

The 5th Aquaphotomics International Conference

The Way of Water & Light, The Path of Life

Open Lecture and Aquaphotomics School May 17, 2025 (Kobe University)

<u>Scientific Sessions</u> May 18 – 20, 2025 (Kobe University)

Study Tour
May 20 – 21, 2025 (Wakayama and Nara)

Aquaphotomics International Society www.aquaphotomics.com

www.aquaphotomics.com/conference/



Request for Sponsorship and Purpose of the Conference

Although water plays a crucial role not only in our daily lives and health but also across all industries, its essential characteristics and functions have long remained a mystery. In recent years, however, advances in computer science and data analysis technologies have significantly unraveled the mysteries of water, opening new frontiers for exploration. One such pioneering scientific field, which is drawing global attention for its potential to lead innovative future technologies, is Aquaphotomics.

In 2005, Professor Roumiana Tsenkova from Kobe University introduced Aquaphotomics, a scientific field that studies the water as a "mirror of matter and energy". By capturing subtle dynamic changes in water light absorbance at various frequencies, this approach enables comprehensive measurement and functional evaluation of biological and aqueous systems. Water molecular system's dynamics presenting restructuring of various molecular conformations with different shape plays as the ultimate sensor and provides information about other elements of the system and all external perturbations and internal fluctuations. Regarding industrial applications, the NIR Aquaphotomics technology, for example, allows real-time, non-destructive analysis, holds immense potential for application across a wide range of industries associated with water, including architecture, beverages, food, the environment, pharmaceuticals, healthcare, manufacturing, and even the space industry. Aquaphotomics development is anticipated to drive significant societal advancements.

This conference brings together researchers from diverse disciplines such as quantum physics, medicine, food science, optics and spectroscopy, agriculture, biology, and chemistry, along with industry professionals from various fields, to Kobe. It provides a platform to exchange cutting-edge insights into Aquaphotomics and foster new collaborations aimed at practical applications. The 5th International Conference celebrates Aquaphotomics' 20th anniversary, featuring keynote speakers like Prof. S. Roke (EPFL, Swiss), Prof. G. Vitiello (University of Salerno, Italy), Dr. Anirban Bandyopadhyay (NIMS, Japan), Prof. H. Zang (Shandong University, China). Events include an Aquaphotomics School, open lecture, sessions on various scientific fields and awards for best poster and most active Aquaphotomics team.

Aquaphotomics is a scientific, educational and technological platform; it is a source of innovation rooted in interdisciplinary approaches that aim to solve future societal challenges. Through this conference, we hope that your company will find a valuable opportunity to showcase your products and presence to a global audience, while also exploring new business opportunities and research collaborations.

We sincerely hope you will agree with the purpose of this conference and extend your support and sponsorship to help make this event a success, contributing to the advancement of both Aquaphotomics and society.

Chairperson and Founder of Aquaphotomics
Prof. Roumiana Tsenkova



Information

Title

The 5th Aquaphotomics International Conference

Organizer

Aquaphotomics International Society



Centennial Hall

Date

May 17 (Sat) - 21 (Wed), 2025

Venue

Rokko Hall, Centennial Hall, Kobe University Kobe, Hyogo, Japan



Rokko Hall

Website

https://www.aquaphotomics.com/conference/

Program Overview

May 17	Open lecture: Rokko Hall, Centennial Hall, Kobe University Aquaphotomics School: Rokko Hall and Room C101, Kobe University Welcome Reception: Takigawa Memorial Hall, Kobe University
May 18 – 20	Scientific sessions: Rokko Hall
May 19 evening	Banquet: The Garden Place Soshuen
May 20 – 21	Study tour: Wakayama prefecture and Nara prefecture

Keynote and Invited Speakers (in alphabetical order)



Anirban Bandyopadhyay

Senior researcher at Advanced Scanning Probe Microscopy group and Advanced Nano Characterization Center (ANCC) of the National Institute for Materials Science, Japan



Antonella De Ninno

PhD in physics, ENEA, Frascati, Rome, Italy



Christian Huck

Professor, University of Innsbruck, Austria



Giuseppe Vitiello

Ph.D. in Physics, Honorary Professor at University of Salerno, Italy



Hengchang Zang

NMPA Key Laboratory for Technology Research and Evaluation of Drug Products, Director School of Pharmaceutical Sciences, Shandong University, China



Jack Tuszynski

DIMEAS, Politecnico di Torino, Torino, Italy, and Department of Physics and Department of Oncology University of Alberta, Edmonton, Alberta, Canada



Krzysztof B. Bec

Senior Postdoctoral Research Scientist (Project Manager - Projektleiter) at Leopold-Franzens, University of Innsbruck, Austria



Masaru Tanaka

Professor, Institute for Materials Chemistry and Engineering Department of Soft Materials at the Faculty of Mechanical Engineering, Kyushu University, Japan



Masato Yasui

Professor, Medical School, Keio University, Japan



Roumiana Tsenkova

Professor, Aquaphotomics Research Department, Graduate School of Agricultural Science, Kobe University, Japan



Shigeaki Morita

Professor, Osaka Electro-Communication University, Japan



Silvie Roke

Professor, Julia Jacobi chair in photomedicine, Laboratory for fundamental BioPhotonics (LBP), EPFL, Lausanne, Switzerland



Stefka Atanassova

Professor, Physics Department, Trakia University, Bulgaria



Tiziana Cattaneo

Research Director, Research Center for Engineering and Agri-food Transformations, Milano, Italy



Zoltan Kovacz

Professor, Hungarian University of Agriculture and Life Sciences Budapest, Hungary



Sponsorship Tiers

Sponsorship Tiers	Open Lecture	Welcome Reception	Aquaphotomics School		Conference	Power at
			Beginner	Advanced	Admission	Banquet
Platinum ¥ 1,000,000	Up to 5 people					
Gold ¥ 500,000	Up to 3 people					
Silver ¥ 300,000	Up to 2 people					
Bronze ¥ 50,000 - ¥ 100,000	Up to 1 person				_	

Sponsorship Tiers	 Logo placement on website Logo placement on main screen during breaks Company flyer*1 	Exhibition booth*2	Sponsor session *3	Sample distribution *4
Platinum ¥ 1,000,000	0	0	0	0
Gold ¥ 500,000	0	0	0	-
Silver ¥ 300,000	0	0	_	-
Bronze ¥ 50,000 - ¥ 100,000	0	_	_	_

Platinum, Gold and Silver: with lunch on the 17, 18 and 19th. Bronze: with lunch on the 17th.

*1 Company Flyer Distribution

⁻ Hand to participants at registration or placed on seats. (Please arrange for the printing and ensure that the printed flyers are brought or delivered to the conference venue.)

⁻ Downloadable on the Conference Website (PDF file)

*2 Exhibition Space at the Venue

Space Size: Width 3m × Depth 1.5m

Exhibition Period: May 17–20, 2025 (until the morning of May 20)

Provided Equipment:

1 long table (L1500 × D450 × H700)

1 poster panel (L163 × W82)





Exhibition spaces will be set up at the entrance and lobby of Rokko Hall. Power supply is available from existing outlets.

The setup schedule for the exhibition booth will be announced later.

*3 Sponsor Session

During the conference from May 18 to 20, dedicated time slots will be provided for sponsor sessions. Each company will have a 5-minute slot to present on stage, showcasing their business and products.

*4 Sample distribution

Please inform the conference secretariat (conference@aquaphotomics.com) in advance about the details of the sample products. Depending on the sample products, we may ask for modifications or, in some cases, request that they not be provided.

Sponsorship Application Form (Please fill out the Google Form)

https://forms.gle/1dpCc1189e8qu3N58

For any inquiries, please contact us at:

conference@aquaphotomics.com

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What is Aquaphotomics?

Aquaphotomics is a new scientific field that deciphers the information carried by water using light. Since water exists everywhere, Aquaphotomics can be applied not only to evaluate the quality of drinking water but also to compare and assess the condition of the body, the quality of food and construction materials, soil, and various environmental factors.



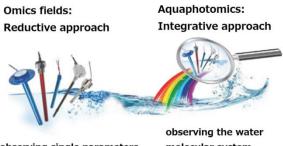
Celebrating the 20th Anniversary of Aquaphotomics

This year marks the 20th anniversary of Aquaphotomics, which was established in 2005. We will celebrate this milestone with researchers, corporate executives, and supporters who have been connected to Aquaphotomics over the years. This will be a unique opportunity to foster connections both domestically and internationally, uncover latent needs, and inspire new ideas.

Potential of Aquaphotomics

Not limited to specific disciplines

Because water is ubiquitous, Aquaphotomics allows for interdisciplinary research without being confined to specific fields of study. The information contained in water is highly precise, which has garnered global attention. It has the potential to drive innovation in a wide range of fields, including food, healthcare, construction, and environmental sciences.



observing single parameters

molecular system

Non-destructive, non-invasive, and precise measurements with simplicity

While Aquaphotomics research can utilize light from various wavelength ranges, such as Xrays, the use of near-infrared or visible light allows for non-destructive measurements of the target. Equipment capable of simple measurements using near-infrared light has advanced alongside traditional spectroscopy. This enables the analysis of water spectra that carry detailed information while keeping the target in its natural, living state. Real-time monitoring is also possible, as temporal changes in data can be collected to detect abnormalities early and make highly accurate future predictions. Aquaphotomics is poised to establish innovative applied technologies closely aligned with real-world needs.



Precise information with simple, non-destructive measurements.

- Real-time monitoring
- Early abnormality detection
- Future prediction



Towards low-cost, early-stage applied technologies

Features of the 5th International Aquaphotomics Conference

Engagement with the public through the Open Lecture and Aquaphotomics School In line with the belief of Professor Roumiana Tsenkova, the founder of Aquaphotomics, that "science is for the people," the International Aquaphotomics Conference traditionally holds Open Lectures. At the Japan Aquaphotomics Conference held in November 2024 at Kobe University, the Open Lecture welcomed 101 on-site participants and 157 online attendees. Feedback from a post-event survey showed that 99% of participants were "very satisfied" or "satisfied." Based on requests to "hear more," a program called the Aquaphotomics School has been planned. Furthermore, this year, we aim to invite high school students—the researchers of the future—to attend the Open Lecture and the academic sessions on the first day of the conference.