement in Square Ducts with Turbulence Promoter Ribs Using LES

Horiuchi, Y. et al. : *Hitachi, Ltd.*

Experimental Investigation into Influence of TBC Surface Roughness on Heat Transfer Coefficient

Kuba, S. et al. : *Hitachi Engineering Co., Ltd.*