

SAE INTERNATIONAL

**SAE/JSAE 2016
SMALL ENGINE TECHNOLOGY
CONFERENCE & EXHIBITION**

November 15-17, 2016

Embassy Suites, Charleston Convention Center
Charleston, South Carolina, USA

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Best Paper Award:

2016-32-0036 - *Establishment of Fuel Economy Estimation Method Focused on Transmission Efficiency of Rubber Belt Type CVT*

Takamori Shirasuna, Ryoh Hatakeyama, Yukio Sakai, Honda R&D Co., Ltd.

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Best Paper Runner Up:

2016-32-0033 - *Measurement and Prediction of Heat Transfer Losses on the XMv3 Rotary Engine*

Tiago J. Costa, Jorge Martins, Francisco Brito, Universidade do Minho; Mark Nickerson, Daniele Littera, Alexander Shkolnik, Nikolay Shkolnik, LiquidPiston Inc.;

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Best Paper Runner Up:

2016-32-0044 - *Research on Combustion Noise for Controlled Auto Ignition Engine Fueled with Natural Gas Effect of Stroke Bore Ratio and Ignition Timing*

Gaku Naoe, Honda R&D Co., Ltd.

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Best Paper Runner Up:

2016-32-0045 - *Mapping of Fuel Anti-Knock Requirements for a Small Remotely Piloted Aircraft Engine*

Joseph K. Ausserer, Marc D. Polanka, Air Force Institute of Technology; Jacob Barnaski, Innovative Scientific Solutions, Inc.; Paul Litke, Air Force Research Laboratory

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Best Paper Runner Up:

2016-32-0057 - *Research on Severity Class Evaluation Based on Various Crash Situations Involved with Motorcycles for ISO 26262*

Yuji Arai, Makoto Hasegawa, Takeshi Harigae,
Japan Automobile Research Institute

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Best Paper Runner Up:

2016-32-0067 - *Multiscale, Multiphysics Computational Chemistry Methods Based on Artificial Intelligence Integrated Ultra-Accelerated Quantum Molecular Dynamics for the Application to Automotive Emission Control*

Akira Miyamoto, Kenji Inaba, Yukie Ishizawa, Manami Sato, Rei Komuro, Masashi Sato, Ryo Sato, Patrick Bonnaud, Ryuji Miura, Ai Suzuki, Naoto Miyamoto, Nozomu Hatakeyama, Masanori Hariyama, Tohoku Univ.

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Best Paper Runner Up:

2016-32-0070 - *Improvement of the Thermal Durability of an Exhaust Gas Purifying Catalyst Using Size-Controlled Pt-Hydroxide Clusters*

Toyofumi Tsuda, Kazuya Miura, Akio Hikasa, Keiji Hosoi, Fumikazu Kimata, Suzuki Motor Corporation

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Best Paper Runner Up:

2016-32-0071 - *Development of Base Metal Catalyst and Its Compatibility Study for Motorcycle Applications*

Koji Ueno, Hiroyuki Horimura, Akiko Iwasa, Honda R&D Co., Ltd.; Pascaline Tran, Ye Liu, BASF Corp.

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Best Paper Runner Up:

2016-32-0093 - *The Effect of Cooled Exhaust Gas Recirculation for a Naturally Aspirated Stationary Gas Engine*

Denis Neher, Fino Scholl, Maurice Kettner, Karlsruhe University of Applied Sciences; Danny Schwarz, Markus Klaissle, Senertec Kraft-Warme-Energiesysteme GmbH; Blanca Gimenez Olavarria, University of Valladolid

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Best Paper Runner Up:

2016-32-0096 - *Mass Balancing Measures of a Linkage-Based Extended Expansion Engine*
Patrick Pertl, Michael Lang, Stephan Schmidt, Roland Kirchberger, Graz University of Technology



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Best Presentation Award

Paul W. Rieger, Graz University of Technology
2016-32-0031

*Analysis of Conventional Motorcycles with the
Focus on Hybridization*



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Best Presentation Award

Stephan Schneider, German Aerospace Center
2016-32-0046

*Development and Experimental Investigation of a
Two-Stroke Opposed-Piston Free-Piston Engine*



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Best Presentation Award

Christian Steinbrecher, Robert Bosch
2016-32-0080

*Improved Fuel Metering for Port Fuel Injection by
Controlled Valve Operation*



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Best Presentation Award

Koichi Tanaka, Suzuki Motor Corporation
2016-32-0089

*Development of Oil-Cooled Engine for Optimization
of Engine Cooling System*



Best Presentation Award

Alexander Winkler, University of Applied Sciences
Upper Austria
2016-32-0027

*Analysis of Low-Cost MEMS Accelerometer and
Gyroscope Characteristics for Stochastic Sensor
Simulation within Motorcycle Models*



Best Poster Award

Patrick Fillips, University of Graz
*Emission Behaviour of Motorcycles under Real
Conditions*