

Association”.

5. Staff

1 Professor, Miyazawa

4 Technicians (Department staff) including part-time position and 1 Office administrator (Department staff)

No assistant

9 Master Students & 10 Bachelor Students

6. Equipment at our Lab.

BRAZING & JOINING

1. Electrical Atmosphere Furnace with Special Loading System for Specimen
2. Electrical Atmosphere Furnace and Vacuum Furnace and Vertical Type Furnace with Rotating Special jig.
3. In-site Observation System for Brazing
4. Spot Brazing System.
5. Special Brazing Equipment with Charcoal as a Heat Source for Ancient Egypt Time Brazing.
6. Soldering System with Hot Plate equipment.
7. Electrical Current Loading System at Room Temperature.

ESTIMATION & ANALYSIS

8. Cross-section Observation System,
Cutting & Mounting & Polishing & Automatically Polishing & Etching & CP (Ion Polishing) & FIB.
9. Observation System, Optical Microscope with CCD camera & SEM & Stereoscopic Microscope.
10. Analysis System, SEM+EDX & SEM+EPMA & SEM+EBSD & XRD & X-ray CT.
11. Mechanical Properties, Tensile & Fatigue at high temperature & Impact & Hardness at Room temperature.
12. Thermal Analysis System, DTA & DSC & TG & TMA.
13. Solder Checker.

7. Fundamental Study Topics in Miyazawa's Lab

You will study following topics, which are important metallurgical knowledge and skills, in Miyazawa lab.

1. Fundamental of Joining Technology for Fabricating Field
2. Fundamental of Brazing & Soldering Technology
3. Technical Visit to Some Fabricating or Joining Company if you need
4. Fundamental of Analysis Method & Technology
5. Practical training of Analysis Method at my university's analytical center with special technician
6. Fundamental of Phase Diagrams for Metals & Alloys
7. Fundamental of Metallurgy not Materials Science

That's all