

17th Small Engine
Technology
Conference

Diversity of Small Powertrain Technologies



PRELIMINARY PROGRAM



November 8-10, 2011
Sapporo Convention Center
Sapporo, Hokkaido, Japan



Schedule Outline

	9	12	15	18	21	
Nov 7 Mon	Technical Visits			Registration		
Nov 8 Tue	Opening Ceremony Keynote Address	Technical Session		Registration	Welcome Reception	
Nov 9 Wed	Technical Session		Plenary Session	Registration	Banquet	
Nov 10 Thu	Technical Session	Exhibition	Closing Ceremony & Lunch	Registration		

Table of Contents

Meeting Outline	2
Introduction of SETC 2011	3
Committee Members	4
Conference Registration / Payment	6
Conference Venue	8
Keynote Speakers	9
Plenary Session	10
Exhibition & Poster Session	13
Special Events	14
Sponsors	15
Technical Visits	16
Session Timetable	18
Technical Sessions	19
Travel Information	33
Sapporo Information	34
Accommodation	36
Hotel Map	37
Advertising	38
Sapporo City Map	48
Floor Guide	49



Meeting Outline

Monday, November 7 Registration 15:00 - 17:00 See Floor Guide

Technical Visits See Page 16	Plan A: 07:30 - 17:00 at Kane-no-Hiroba of Sapporo station Plan B: 09:30 - 17:00 at Kane-no-Hiroba of Sapporo station
------------------------------	--

Tuesday, November 8 Registration 08:00 - 17:00 See Floor Guide

Opening Ceremony ●Opening Address ●Welcome Remarks from the representative of JSAE, SAE International and FISITA	09:00 - 09:30 at Hall C
Keynote Address	09:30 - 10:30 at Hall C
Technical Session	11:00 - 12:30 See Page 18
Exhibition	10:00 - 17:00 at Hall A & B
Lunch	12:30 - 14:00 at Hall A & B
Technical Session	14:00 - 18:00 See Page 18
Welcome Reception	18:30 - 20:30 at Hall C

Wednesday, November 9 Registration 08:00 - 17:00 See Floor Guide

Exhibition	10:00 - 17:00 at Hall A & B
Technical Session	08:00 - 12:00 See Page 18
Lunch	12:00 - 13:30 at Hall A & B
Technical Session	13:30 - 15:00 See Page 18
Plenary Session	15:15 - 17:35 at Hall C
Banquet	19:00 - 21:30 at Keio Plaza Hotel Sapporo Plaza Hall (B1F)

Thursday, November 10 Registration 08:00 - 12:00 See Floor Guide

Exhibition	10:00 - 12:00 at Hall A & B
Technical Session	08:00 - 12:00 See Page 18
Lunch & Closing Ceremony ●Paper and Presentation Award ●Introduction of SETC2012	12:30 - 14:00 at Hall C



Introduction of SETC 2011

Theme

Diversity of Small Powertrain Technologies

Since its first event in 1989, the Small Engine Technology Conference (SETC) continues to be the international technology conference for small engines and related products. SETC is jointly sponsored by Society of Automotive Engineers of Japan, Inc. (JSAE) and SAE International.

JSAE is pleased to offer the 17th SETC which will be held at the Sapporo Convention Center in Sapporo from November 8 to 10, with the cooperation of Japan Land Engine Manufacturers Association (LEMA) and Japan Boating Industry Association (JBIA).

Considering the circumstances of small engines, arising concerns for global warming and other environmental issues, the main theme for this Conference, "Diversity of Small Powertrain Technologies", has been chosen.

SETC History

Conference	City	Country
SETC 1989	Milwaukee	USA
SETC 1991	Yokohama & Hamamatsu	Japan
SETC 1993	Pisa	Italy
SETC 1995	Milwaukee	USA
SETC 1997	Yokohama	Japan
SETC 1999	Madison	USA
SETC 2001	Pisa	Italy
SETC 2002	Kyoto	Japan
SETC 2003	Madison	USA
SETC 2004	Graz	Austria
SETC 2005	Bangkok	Thailand
SETC 2006	San Antonio	USA
SETC 2007	Niigata	Japan
SETC 2008	Milwaukee	USA
SETC 2009	Penang	Malaysia
SETC 2010	Linz	Austria
SETC 2011	Sapporo	Japan



This event is organized under FISITA patronage.

FISITA is the international federation linking the national automotive engineering societies in 37 countries. FISITA was founded in 1948 as a neutral forum the exchange of technical knowledge on every aspect of vehicle design, development and manufacturing. FISITA is a non-profit organization committed to help create efficient, affordable, safe and sustainable automotive transportation.



Committee Members

Honorary Committee 2011

Chair: Masanori Atsumi (SUZUKI MOTOR CORPORATION)

Yoshiaki Namboku (Japan Land Engine Manufacturers Association)

Toyoo Ohtsubo (Yamaha Motor Co., Ltd.)

Hideo Shoji (Nihon University)

Tetsuya Tosaka (Honda R&D Co., Ltd.)

Yasushi Tsuritani (Japan Boating Industry Association)

Kohei Yamada (Kawasaki Heavy Industries, Ltd.)

Organizing Committee 2011

Chair: Ryosuke Ishikawa (SUZUKI MOTOR CORPORATION)

Masayuki Baba (Honda R&D Co., Ltd.)

Takemi Chikahisa (Hokkaido University)

Takanobu Fujimura (SUZUKI MOTOR CORPORATION)

Minoru Iida (Yamaha Motor Co., Ltd.)

Masaaki Ishibashi (Honda R&D Co., Ltd.)

Hiroyuki Iwai (Kawasaki Heavy Industries, Ltd.)

Takashi Mitome (SUZUKI MOTOR CORPORATION)

Masaaki Miura (Yamaha Motor Co., Ltd.)

Yasuo Moriyoshi (Chiba University)

Yuh Motoyama (Yamaha Motor Co., Ltd.)

Tadao Okazaki (*LEMA / Kubota Corporation)

Yasuhiro Sugimoto (Honda R&D Co., Ltd.)

Yoshihiro Sunayama (SUZUKI MOTOR CORPORATION)

Yasuhito Tanaka (SUZUKI MOTOR CORPORATION)

Shigeru Tosaka (Hokkaido Institute of Technology)

Takehiro Washizu (**JBIA / Yamaha Motor Co., Ltd.)

Koji Yoshida (Nihon University)

* LEMA: Japan Land Engine Manufacturers Association

**JBIA: Japan Boating Industry Association

Technical Committee 2011

JSAE

Chair: Minoru Iida (Yamaha Motor Co., Ltd.)

Hiromi Deguchi (SUZUKI MOTOR CORPORATION)

Toshimi Kobayashi (Kawasaki Heavy Industries, Ltd.)

Kazue Kondo (Yamaha Motor Co., Ltd.)

Takashi Mitome (SUZUKI MOTOR CORPORATION)

Yasuo Moriyoshi (Chiba University)

Yasuyuki Muramatsu (Yamaha Motor Co., Ltd.)

Toru Nakazono (*LEMA / Yanmar Co., Ltd)

Tadao Okazaki (*LEMA / Kubota Corporation)

Kazuyuki Shiomi (Honda R&D Co., Ltd.)

Tomoo Shiozaki (Honda R&D Co., Ltd.)

Isato Taki (SUZUKI MOTOR CORPORATION)

Yoshiro Tokunaga (Kawasaki Heavy Industries, Ltd.)

Takehiro Washizu (**JBIA / Yamaha Motor Co., Ltd.)

Koji Yoshida (Nihon University)

* LEMA: Japan Land Engine Manufacturers Association

**JBIA: Japan Boating Industry Association



Committee Members

Technical Committee 2011

SAE International

Chair: Robert Kee (Queen's University Belfast)

Vice-Chair: Jaal Ghandhi (University of Wisconsin-Madison)

William Attard (MAHLE Powertrain)

Glenn R. Bower (University of Wisconsin)

Brian Callahan (Achates Power & Basco)

Jim Carroll (South West Research Institute)

Roy Douglas (Queen's University Belfast)

Robert Fleck (Queen's University Belfast)

Peter Kaub (Re-Sol, LLC)

Ken Kicinski (Harley-Davidson Motor Company)

Nagesh Mavinahally (LEHR Inc.)

Geoff McCullough (Queen's University Belfast)

Jay Meldrum (Michigan Tech University)

Scott Miers (Michigan Tech University)

Dan Nehmer (BRP)

David Palmer (BRP)

Phil Pierce (Harley-Davidson Motor Company)

Paul Richards (Innospec Inc.)

Stephan Schmidt (Graz University of Technology)

Kay Stepper (Robert Bosch LLC)

Tony Szczotka (Robert Bosch LLC)

Andy Traxel (Briggs & Stratton Daihatsu LLC)

General Committee

JSAE

Chair: Takashi Mitome (SUZUKI MOTOR CORPORATION)

Akio Miguchi (Kawasaki Heavy Industries, Ltd.)

Sakae Mizumura (Honda R&D Co., Ltd.)

Yuh Motoyama (Yamaha Motor Co., Ltd.)

Tadao Okazaki (Japan Land Engine Manufacturers Association)

Takehiro Washizu (Japan Boating Industry Association)

SAE International

Chair: Jim Carroll (South West Research Institute)

Vice-Chair: Nagesh Mavinahally (LEHR Inc.)

William Attard (MAHLE Powertrain)

Glenn R. Bower (University of Wisconsin)

Brian Callahan (Achates Power & Basco)

Jan Czerwinski (University of Applied Sciences - Biel)

Roy Douglas (Queen's University Belfast)

Robert Fleck (Queen's University Belfast)

Ken Fosaaen (Fosaaen Technologies, LLC)

Josef Fuerlinger (BRP)

Jaal Ghandhi (University of Wisconsin-Madison)

Deane Jaeger (Harley-Davidson Motor Company)

Peter Kaub (Re-Sol, LLC)

Robert Kee (Queen's University Belfast)

Ken Kicinski (Harley-Davidson Motor Company)

Geoff McCullough (Queen's University Belfast)

Jay Meldrum (Michigan Tech University)

Scott Miers (Michigan Tech University)

Dan Nehmer (BRP)

David Palmer (BRP)

Phil Pierce (Harley-Davidson Motor Company)

Paul Richards (Innospec Inc.)

Stephan Schmidt (Graz University of Technology)

Kay Stepper (Robert Bosch LLC)

Sebastian Strauss (STIHL Inc.)

Tony Szczotka (Robert Bosch LLC)

Andy Traxel (Briggs & Stratton Daihatsu LLC)

Jeff White (South West Research Institute)



Conference Registration

[Personal information related to the conference registration shall not be used for any other purpose without your permission.]

Registration Fee

	Advanced Online Registration ¹⁾ By Friday, September 30	Online Registration, ²⁾ On-site Registration
SAE/JSAE Member	¥50,000-	¥60,000-
Presenting Author and Session Chair ³⁾	¥45,000-	N/A
Student (Including Student Presenting Author) ⁴⁾	¥3,000-	¥4,000-
Other than the above	¥60,000-	¥70,000-
Accompanying Person ⁵⁾	¥6,000-	¥7,000-
Media	Free	Free

1) Participants making use of this offer must pay the fee by Friday, September 30.

2) Online Registration closes on Thursday, October 20.

3) Presenting authors and session chairs must pay their fees by Friday, September 30. If the payment is not possible by that day, please contact the Conference Secretariat.

4) Student registration requires the applicant to send/fax a copy of their student ID to the Conference Secretariat in advance, and to present the original when at the conference registration.

5) Accompanying persons should be a family member of the delegate.

On-site Registration Hours

Monday, November 7	15:00 - 17:00
Tuesday, November 8	8:00 - 17:00
Wednesday, November 9	8:00 - 17:00
Thursday, November 10	8:00 - 12:00

What Does the Registration Fee Cover?

		Participant	Student	Accompanying person
1	Admission to the Opening and Closing Ceremonies	✓	✓	✓
2	Admission to Keynote Speeches and Plenary Sessions	✓	✓	✓
3	Admission to Technical Sessions	✓	✓	—
4	Admission to the Exhibition	✓	✓	✓
5	Proceedings CD	✓	✓	—
6	Welcome Reception and Lunch	✓	✓	✓

Additional Events

Tickets for these events are not included in the registration fee.

The advanced registration is required for all participants. If you cannot make a registration online, please contact the Conference Secretariat.

Banquet

Wednesday, November 9 from 19:00 in Plaza Hall in the 1st-floor basement of the Keio Plaza Hotel, Sapporo.

Cost: ¥5,000-

The cost includes transportation fee from the Sapporo Convention Center to the Keio Plaza Hotel.



Conference Registration

Technical Visits

Course A	¥5,000-
Course B	¥5,000-

Monday, November 7

Persons who join these tours must be conference participants.

Lunch is included to each course.

If you require special meals for religious or health reasons, advanced notice to the Conference Secretariat is necessary.

Please refer to the Technical Visits page. Details will be forwarded later.

Payment

Advanced online registration begins at the beginning of July and ends on Thursday, October 20.

Please pay for the total sum of the registration, banquet and technical visits, in either of the following ways.

Please proceed with payment once you have completed your online entry.

Credit	VISA / Master / AMEX are accepted.
Bank Transfer Domestic only	Please check the transfer account by accessing the URL below. http://www.setc-jsae.com/

Note that personal/company checks CANNOT be accepted.

Cancellation Policy

Cancellation requests must be sent by e-mail to the Registration Secretariat.

Cancellation Charges

If the notification reaches the Secretariat:

By Friday, September 30	10% of the registration fee
By Thursday, October 20	50% of the fee
After Friday, October 21	100% of the fee (no refunds will be given)

Banquet and Technical Visits Costs

Cancellation charge is 100% of the cost, once a Banquet or Technical Visit application has been registered.

Contact

Please contact SETC 2011 Conference Secretariat regarding:

- Registration for the conference
- Hotel Information
- Banquet
- Visa-support Documents
- Technical Visits
- All the matters concerning the conference

SETC2011 Conference Secretariat

c/o E. C. PRO Inc.,

7F Kitaguchi Yoshiya Bldg., Kita 7-jo Nishi 4-chome, Kita-ku, Sapporo 060-0807 JAPAN

Tel: +81-11-299-5910 Fax: +81-11-299-5911

E-mail: SETC2011@jsae.or.jp



Keynote Speakers

Tuesday, November 8, 9:30 - 10:30 at Hall C



Mr. Wolfgang Wukisiewitsch

Vice President R&D,
Managing Director
Powertrain Division,
BRP-Powertrain GmbH & Co KG



Subject

Conformity or diversity– the future of powertrain technologies

- 1982 – 1990 Study of electric/electronics TU Graz
- 1991 – 1993 Development Engineer for electronic controlled Diesel injection systems, BMW Motors, Steyr
- 1994 – 1998 Project Leader, Diesel engines, BMW Motors, Steyr
- 1998 – 2000 Segment Leader, AVL Graz
- 2000 – 2001 Project Leader, 4 cylinder VALVETRONIC gasoline engines, BMW AG Munich
- 2001 – 2002 Team Leader, sequential gearbox, BMW AG, Munich
- 2003 – 2004 Chief engineer 4 cylinder gasoline engines, BMW AG
- 2004 – 2006 Manager, engine electrical systems gasoline engines, BMW AG, Munich
- 2007 - 2008 Vice President Product Development, Managing Director BRP-Rotax GmbH & Co. KG
- Since 2009 Vice President R&D, Managing Director Powertrain Division, BRP-Powertrain GmbH & Co. KG



Mr. Ichizo Aoyama

Managing Officer &
Executive General Manager,
Research & Development
SUZUKI MOTOR CORPORATION



Subject

TBD

- 1980 Graduated from University of Tokyo, Petroleum Development Engineering Joined the Ministry of International Trade and Industry
- 1994 Houston Office, the Japan External Trade Organization (JETRO)(on loan)
- 1997 Senior Coordinator for Logistics, Industrial Policy Bureau, the Ministry of International Trade and Industry
- 2002 Director for Nonferrous Metals Division, Director for Nanotechnology and Material Strategy Office, Manufacturing Industries Bureau, the Ministry of Economy, Trade and Industry
- 2004 Joined SUZUKI MOTOR CORPORATION General Manager of New Powertrain Design Dept.
- 2005 Councilor & General Manager of New Powertrain Design Dept.
- 2006 Managing Officer & General Manager of New Powertrain Design Dept.
- 2011 Managing Officer & Executive General Manager, Research & Development



Plenary Session

Wednesday, November 9, 15:15 - 17:30 at Hall C

Theme

Combustion and Electrification -Competition and Collaboration -

There is a growing concern on the environmental crisis with global warming, and the various approaches in each technical field for reducing the emissions of greenhouse gases into atmosphere are greatly drawing attention. So far, in the field of the internal combustion engines and their circumferences that have been considered as the core part of SETC, various new attempts for their improvement of efficiency have been done in technological areas.

On the other hand, a new stream to adopt electric power surges in the area of products as well, where small engines have made its base. Moreover, the study has been in progress developing a new plan for the electric power infrastructure, for example, the smart grid concept aiming at practical use. However, it has not reached to judging point of the complete shift to the electric power because there are many issues in its adoption. It may be a conceivable case, in our opinion, that the age of the diverse power resources will come in the foreseeable future.

In the SETC2011 Plenary Session, the following four topics will be introduced by specialists. Then, we would like to lead the attractive discussions regarding the future visions. Through those discussions, we hope that the researches and developments of internal combustion engine and electric drive technologies will be made further advancement by studies mutually done with diligence for the future.

Moderator



Prof. Takemi Chikahisa

Professor
Div. of Energy and
Environmental Systems,
Graduate School of Engineering
Hokkaido University, Japan

Education

1976 B.E.(ME) Hokkaido University

1978 M.E.(ME) Hokkaido University

1980 M.S.(ME) University of Wisconsin-Madison

1982 Ph. D.(ME) Hokkaido University

Career

1982 Assistant Professor, Dept. of Mechanical Engineering,
Hokkaido University

1984 Associate Professor, Div. of Mechanical Science, Hokkaido University

2003 Professor, Div. of Energy and Environmental Systems,
Hokkaido University

Short CV

Professor Dr. Takemi Chikahisa obtained his M.S. in the University of Wisconsin-Madison in 1980 and Ph.D. in Hokkaido University Japan in 1982. He is currently a professor of Energy and Environmental Systems Division at Hokkaido University in Japan. His research interests include transport phenomena in fuel cell, combustion control in engines, and analysis of optimal energy system in the future.



Plenary Session

Speakers



Mr. Pierre Duret

Director
Center for "Engines &
Utilization of Hydrocarbons"
IFP School, France.

Subject

Current Status and Future Forecast of Research and Development of Small Internal Combustion Engine (tentative)

Pierre DURET was graduated in 1981 from the French Engineer School "Ecole Centrale de Paris" and started his career at IFPEN (IFP New Energy) in 1982 as research engineer responsible of the study and development of direct fuel injected two-stroke engines.

In 1987, he became Projects leader "Two-Stroke Engines" at IFPEN, responsible of a R&D group working on several projects of design and development of low emissions high fuel economy small two-stroke engines and gasoline controlled auto-ignition engines for world-wide customers.

In 1996, he joined the management of the IFPEN engines R&D as Assistant Director and then in 2011 as Deputy Director of the "Engines & Energy" Technology Business Unit. During this period (and still now) he sometimes acted as expert for French Public authorities and for the European Commission in internal combustion engines and also coordinated several EU Projects, Network of Excellence and International Consortium Projects driven by IFPEN.

In September 2003, he moved to the IFP School as Director of the Center for "Engines and Utilization of Hydrocarbons", still his current position.

In parallel, since May 2005, he is also the Chairman of the "Powertrain" Committee of the French Society of Automotive Engineers, especially involved in the organization of several International Congresses on Powertrains.

During his career, P. Duret applied for more than 30 families of granted patents and published more than 50 international papers on engines and powertrains for automotive and other applications. He got several "Best paper" Awards including two at SETC 1993 and 2002.

Subject

Trend and Future of Alternative Fuels

Education

1983 BSc in Mechanical Engineering from Hokkaido University

1985 MSc in Mechanical Engineering from Hokkaido University

1988 Ph.D from Hokkaido University

Career

1988 Started academic career as Instructor in the Department of Mechanical Engineering, Kyoto University

1994 Lecturer at the same

1995 Associate Professor in the Department of Mechanical Systems Engineering at The University of Shiga Prefecture, Japan.

2001 Visiting Scientist of Massachusetts Institute of Technology

2002 Professor in the Department of Mechanical Systems Engineering at The University of Shiga Prefecture, Japan.

Award

1994 Best Paper Award from The Japan Society of Mechanical Engineers

2002 Best Paper Award from The Water Jet Technology Society of Japan

2007 Kansai Branch Award from The Japan Society of Mechanical Engineers-Kansai Branch

2009 Oleoscience Editors' Award from The Japan Oil Chemists' Society

Major Research Topics

Production of biodiesel from edible and non-edible feedstock with high FFA, Oxidation mechanism and antioxidants of biodiesel, Combustion and emission characteristics of diesel engines fuelled with biodiesel, biodiesel blend and pure plant oil.



Prof. Koji Yamane

Professor
Department of Mechanical
Systems Engineering,
School of Engineering,
The University of Shiga Prefecture,
Japan



Plenary Session



Mr. Kazuki Takahashi
General Manager,
Tokyo Office,
YAMAHA Motor Co., Ltd., Japan

Subject

Current Status and Issues of Application of Electric Power in Small Mobility and Those Forecast in the Future (tentative)

Education

- 1979 Bachelorship of Mechanical Engineering Kyoto Institute of Technology
- 1981 Mastership of Mechanical Engineering Kyoto Institute of Technology

Career

- 1981 Enter YAMAHA Motor Co., Ltd. (Japan)
Research and Development Div. Noise reduction,
Experimental Analysis of Vibration, CAE / Multi Body Dynamics
- 2001 YAMAHA Motor Europe R&D CREMA (Italy)
Project manager of Soft-Computing Technology Development,
Representative of the R&D office
- 2005 YAMAHA Motor Co., Ltd. (Japan)
General Manager of System Technology R&D div. R&D Operations
- 2008 General Manager of Smart-Power Technology div. R&D Operations
- 2009 General Manager of Electric Vehicle Div., Motorcycle Business
Operations
- 2011 General Manager of Technical Administration div. Smart Power
Vehicle Business Unit
- 2011 General Manager of Tokyo Office



Mr. Shinsuke Ito
Deputy Director
Infrastructure and
Advanced Systems Promotion Office and
Creative Industries Promotion Office,
Manufacturing Industries Bureau,
Ministry of Economy Trade and Industry,
Japan

Subject

Smart Community - Rebuilding the Country with New Vision -

Education

- 1997 B.A. in Electric Engineering from Kyoto University
- 1999 M.E. in Electric Engineering from Kyoto University
- 2005 MBA from University of Washington

Career

- 1999 Joined the Ministry of Trade and Industry (MITI, now METI)
Assigned to Information Policy Division, Machinery and Information
Industries Bureau
- 2000 Assistant Director
Americas Division, Trade Policy Bureau, METI
- 2002 Assistant Director
General Policy Division, Agency for Natural Resources and Energy
- 2003 University of Washington (MBA)
Government Sponsored Student
- 2005 Deputy Director for Environment and Technology Automobile
Division, Manufacturing Industries Bureau
- 2007 Deputy Director for General Management
Information Economy Division, Commerce and Information Policy
Bureau (In charge of "Smart Grid" and "Smart Community")
- 2010 Deputy Director for General Management
Infrastructure and Advanced Systems Promotion Office, Manufacturing
Industries Bureau (In charge of "Smart City")



Exhibition & Poster Session

The technical exhibition and the poster session will offer opportunities for small engine and application products suppliers, manufacturers and research institutions to show-case their products to an elite group of small engine researchers and engineers. Conference participants will be able to discuss directly with the exhibitors regarding the various innovative products on display. Companies and also universities, involved in vehicles, components, equipment and measuring instruments, will be participating in the exhibition and the poster session.

Exhibition and Poster Session Venue

Hall A&B on the first floor of Sapporo Convention Center. The ceremony space and main presentation areas are on the same floor, and the lunch and coffee break areas are adjacent to the exhibition space.



Opening Time of Exhibition and Poster Session

Tuesday, November 8	10:00 to 17:00
Wednesday, November 9	10:00 to 17:00
Thursday, November 10	10:00 to 12:00

Call for Exhibitors

Please find instructions for Technical Exhibition and Poster Session in SETC web site.

<http://www.setc-jsae.com/>

Application Deadline: Friday, July 1 2011



Special Events

Welcome Reception

Sapporo Convention Center, Hall C
Tuesday, November 8, 18:30 – 20:30

A reception is scheduled after the technical session on the first day, Tuesday, November 8.

It will be held in Hall C of the Sapporo Convention Center, where you can relax and enjoy the first evening of the conference period.



Banquet

Plaza Hall, B1F, Keio Plaza Hotel Sapporo
Wednesday, November 9, 19:00 – 21:30

¥5,000 (Advanced registration required. No tickets available on the day.)

Register early to take advantage of this opportunity to meet and mingle with the professionals of small engines and their applications from all over the world.

Keio Plaza Hotel Sapporo is located in the vicinity of Sapporo Station. A Shuttle bus service will be provided from the conference venue to the hotel. Hokkaido is famous for being one of Japan's leading food producing regions. The banquet will welcome guests with local cuisine made with fresh seafood and crops from the region.

Guests will also be able to enjoy dance performances from the Yosakoi Soran festival held in the city in early summer every year, when such dances are performed throughout the whole city. Watch or join in with the members of the Hiragishi Tenjin dance team, which has won the festival's best performance prize on numerous occasions. Enjoy evening of delicious local food and dynamic dancing.



KEIO PLAZA HOTEL SAPPORO





S p o n s o r s

The Small Engine Technology Conference 2011 organizing committee, JSAE and SAE International wish to gratefully acknowledge the generous contribution and support of the following companies towards SETC 2011.



Oronite





Technical Visits

Technical Visits will be arranged on Monday, November 7 with the cooperation of the following organizations. SETC 2011 Technical Visits offer unique courses of interests. Encounter the spirit of the Japanese sword and observe large-scale steel production at The Japan Steel Works, Ltd. Also experience the unique DMV and the history of Hokkaido's railways at Hokkaido Railway Company. The Hokkaido University Museum displays the scientific history of Hokkaido. In addition, other attractions include a special view of Sapporo from Okurayama Jump Stadium and Japanese sake tasting at the Chitosetsuru Brewery.

JSW The Japan Steel Works, LTD.

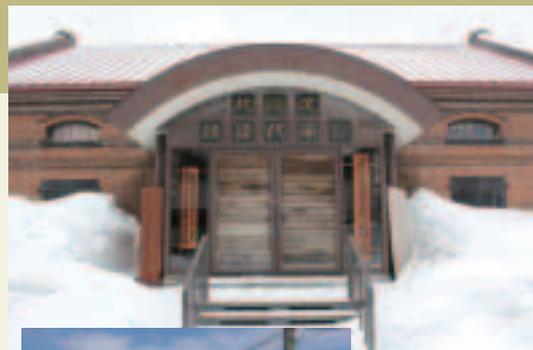
The Japan Steel Works, Ltd. (JSW) was established in 1907 and had amassed a wealth of advanced technology as the largest private weapons manufacturer in Japan by the end of World War II. After the war, conversion of production to meet civilian demand gave the company a fresh start, and materials and processing technologies accumulated over the years were used as a base for technical development and the cultivation of new business fields. The Company's products now include large-scale steel castings and forgings, heavy machinery and steel structures, steel plates, plastic machinery, industrial machinery, and equipment for the petroleum, gas, chemical, and petrochemical industries.



Manufacturing of Japanese swords takes place at JSW using traditional techniques.

JR Hokkaido Railway Company

The JR Naebo Workshop began its operations 102 years ago, and is where rolling stock is inspected, repaired, remodel, and built. Technological development, design, running tests, and data analysis related this work can also be observed, along with the the manufacture of rolling stock brake shoes. Test ride a Dual Mode Vehicle (DMV), which is modified from a microbus and developed to run on both railway tracks and roads. While it runs with front and rear rubber tires on the road, on the railway it is operated with front and rear steel wheels as well as rear rubber tires set on the tracks. In both cases, the drive power is transmitted via the rear rubber tires. The mode change takes only 10 - 15 seconds, and the vehicle is capable of speeds of up to 70km/h on the railways.



Course A 7:00 - 7:20 Tour Desk Opens at Kane-no-Hiroba in Sapporo Station

Lunch included

7:30 Departure



Japan Steel Works, Murooran Plant



Lunch in Bus



Hokkaido Railway, Naebo Workshop



17:00 Return to Sapporo Station



Technical Visits



The Hokkaido University Museum was established in 1999, and has a collection of more than 4 million irreplaceable specimens and academic materials stretching back to the time of the Sapporo Agricultural College (now Hokkaido University), which was founded in 1876. The Museum was established to promote the use of the collection in projects that cannot be undertaken digitally, and makes full use of Hokkaido's geographical location and geomorphological character to undertake educational and research projects that center on the area embraced by Eurasia, the Sea of Okhotsk and the Arctic Circle.



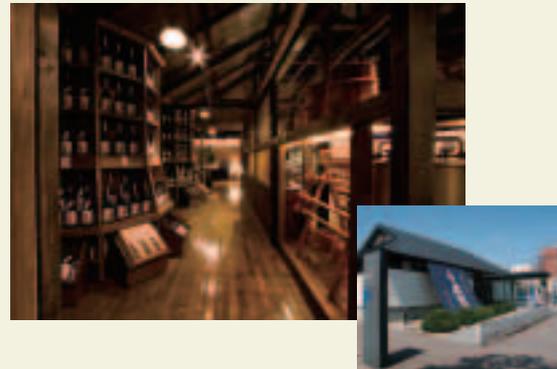
The Museum seeks to encourage young people with talent and imagination to construct a sustainable society in which citizens can lead comfortable lives in harmony with their natural environment, while also undertaking research into such questions as the history of the earth and the evolution of biodiversity, to better understand the origin and genealogy of mankind and the growth of human culture. The Museum also hopes to help establish Sapporo as a model city with a full and rich cultural life.

Okurayama Jump Stadium



Okurayama Jump Stadium is famous as the venue for the 90-meter ski jump competitions at the 1972 Sapporo Winter Olympics. An elevation of 307 meters above sea level provides a magnificent view of the city of Sapporo and the Ishikari Plain. You can also enjoy a delicious meal of a "Hamburg" steak lunch at Lamb Dinning Okurayama.

Chitosetsuru Sake Museum

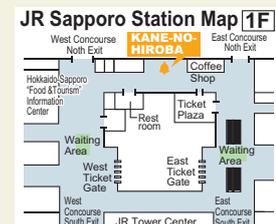


This Hokkaido-based company was established in 1872 as the first sake brewery in Sapporo. The tsuru part of the name means crane, which is a bird that has spread its white wings and flown over the northern part of Japan gallantly for centuries. Observe the brewing process here and enjoy free samples.

Notice: Technical visits require advanced registration. On-site registration is not available. Due to the circumstances of the SETC 2011 schedule, the committee may ask you not to participate in a tour.

Course B 9:00 - 9:20 Tour Desk Opens at Kane-no-Hiroba in Sapporo Station

Lunch included





Session Timetable

Session Name	Tue 8		Wed 9		Thu 10
	AM	PM	AM	PM	AM
Advanced Combustion			○	○	
Alternative Fuels			○	○	○
Collegiate Events				○	○
Diesel Engines			○		
Emissions			○		
Engine Components					○
Engine Controls					○
Engine Technology	○	○			
Fuel Supply Systems	○	○			
HCCI					○
Hybrids, Electric Drives, and Fuel Cells	○	○			
Lubricants			○		
Materials	○	○			
Measurement & Simulation	○	○		○	○
NVH Technology				○	
Two Stroke Engines					○
Vehicle Components		○			
Vehicle Dynamics and Safety			○		



Technical Sessions

Advanced Combustion

Organizers: Akira Iijima (Nihon University), William Attard (MAHLE Powertrain), Jaal Ghandhi (University of Wisconsin-Madison)

20119523

Experimental and Numerical Studies on Mixture Formation and Ignition Processes of Spray-Guided DISI Engines

Jiangping Tian, Hajime Kataoka, Keiya Nishida (University of Hiroshima), Kiyotaka Sato (Mazda Motors Corp.)

20119574

Efficiency improvement of a micro combined heat and power generation unit by installation of an extended expansion engine using multiple linkage system

Yoshiharu Takita, Atsumu Naoi (Honda R&D Co., Ltd.)

20119576

Effect of Wall Impingement on Heterogeneous Structure in Diesel Sprays

Noritsune Kawaharada, Daisaku Sakaguchi, Keisuke Komada, Hironobu Ueki, Masahiro Ishida (Nagasaki University)

20119577

The Effects of Electric Fields on Flame Propagation of Homogeneous Hydrogen-Air Mixture

Ryuichi Yamaguchi, Akira Iijima, Hideo Shoji, Koji Yoshida (Nihon University)

20119583

An investigation of 2-stage high-pressure injections on Combustion and Emissions in a D.I Compression-Ignition Engine

Jaehoon Jeong, OckTaeck Lim (University of ulsan), Dongwon Jeong, Norimasa Iida (Keio University)

20119584

A study on the Combustion Characteristics of the Hydrogen Compact Ceramic Linear Engine for the Compact Powerpack

Yong-il Oh (University of ulsan), Nam-yeol Kim (YURA Corporation), Ock-teack Lim (University of ulsan)

20119589

Design of a tumble-orientated intake port layout for a gasoline DI combustion process used in motor sport application

Oliver Schogl, Hermann Edtmayer, Martin Abart, Stephan Schmidt (Graz University of Technology), Thomas Schabetsberger, Stefan Leiber (BRP-Powertrain)

20119600

Thermodynamic Analysis and Comparison of the K6 Cycle

Matthew David Carlson, Timothy A. Shedd (University of Wisconsin-Madison), Jerry Kashmerick (Kashmerick Engine Systems LLC)

20119610

Reduction in Pollutant Emissions in an "Off-Road" DI Diesel Engine by Means of Exhaust Gas Recirculation

Patrizio Nuccio, Marco Bertone (Politecnico di Torino)

20119618

A Knock Limit Study of a Pre-Chamber Combustion System Enabling Compression Ratio Increases

William P Attard (MAHLE Powertrain)



Technical Sessions

Alternative Fuels

Organizers: Koji Yoshida (Nihon University), Paul Richards (Innospec Inc.)

20119520

Experimental Performance and Emission Characteristics of Bio Diesel Operated CI Engine

Sundara Pandian (Anna University-Tirunelveli), Deva Radjane (Anna University-Chennai)

20119531

Performance and Emission of a Spark Ignition Engine with Liquefied Petroleum Gas LPG Injection Method at Liquid Phase into the Intake Manifold

Nguyen Thanh Tuan, Stanislav Beroun (Technical University of Liberec)

20119535

Impact of the Wall Film Formation on the Full Load Performance of an Engine Operated with the Ethanol Blend E85

Thomas Lauer, Michael Heiß (Vienna University of Technology), Markus Klein (GM Europe Engineering)

20119551

Experimental Investigation in Combustion Characteristics of Ethanol-Gasoline Blends for Stratified Charge Engine

Chinda Charoenphonphanich (King Mongkut's Institute of Technology Ladkrabang), Piyaboot Ornman (TAIST Tokyo Tech Automotive Engineering Program), Nuwong Chollacoop (National Metal and Materials Technology Center), Hidenori Kosaka (Tokyo Institute of Technology)

20119553

Analysis of Ethanol Blended Gasoline Fuels Combustion on 4T Motorcycle Engine

Somnuek Jaroonjitsathian, Somchai Siangsanorh (PTT Public Company Limited), Kaukeart Boonchukosol (Society of Automotive Engineers Thailand)

20119561

A Study on Improvement of Diesel Spray Characteristics Fueled by Rape-seed Oil

Azwan Bin Sapit, Sho Nagayasu, Yasunori Tsuboi, Yuzuru Nada, Yoshiyuki Kidoguchi (The University of Tokushima)

20119562

Experimental Study on Performance, Emissions and Combustion Characteristics of Single Cylinder Dual Fuel LPG/Diesel Engine

Tuan Anh Le, Truc The Nguyen (Hanoi University of Science & Technology)

20119590

Diesel Combustion Characteristics of Biodiesel with 1-Butanol

Eiji Kinoshita, Kazunori Hamasaki, Ryota Imabayashi (Kagoshima University)

20119591

An Investigation on the Spray Characteristics of DME Common Rail Fuel Injection System with variation of Ambient Pressure

Se Jun Lee, Gun Ho Choi, Ock Taek Lim (University of Ulsan), Norimasa Iida (Keio University)

20119593

Ignition of DME Spray Impinging from Injector to Atmosphere by Laser-Ignition

Tomohiro Kumazawa (Kogakuin University), Takeshi Saito (Meisei University), Koji Korematsu, Junya Tanaka (Kogakuin University)

20119605

A Study on Influence of Forced Over Cooling on Diesel Engine Performance

Syuichi Nanba, Akira Iijima, Hideo Shoji, Koji Yoshida (Nihon University)



Technical Sessions

20119632

Numerical Analysis of Carbon Monoxide Formation in DME Combustion

Yuya Muramatsu (Ibaraki University), Mitsuharu Oguma, Tadanori Yanai (National Institute of Advanced Industrial Science and Technology), Mitsuru Konno (Ibaraki University)

20119641

Investigation of Combustion Characteristics of Palm Oil-Derived Methyl Ester as Ignition Improver in Modified Ethanol Fueled Agricultural Direct-Injection Engine

Yossapong Laonual, Sumreng Jugjai, Somchai Chanchaona, Kitti Iempremjit (King Mongkut's University of Technology Thonburi)

20119651

Methodology of Lubricity Evaluation for DME Fuel Based on HFRR

Mitsuharu Oguma, Shinichi Goto, Tadanori Yanai (National Institute of Advanced Industrial Science and Technology), Yasuhiko Mikita (Iwatani Corporation)

Collegiate Events

Organizers: Takashi Mitome (SUZUKI MOTOR CORPORATION),
Geoff McCullough (Queen's University Belfast), Jay Meldrum (Michigan Tech university)

20119549

Technical developments of power train of the 2010 F-SAEJ championship car originally developed by Osaka university student formula team

Shinichi Okunishi, Kyohei IZUMI, Takumi TOKINOYA, Yoshiyuki MATSUMOTO, Kenji YOSHIDA (Osaka University)

20119571

Improvement of a small engine's efficiency with a supercharger

Takashi Suzuki (Sophia University)

20119578

Feed-back control of ignition timing using peak cylinder pressure angle with rough timing table

Thu Huong Thi Tran, Hiroshi Enomoto, Kenichi Shimizu, Kosuke Nishioka (Kanazawa University)

20119579

Development of small gasoline engine with electronic variable valve timing unit

Thu Huong Thi Tran, Hiroshi Enomoto, Kenichi Shimizu, Kosuke Nishioka (Kanazawa University)

20119580

Effect of cylinder diameter of monotube-type MR-damper on the damping force change ratio and the response time

Hajime Komatsu, Hiroshi Enomoto, Toshihiko Komatsuzaki, Kohei Izumi (Kanazawa University)

20119588

Effect of Electrically controlled MR-damper on the cornering of small racing car

Hajime Komatsu, Hiroshi Enomoto, Toshihiko Komatsuzaki, Kohei Izumi (Kanazawa University)

20119617

Dry Sump Design for a 600cc Yamaha YZFR6 Engine

Shane McKenna, Chris McKeown, Glenn Sloan, Geoffery McCullough, Geoff Cunningham (Queens University Belfast)

20119636

Performance of a Flexible Fueled Snowmobile Operating on Ethanol Blended Gasoline for the 2011 SAE Clean Snowmobile Challenge

Gregory W Davis (Kettering University), Gregory Lazorcik



Technical Sessions

20119656

Development Process of a Formula SAE Vehicle of HU

Kazuki WATANABE, Ken TERAOKAWA (Hokkaido University)

Diesel Engines

Organizers: Yoshiro Tokunaga (Kawasaki Heavy Industries, Ltd.), Brian Callahan (Achates Power & Basco)

20119503

The Effect of Compression Ratio on a Common Rail Commercial Diesel Engine

Murali Manoharan, Shelav Jain, Kiran Karanjikar, Jagtap Harishchandra (Mahindra & Mahindra)

20119565

Combustion Chamber Optimization in a Single Cylinder D.I. Diesel Engine

Abishek M Thalagavara, K.S. Vishnu Kumar, Amit A Padaki, Sumit S Chavan, Pattabiraman V (TVS Motor Company)

20119602

Feasibility Study on the Utilization of Water-in-Oil Type Emulsified Fuels to Small DI Diesel Engines

Hironori SAITOH, Kouji UCHIDA (Sojo University)

20119606

Study on Performance of Diesel Engine Applied with Emulsified Diesel Fuel -The Influence of Fuel Injection Timing and Water Contents-

Masatoshi Iwai, Akira Iijima, Hideo Shoji, Koji Yoshida (Nihon University)

20119635

Development of EGR system for industrial diesel engine using CFD approach

Kazumichi Matsuishi, Tadao Okazaki, Masahiko Sugimoto (KUBOTA Corporation)

Emissions

Organizers: Hiromi Deguchi (SUZUKI MOTOR CORPORATION), Phil Pierce (Harley-Davidson Motor Company)

20119511

Exhaust emissions tests of small gasoline engines used as drives for power generators and handheld machinery

Piotr Lijewski (Poznan University of Technology)

20119512

Accelerated Durability Test for Metallic Substrates Tailored for Motorcycle Application

Lorenzo Pace (Emitec G.m.b.H.), Martin Forster, Rudolf Prem, Richard Humer (KTM-Sportmotorcycle AG), Francois Jayat, Roman Konieczny (Emitec G.m.b.H)

20119532

Study on Diffusion Behavior of Evaporative Fuel Gas from Gasoline in Carbon Canister in Consideration of Temperature-Dependence

Hideaki Kuronuma, Noriyuki Kobayashi, Soichiro Masuda (Nagoya University), Kazunari Satoh, Koji Yamasaki (MAHLE Filter Systems Corp.)

20119554

Characterization of Nano Particle Emissions and It's Metrics for 2-wheeler Motorcycles

Husein Adam Nakhawa, S. P. Tijare, S. S. Ramteke (The Automotive Research Association of India)



Technical Sessions

20119572

A demonstration of the emission behaviour of 50 cm³ mopeds in Europe including unregulated components and particulate matter

Juergen Tromayer, Gerd Neumann, Roland Kirchberger, Helmut Eichlseder (Graz University of Technology), John May, Dirk Bosteels, Cecile Favre (Association for Emissions Control by Catalyst (AECC) AISBL)

20119587

Different speed limiting strategies for 50cm³ two-wheelers and their impacts on exhaust emissions and fuel economy

Juergen Tromayer, Gerd Neumann, Roland Kirchberger (Graz University of Technology)

20119594

GHG'S FINAL RULE: IMPACT AND CONSEQUENCES IN THE SMALL OFF-ROAD ENGINE MARKET

Kai Willi Beck (Karlsruher Institute of Technology (KIT)), Patrick Ulmerich (AVL EMISSION TEST SYSTEMS GMBH), Soeren Bernhardt, Ulrich Spicher (Karlsruher Institute of Technology (KIT))

20119614

Diagnosic signal to monitoring of catalytic converter in CI engine

Marcin Rychter (Motor Transport Institute)

20119654

Development of Single cylinder Gasoline Three wheeler for compliance to EUROII emission Norms

Balasaheb Jalindar Shinde, Hanumant S shedge (Piaggio Vehicles Pvt. Ltd)

20119657

High performance cost efficient catalytic coatings for carbureted small motorcycles

Ansgar Wille, M. Bonifer (W.C. Heraeus GmbH), U. Endruschat (Heraeus Catalysts (Danyang) Co., Ltd.)

Engine Components

Organizers: Toshimi Kobayashi (Kawasaki Heavy Industries, Ltd.), Robert Fleck (Queen's University Belfast), Roy Douglas (Queen's University Belfast)

20119533

Forged Straight Bevel Gear for Outboard Motor

Yuuki Eidome, Kouji Naganuma (SUZUKI MOTOR CORPORATION)

20119613

Transistor Coil Ignition System for Kick Start Based Small Engines

Dipanjan Mazumdar, Sivakumar A, Jabez Dhinagar (TVS Motor Company)

20119616

Optimization of Scooter Crankcase by Using Virtual Simulation and Testing

Saharash Khare, Dora K B, Manjunath Bhat, C Sasun, Sivakumar Balakrishnan (TVS Motor Company)

Engine Controls

Organizers: Yutaka Nitta (SUZUKI MOTOR CORPORATION), Tony Szczotka (Bosch)

20119508

KWP Communication Wake Up Pattern Detection Using Serial Communication Interface

Anand Patidar (Tata Motors Ltd.)

20119530

The Application on Model Based Calibration of Air Charge for Motorcycle Engine Management System

Xun Zhan, Hui Wang, Shousheng Wen, Yunfeng Xu (Chongqing Changan Visteon Engine Control Systems Co., Ltd.)



Technical Sessions

20119581

Development of Electronic Throttle Actuation for a 50cc 2-Stroke Scooter Application

Jeffrey Allen (Scion-Sprays Ltd.)

20119626

A Control Oriented Model Development for a Gas Control Path with a Stepper Motor-based Actuator for a Gas Engine

Himadri Bhushan Das, Kavitha Shailesh N, Srikanth Kanchi K (TVS Motor Company)

20119627

A Control Oriented Model Development for Fuel Delivering Structure of a Port Injection Based System

Kommuri Naga Kavitha, Himadri Bhushan Das (TVS Motor Company)

20119628

In Cylinder Air Determination Using Sliding Mode Observer for Turbocharged Diesel-Dual Fuel Engines with EGR

Ittdej Moonmangmee, Withit Chatlatanagulchai (Kasetsart University), Shinapat Rhienprayoon, Krisada Wannatong (PTT Public Company Limited)

20119629

Application of Air Fuel Ratio Control to a Motorcycle with Dual Oxygen Sensor

Takashi Abe, Yoshinobu Mori, Daisuke Yanase, Shinichi Kuratani (Kawasaki Heavy Industries, Ltd.)

20119631

Development of Low-cost Fuel Injection Control Unit for Small Motorcycles with Single-cylinder Engine

Keiji Kiyohara, Ryuji Asou (Keihin Corporation)

20119633

Air-path Supervisory Fuzzy Control of Diesel-Dual-Fuel Premixed-Charge-Compression-Ignition (DF-PCCI) Engine

Kittipong Yaovaja, Withit Chatlatanagulchai (Kasetsart University), Shinapat Rhienprayoon, Krisada Wannatong (PTT Public Company Limited)

20119637

Optimum Knock Sensor Location through Experimental Modal Analysis of Engine Cylinder Block

Yatin Vasant Chaudhary (TVS Motor Company), Stephen J Walsh (Loughborough University), Om Prakash Singh (TVS Motor Company)

20119655

In-cylinder Air and its Temperature Estimation of Diesel-Dual-Fuel

Premixed-Charge-Compression-Ignition (DF-PCCI) Engine with Turbocharger and EGR Systems using Fuzzy System

Kittipong Yaovaja, Withit Chatlatanagulchai (Kasetsart University), Shinapat Rhienprayoon, Krisada Wannatong (PTT Public Company Limited)

Engine Technology

Organizers: Takehiro Washizu (Yamaha Motor Co., Ltd.), Nagesh Mavinahally (LEHR Inc.)

20119506

Effects of Intake Port Geometry on the Performance of an S.I. Engine

B Selvaraj (TVS Motor Company), S.N Sridhara, G Indraprakash (MS Ramaiah School of Advanced Studies, Bangalore), A Senthilkumar, Arvind Pangaonkar (TVS Motor Company)



Technical Sessions

20119509

Compressed Air as Quality and Pollution Free Fuel Substitute in Reciprocating Engines - An Effective Solution to Improve The Engine Performance

Takayuki Sugita (Sanyo High School)

20119510

Estimation of the Indicated Mean Effective Pressure Using the Crankshaft Angular Velocity Variation

Kenji Nishida, Tetsuya Kaneko, Yoichi Takahashi, Koji Aoki (Honda R&D Co., Ltd.)

20119538

Research on Noise Reduction of Linkage Drive Gear in Extended Expansion Engine

Gaku Naoe, Kota Tokubi (Honda R&D Co., Ltd.)

20119540

A Novel 2D Computational Model for an Air-cooled Engine

Faiz Ahmed, Om Prakash Singh, Sandeep Kolluri, M. Kannan (TVS Motor Company)

20119552

Low Temperature Starting Techniques for Ethanol Engine without Secondary Fuel Tank

Chinda Charoenphonphanich, Wittawat Imerb (King Mongkut's Institute of Technology Ladkrabang), Nuwong Chollacoop (National Metal and Materials Technology Center (MTEC)), Katsunori Hanamura (Tokyo Institute of Technology)

20119555

Reduction of Engine Oil Consumption and Durability Improvement of Four Stroke Forced Air Cooled SI Engine

Parthiban Rajamani, B Sadesh, Mohan D Umate, V Lakshminarasimhan (TVS Motor Company)

20119557

Advanced Combustion System Analyses on a 125cc Motorcycle Engine

Frank Schuerg (Robert Bosch GmbH, Germany), K. Manikandan, Peter Roth (Bosch Ltd., India), Andre Kulzer, Andreas Kufferath (Robert Bosch GmbH, Germany)

20119566

Investigation of the Effects of Port Fuel Injection on Flame Behavior in Motorcycle Engine by Visualization Technique

Miki Yumoto, Kazuhiro Goto, Shoichi Kato, Minoru Iida (YAMAHA MOTOR CO., LTD.)

20119585

Charging and Powersport for Motorcycles: a contradiction?

Martin Abart, Christian Zinner, Oliver Schoegl, Stephan Schmidt (TU Graz), Thomas Schabetsberger, Stefan Leiber (BRP Powertrain)

20119595

Compact Engine Architecture for Best Fuel Efficiency and high Performance — Challenge or Contradiction

Christian Hubmann (AVL List GmbH)

20119615

Performance of Air Motor with Regenerating System Designed for Propulsion of Bicycle

Asako Sato, Yuya Abe, Akira Iijima, Hideo Shoji, Koji Yoshida (Nihon University)



Technical Sessions

Fuel Supply Systems

Organizers: Isato Taki (SUZUKI MOTOR CORPORATION), Dan Nehmer (BRP)

20119516

Development Of The Next Generation Fuel Pressure Regulator

Jeffrey A Schultz, Harish Domala (Schrader International)

20119528

Piezoelectric Controlled Carburettor

Kai Peter Niegetiet, Michael Reke, Sebastian P. Grobosch (VEMAC GmbH & Co. KG)

20119564

Development of the boost sensor-less fuel injection system for small motorcycles

Yuki Takano, Katsuhiko Utsugi, Kazuhiko Sakaguchi, Kenta Ohnishi (Honda R&D Co., Ltd.)

20119570

Research on the clogging mechanism of multilayered fuel filters and the extension of the filter life span in fuel with ethanol content

Atsushi Ito, Hideaki Ando, Keita Kinoshita, Fujio Umebayashi, Tsubasa Ishii (Honda R&D Co., LTD)

20119582

Effects of ethanol ratio and temperature on gasoline atomizing using the local-contact microwave-heating injector

Thu Huong Thi Tran, Hirososhi Enomoto, Motoki Kushita, Takaaki Sakitsu, Naoki Ebisawa, Kosuke Nishioka (Kanazawa University)

20119601

JP-8 Efficiency Optimization Using Fuel Injection in a 34cc 4- Stroke Spark-Ignition Engine

Cary W. Wilson (US Air Force), Frederick Schauer (Air Force Research Lab), John Hoke (Innovative Scientific Solutions Inc.), Paul Litke (Air Force Research Lab)

20119624

Fine atomization injector for gasoline engines

Akira Akabane (Keihin Corporation)

20119625

Improvement of fuel injectors for motorcycles engines

Kenichi Saitoh, Mitsutomo Kawahara, Kazuhiko Sato (Keihin Corporation)

HCCI

Organizers: Yasuo Moriyoshi (Chiba University), Jaal Ghandhi (University of Wisconsin-Madison), William Attard (MAHLE Powertrain)

20119521

Analysis of Supercharged HCCI Combustion Operating on a Blended Fuel

Ryosuke Shimizu, Akira Iijima, Koji Yoshida, Hideo Shoji (Nihon University)

20119522

A Study of HCCI Engine Operating on a Blended Fuel of DME and Methane

Kiyoshi Komatsu, Mitsuo Asanuma, Akira Iijima, Koji Yoshida, Hideo Shoji (Nihon University)

20119524

A Study of HCCI Combustion Using Spectroscopic Measurements and Chemical Kinetic Simulations - Effects of Fuel Composition, Engine Speed and Cylinder Pressure on Low-temperature Oxidation Reactions and Autoignition

Yusuke Takahashi, Kenta Suyama, Akira Iijima, Koji Yoshida, Hideo Shoji (Nihon University)



Technical Sessions

20119543

Effect of Anhydrous and Hydrous Ethanol on Performand and Non-Regulated Emissions of an HCCI Engine

Helmer R Acevedo, Felipe Rodriguez, Diego Gonzalez (Universidad Nacional de Colombia), Anil Bika (University of Minnesota)

Hybrids, Electric Drives, and Fuel Cells

Organizers: Yasuyuki Muramatsu (Yamaha Motor Co., Ltd.), Glenn R. Bower (University of Wisconsin-Madison)

20119527

Improvement of Fuel Consumption for the Strong Hybrid Motorcycle

Yukiharu Yuki Hosoi (YAMAHA MOTOR CO., LTD.)

20119546

Development of a Racing Motorbike with Electric Power Train

Peter Stuecke, Sebastian Fethke, Wolfgang Foken, Martin Jentsch, Andre Lehmann (Westsaechsische Hochschule Zwickau), Klaus Kloetzner (ADAC-Sachsen)

20119556

Development of Electric Scooter for Business Use

Toshiyuki Cho, Ryuji Akiba, Takashi Sone (Honda R&D Co., Ltd.)

20119560

Development of Electric Motor for Electric Two-Wheeled-Vehicle (EV) for Business Use

Naoki Kobayashi (Honda R&D Co., Ltd.)

20119586

A Methodical Approach for Thermal Management Simulation of Hybrid Powersport Applications

Stephan P Schmidt, Paul Rieger, Hermann Edtmayer, Alexander Trattner (Graz University of Technology), Christof Dutzler (BRP-Powertrain)

20119592

Concept Study of Range Extender Applications in Electric Scooters

Hans Juergen Schacht, Franz Winkler, Roland Kirchberger (Graz University of Technology)

20119596

Novel Range Extender Concepts for 2025 with Regard to Small Engine Technologies

Alexander Trattner, Patrick Pertl, Stephan Schmidt (Graz University of Technology), Takaaki Sato (DENSO Automotive Deutschland GmbH)

20119597

Low Cost Hybrid Scooter Study

Jeffrey Allen (Scion-Sprays Ltd.)

20119644

Development and Evaluation of Air-Cooled Fuel Cell Scooter

Kengo Ikeya, Yohei Takada, Toru Eguchi, Kazuhiko Mizutani, Tohru Ohta (SUZUKI MOTOR CORPORATION)

20119647

Integration Challenges for Air Cooled Fuel Cell Systems in Vehicles

Damian Patrick Davies, Nathan Grange (Intelligent Energy Ltd.)



Technical Sessions

Lubricants

Organizers: Tohru Nakazono (Yanmar Co., Ltd), Peter Kaub (Re-Sol, LLC)

20119513

The Development of a Low Viscosity, Highly Efficient Lubricant for Sport Motorcycle Applications

Gianluigi Zoli, Matthew Symonds, May Turner, Mark Leonard, Nick Solomon, Cliff Newman (Castrol Global Lubricants Technology)

20119536

Field to Lab Correlation and Lubrication Oil Change Frequency Estimation For Two Wheeled Vehicles Through Oil Analysis Technique

Anil V Singanamalli, Sasun C, Kumar Abhishek (TVS Motor Company)

20119545

Fuel Economy Durability - A Concept to be Considered for Motorcycle Oils

Brent Richard Dohner, George Szappanos, Alex Michlberger, Gajanayake Ananda (The Lubrizol Corporation)

20119634

Study of Lower Viscosity Motorcycle Engine Oils for Fuel Saving (2) -Anti-fatigue Performance-

Nobuaki Watanabe, Akira Mitarai, Maiko Inuzuka (Idemitsu Kosan Co.,Ltd.)

Materials

Organizers: Ogishi Hideyuki (Kawasaki Heavy Industries, Ltd.), David Palmer (BRP)

20119504

Application of J Factor to Evaluation of Leakage Quality for High Pressure Die Casting to Apply Closed-deck type Cylinder Block

Yamada Youji (YAMAHA MOTOR CO., LTD.), Jun Yaokawa (Tohoku University), Yoshii Hiroshi (YAMAHA MOTOR CO., LTD.), Anzai Koichi, Oikawa Katsunari (Tohoku University), Yuuta Bannai (YAMAHA MOTOR CO., LTD.)

20119607

Development of lightweight valve lifter made from DLC coated beta titanium alloy for motorcycles

Kosuke Doi, Hirotaka Kurita (YAMAHA MOTOR CO., LTD.)

20119612

Friction and Wear Reduction via Novel Porous Al-Si Cylinder Liners

Chung Hwa Kong (University Science Malaysia), Horizon Walker Gitano-Briggs (Universiti Sains Malaysia)

20119630

Lightening Approach for Small Vehicles by Developing Extruded Aluminum Suspension Arm

Ryo Yamauchi, Gouki Yotsuya (SUZUKI MOTOR CORPORATION)

20119645

Anodizing method for Aluminum alloy by using high-frequency switching electrolysis

Hiroomi Tanaka, Masahiro Fujita, Hitoshi Muramatsu (SUZUKI MOTOR CORPORATION)

20119649

Development of lead-free crankshaft for motorcycle

Osahiko Horii, Shigenori Yamada (SUZUKI MOTOR CORPORATION), Shigefumi Nishitani (Sumitomo Metals (Kokura), Ltd.), Kunihiko Hiraoka, Takahiro Nozawa (SUZUKI MOTOR CORPORATION)



Technical Sessions

Measurement & Simulation

Organizers: Tadao Okazaki (Kubota Corporation), Stephan Schmidt (Graz University of Technology), Andy Traxel (Briggs & Stratton Daihatsu LLC)

20119507

Craftsmanship - An objective approach to improve perceived quality in two wheelers

Anantha Narayanan Ramanathan, Gunalan Thanikachalam, Paul Christudass Arul Dass, Ravisankar Rajamani (TVS Motor Company)

20119518

Development of CVT Shift Dynamic Simulation Model with Elastic Rubber V-Belt

Daisuke Hirajo, Tetsuya Kimura, Koji Kobayashi (YAMAHA MOTOR CO., LTD.)

20119525

CFD investigation of the thermal behavior of a high performance bike engine

Stefano Fontanesi, Giuseppe Cicalese (University of Modena), Stefano Fantoni, Massimo Rosso (Ducati Motor Holding spa)

20119529

Investigation of the Flow Velocity in the Spark Plug Gap of a Two-Stroke Gasoline Engine Using Laser-Doppler-Anemometry

Kai Schreer, Kai W. Beck, Ulrich Spicher (KIT - Institut für Kolbenmaschinen)

20119534

Ultra-Downsizing of ICE: Simultaneous Increasing of Thermal Conversion Efficiency and BMEP while Reducing Emissions

Victor Gheorghiu

20119541

An experimental and computational investigation of two-stroke piston skirt scuffing

Om Prakash Singh, T. Sreenivasulu (TVS Motor Company), Yogesh Umbarkar (2Caepro Technologies Pvt. Ltd.), M. Kannan, Y. R. Babu (TVS Motor Company)

20119559

Formulation of three-dimensional piston behavior-analysis technique, which couples mechanism system analysis and structural analysis

Hirotake Murakami, Tomoharu Kawano, Naoto Ono, Narutake Nakanishi (Honda R&D Co., Ltd.)

20119563

Development of Simulation Technology for Dynamic Analysis of Water and Soil using Particle Method

Yosuke Yamamoto, Takayuki Sato, Genki Anraku (Honda R&D Co., Ltd.)

20119567

Accelerated Test Technique to Evaluate the Starting System of a Motorcycle Engine

S Sakthi Saravanan (TVS Motor Company)

20119608

Challenges In Muffler Mounting Design For Resilient Mounted Scooter Engine

Dora K B, Anandkumar M S, Anand R B, Jayaram N (TVS Motor Company)

20119609

Study of Auto Decompression Unit Tuning in a Motorcycle Engine

balasubramanian thiruvallur loganathan (TVS Motor Company)

20119622

An innovative exhaust muffler design for enhanced cooling

T Sreenivasulu, Om Prakash Singh, Kannan M (TVS Motor Company)



Technical Sessions

20119623

Sensory Evaluation for Motorcycle Gear Shift Feeling with Simulator

Akio Ikemoto (SUZUKI MOTOR CORPORATION)

20119639

Development of Computer Simulation Technology for Electrodeposition Painting Process

Takeshi Kashiya (SUZUKI MOTOR CORPORATION)

20119640

Study of Piston Temperature Measurement System used RF-MEMS

Takashi Tsuchiya (Shizuoka Institute of Science and Technology), Naoyuki Suda, Masaya Kunioka (SUZUKI MOTOR CORPORATION)

20119642

Prediction of Vibration Fatigue Life for Motorcycle Exhaust Systems

Masashi Michiue, Kenji Nishio, Takumi Kawasaki, Fumihide Inamura, Hiroshi Sugiura, Manabu Morikawa (Kawasaki Heavy Industries, Ltd.)

20119643

Prediction Method of the Speed Characteristics of V-Belt CVT

Michinori Takeuchi, Mitsugu Koide, Yoshihiko Sunayama (SUZUKI MOTOR CORPORATION)

20119646

Prediction Oil Parameter of Connecting Rod Small End Bearing of EF7 Engine by Artificial Neural Network by Simulation in AVL Excite Software

mohammad kazemi (tarbiat modares university), mohammad kazemi (IPCo), Timour Tavakoli Hashjin (tarbiat modares university), Siamak Alizadenia (IPCo), gholamhassan najafi (tarbiat modares university)

20119652

The Strength Analysis of ATV Frame on Computer Simulation

Daisuke Iwata (SUZUKI MOTOR CORPORATION)

20119653

The Stress Measurement of the Crankshaft for High-performance Engine

Satoshi Takayama (SUZUKI MOTOR CORPORATION)

NVH Technology

Organizers: Masahiko Sugimoto (Kubota Corporation), Ken Kicinski (Harley-Davidson Motor Company)

20119514

A Complete Acoustic Analysis on the Passive Effect of Small Engine Silencer Elements

Raimo Kabral, Hans Rammal, Juri Lavrentjev (Tallinn University of Technology), Fabio Auriemma (Universita Federico II di Napoli)

20119621

Design of Motorcycle Mufflers using Micro-Perforated Panels

Juri Lavrentjev, Hans Rammal, Raimo Kabral (Tallinn University of Technology)

20119650

Radiation Noise Analysis for Electric Scooter Swing-arm with Finite Element Method

Shunzi Sato, Yoshihiko Sunayama, Yoshisada Sakamoto (SUZUKI MOTOR CORPORATION)



Technical Sessions

Two Stroke Engines

Organizers: Tomoo Shiozaki (Honda R&D Co., Ltd.), Scott Miers (Michigan Tech University)

20119517

Multi-Layer Stratified (MuLS) Two-Stroke Engine

Nagesh S Mavinahally (LEHR Inc.), Jay S Veerathappa, Sharu Rajgiri (MavinTech), Vinayaka S Mavinahally (RECKON TECH INDIA)

20119526

1D and 3D CFD Investigation of Cyclic Dispersion and Knock Occurrence in a CNG Small-Size SI Engine

Stefano Fontanesi, Elena Severi (University of Modena), Fabio Bozza, Alfredo Gimelli (University of Naples "Federico II")

20119544

A Detached-Eddy Simulation (DES) of Scavenging and Mixture Preparation Process of a 2-Stroke Engine

Dalibor Jajcevic, Raimund Almbauer, Stephan Schmidt (Graz University of Technology), Karl Glinsner (BRP Powertrain GmbH & Co. KG)

20119620

Prediction of Secondary Air Injection System Performance Using Computer Simulation Techniques

Faiz Ahmed, Ajith Venkateswara Pai (TVS Motor Company)

20119638

Effect of Modified Intake Charge Stratification on the Performance Characteristics of a Two Stroke SI Engine

Arul Mozhi Selvan V (National Institute of Technology, Tiruchirappalli)

Vehicle Components

Organizers: Toshimi Kobayshi (Kawasaki Heavy Industries, Ltd.), Jim Carroll (South West Research Institute)

20119519

The Electric Steering Damper For Motocross

Nobuo Hara, Hitoshi Watanabe, Masanobu Negoro, Yasunobu Harazono, Masashi Matsuo, Terumi Yachi (YAMAHA MOTOR CO., LTD.), Satoshi Ishikawa (YAMAHA MOTOR ENGINEERING CO., LTD.)

20119539

A Failure Investigation of Engine Cradle Using Statistical and FE Methods

Senthilnathan Subbiah, O.P Singh, Srikanth Kaanchi Mohan, Arockia Pudumai Jeyaraj (TVS Motor Company)

20119568

Material and Geometric Optimization of Cast Handle bar subjected to Shock Loads

Dumpala Gangi Reddy, GSG Ravikanth (TVS Motor Company)

20119569

Design and Optimization of Rear Trailing arm in 3-wheeler

Ravi kanth GSG, Venkata Manga Raju K (TVS Motor Company)

20119573

Design of Motor-scooter Frame by Parametric Multi-body and Finite Element Integrated Approach

Govardan Daggupati, Dora K B (TVS Motor Company)



Technical Sessions

20119604

Stabilizer Bar Elastomer Bush Design with Self Lubricated Inner Liner to Prevent Noise

Anandan Sivakumar (Tata Motors Ltd.), Raghvendra Gopal

20119611

Design Optimization of Frame Stiffness through Hydroforming

Meghashyam Laxman Dighole, Dora K B, Chandan M R (TVS Motor Company)

Vehicle Dynamics and Safety

Organizers: Masayuki Baba (Honda R&D Co., Ltd.), Deane Jaeger (Harley-Davidson Motor Company),
Jim Carroll (South West Research Institute)

20119502

Simulation and Analysis of Small-vehicle Deceleration to Reduce Occupant Injury at Frontal Collision

Takanobu Fujimura (SUZUKI MOTOR CORPORATION)

20119537

Ride Comfort Analysis of Motorcycle Using Virtual Prototype

Chandan Bansilal Chavan, Dora Karedla, Rengarajan Babu, Mudassar A Shaikh (TVS Motor Company)

20119548

A Prediction of Cruising performance of Planing Craft with outboard motor

Tatsunori Kataoka (SUZUKI MOTOR CORPORATION)

20119558

Stability control of motorcycle

Yoshihiro Masuda, Yoshimoto Matsuda (Kawasaki Heavy Industries, Ltd.)

20119619

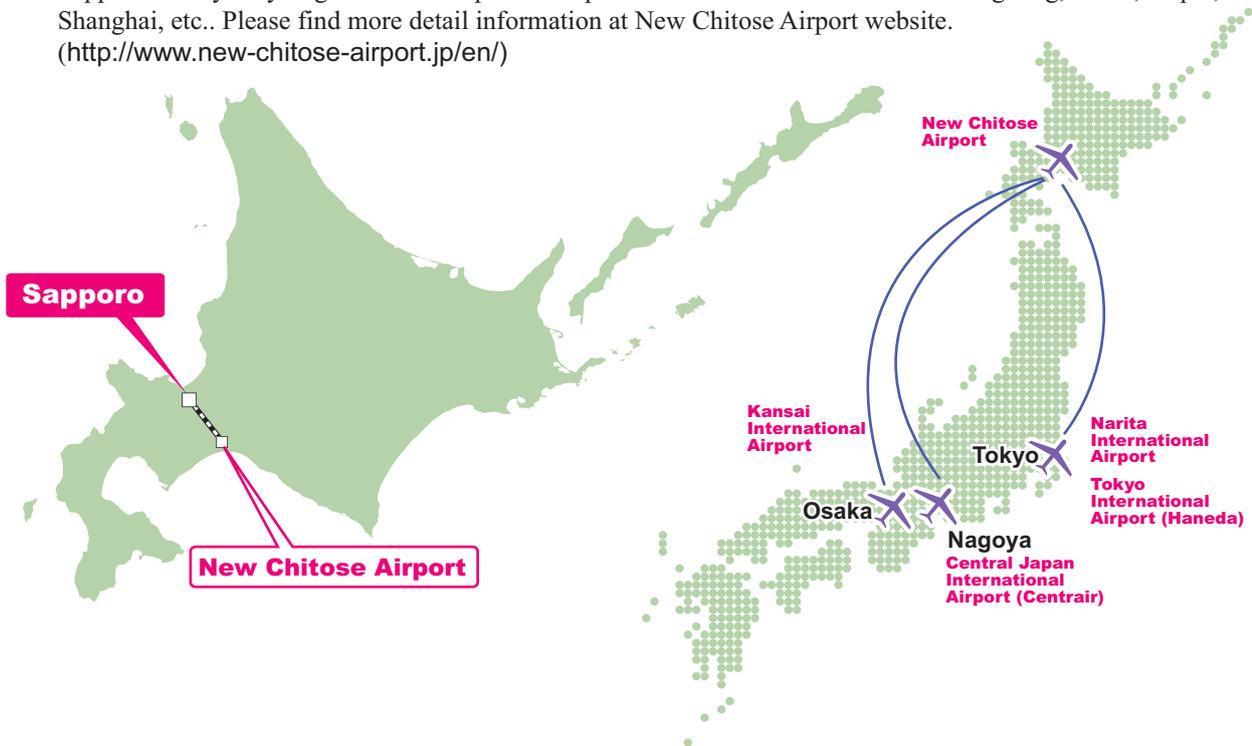
Study on stability of a two wheeler with heavy luggage

Deependra Singh Shekhawat, Venkata Mangaraju Karanam, Babu R (TVS Motor Company)



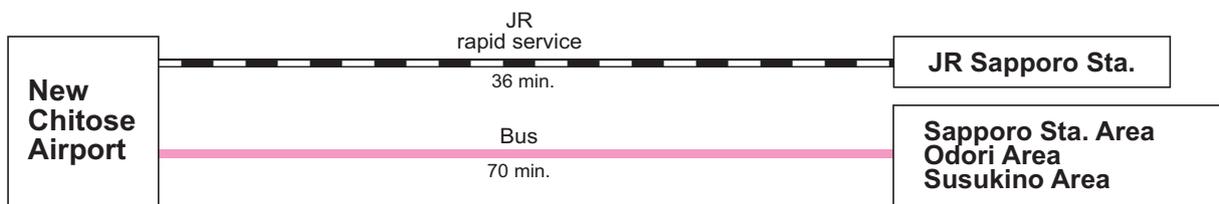
Travel Information

Sapporo is very easy to get from other parts of Japan as well as from overseas like Hongkong, Seoul, Taipei, Shanghai, etc.. Please find more detail information at New Chitose Airport website.
(<http://www.new-chitose-airport.jp/en/>)



For Sapporo Map, please go to page 37 and 48

From Airport to City Center of Sapporo



Airport Information

●Narita International Airport	http://www.narita-airport.jp/en/
●Tokyo International Airport (Haneda Airport)	http://www.tokyo-airport-bldg.co.jp/en/
●Kansai International Airport	http://www.kansai-airport.or.jp/en/
●Central Japan International Airport (Centrair)	http://www.centrair.jp/en/
●New Chitose Airport	http://www.new-chitose-airport.jp/en/

Timetable of Transportation

JR Train	http://www2.jrhokkaido.co.jp/global/english/ttable/index.html
Bus	http://www.new-chitose-airport.jp/en/access/bus/

Visa Application

For detail, please visit below URL.

Ministry of Foreign Affairs of Japan website http://www.mofa.go.jp/j_info/visit/visa/

If it is necessary to have an invitation letter for visa, you are required to contact at setc2011@jsae.or.jp for the letter. A staff will send an email to ask your information required for the documents.



Sapporo Information



Sapporo is Japan's 5th largest city with a population of 1.9 million, and the capital of Japan's northern island of Hokkaido. Only 150 years or so have passed since the pioneers first arrived, making it a relatively young city. Since the staging of the Winter Olympics in 1972, Sapporo has continued to develop into a truly international city, hosting various international events including the FIFA World Cup in 2002, the Ski Jumping World Cup, the Nordic World Ski Championships, and in 2017 is set to host the Asian Winter Games. Despite being a large metropolis, a short trip out to the suburbs reveals abundant natural scenery, where outdoor leisure activities such as hiking, canoeing and camping can be enjoyed. Each of the four seasons bring their own delights, and every year many tourists from both home and abroad visit the region, which is famous for being one of Japan's leading producers of delicious foodstuff. The city also ranks number one among the places Japanese people would like to live.

History



Originally inhabited by the indigenous Ainu, the full-scale colonization of Sapporo by the Japanese government began in 1869. The name Sapporo is said to have derived from the Ainu words sari poro pet meaning a river lined with a large reed bed, or sat poro pet meaning large dried-up river.

Thanks to the efforts of Edwin Dun and Horace Capron, who were hired from the United States by the government during the colonial period, the American influence on urban planning, architecture, agriculture and stock farming is still evident today.

Climate

Hokkaido's climate, with its four distinct seasons, means that summers are warm



with temperatures exceeding 30°C on some days, and winters are very snowy with some days as cold as minus 10°C. Unlike Japan's main island of Honshu, Hokkaido has no rainy season, and spring, summer, autumn and winter can each be enjoyed in their own distinctive way.

Sapporo is situated at the same latitude as Milan in Italy and Toronto in Canada, and is unique in that it is the world's only city with a population of over one million, where more than 5 meters of snow falls every year.

Culture



The Pacific Music Festival (PMF), an international educational music festival

aimed at nurturing young musicians from around the world, which began after a proposal by Leonard Bernstein, is held every summer. In addition, the Yosakoi Soran Festival (June), which developed from a traditional Hokkaido folk song and began as a student-planned event, is now a huge event that attracts participants from throughout Hokkaido, Japan and even overseas. The city also boasts professional baseball, soccer and basketball teams.

Food



Thanks to the extreme differences in temperatures and the natural environment of the mountains and the seas, Hokkaido is a treasure-trove of agricultural and marine products. Dishes made from such fresh, delicious ingredients, as well as sweets prove extremely popular throughout Japan, and such delights are



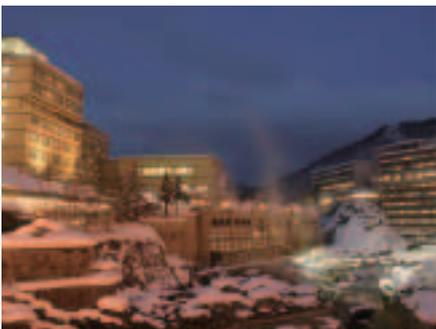
Sapporo Information

famous as the “Hokkaido Brand” overseas, too. Delicious food from all around Hokkaido can be found in Sapporo, and the cuisine is an important element of tourism here. In particular, the Susukino area of the city is where many restaurants and bars can be found, with the choice too exhaustive for even the locals.

Typical Sapporo dishes include ramen, jingisukan (mutton barbecue) and soup curry, with subtle differences in flavor according to individual establishments. Sapporo Beer, which is available throughout Japan, has a special beer that can only be enjoyed in Hokkaido.



Hot springs



Hot-spring water can be found even in central Sapporo, and there are a number of facilities where non-overnight guests can also enjoy bathing. For those wishing to relax a little more, the Jozankei Onsen area is recommended.

This spa area includes several accommodation facilities where hot springs and dining can be enjoyed, and is popular among overnight guests from both home and abroad. Many of the facilities offer traditional Japanese-style rooms, where guests can experience Japanese culture while relaxing in a yukata robe.

Shopping



The downtown districts around Sapporo Station and Odori are expansive shopping areas, where establishments from department stores to small shops sell almost everything from world-famous brand products to handmade knick-knacks.

Famous Hokkaido confectionary can be found in the basements of most major department stores. Those looking for electrical goods should head for the area around Sapporo Station.

Entertainment



Sapporo has various cultural facilities, including museums, art galleries and even a zoo, but maybe the best way to enjoy Sapporo is the Susukino area at nighttime. This entertainment district is chock-a-block

with izakaya-style wining and dining establishments and bars, and their close proximity means you can walk between several on a “pub crawl” just like the locals.

Being an entertainment district, the streets are bustling with people at night, and are safe enough for females to walk alone.

Exchange Cashing

Many city center banks offer foreign exchange services, however they only open between 9:00 am and 3:00 pm. Outside these hours, the following places are recommended.

Hokkaido Bank Foreign Exchange Plaza (Odori area: Hinode Bldg. B2, Minami 1-jo Nishi 4-chome (South 1 West 4?), Chuo-ku, Sapporo)

Weekdays: 10:00 am – 7:00 pm

Saturdays: 10:00 am – 5:00 pm

※Closed on Sundays and public holidays

Credit card cashing is available at Seven Bank ATMs (this service is not available at other banks’ ATMs). Seven Bank ATMS are located inside Seven Elevens (24-hour convenience stores) and Yodobashi Camera (Sapporo Station area) in the city.

For further details, please refer to the following website.

<http://www.sevenbank.co.jp/intlcard/index2.html>

Useful website

For more details about Sapporo and sightseeing, please visit the following URL.

Hokkaido Tourism Organization <http://en.visit-hokkaido.jp/>

City of Sapporo <http://www.welcome.city.sapporo.jp/english/index.html>

Sapporo Tourist Association <http://www.sta.or.jp/english/>

Tourist Information Desk

English staffs available at a several Tourist Information Desk.

Please find the information at

<http://www.welcome.city.sapporo.jp/english/access/information.html>.



Accommodation

From cheap to luxury, there are various kind of hotels in Sapporo, and they offer you a great time during your stay. Recommended hotels are as following:

High Class

Sapporo Station Area	<ol style="list-style-type: none"> 1. Keio Plaza Hotel 2. JR Tower Hotel Nikko Sapporo 3. Hotel New Otani Inn
Odori Area	<ol style="list-style-type: none"> 4. Hotel Okura Sapporo 5. Sapporo Grand Hotel 6. Royton Sapporo

Middle Class

Sapporo Station Area	<ol style="list-style-type: none"> 7. Aspen Hotel 8. ANA Hotel Sapporo 9. Best Western Hotel Fino Sapporo 10. Century Royal Hotel 11. Crescent Hotel 12. Hotel Crest 13. Hotel Gracery Sapporo 14. Hotel Keihan 15. Hotel Montrey Sapporo 16. Hotel Montrey Edelfhof 17. JR Inn Sapporo
Odori Area	<ol style="list-style-type: none"> 18. Hotel Resol Trinity Sapporo 19. Tokyo Dome Hotel Sapporo

Budget

Sapporo Station Area	<ol style="list-style-type: none"> 20. Toyoko Inn Sapporo-eki Nishi-guchi Hokudai Mae 21. Toyoko Inn Sapporo-eki Kita-guchi 23. Hotel Sunroute 24. Hotel Route Inn
Odori Area	<ol style="list-style-type: none"> 25. APA Odori Koen 26. APA Sapporo 27. Resol Sapporo Minami 2jo

How to Book

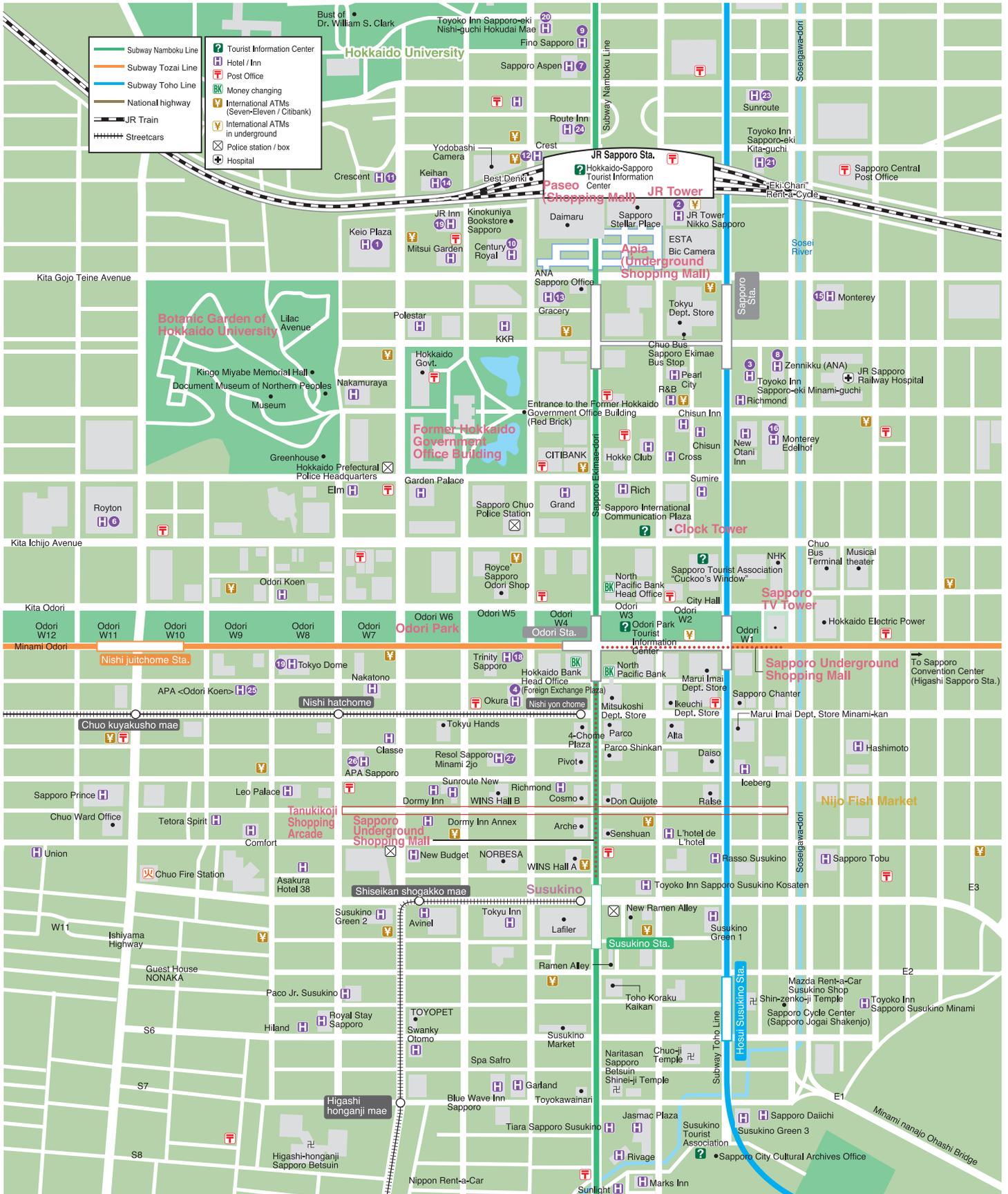
The following booking websites are easy and helpful for your accommodation booking.

Rakuten Travel	http://travel.rakuten.com/hotel/asia/japan/hokkaido/sapporo.html
JAPANIcAN.com	http://www.japanican.com
Japanhotel.net	http://www.japanhotel.net/

Note: Accommodation prices are subject to change according to the seasons.

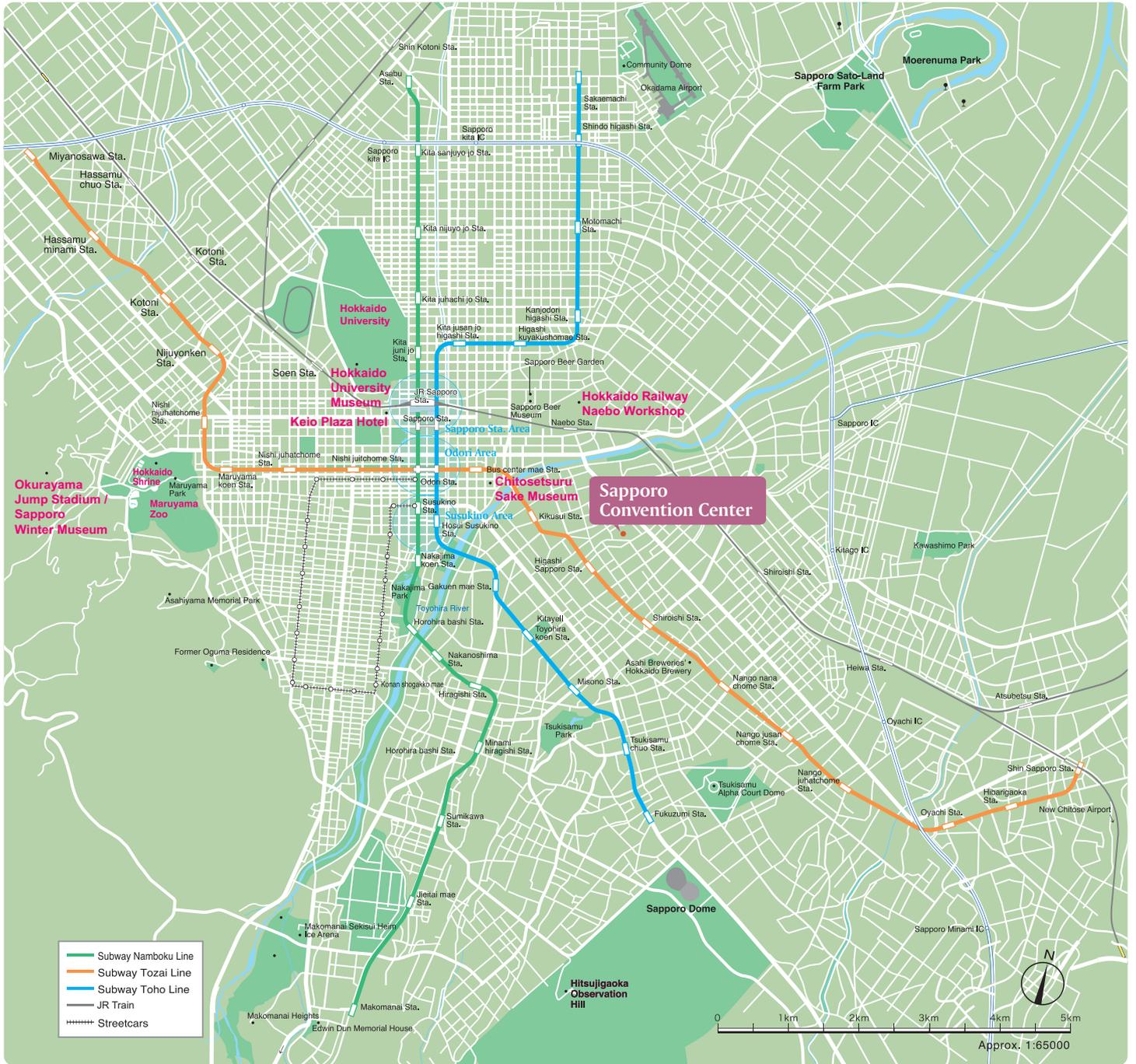


Hotel Map





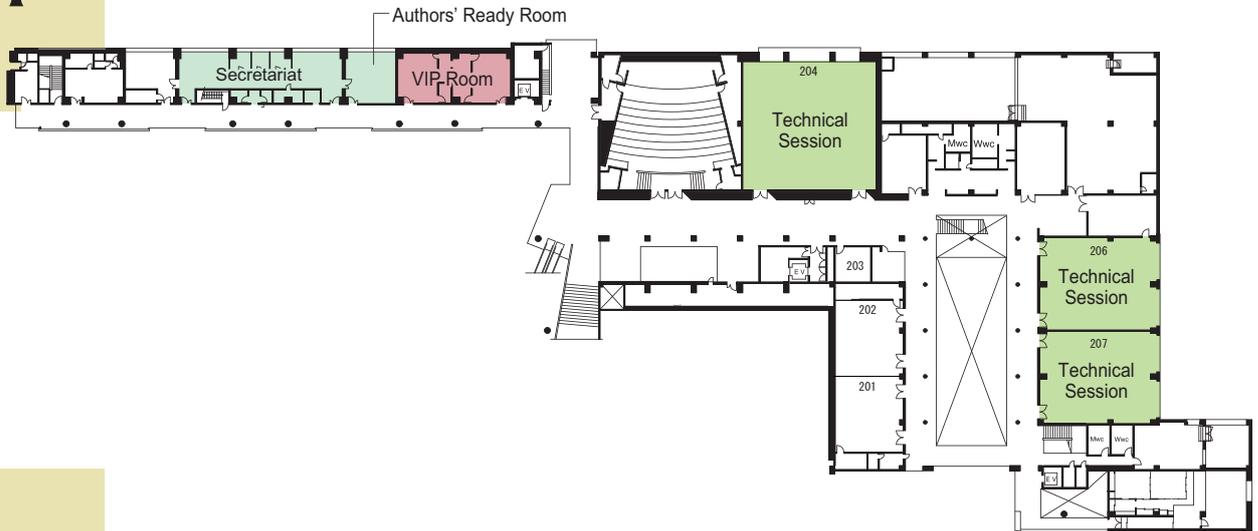
Sapporo City Map





Floor Guide

2 F



1 F





<http://www.setc-jsae.com/>

Organized by
Society of Automotive Engineers of Japan
SAE International