Strategic Regional Innovation Support Program by MEXT (For recovery from Tohoku Disaster, International competitiveness strengthening regional) Next-Generation Automobiles / Miyagi Area

Next Generation Automobiles Miyagi Area Summer Camp 2016



Venue: Kawatabi Seminar Center & Tamatsukuri-SoDate: Saturday, August 6 to Monday August 8

Organized by;

Next Generation Automobiles Miyagi Area, Human Cultivation Participants;

30 of Students and 29 of industry-government-academia

Next-Generation Automobiles Organization



●Katsuto NAKATSUKA ICR • Project Director



Strategic Regional Innovation Support Program (Miyagi Area) Project Director. He was born in 1941 Nagano Prefecture. He graduated Tohoku University Graduate School of MSc Mining Engineering. He became a Tohoku University professor in 1987, and retired in 2005. Meanwhile Faculty of Engineering, Graduate School of Engineering length, Tohoku University Vice-Chancellor (Research in charge), served by the same director. Lecture experience mineralogy, physics, chemistry, exploration, mineral processing engineering, earth science, deposit studies, geothermal development engineering, surface chemistry, magnetic material engineering, environmental engineering and so on. JST Sendai Innovation Plaza director such as another experience.

Research Fields and Themes

Thomas of the Dessent	Permanentative of the Personal		Takalus University Affiliation and Desition
atalysts	Development of the Catalysts for Next Generation Automotives	Akira Mivamoto	Professor / New Industry Creation Hatchery Center
	Research of the Ceramic materials for Next Generation	Tsugio Sato	Professor / Institute of Multidisciplinary Research for Advanced Materials
	Research of the Fine particles synthetic for Next Generation	Hiroshi Inomata	Professor / School of Engineering
	Functional Ceramics Synthesis	Hirotsugu Takizawa	Professor / School of Engineering
	Hybrid Nano-Particles	Masafumi Ajiri	Professor / Advanced Institute for Materials Research
	Synthesis of Monodisperse Particle	Mikio Konno	Professor / School of Engineering
	Development of Solid Catalyst	Keiichi Tomishige	Professor / School of Engineering
	Synthesis of Hybrid Nano-Particles and Application to Functional Materials	Atsushi Muramatsu	Institute of Multidisciplinary Research for Advanced Materials / Professo
	Development of Catalytic Simulator	Ai Suzuki	New Industry Creation Hatchery Center Assistant Professor
otor and Magnet	Development of Transportation System for Next Generation	Fumihiko Hasegawa	New Industry Creation Hatchery Center Professor
	Development of Non-magnet motor and Driving method	Osamu Ichinokura	Protessor / School of Engineering
	Development of High-performance magnet	Satoshi Sugimoto	Protessor / School of Engineering
	Research of Recovered Rare Metal	Takashi Nakalitura	Professor / Insulate of Multidisciplinary Research for Advanced Materials
	Development of Non-magnet motor and Driving method	Hiroki Goto	Assistant Professor / School of Engineering
bot	Development of Rescue Robot	Satoshi Tadokoro	Professor / School of Information
	Development of Partner robot which helps operation	Kazuhiro Kosuge	Professor / School of Engineering
	Development of Double arm robot and Space robot	Masaru Uchiyama	Professor / School of Engineering
	Development of Rescue Robot	Kazunori Ohno	Associate Professor / New Industry Creation Hatchery Center
	Research of Multi body Emphasis	Yasuhisa Hirata	Associate Professor / School of Engineering
	Research of Sensing	Eijiro Takeuchi	Assistant Professor / School of Information
	Research of Next generation automobiles, Next generation mobility and automatic driving	Takahiro Suzuki	Professor / New Industry Creation Hatchery Center
eless Charging	Development of Wireless Charging System	Hidetoshi Matsuki	Professor / Graduate School of Biomedical Engineering
	Development of Wireless Charging System	Fumihiro Sato	Associate Professor / School of Engineering
	Development of Wireless Charging System	Tetsuya Takura	Assistant Professor / School of Engineering
tery	Research of Ion Conduction	Junichi Kawamura	Professor / Institute of Multidisciplinary Research for Advanced Materials
	Research of Heat & Mass Transfer	Shigenao Maruyama	Professor / Institute of Fluid Science
	Hydrogen Storage, Ion Conduction	Shinichi Orimo	Professor / Institute for Materials Research
	Biosensing device	Tomokazu Matsue	Protessor / Advanced Institute for Materials Research
	Highly efficient hydrogen production system	Hitoshi Takamura	Protessor / School of Engineering
	Construction and application of functional materials	Kazuyuki Tohji	Professor / Graduate School of Environmental Studies
	Research of advanced devices by intelligent Nano process	Selji Samukawa	Professor / Institute of Fiuld Science
	Development of energy device materials	Itaru Honnma	Professor / Institute of Multidisciplinary Research for Advanced Materials
	Development of multi-scale battery simulator	Akira Miyamoto	Professor / New Industry Greation Hatchery Genter
	Development of multi-scale battery simulator	Nozomu Hatakeyama	Associate Professor / New Industry Creation Hatchery Center
miconductor	Development of semiconductor sensor	Shigetoshi Sugawa	Professor / Graduate School of Engineering
	Engine combustion pressure sensor	Akira Yoshikawa	Professor / Institute for Materials Research
erface and Friction	Research of Skin friction	Kazue Kurihara	Professor / Advanced Institute for Materials Research
	Development of Surface modification technology	Toshiyuki Takagi	Professor / Institute of Fluid Science
	Research of Surface examination method	Tetsuo Shoji	Professor / School of Engineering
	Research of Tribology	Koshi Adachi	Professor / School of Engineering
	Development of Multi-scale Tribology Simulator	Akira Miyamoto	Professor / New Industry Creation Hatchery Center
	Development of Multi-code Tribulant Condition	D	Assistant Darferson / Darferson / New Industry Oracting Hatchers
	Development of Multi-scale Tribology Simulator	Ryuji Miura	Assistant Professor / Professor / New Industry Greation Hatchery
mbustion	Compustion under high temperature and high pressure environment	Hideaki Kobayashi	Professor / Institute of Fluid Science
insubtion	Compustion of alternative fuel biomass and synthetic fuel	Kaoru Maruta	Professor / Institute of Fluid Science
Iding and junction	Research of Junction process	Hiroyuki Kokawa	Professor / School of Engineering
	Development of Multi-scale material junction simulator	Akira Miyamoto	Professor / New Industry Creation Hatchery Center
	Development of Multi-scale material junction simulator	Nozomu Hatakeyama	Associate Professor / New Industry Creation Hatchery Center
sting. Forging and Nano-Fabrication	Nanoprecision manufacturing technology	Tsunemoto Kuriyagawa	Professor / School of Engineering
Casting, Forging and Nano-Fabrication	Research related rolling	Fumio Fujita	Professor / School of Engineering
	Research of die-cast	Koichi Anzai	Professor / Institute for Materials Research
	Materials development by Processing	Akihiko Chiba	Professor / Institute for Materials Research
Structurel materials Organization	Research of Material surface reforming	Hitoshi Soyama	Professor / School of Engineering
uctural material Organization control	Material organizational structure analysis	Toyohiko Konno	Professor / Institute for Materials Research
Vision Analysis	Research of Information Display	Tatsuo Uchida	Visiting Professor / New Industry Creation Hatchery Center
	Development of High-speed vision	Takafumi Aoki	Professor / Graduate School of Information
	Development of Computer Vision	Takayuki Okatani	Associate Professor / School of Information
	Research of Display Device	Masahiro Nishizawa	Visiting Professor / New Industry Creation Hatchery Center
dical Application and MEMS	Research of Brain function science	Ryuta Kawashima	Professor / Institue of Development, Aging and Cancer
	Research of relation between illness and driving	Masafumi Goto	Professor / New Industry Creation Hatchery Center
	Research of MEMS	Masayoshi Esashi	Protessor / Advanced Institute for Materials Research
	Highly functional creating and Cost reduction for titanium	Naoyuki Narushima	Protessor / School of Engineering
cal Industry Policy	Research of Globalization scenario	Masato Hisatake	Visiting Professor / New Industry Creation Hatchery Center

<Round Table>

Governor of Miyagi Prefecture

President of Tohoku University Chairman of Tohoku Economic Federation

Mayor of Sendai

Business Promotion Systems Implementation

Promotional Council for Next Generation Automibiles

Project Management Board International Technology Trend Survey Unit Industrialization - Commodification Promotional Committe Patented Promotional Committee Regional Public Relations Promotional Committee Research Promotional Committee Progress Evaluative Committee Public Relations Committee Intelligent Cosmos Research Institute

T

Tohoku University New Research Organization for Disaster Reconstruction Industry-Academia-Government Liaison Organization

Sendai City, Tohoku Bureau of Economy, Trade and Industry, Tokeiren Business Center, Miyagi Organization for Industry Promotion, Miyagi Industrial Association, Miyagi Council for Automotive Industry Promotion, Sendal City Industrial Promotion Organiz 77Bank, Tohoku Innovation Capital Corporation Other Universities and Technical Colleges, Advanced Industrial Science and Technology Industrial Promotion Organization

Cooperation within Tohoku Area and Other Region centered on Iwate Prefecture

Research Institute Coordinator TECHNICAL SEEDS MATCHING Company Coordin Researcher

We promote creation of new business 'eggs', by aiming for the best

combination of technology seeds and business needs in the region.

Notes

Meeting time and place

August 6 (Sat) 8:30 in front of New Industry Creation Hatchery Center (NICHe), Tohoku Univ.



Facility

• Only minimum goods are prepared at Seminar Center (NO convenience store)

- Car Arrangement is available in emergency situation
- No Air-conditioning
- Measures for cold weather is needed
- Insect repellent, Insect bites drugs are prepared
- Yukata and amenity goods are prepared at Tamatsukuri-So

Emergency case

•4 lecturer(Shuichi MATSUMOTO:BUNKYO Univ., Shigeyuki YAMABE, Nozomu HATAKEYAMA, Patrick Alain Bonnaud:TOHOKU Univ.) will stay at Lecturer building. In emergency case, please

come to lecturer building or contact below.



Summer Camp Outline

Objective

In the next-generation vehicles project (Miyagi Prefecture area), think of the future of the Tohoku region of the car, we carry out human resource development in order to foster a future of excellent leader. We will hold a summer student camp in order to promote human resource development. We will make the group discussion and presentation to make a mutual understanding about the latest situation of the next-generation automotive-related initiatives, the theme of matching of the campus needs and regional needs. Each group is made up sprinkled various faculty, other university students, foreign students. We expect that idea by free and flexible thinking are created through the group work. Speakers and teachers from companies advice for students of challenges announcement, it will contribute to the training of young people for the next generation. We will aim to be a new discovery and an exchanging place for students, lectures.

Theme

"Matching of the campus needs and regional needs"

Sub-theme: When; "In the near future /up to 2020", "Distant future/ 2030-2050 or later", Where; "Flat-coastal areas", "Hilly and mountainous areas "What; "Cars X not limited to automobiles, it may be considered widely the hardware of the movings means", "Transportation Systems X tele-communications system may include such energy infrastructure " Students give a presentation in 6 groups each theme.

Points

•Make a proposal based on the knowledge, technology and information obtained from a plurality of lectures (indicate based lectures)

 In the proposal, to emphasize the novelty and originality, and the feasibility of the technology and business both sides

Make a roadmap for Implementation of the proposal as much as possible

• Define the target area and structure and organization for implementation as much as possible.

If it is proposed by taking advantage of own research, more desirable

Presentation

• Group theme and title will be made the interim report in the second day.

• Each group will make about 15 minutes presentation with PC and projector.

 In the poster discussion, each groups will be questioned by adviser and make a discussion in front of the poster.

※PC and printer will be prepared in each secretariat, but you should make an announcement data on your own PC.

Please draw a big picture, take advantage of the ideas that came out in the brainstorming.
 We have prepared marker for posters, imitation paper, scissors, sticky notes, tape, ruler, correction tape. Please share other stationaries with other groups.

*Lecturers will paste the Post-it written an advice comment on a poster.

belongings

□writing utensils □notebook / memo pad □PC for presentation

□light meal and drink (no convenience store nearby)

□bug spray □fan (no air-conditioning)

goods for stay (changing clothes, clothes for cold weather, towel, tooth brush, soap, shampoo)

Schedule

August 6 (S	at)	
8:30- 9:30	Meet at Aobayama/ Aobayama tour/ ride on th	e bus
	※commuting expenses to Aobayama is NOT in	luded
10:20-11:20	Tagajo, Miyagi reconstruction park tour/lecture	by Prof. Fumihiko Hasegawa
12:30-13:30	Lunch: A•RA•DATENA-MICHINOEKI	
13:55-14:00	Arrive at Kawatabi Joint Seminar Center, luggag	e carrying, Venue ready
14:00-14:05	Opening speech; Project Director, Prof. Katsuto	o Nakatsuka
14:05-14:20	Brainstorming basic course; Masaharu Okudera	
14:20-14:50	Information of the traffic for solving region probl	ems; Shuichi Matsumoto
14:50-15:10	Various Works for Regional Traffic Solutions; Tal	kahiro Suzuki)
15:10-15:30	Self-introductions for Advisers	
15:30-16:45	Group Discussing to decide the theme;	
	Brainstorming (1h) and free discussion (15min.)
17:00-17:40	Clean up, dormitory preparation; Get sheets f	rom the center
	move to Tamatsukuri-so by bus	Please take a bus with your towels as soon as
17:40	Taking a Onsen bath upon arrival	you finish the preparation. You'll take a hot spring tab.
18:30-20:30	Social gathering XSelf-introduction for students; 1min.×31)
20:40-21:00	Move to Seminar Center by bus	
21:00-	Preparation for group presentation each buildi	ng at seminar room/sleeping
	* All students will stay at Kawatabi Seminar C	Jenter
	Rease don't stay up late for tomorrow that	cussion;
	r lease don't stay up late for tomorrow thot	4511.

Schedule

August 7 (S	Sun) Please be ready the book which is
8:00-	Wake up /Breakfast written by Mr. Kageyama; handed on the 1 st day
9:00-11:00	Intermediate presentation/Question-and-answer session ※Please announce your group presentation title at the beginning
11:00-11:15	Automated Driving and Lows, Investigation and Patents; Mr. Kotaro Kageyama
11:1 <mark>5</mark> -11:45	Future Technologies for Automobile; Mr. Nobuyoshi Koyama
11:45-12:00	Researches utilize Driving simulator; Dr. Shigeyuki Yamabe
12:00-13:00	Lunch
13:00-13:15	Strengthen your "Finding Ability"; Mr. Tatsuhiko Yoshimura
13:15-17:00	Group Discussion
17:00-18:30	Move to Tamatsukuri-so, Bathing in Onsen
18:30-20:40	Social gathering
20:40-21:00	Move to the Seminar Center by bus
21:00-	Preparation for group presentation each building at seminar room/sleeping
August 8 (I	Mon)
8:00-	Wake up /Breakfast
9:30-10:30	Group Presentation; 15min* 6G, using PC and slids
10:30-11:30	Poster Presentation
11:30-12:30	Comments and Reviews by Advisers
12:30-12:40	Closing;; Prof. Aklira Miyamoto, Chairman of Research Promotion Committee
12:30-13:30	Lunch/Back to Sendai by bus; at around 15:30 via Sendai station to Aobayama

Advisor Information

•Yoshinobu KOYAMA

:Manager of Toyota Motor East Japan Co., Ltd. Development Planning Department
He graduated from Musashi Institute of Technology Graduate School of Mechanical Engineering (now Tokyo City University). He then joined Kanto Auto Works Co., Ltd. in April
1988.Experimental part first experiment Office, rosacea with a part, held a thermal fluid experiment chief, car wind noise development and evaluation, FF car · FR car vibration noise evaluation, ergonomic evaluation, air-conditioning performance evaluation, such as CFD technology development engaged in the business. After the inauguration of Toyota Motor Corp. on July 2012, he was appointed to the planning and development director of the company on January 2014. Doing Technology Development summary of company-wide.

Kotaro KAGEYAMA KAGEYAMA Law and Patent Office

After completing the Master's course of The University of Tokyo Graduate School of Industrial Chemistry MSc, in 1968, he had been wored for Asahi Glass Co., Ltd., a factory. Currently, he has been worked as a lawyer, patent attorney. He specialized reconstruction of the company and intellectual property rights relationship of business. He worked for Kumamoto, Oita University, etc., as a professor and he made efforts to reconstruction, also he had been the president of Tohoku Bunka Gakuen University about a year. He has been Tohoku University Future Science and Technology Joint Research Center Senior Research Fellow from 2015.

Tatsuhiko YOSHIMURA G D Cube Consulting

After completing Tohoku University Graduate School of Mechanical Engineering Department of the second master's program in 1968, he joined Toyota Motor Corporation, and he had engaged strength experiment for 32 years. Engineering Dr. (Tohoku University) in 1988. Kyushu University Graduate School of Engineering, Professor, Faculty of (solid mechanics course)in 2000. General Motors executive director (reliability and durability strategy charge of)in 2003. Creative problem solving as G D cube consulting representative in 2007, quality problem prevention, the management, etc. of the development is carried out. 1% inspiration and 99% Perth pin configuration or (which is also creative act) do with.

Masaharu OKUDERA :Professor, Iwate University Faculty of Engineering, Manufacturing
 Engineering Factory Entrepreneurs Support Office

He graduated Tohoku University Graduate School of Engineering, Nuclear Engineering Department in 1977. He then joined Sukegawadenkikogyo Co., Ltd., and then joined Alps Electric Co., Ltd. in 1989, magnetic recording, after engaged in LCD · thin film process technology, etc., process technology manager, processing technology development manager, elemental technology development manager. He retired the company in 2012, the same year he became a frofessor of Iwate University Faculty of Engineering, Manufacturing Engineering factory. His areas of expertise include production technology, process technology.

•Shuichi MATSUMOTO Associate Professor, Bunkyo University School of Information After assistant professor of Kochi University of Technology and Keio University full-time lecturer, he arrived in Bunkyo University School of Information in 2014. It specializes in intelligent transportation systems (ITS), transportation planning.

In rural areas has had a unique traffic problems in each of its land, the use of information technologies such as ITS has become important for the problem solution. In this summer camp, he explains how to improve regional transportation issues on the basis of the ITS of Practice in the region

. Hiroki SATO SATO Management Institute, inc

He was born in Shiogama. After graduating from the Tohoku University Faculty of Engineering Department of Mechanical Engineering in 1966, he joined Toyota Motor Corporation. He managed in Vehicle planning, vehicle motion performance and chassis development and design for the person 31 years. After working for the Akebono Brake, currently he is consulting mainly in the US aircraft company as the automotive industry promotion advisors and SMI (SATO MANEGEMENT INSTITUTE) CEO of INC of Miyagi Prefecture.













Advisor Information



Fumihiko Hasegawa Professor, Tohoku University Future Science and Technology Joint Research Center Deputy Director

He graduated from the Tohoku University resources Engineering in 1979. After he complited Graduate School of Engineering doctoral the previous fiscal year , he joined Nippon Steel Corporation in 1985. And then he joined advanced technology and Research Institute through the same university beneficiation smelting laboratory assistant in 1981. working on new material development. Through the New Energy and Industrial Technology Development Organization seconded 1993, Nippon Steel 1995 (Inc.) Technology Development Planning Department, to return to the Tohoku University in 2000, Tohoku University Future Science and Technology Joint Research Center Deputy Director in 2003, he then became a professor in 2005. Regional economic organizations, have launched a variety of projects in collaboration with the local government.

Takahiro Suzuki Professor, Tohoku University Future Science and Technology Joint Research Center Deputy Director

☆Planner, Moderator in this Summer Camp

After completing the University of Tokyo Graduate School of Engineering doctoral program, he became the university Institute of Industrial Science lecturer, after the assistant professor, go to the university in Information Studies, interdisciplinary robot \cdot ITS (Intelligent Transportation Systems) such as Project society of advanced technology working on implementation. Three years from 2010, seconded to the Nagasaki prefectural government officials, promoting EV and (electric vehicles) the activation project of the island by the ITS. After returning to the University of Tokyo in 2013, the incumbent from 2014. In the promotion of mainly each project the nextgeneration mobile, being promoted contributing to the local creation Zone certification of Sendai City, the demonstration of near-future technology of the automatic travel, and so on.

●Akira Miyamoto Professor, New Industry Creation Hachery Center (NICHe), Tohoku University

After completion of the Tohoku University Graduate School of Engineering PhD, he became an assistant of Nagoya University Faculty of Engineering, and associate Professor of Kyoto University Faculty of Engineering. After that he was appointed a professor of Tohoku University Faculty of Engineering in 1992. Until now, he has been a professor at the New Industry Creation Hatchery Center(NICHe) since 2002. He was appointed a director of NICHe. Currently he carries out the project as a next-generation vehicles, Miyagi Prefecture area Research Promotion chairman. He is engaged in practical multi-level computer chemistry for specialty industrial innovation.

Hiroshi Inomata Professor, Tohoku University Graduate School of Engineering supercritical solvent Engineering Research Center



He graduated from Tohoku University Faculty of Engineering Department of Chemical Engineering in 1979, and completed Tohoku University Graduate School of Engineering in 1986. Currently, he is a professor at the University supercritical fluid engineering research Center which research theme is using a supercritical fluid state of "water", "carbon dioxide", in promoting applied research and the basis of environment-friendly technology. In the automotive, paint with supercritical CO2, coating technology, such as precision cleaning technology.

Tsunemoto KURIYAGAWA Professor, Tohoku University Biomedical Engineering Graduate School

He graduated from Tohoku University Precision Engineering in 1979. He became an assistant of Precision Engineering Precision Machining Laboratory since 1984. Currently, he has been a professor at medical engineering Graduate School of biomechanical system Medical Engineering biological functions Creation Science, Graduate School of Engineering Mechanical Systems and Design Engineering. And he is also appointed Intellectual design Laboratory nano-precision machining science Professor, specialize in nano-precision machining. The aim of functionality interface creation, not engineering only, medicine, even application and development of the dentistry aim. There track record of commercialization due to a number of industry-university collaborative research. Science Council of Japan member.





Advisor Information



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Shigeyuki YAMABE, Associate Prof. NICHe, Tohoku University

Participated in 'Development of Energy-saving ITS Technologies', NEDO, 2008 to 2012, inducted the current post from Tokyo University. Now his research keyword is 'earthquake disaster 'to reconstruct, reduce second accidents, and automated drive and HMI which he keeps work on before the disaster, based on the center of Next-Generation Advanced Mobility System in Miyagi Fukko Park in Tagajo.



Masayoshi MIZUTANI Associate professor, Tohoku University Graduate School of Engineering of Mechanical Systems and Design Engineering

After completing the Keio University Graduate School of Engineering doctoral program in 2006, he worked for RIKEN and Sophia University as a researcher. Inducted the current post in 2012. Aims for actual use of next generation type of materials which are created by nano degree of accuracy for medical care of living body. The research keywords are Micro/Meso Mechanical Manufacturing, M4 processes, PJD, functionality interface, biomaterials, application for living body/medical care, etc.

Naoto MIYAMOTO, Associate Prof. NICHe, Tohoku University



Completed Tohoku University Graduate School of Engineering PhD., his research goes into development design of semiconductor circuit, high degree of analog signal processing, high speed and low power consumption distal signal processing.

Collaborating with industries, put to practical use; the ultrasonic wave wifi talk system in the sea, handy audio devices, current sensor utilized superparamagnetic substance. Now he works on the research for ultrahigh-precision GPS which is shaped only a few millimeters, and snow sports.

Nozomu HATAKEYAMA, Associate Prof. NICHe, Tohoku University La Farned Dester of science at Takwa University. Craduate School by

He Earned Doctor of science at Tokyo University Graduate School by theoretical studies based on direct numerical simulation of turbulent flow (DNS) in 1999. He became an associate professor at New Industry Creation Hachery Center (NICHe) Tohoku University after an asistant at Institute of Fluid Science (DNS fluid sound) Tohoku University. Currently, he has been engaged in the industry-academia-government collaboration research based on the development and application of multi-scale, multi-physics computational chemistry which is related to automobile, nuclear power generation, sports area, etc.

Ruji MIURA, Assistant Prof. NICHe, Tohoku University



Earned PhD in Department of Materials Chemistry at Tohoku University School of Engineering in 1999. After that He engaged in technology development research by computer program development and its application as a computational science researcher at Kansai Research Institute. Since 2002 he has been engaging in Construction of the development of molecular simulation programs and computer systems in Miyamoto Laboratory, Tohoku University. His expertise areas include molecular simulation, 3D visualization technology, computer systems, network etc.

Patrick Alain Bonnaud , Assistant Prof. NICHe, Tohoku University

He graduated from Mediterranean University (Aix - Marseille University) physical chemistry and materials science doctor course in 2010. And then he became the Massachusetts Institute of Technology Materials Science and Engineering Department postdoctoral fellow from 2011 to 2014. He then joined New Industry Creation Hachery Center (NICHe) Miyamoto laboratory on May 2014, and he became an assistant professor at NICHe since April 2015. He is engaged in the application of computational simulation tools, and understanding the properties of the material in the molecular scale, theoretically in order to improve. For example, catalysis, nano-filtration, phase separation, porous materials, such as amorphous silica and cement that are applied to large-scale industries such as building materials.

11 Aobayama • Tagajo reconstruction park facility tour

- 8:30 Meeting/ move to conference room at NICHe building 1F/ documents handout and orientation
- 8:40 Baggage loading (bus) at NICHe building/ move to New campus (on foot)
- 8:50 Rare metal Building tour 9:00 -9:20 New campus tour
- 9:20 Bus ride and departure



Kawatabi joint Seminar Center



Each building inside map



Seminar tower

Students will stay here. There are blackboard and tables for presentation.



Group member table

group	member
A Near future (up to 2020) Flat-coastal areas Cars(mobility)	Kohei IKEBUCHI Tomoki ITO Tomoki KYOIZUMI Angga Hermawan Go SANNOMIYA
B Near future (up to 2020) Hilly and mountainous areas Cars(mobility)	Keisuke TAKASE Shun WATANABE Masahiro KAJIWARA Muhammad Salman Al Farisi Kohei MATSUYAMA
C Distant future (2030-2050 or later) Either will do */ *Please decide it on Aug. 6	Kotaro OIZUMI Akihito EGAWAThomas Westfechtel Andrzej-Alexander Litwinowicz Hiroaki NAKAMURA
D Near future (up to 2020) Hilly and mountainous areas/Transportation Systems	BOUCIDA NazimMakoto SaitoYuya YOSHIDAYu IGARASHISoma SATO
E Distant future (2030-2050 or later) Flat-coastal areas Transportation Systems	Ferri Sebastien Kodai ISHIKAWA Kazuki HANZAWA Naoto KOBAYASHI Mayuko KAWATA
F Distant future (2030-2050 or later) Flat-coastal areas Transportation Systems	Yoshiki IKEDA Masaki TSUKUDA Fumiya SATO Norikazu ISHIGAKI Muhammad Zamir Hossain

☆The sub themes of Group E & F are the same. Please make it different from the other one.
 ☆Please decide 'where' of Group D.



Please come to the seats for simultaneous interpretation during the lectures



グルーブ・	お名前	学校名	▼	学年	▼ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
А	Kohei IKEBUCHI	Tohoku University	Department of Electrical Engineering(Graduate Schoool of Engineering)/Ichinokura laboratory	M2	SR motor
А	Tomoki ITO	Tohoku University	Research Laboratory on Advanced Crystal Engineering, Yoshikawa Laboratory (IMR & NICHe)	Doctor's 1st year	Crystal growth
A	Tomoki KYOIZUMI	Tohoku University	Graduate school of Engineering/Kuriyagawa,shimada,Xu,Mizutani laboratory	M1	Nano-precision machining science
A	Angga Hermawan	Tohoku University	Institute of Multidisciplinary Resarch for Advanced Materials/Yin laboratory	M1	Environmental Sciences
A	Go SANNOMIYA	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	ITS
В	Keisuke TAKASE	Tohoku University	Department of Electrical Engineering(Graduate Schoool of Engineering)/Ichinokura laboratory	M2	SR motor
В	Shun WATANABE	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	Traffic
В	Masahiro KAJIWARA	Tohoku University	Graduate School of Information Sciences/Tadokoro laboratory	M1	Automatic driving
В	Muhammad Salman Al Farisi	Tohoku University	Micro Electro Mechanical Systems Lab/Tanaka Shuji laboratory	MI	MEMS, Heterogeneous Integration
В	Kohei MATSUYAMA	Tohoku University	Graduate School of Information Sciences/Tadokoro Iaboratory	MI	Applied Information Science
C	Kotaro OIZUMI	Tohoku University	Department of applied chemical engineering and Biomolecular engineering/ Honma laboratory	Senior	Electrochemistry
S	Akihito EGAWA	Tohoku University	Graduate school of Engineering/Kuriyagawa,shimada,Xu,Mizutani laboratory	MI	Nano-precision machining science
С	Thomas Westfechtel	Tohoku University	Graduate School of Information Sciences/Tadokoro laboratory	M1	Robotics
C	Andrzej-Alexander Litwinowicz	Tohoku University	Department of chemical engineering/Adschiri laboratory	D3	Nanoparticle synthesis process
C	Hiroaki NAKAMURA	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	Information Transport Studies
D	BOUCIDA Nazim	Tohoku University	ELyTMax / Institute of Fluids Science(IFS)	M2	Materials Science and Engineering
D	Makoto Saito	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	ITS
D	Yuya YOSHIDA	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	Traffic
D	Yu IGARASHI	Tohoku University	Research Laboratory on Advanced Crystal Engineering, Yoshikawa Laboratory (IMR & NICHe)	M1	Material science
D	Soma SATO	Tohoku University	Chemical Engineering and Biomolecular Engineering/Inomata laboratory	Senior	Chemical engineering
ш	Ferri Sebastien	Tohoku University	Department of Quantum Science and Energy Engineering/Watanabe laboratory	Special research student	Nuclear materials, corrosion
ш	Kodai ISHIKAWA	Tohoku University	Graduate School of Biomedical Engineering/Sajjo laboratory	M1	Photoacoustic
ш	Kazuki HANZAWA	Tohoku University	Department of applied chemical engineering and Biomolecular engineering/ Honma laboratory	MI	Electrochemistry
ш	Naoto KOBAYASHI	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	Transportation system
ш	Mayuko KAWATA	Tohoku University	Graduate School of Information Science/ Shinozawa laboratory	M2	Philosophy, ethics
ш	Yoshiki IKEDA	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	ITS
ш	Masaki TSUKUDA	Tohoku University	Graduate school of Engineering/Kuriyagawa,shimada,Xu,Mizutani laboratory	MI	Nano-precision machining science
LL_	Fumiya SATO	Bunkyo University	Bunkyo University Information Society Department/Matsumoto laboratory	Junior	ITS
ш	Norikazu ISHIGAKI	Tohoku University	Department of Physics/Kawamura laboratory	MI	Battery
ш	Muhammad Zamir Hossain	Tohoku University	Department of chemical engineering/Adschiri laboratory	D3	Viscosity of the nano-fluid
A	VIn the near future (up to 2020)/	Flat-coastal areas/C	ars(mobility)	5	
B	In the near future (up to 2020)/	Hilly and mountainous	s areas/Cars(mobility)	5	
0	Distant future (2030-2050 or late	<pre>:r) / Either will do */*</pre>	Please decide it o <u>n Aug. 6</u>	5	
	In the near future (up to 2020)/H	Hilly and mountainous	a areas/Transportation Systems	2	
	EDistant future (2030-2050 or late	er)/Flat-coastal areas	s/Transportation Systems	5	
4	Distant future (2030-2050 or late	er)/Flat-coastal areas	s/Transportation Systems	5	
				30	

Majors of the member

Building No.	member
Build No. 6 Capacity 20	Thomas WestfechtelBOUCIDA NazimFerri SebastienAndrzej-Alexander LitwinowiczMuhammad Zamir HossainAngga HermawanMuhammad Salman Al FarisiAkihito EGAWAAkihito EGAWAMasaki TSUKUDATomoki KYOIZUMI
Build No. 7 Capacity 20	Kohei MATSUYAMA Masahiro KAJIWARA Kohei IKEBUCHI Keisuke TAKASE Tomoki ITO Yu IGARASHI Kazuki HANZAWA Kotaro OIZUMI Soma SATO Kodai ISHIKAWA Norikazu ISHIGAKI
Build No. 8 Capacity 10	Fumiya SATO Naoto KOBAYASHI Shun WATANABE Go SANNOMIYA Hiroaki NAKAMURA Yoshiki IKEDA Yuya YOSHIDA Makoto Saito
If you have got any lecturer tower when • Shuichi MATSUMO • Shigeyuki YAMABE • Nozomu HATAKEYA • Patrick Alain Bonna **Mayuko KAWATA will sta (She will keep the key o Work group member Accommodation me Please refrain from v and go to bed early. If you need to work a Seminar room each t	problem, you can come to re 4 lecturer will stay at . TO: Bunkyo University : Tohoku University AMA : Tohoku University aud : Tohoku University ay at lecturer tower. f lecturer tower.) rs are different from mbers. vorking at late night at night, please use tower.

Tamatsukuri-So (Kawatabi Onsengo) /Room assignment





A bus will pick you up around 17:00 or 17:40 from the seminar center; Please bring towels, etc. Reception venue: Kaede $18:30 \sim 20:30$ Please take a bath before the reception.





MEMO









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