

**Technical committee on systematization of electrochemical measurements
based on physicochemical theory (JCI-TC-134A)
The first steel materials WG meeting minutes**

Date: October 3, 2013, 14:30~17:15

Place: JCI the fourth conference room

Attendance: YAMAGUCHI chairperson, KATO chief secretary, MIYAZATO secretary, KANEMATSU secretary, KOBAYASHI secretary, M.YAMAMOTO secretary, OYAMOTO committee, KNADA committee, TAKAYA committee, HANAOKA committee, S.YAMAMOTO committee, OKADA secretariat and AZUMA committee

Absence: FUKUYAMA committee

Handout: W1-1-1, W1-1-2, W1-1-3, W1-1-4 Study cases (From YAMAGUCHI chairperson)

W1-2 Study case (From TAYAKA committee)

W1-3 Study case (From KANADA committee)

W1-4 Literature search (From M.YAMAMOTO secretary)

W1-5-1, W1-5-2 Study cases (From HANAOKA committee)

W1-6 Study case (From S.YAMAMOTO committee)

W1-7 Study case (From OYAMOTO committee)

Meeting agenda:

1. Self-information

*Self-introduction were performed from OYAMOTO committee, HANAOKA committee and YAMAMOTO committee, because they were absent from the first whole committee.

2. Introduction of the study case about steel corrosion.

*W1-1 was explained by YAMAGUCHI chairperson.

>Introduction of the research on -3 dimension simulation model of concrete structures with chloride attack.

>Introduction of the research on -Influence of the thermal spray method of the galvanic anode system for cathodic protection under marine environment on the protection effect.

>Introduction of the research on -Examination about evaluation of electric current in cathodic protection using the splitted rebar specimen. --- This was explained in detail by YAMAMOTO secretary.

>Introduction of the research on -Examination about the long term durability of the SHIRASU-concrete under the marine environment.

*WG1-4 was explained by S.YAMAMOTO committee.

>Introduction of the research on -Experimental study on effects of cathodic protection to prevent macro-cell corrosion of steel in concrete.

*W1-2 was explained by TAKAYA committee.

>Introduction of the research on -Influence of the differences of the generation process and type of corrosion

products in concrete on the crack width and weight loss.

*W1-3 was explained by KANADA committee.

- >Introduction of the research on –Influence of the depth from the concrete surface on the electrical resistivity.
- >Introduction of the research on –Polarization resistance measurement of the steel in the actual concrete structure.
- >The item which should be examined in this steel material WG.

*W1-7 was explained by OYAMOTO committee.

- >Introduction of the research on –Calculation of macrocell corrosion rate in existing buildings.
- >Introduction of the research on –Durability evaluation of RC structures based on the steel corrosion.
- >Introduction of the research on –Prediction of macrocell corrosion rate.
- >Introduction of the research on –The example of investigation of buildings.

*W1-5 was explained by HANAOKA committee.

- >Introduction of the research on –The factor influenced to the measured value of the microcell corrosion rate of the steel in concrete, and its variation.
- >Introduction of the research on – Examination about probability of corrosion of the steel in the concrete with blast-furnace slag cement.

*W1-4 was explained by YAMAMOTO secretary.

- >The literature survey for electrochemical measurements.

3. Schedule of next meetings

*The next steel material WG meeting is December 19, 2013, 15:00~18:00.

*The next whole committee is December 20, 2013, 10:00~12:00.

Name of the reporter: AZUMA