

# NIINO LAB.

## [Manufacturing Science on Functional Form Materialization]

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<http://niinolab.iis.u-tokyo.ac.jp>

### Applicative Electromechanical Systems

Department of Precision Engineering

## Additive Manufacturing and MID\*

\* Molded Interconnect Devices

We are carrying out research activities on new fabrication technologies such as additive manufacturing (which is formerly known as rapid prototyping) and MID (Molded Interconnect Devices) and their applications. We are aiming at manufacturing of new functional parts and mechatronic devices/systems by multifunctional free-form fabrication technologies. We are also developing new mechatronic devices which is fully compatible to extreme conditions such as ultrahigh vacuum.

## Research Subjects

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| Selective laser sintering process of plastic powder    | Additive manufacturing of tissue engineering scaffold       |
| Preheat free plastic laser sintering                   | MID application to mechatronic devices                      |
| Improvement in precision of laser sintering process    | MID fabrication process using sacrificial material          |
| Powder compaction in selective laser sintering process | Fabrication of functional flow channel by injection molding |

### Fusion of a novel mechanism and its fabrication process MID (Molded Interconnect Device)

