* Experience Demonstration*

Takiguchi LAB.

[The leading-edge trend of Quasi Electro Static Field]

Department of Mechanical and Biofunctional Systems

http://www.takiguchilab.iis.u-tokyo.ac.jp/index.html

Engineering of Quasi-electro Static Field

*Mechanical Engineering

The leading-edge trend of Quasi Electro Static Field

New development for "Smart Reference" etc.

For the human movement behavior and the activity more richly, it is hoped to develop the technology innovatively concerning the monitoring and the sensing of the man biological and sensibility information and the technology regarding to the provision of information and evaluation. In this laboratory, we study the application to the mobile society mainly, it pays attention to the field science expected from various viewpoints.

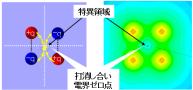
The main topics of research

- Mobility communication and sensing, applying Quasi-electrostatic field
 * We provide the experience demonstration of the human body communication
- ◆Technology of Multipole electric-field control
- Development of "Smart Reference" use of Multipole Electrode Structure





Example of human body communication using Quasi-electrostatic field



generation principle of reference potential (ex. Quadrupolar structure)



tissue by laser light assistance photoexcitation (cross section surface of

leaf of camellia)

Multipole Electrodes structure as the Virtual Ground for Mobile Sensing and Communications

Visualization for ionic polarization of plant



Bicycle backing monitor system using Quasi-electrostatic field method



Communication example by using the technology of Quasi-electrostatic field wearing around the car body