

Delivery Science Classes

As a purpose that students can commune with science by intuitively understanding it, we have held delivery science classes for children and teachers in elementary schools. We have also opened “University for Citizens of Miyagi Prefecture”. Moreover, for high-school students, we have also lectures and experiments. For company people, we have done lectures and experiments in “KINKEN Summer School” which have started since 1916 established Institute for Materials Research, Tohoku University “KINKEN”. In addition, we give talks about the fascination of science and the pleasure of research in many kinds of lecture meetings in which everybody can participate. In some private companies, we have spoken both the mind of researchers and the current status of semiconductors in which I am specialist.

Delivery Science Classes “Story of Fun Science ~Open the Mysterious Boxes~

[Marvelous Optical Communications]”

Organizer: KAHOKU SHIMPO Publishing Co

Collaborator: Tohoku University

Sponsor: Tokyo Electron Ltd. (2009~2011)

Tokyo Electron Miyagi Ltd. (2012~2019)

1. Shouryou Elementary School in Sendai, May 27, 2009.

Kahoku Shinpo Morning Edition, "Story of Fun Science 2009, Part 1", Jul. 26, 2009.

Summary Event, Tokyo Electron Hall in Sendai, Sept. 20, 2009.

Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Oct. 25, 2009.

2. Yoshida Elementary School in Taiwa-cho, Jun. 22, 2010.

Kahoku Shinpo Morning Edition, "Story of Fun Science 2010, Let's Open the Mysterious Box, Part 2", Aug. 7, 2010.

Summary Event, Tokyo Electron Hall in Sendai, Aug. 28, 2010.

Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event 2010, Let's Open the Mysterious Box", Sept. 95, 2010.

3. Higashi Miyagino Elementary School in Sendai, Jul. 7, 2011.

Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Aug. 7, 2011.

4. Date Elementary School in Sendai, Jun. 28, 2012.

Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Aug. 4, 2012.

Summary Event, Tokyo Electron Hall in Sendai, Aug. 21, 2012.

Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Sept. 16, 2012.

5. Okino-Higashi Elementary School in Sendai, 2013.5.31.

Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Aug. 3, 2013.

Summary Event, Tokyo Electron Hall in Sendai, Oct. 14, 2013.

Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Nov. 16, 2013.

6. Wakabayashi Elementary School in Sendai, Jun. 25, 2014.
Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Jul. 26, 2014.
Summary Event, Tokyo Electron Hall in Sendai, Aug. 21, 2014.
Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Sept. 21, 2014.
7. Tsubamezawa Elementary School in Sendai, Jul. 15, 2015.
Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Aug. 2, 2015.
Summary Event, Tokyo Electron Hall in Sendai, Aug. 21, 2015.
Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Sept. 27, 2015.
8. Higashi Sendai Elementary School in Sendai, 2016.6.29.
Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Jul. 30, 2016.
Summary Event, Tokyo Electron Hall in Sendai, Aug. 23, 2016.
Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Sept. 24, 2016.
9. Haramachi Elementary School in Sendai, 2017.6.30.
Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Jul. 29, 2017.
Summary Event, Tokyo Electron Hall in Sendai, Aug. 22, 2017.
Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Sept. 24, 2017.
10. Tsurusu Elementary School in Taiwa-cho, May 31, 2018.
Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", 2018.7.29.
Summary Event, Tokyo Electron Hall in Sendai, Aug. 23, 2018.
Kahoku Shinpo Morning Edition, "Story of Fun Science Summary Event", Aug. 28, 2018.
11. Yoshida Elementary School in Taiwa-cho, Jun. 3, 2019.
Kahoku Shinpo Morning Edition, "Story of Fun Science 2011", Jul. 29, 2019.

**Hosted "University for Citizens of Miyagi Prefecture" at Institute for Materials Research,
Tohoku University**

Organizer: Miyagi Prefectural Government

1st (Jun. 2008) ~ 5th (Aug. 2012)

"Earth-Friendly Energy and Eco-Materials from Solar Cells to Hydrogen"

6th (Jun. 2013) ~ 11th (Aug. 2018)

**"Earth-Friendly Energy and Circumstances/Energy-Saving Technology
~Solar Cells, Semiconductors, and Super-conduction~"**

Work Experience Program for Students of Junior High School and High School

1. Iwaki High School, Jul. 24, 2008.
 2. Iwaki High School, Aug. 7, 2009.
 3. “Exploration of University in Summer Vacation 2010” for Junior High School Students
~Let’s Fabricate Name-Plates with Light-Emitting-Diodes~ Jul. 23, 2010
 4. Daisan High School, Sendai Aug. 2, 2010
Workshop of Science and Mathematics Course
 5. Fukushima High School, Fukushima Pref. Nov. 25, 2010
Experimental Class, “Contribution to Society with Semiconductor Light Emitting Devices
~Blue-Light Emitting to Optical Communications~”
 6. Ishinomaki-Koubunkan High School, Miyagi Pref. Aug. 6, 2012
“Let’s View Light-Emitting-Diode from Miniature Bulb”
 7. Tsuruoka Minami High School, Yamagata Pref. Mar. 22, 2013
Field Trip in University, “What is Semiconductor?”
 8. Nisshin Junior High School in Yamagata Pref. Nov. 15, 2013
Workshop on Course after Graduation, “Wonder of Optical Communications”
 9. Atago Junior High School, Sendai Dec. 13, 2013
Refreshed Science Class by Tohoku Branch of The Japan Society of Applied Physics
 10. Fukushima Dai-Yon Junior High School, Fukushima Pref. Nov. 15, 2013
Workshop on Course after Graduation, “Wonder of Optical Communications”
 11. Shiroishi High School, Miyagi Pref. Sept. 3, 2015
Workshop on Work
 12. Tateoka High School, Yamagata Pref. Nov. 12, 2015
Site Visit
 13. Furukawa-Gakuen Junior High School. Mar. 8, 2016
Site Visit
 14. Tsuruoka-Minami High School, Yamagata Pref. Mar. 21, 2017
“Let’s View Light-Emitting-Diode from Miniature Bulb”
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Lecturer in “KINKEN Summer School”

1. **"Nitride Semiconductors Famous for Blue Light-Emitting-Diode and its Applications"** in 78th,
Jul. 30, 2008
 2. **"Nitride Semiconductors Famous for Blue Light-Emitting-Diode and its Applications"** in 80th,
Memorial Site Visit of My Division of Physics of Electronic Materials Jul. 29, 2010
 3. **"Nitride Semiconductors Famous for Blue Light-Emitting-Diode and its Applications"**
in 81th Jul. 28, 2011
 4. **"Novel Development by Nitride Semiconductors Famous for Blue Light-Emitting-Diode"**
in 88th Jul. 26, 2018
 5. Lecture for Cooperation with Industry, Government, Schools in 88th, Jul. 27, 2018
"To Cooperation with Industry, Government, Schools for Japan Resurfacing"
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Other Lectures

1. Creation Strategy Group Seminar of Technical Value "Seminar for Young Researcher Growing up to Researchers who can talk dream and realize it ~To know top researchers and issue to be practiced", Japan Research Institute (Sankei Plaza, Tokyo, Apr. 17, 2009)
"Thoughts which cannot help temporarily giving up blue-emission from GaN with which concerned myself".
2. 21th Meeting of Physics and Chemistry/Materials by OB Electrical Communication Laboratories (Yoyogi Kenshu Center of Nippon Steel Corp., Jun. 6, 2009)
"Research and Development of Nitride Semiconductors"
3. Science Day, "Let's talk by using Light", (Tohoku Univ., Jul. 11, 2010).
4. Tohoku University Innovation Fare 2020 in Sendai (Sendai International Center, Oct. 18, 2010)
5. JST Innovation Forum in Miyagi, (Sendai, Dec. 1, 2010)
"High-Temperature Growth Technique of InGaN for Green-Light Emission on ZnO Substrate by MOVPE".
6. JST Science Agora "Light Connecting the World ~Next Generation over Earthquake Disaster and Experimental Show~"
(National Museum of Emerging Science and Innovation, Nov. 19-20, 2011)
"Research on Temperature-Stable InN Semiconductor Lasers for Optical Communications Systems and its Progress"
"Great East Japan Earthquake in Institute for Materials Research, Tohoku University",
7. The Association of Basic Chemical Education in Japan (IMR, Tohoku Univ., Mar. 29, 2012)
"Semiconductor Materials ~Lecture on Nitride Semiconductors famous for Blue LED and Site Visit of Experimental equipment~"
8. Center for Collaborative Interdisciplinary Sciences, 22th Civic Program (Sendai, Feb. 4, 2014)
"What kind of Light is Emitted from Stone? ~ From Traffic Signal to Optical Communications~"
9. Memorial Lecture of Nobel Prize in Physics on Technology of Blue Light-Emitting-Diode, Organizer: Institute for Multidisciplinary Materials Science and Tohoku Forum for Creativity, Tohoku Univ. (Sendai Civic Center, Dec. 26, 2014)
"Principle of Light Emission from White LEDs, their Development History, and their Meaning"
10. Special Lecture in National Institute of Technology, Sendai College (Sendai, Jan. 20, 2015).
"Research and Development of Semiconductor Materials and Optical Devices ~from Infrared to Blue~".
11. Table Speech in NTT Tokyo 40 (Kojunsha Clab, Tokyo, Apr. 15, 2015).
"Blue Light-Emitting-Diode and Management of Research ",
12. 28th Meeting of Physics and Chemistry/Materials by OB Electrical Communications Laboratories (Yoyogi Kenshu Center of Nippon Steel Corp., Jun. 25, 2016).
"Research and Development of Nitride Semiconductors in NTT"

13. 31th Meeting of Physics and Chemistry/Materials by OB Electrical Communications Laboratories,
(Yoyogi Kenshu Center of Nippon Steel Corp., Jun. 25, 2016)
"History of Development of Blue LED and Evolution of Wide-Gap Semiconductors"
14. Sumitomo Shoji Seminar (Sumitomo Shoji Maschinex Co. Ltd, Tokyo, Aug. 2, 2019)
"What is Nitride Semiconductors?"
15. IMRA Japan Employee Training (IMRA Japan, Sapporo, Aug. 25, 2019)
**"Methods and Mental Attitude for Progressing Research
~Based on My Experiences~"**
16. Employee Training of High Frequency & Optical Device Works, Mitsubishi Electric Corp.
(Itami, Sept. 5, 2019)
"Potential of Nitride Semiconductors and their Contribution to Society"
17. New Technology Presentation by Tohoku Univ., Japan Science and Technology Agency
(JST Tokyo Headquarters K's Gobancho, Dec. 5, 2019)
No. 5, **"Solar Cells with High Efficiency by using Crystallographic Polarity"**
18. 1st Open Seminar of Future Science
(New Industry Creation Hatchery Center, Tohoku Univ., Jul. 31, 2020)
**"Let's Peer Semiconductors Supporting Advanced information society ~From Optical
Communications, through Blue LEDs, to 5G~"**