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Masaaki Fujii honored with Humboldt Research Award



Photo in Awards Ceremony of Humboldt Research Prize. Masaaki Fuji (Left) and Professor Dr. Hans-Christian Pape, President of Alexander von Humboldt Foundation, 27th June, 2019 at Schloss Charlottenburg, Berlin, Germany.

Professor Masaaki Fujii of the Institute of Innovative Research, Tokyo Tech has been honored with the Humboldt Research Award.

The German government's internationally acclaimed the Humboldt Research Award is presented by the Alexander von Humboldt Foundation to renowned overseas researchers who have had and are expected to continue to have a lasting impact in their field. The award is not restricted to any particular academic discipline and allows the recipient to conduct research in Germany on a research topic chosen by the researcher and a collaborating partner at a host institution. Each year, up to 100

researchers receive the Humboldt Research Award, which is viewed as one of the most prestigious academic awards in Germany.

Prof. Fujii is well-known for his pioneering studies on molecular recognition phenomena and reaction dynamics in molecular clusters. He developed laser spectroscopic techniques to probe solvation dynamics in isolated molecular clusters in real time, with the aim to understand solvent effects in chemical reaction mechanisms at the molecular level. In Germany he will extend his previous studies to effects of solvent-solvent interactions on the properties of solvation dynamics and to biomolecular recognition.

Fujii is hosted by Professor Dopfer at the TU Berlin.



Certification of Humboldt Research Awards

Comment from Masaaki Fujii

It is great pleasure for me to be awarded the Humboldt Research Prize at the 250th anniversary of Professor Alexander von Humboldt. I deeply thank Prof. Dr. Otto Dopfer (TU Berlin and WRHI Tokyo Tech) who recommended me to avH, my hard-working collaborators, Tokyo Tech's Profs Shun-ichi Ishiuchi, Mitsuhiko Miyazaki, Makoto Sakai (current address: Okayama Science U), all the postdocs and graduate students. Such achievements are possible under the superior policy and research circumstance for scientific research in our university, which are prepared by the Chemical Resources Laboratory / Laboratory for Chemistry and Life Science, the Institute of Innovative Research, the School of Biotechnology, directed by President Kazuya Masu (the foundation director of IIR), CLS Director Prof. Toru Hisabori, Head of School of Biotechnology Prof. Mihara, and all related professors. Here, I would like to express my deep appreciation to all the people. Finally, I am grateful to my wife Kyoko (d. 2010) for her kind support and to my children for their encouragements.



Photo at the Reception of the ceremony, with Prof. Dr. Otto Dopfer (TU Berlin and Specially appointed professor of WRHI Tokyo Tech) who recommended MF to the foundation.

(Tokyo Tech news published: Publish Relation Section • July 23, 2019)

Distinguished staff members in AY2019 Commended

Employee Relations Office

Tokyo Tech held its Distinguished Staff Awards for academic year 2019 on June 26 at Ookayama Campus.

Each year, the Institute recognizes a number of administrative and technical staff members who have made significant contributions to the development of Tokyo Tech through their outstanding service. This year, President Kazuya Masu and his executive team commended the achievements of 25 Tokyo Tech members.



President Masu congratulating award recipients

Congratulations to all the award recipients!

| Name | Position | Affiliation | Department /Office | Contributions |
|--------------------|--------------------------------|--|----------------------------------|---|
| Yuko Takahashi | Senior Administrative Staff | General Planning Group, Planning and Evaluation Division | General Affairs Department | Exceptional efforts and creativity to launch the unprecedented Laboratory for Design of Social Innovation in Global Networks (DLab) |
| Takuya Karakane | Staff member | HR Development Group, Employee Relations Office | | Proposals regarding more efficient labor management and proactive work approaches |
| Rikiya Iwamatsu | Group Leader | General Affairs and Audit Group, Budget Division | Finance Department | Exceptional efforts to centralize accounting duties |
| Tomoaki Iketani | Senior Administrative Staff | Management and Expenditures Group, Accounting Division | | Exceptional efforts to improve operational efficiency through review of data coordination and analysis methods |
| Mai Nakagawa | Deputy Group Leader | | | Exceptional efforts in security export control duties |

| Name | Position | Affiliation | Department /Office | Contributions |
|----------------------|--------------------------------|---|--|---|
| Minako Endo | Group Leader | Planning and | Research Promotion Department | Labor-saving efforts with introduction of regular |
| Satoshi | | Management Group, Industrial Cooperation Division | | |
| Kusunose | Deputy Group Leader | | | self-reporting of conflicts of |
| Kei Matsumura | Staff member | | | interest online and tablets |
| Takashi Harada | Group Leader | 17 | Facilities Department | Establishment of space allocation standards to strengthen space management |
| Miwako Hara | Senior Administrative Staff | | | |
| Tatsuyuki | Senior Administrative | | | system |
| Watanabe | Staff | | | system |
| Miwako | Charle I and an | | Ookayama Campus 1st Administration Office | Exceptional efforts to establish |
| Nakamura | Group Leader | | | administrative systems for |
| Keiji Tezuka | Deputy Group Leader | School of Science | | Schools, etc. |
| Shinya Hirakawa | Senior Administrative Staff | Administration Group 1 | | Exceptional efforts to execute International Science Workshop 2018 organized by the School of Science |
| Masanori Tanaka | Group Leader | Schools Administration Group 1 | Ookayama Campus 2nd Administration Office | Exceptional efforts to establish administrative systems for Schools, etc. |
| Fumihito Katayama | Staff member | | | |
| Takahiro Okada | Group Leader | Schools Administration Group 2 | | |
| Hayato Fukushima | Group Leader | Schools Administration Group 3 | | |
| Fumiko Kida | Group Leader | Schools Administration Group 4 | | |
| Hideyuki Takai | Group Leader | Schools Administration Group 5 | | |

| Name | Position | Affiliation | Department /Office | Contributions |
|----------------------|----------------------|--|------------------------------|---|
| Hiroyuki Ariyama | Group Leader | Suzukakedai Campus | Campus 2nd Administration | Exceptional efforts to establish administrative systems for Schools, etc. |
| Masamitsu Sekine | Deputy Group Leader | Administration Office | | |
| Norihiko Yamamoto | Technical specialist | Suzukakedai Design and Manufacturing Division | Technical Department | Exceptional efforts to put technology succession into practice and improve work environment in machine shops |
| Fumio Kanno | Technical specialist | Electrical and Electronic Engineering Division | | Exceptional efforts to construct, maintain, and create vulnerability countermeasures for web systems of Dept. of Computer Science, Dept. of Electrical and Electronic Engineering |
| Hitoshi Fukuda | Technical specialist | Safety and Radiation Management Division | | Exceptional efforts concerning managed operation of co-irradiation experimental apparatus and beam irradiation experiments |



This year's achievers with President Masu and executive management

Three Tokyo Tech pairs advance to 28th All Japan Women's Student Sailing Championships

Three pairs from the Titech Sailing Team, an official student club, will be competing at the 28th All Japan Women's Student Sailing Championships, to be held at Kaiyo Yacht Harbor in Gamagori City, Aichi Prefecture from September 20 to 23, 2019.

The results were confirmed after outstanding performances in the Snipe¹ and 470² classes at the Kanto regional qualifiers at Enoshima Yacht Harbor in Kanagawa Prefecture. At the Snipe competition on May 25 and 26, 4th-year students Ami Kawai and Nami Tsuda and 3rd-year students Shione Hagiuda and Hinako Horikoshi advanced to the finals. Two weeks later, 3rd-year students Misako Sato and Chihiro Inaba advanced to the finals in the 470 class.

This will be the first all-Japan final for the 3rd-year pairs. Kawai and Tsuda had their first finals experience last year.

Comments from Snipe class pairs

Ami Kawai

4th year, Industrial Engineering and Economics

Nami Tsuda

4th year, Life Science and Technology

This will be our last chance to prove ourselves at the all-Japan championships. Last year we finished in 15th



Kawai and Tsuda (far right)

place, a result that left us both vexed. We have been practicing hard for the past year in the hopes that we finish on the podium this September. We have been able to sail the seas thanks to everyone's support, not least the alumni,³ and we will give it our all at the championships.

Shione Hagiuda

3rd year, Architecture and Building Engineering

Hinako Horikoshi

3rd year, Mechanical Engineering

This will be our first time at the all-Japan championships. The waters in Gamagori are unknown to us, but we will be sure to enjoy the race and will do our best to produce a good result.



Hagiuda and Horikoshi

In academics, we acquire various types of knowledge through independent thinking and trial and error, and in many ways we can also apply this approach to sailing. We will accumulate experience through our daily efforts, and will do our best to reflect that in our results. We look forward to your continued support and encouragement.

Comments from 470 class pair Misaki Sato

3rd year, Industrial Engineering and Economics

Chihiro Inaba

3rd year, Chemical Science and Engineering

This will be our first all-Japan competition, and we are looking forward to competing in a new environment. At the



Sato and Inaba

recent regional race, which was a valuable learning experience, we realized the importance of preparation, much like with academics. There were races during the qualification that did not go well, but we aim to improve our form in the finals. We look forward to your continued support.

About Titech Sailing Team

The Titech Sailing Team is a group of ocean-loving sailors who polish their seafaring skills off the Hayama coast in Kanagawa Prefecture. The team has access to five 470-class dinghies and five Snipes, as well as two rescue motorboats in case the seas get rough. Members often head to the seaside on Saturday morning and only return to Tokyo on Sunday evening.

- 1 The 470 (four-seventy), so named due to its 4.7-meter length, is a sailboat designed to plane easily. Sailing the boat efficiently requires strong teamwork from its two members. Designed in 1963 by Frenchman André Cornu, the 470 has been an Olympic sailing class since 1976.
- 2 The Snipe is a 4.72-meter sailboat designed by William F. Crosby in 1931. It was originally intended as a boat that can be rigged and launched in a short time, and has maintained its position as one of the most popular two-person racing sailboats since its creation.
- 3 The Kuramae Ushio Association is a 400-member group of alumni supporting the Titech Sailing Team. Their motto is "developing full-fledged sailors, full-fledged members of society."

(Tokyo Tech news published: Titech Sailing Team · August 16, 2019)

Tokyo Tech Automobile Club second in Ebisu Super Endurance Race

The Tokyo Tech Automobile Club has finished second in the 2019 Ebisu Super Endurance Race, held on June 22 at the Ebisu Circuit in Nihonmatsu City, Fukushima Prefecture.



(from left) Club rep Takuya Ikeda (2nd-year master's student, Materials Science and Engineering), captain Ryota Kurihara, vice-captain Yotaro Okada (1st-year doctoral students, Materials Science and Engineering)

Ebisu Super Endurance is held four times a year at the same 2,061-m circuit. Team drivers alternate to drive their car around the course for six hours non-stop. The team with the most completed laps when time runs out is the winner. Cars are divided into two classes. Class B includes modified general commercial vehicles that are not licensed for public roads. Class N automobiles are vehicles licensed for public roads. This June, a total of 14 cars participated in the two classes. Tokyo Tech's racing team completed 259 laps in six hours — 14 laps less than the race winner.

This is the first time the Tokyo Tech Automobile Club has finished in second since it began participating in the race in 2006.

2019 Ebisu Super Endurance drivers

Ryota Kurihara, 1st-year doctoral student, Civil and Environmental Engineering Satoru Uchiyama, 2nd-year master's student, Mechanical Engineering Tomu Makino, 4th year, Mechanical Engineering

Comments from Tokyo Tech Automobile Club captain

Ryota Kurihara, 1st-year doctoral student in Civil and Environmental Engineering

To finish second in a non-students-only race demonstrates the comprehensive strength of the Tokyo Tech Automobile Club.

While we have less funding than other teams, our knowledge ranges from mechanical, electrical, chemical, and materials engineering to ergonomics. Our race strategy incorporates the construction of important information networks, strong teamwork and management of our operations, daily physical and mental training, and the psychological care of our drivers and pit crew during the race. We achieved this outstanding result due to our technological expertise and teamwork.

In academic life, I conduct research on methods used for the long-term management of social infrastructure. The knowledge I have accumulated through my research and the lectures provided by various Schools and institutes can be directly applied to our racing activities. I hope to continue practicing not only motor sports but also other forms of technical craftsmanship at the highest level.

Tokyo Tech Automobile Club

The epitome of engineering technology — the automobile — is the central source of knowledge for the Tokyo Tech Automobile Club. The club's facilities form a certified automobile analysis and maintenance center, but its members are not simply interested in passenger and stock cars. They also work on buses, trucks, bikes, and other vehicles.

By understanding the structure of automobiles, acquiring a broad range of knowledge through practical car maintenance, and learning safe driving techniques, the Tokyo Tech Automobile Club aims to enrich the library of basic theories and existing technologies through vehicles. The club also aims to study systematically the societal spheres that envelop technical craftsmanship and innovation by studying related laws, regulations, and industrial structures.

Tokyo Tech Automobile Club members also develop hybrid and electric vehicles, and race at motor sports events around the country.



Automobile Club members around winning machine

(Tokyo Tech news published: Tokyo Tech Automobile Club · August 28, 2019)

Tokyo Tech student wins regional kendo contest

Second-year Materials Science and Engineering student Kaisei Saito has won the men's individual category at the 67th Tokyo Regional Kendo Contest for National and Public Universities held on Ookayama Campus on June 1.





Saito with certificate

Saito (left) during his second bout

This contest consists of both group and individual categories, with three students each from 10 universities participating in the men's individual category.

Comments from winner and Kendo Club captain Kaisei Saito

I am delighted to have won this competition. Being eliminated in the second round of the men's group category was very disappointing, but as captain, I am relieved that I achieved this result individually.

This year's contest was hosted by Tokyo Tech on Ookayama Campus, and thanks to everyone's cooperation, everything went smoothly. I would like to thank all the faculty members, judges, and alumni who contributed to the success of the event.

As a student, I study in the Materials Science and Engineering department, where the content of the lectures is slowly getting more difficult. I will continue to seek a balance between my studies and kendo, and as a united team, we will continue to practice with the next big tournament in our sights.

Tokyo Tech Kendo Club

The Tokyo Tech Kendo Club currently consists of 10 students, most of whom study at the bachelor level. Club members train together regularly with two goals in mind — participating in the Kanto University Kendo Federation All-Japan Championships and winning the Nationwide Judo and Kendo Competition for National Technical Schools.

(Tokyo Tech news published: Publish Relation Section · August 28, 2019)

Track & field men third at Kanto intercollegiate contest

The graduate-level men of the Tokyo Tech Track & Field Club finished third at the 98th Kanto Intercollegiate Track & Field Contest, held from May 23 to 26 at Sagamihara Gion Stadium in Kanagawa Prefecture.



Tokyo Tech anchor Masaki Shibae (1) steals victory in 4x400 m relay

At this contest, undergraduate and graduate-level students compete in different categories. A victory in an event earns the team three points, second place is worth two points, while a third-place finish equals one point.

This year, Tokyo Tech's graduate-level athletes competed against 20 other universities, finishing with 12 points. Most of these came from short-distance races. Kazuki Masuda, Yuya Nagashima, Tomoya Takahashi, and Kazuyuki Sanada won the 4x100 m relay. Takahashi, Nagashima, Yusuke Otsuka, and Masaki Shibae also won the 4x400 m relay. Sanada finished second in the 200 m individual final, while Nagashima finished second in the 110 m hurdles.



Takahashi hands off to anchor Sanada (9) in 4x100 m relay

Comments from graduate-level team captain Yuya Nagashima, 2nd-year master's student in Mechanical Engineering

Nagashima's results 2nd in 110 m hurdles 1st in 4x100 m relay 1st in 4x400 m relay

At Tokyo Tech, I am focusing on vibro-acoustics research, and I am busy with seminars, academic conferences, and the like. This means I cannot find as much time as I would like for athletics. That said, I would like to thank our academic supervisors and the alumni association for their support.

At the undergraduate level, finishing on the podium at this contest seemed like a distant, unachievable dream. I am delighted to be able to compete against strong schools at the graduate level, and to produce such a great team result. While we aim to win this competition in the future, I think Tokyo Tech's undergraduate-level team can also grow into a real podium contender. Come and cheer us on!

Tokyo Tech Track & Field Club

The Tokyo Tech Track & Field Club holds daily practices to train for intercollegiate competitions, Hakone Ekiden qualifiers, and simply to achieve new personal bests and perform well as a unified team. Through discussions among each other and under the guidance of coaches and trainers, the team aims to create an environment where both individual and group performances are optimized.

(Tokyo Tech news published: Publish Relation Section • August 28, 2019)

Tokyo Tech baseball club member takes league batting title

Tokyo Institute of Technology Baseball Club's Soraki Fuchiwaki, a 4th-year Electrical and Electronic Engineering student, has won the 2019 spring batting title in Group 4 of the Tohto University Baseball League.

Fuchiwaki played in eight games during the spring session in April and May. He had 13 hits in 31 at-bats, giving him a batting average of 0.419. Six of his thirteen hits were doubles.



Fuchiwaki during league match

Comments from Soraki Fuchiwaki

This is the first time I achieve an individual title, so I am very pleased. I think this is the result of the quality of our training sessions, even though our practice times and locations are fairly restricted compared to other teams. However, it is disappointing that, as a team, we finished last in our group.

My research currently focuses on the practical application of ultrasonic waves, so I am following the footsteps of the baseball club's Professor Kentaro Nakamura. While making time for both baseball and research, I will do my part so that the team can share better news in the fall season.



Fuchiwaki (left) with club Prof.

Nakamura
at league awards ceremony on June 27

Tokyo Institute of Technology Baseball Club

According Professor Taku Uemura, the first faculty member to manage the club, the Tokyo Institute of Technology Baseball Club was established in 1922. Before World War II, Tokyo Tech's main rivals were present-day Hitotsubashi University, University of Tsukuba, and the former Chiba Medical University.

The club joined the Tohto University Baseball League in 1946. The league is divided into four groups, with 21 universities in total. Groups 1 and 2 consist of the strongest universities, which send players to professional leagues every year. Tokyo Tech played in Group 1 from the spring of 1948 to the fall of 1950, but since then has played in Group 3 or 4. The club works hard to improve their technique and teamwork by squeezing in practice sessions early in the morning or between lectures and experiments.

The club, which is quickly approaching its centenary, has had approximately 450 members throughout its history. With the support of alumni and former team members, the club is aiming for a promotion to Group 3 without compromising its Tokyo Tech style.

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