

Support system by professional engineers

Professionals in optical and mechatronic technology propose and provide high-value solutions

Owned technology

- Optical design
- Mechatronic technology
- Electronic circuit technology
- Molecular bio-simulation
- Application software

Owned equipment

- Visible infrared spectrophotometer
- X-ray machine
- Optical dimension meter
- Ray tracing software
- Electronic balance
- Three dimensional microscope
- Magnetic measuring instrument
- Environmental test chamber
- 3D printer
- Multivariate analysis software
- Spectrum analyzer

Company profile

Name	Optomechatronix Inc.	Establishment	5 th , February 2009
CEO	Dr. Hidehiro Kume		

Company location



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7th floor, Hamamatsu Act tower
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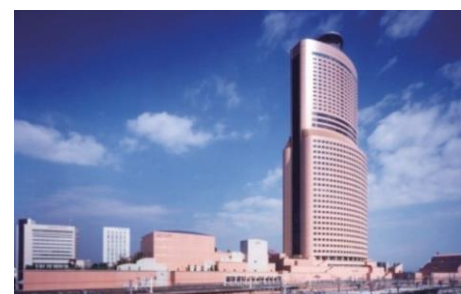
Map

By train

- 5 minutes walk from JR Hamamatsu Station
- If you are coming by Shinkansen, the shortest distance is to exit from the 2nd floor ticket gate located below the platform on the conventional line side.
- Ride on the moving walkway and enter from the central exit of Act Tower.
- Take elevator B (2nd to 8th floor) and our office is located on the south side of the 7th floor.

By car

- 20 minutes by car from Hamamatsu I.C., 30 minutes from Hamamatsu Nishi I.C.
- Around JR Hamamatsu Station.
- If you come by car, please use the ACT underground parking lot.



Creating new and unknown businesses with light and mechatronics technology

Company Introduction

Optomechatronix Inc.

- Creating new businesses in the bio-medical, agriculture and fishery fields using optical and mechatronic technologies
- Proposing and providing solutions by combining optical technology and electronic/mechanical technology
- An all-in-one, individual response system from estimation of possibilities to prototyping, manufacturing, and data analysis.

OMT Optomechatronix Inc.



Message from CEO

Half a century of involvement in the world of light

In my previous job, I was involved in the development of large-scale detectors for elementary particle experiments at Kamiokande, as well as optical systems for nuclear medicine, space, and analytical equipment. We are promoting the practical application of medical diagnostic equipment for antigen and antibody reactions, probes for detecting leaked gamma rays, and component analysis of substances using light.

Our infrared mobile devices are used at fishing ports to select fish oil, measure the sugar content of fruits, analyze the components of living organisms, and analyze the structure of polymers, achieving results comparable to those of large analyzers. Taking advantage of the characteristics of light, we offer comprehensive proposals using applied software that uses mechatronics technology and AI. We achieve new research and development, efficiency in productivity, and product quality control through the experience gained over many years, the vitality of our employees, and the cooperation of our affiliated companies.



Light is the glue that connects matter and life. We welcome any questions you may have or questions you would like to solve. My motto is, if you believe you can do it, you can do it!

Founder and CEO Hidehiro Kume

Application Examples

Agriculture and fishery

Quantitative analysis of components

Near-infrared component analyzer (NIR)

Non-destructive measurement of ingredients in foods and various materials using near-infrared. The ultra-compact sensor makes it compact and lightweight, making it ideal for outdoor measurements. Links with mobile terminal via Bluetooth.

M011 is used



Fruit sugar content measurement



Fish fat measurement

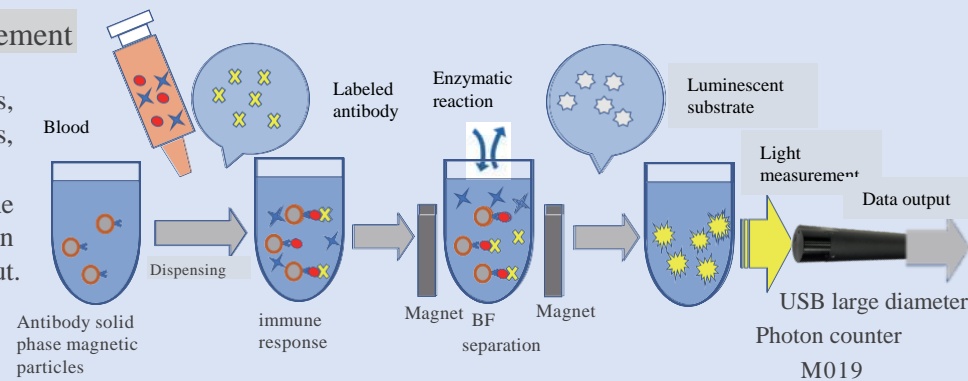
Bio-medical

Medical diagnostic application

Immuno-chemiluminescence measurement

Designed mechanisms for living organisms, reagent introduction mechanisms, incubation, BF separation, etc.

The weak chemiluminescence caused by the immune reaction is measured with a photon counter and the diagnostic results are output.



Other applications

Various examples in application notes

Component analysis by light

Near-infrared analyzer

Near-infrared component analyzer

Material analysis, structural analysis

- Component analysis and structural analysis are performed by spectroscopically measuring reflected and transmitted light from near-infrared light irradiation. Depending on your purpose, you can select a spectroscopic module that matches your wavelength range and wavelength resolution.
- Supports various analytical tasks such as organic synthetic products, fish, agricultural products, and pharmaceuticals.
- Can be used to measure all-purpose objects in different form such as powders, solids, liquids, biological tissues, and films.



Mobile near-infrared analyzer M011



Portable near-infrared analyzer Reflection type M020/M022



Transmission type M021/M023

Other applications

- Plastic component analysis
- Deterioration judgment of resin materials
- Agricultural and marine products inspection
- Medical healthcare equipment
- Food and biological component analysis, etc.

Despite being palm-sized, you can obtain analysis results equivalent to HPLC, mass spectrometers and large analyzers.

Optical measuring devices

Low light measurement Various lamps

A variety of photometers that use photomultiplier tube to measure weak light and semiconductor sensors that cover the ultraviolet to near-infrared ranges.



USB photomultiplier (analog) M009



USB/RS232C Photon counter M014



USB large diameter Photon counter M019



Ultra wide range luminometer S009

Cell insertion type ultra wide range weak luminescence measuring device



Near-infrared lamp source M018

Optimal placement of high-output lamps and receiving fibers



Light source for checking photon counters

For checking photomultiplier tube and camera