Messages

We measure the properties of various nanotechnology materials using our original method and a beam of electrons narrowed down to the atomic scale. Our motivation is to see the unseen and measure the unmeasured. Our targets extend from fundamental properties of materials to any field of engineering. Examples include catalytic exhaust purifiers of vehicles, magnetic materials, phosphors, low-friction coatings, dielectric devices, soft matter, extraterrestrial dust, and Earth's interior materials. We have many domestic and international research collaboration partners in academia and industries. We always ask ourselves why it is so (and not otherwise). Understanding causality accurately helps us formulate guidelines to design novel materials.
Big data is a hot topic nowadays. A sufficient volume of measurement data now exists to be called big data. We were the first to introduce a statistical processing system for measured data. Our method is very powerful and has broad application areas. Our method will be your powerful tool to explore the future.

Education and Research Policy

Everything starts from accurately understanding the basics: fundamental mathematics and physics taught in middle and high schools and the first two years at university. We are not about memorizing difficult formulae. We believe in learning how to use simple concepts accurately at your own pace and then discussing the results. This is the most important process. Every year we have visiting researchers and students from abroad. Do not feel intimidated. You do not need to speak perfect English from the beginning to communicate in English. There are plenty of opportunities to practice communicating in English.

Message to Our Students

Use the world's most advanced microscopes and perform the world's most sophisticated measurements at our laboratory. You can measure any property of materials at an atomic resolution. The measured data can be processed mathematically for visualization. You can create distribution maps of the material's properties. The only things we need from you are passion and a little ingenuity.

Message to Prospective Students

We welcome young minds who want to develop their careers without borders, even if they are unsure of their exact path. We welcome young scientists who want to accomplish something here using the most advanced laboratory facilities and equipment. The world is waiting to be explored.

Professor Shunsuke MUTO