Global Silicon Water Japan TC Chapter

Meeting Summary and Minutes

August 2, 14:00 – 17:00

SEMI Japan, Ichigaya, Tokyo

TC Chapter Announcements

Next TC Chapter Meeting

December 12, 2019, 13:00 – 17:00

Tokho Big Sight, Tokyo, Japan

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Naoyuki Kawai (Meiji University), Tetsuya Nakai (SUMCO)
SEMI Staff: Junko Collins

Company	*Last*	*First*	*Company*	*Last*	*First*
Meiji University	Kawai	Naoyuki	SUMCO	Nakai	Tetsuya
Wafer Information Service	Yoshise	Masanori	ShinEtsu Handotai	Toda	Naohisa
Global Wafers Japan	Takeda	Ryuji	Consultant	Kumai	Sadao
Hitachi High-Technologies	Ikota	Masami	Hitachi High-Technologies	Oka	Kenji
Kobelco Research Institute.INC	Sumie	Shingo			
			SEMI Japan	Collins	Junko

Table 2 Leadership Changes: none

WG/TF/SC/TC Name	*Previous Leader*	*New Leader*
Japan AWG Task Force	Satoshi Akiyama, Optima	None

Table 3 Committee Structure Changes: None

Previous WG/TF/SC Name	*New WG/TF/SC Name or Status Change*
Japan AWG Task Force	Disbanded

Table 4 Ballot Results: None

Document #	*Document Title*	*Committee Action*

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 5 Activities Approved by the GCS between meetings of the TC Chapter: None

#	*Type*	*SC/TF/WG*	*Details*

Table 6 Authorized Activities: None

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

#	*Type*	*SC/TF/WG*	*Details*

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:
http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF

Table 7 Authorized Ballots: None

#	*When*	*TF*	*Details*
6526A	Cycle 7, 2019	Test Method	New Standard Document: Test Method for Bulk Microdefect density and Denuded Zone Width in Annealed Silicon Wafers by Optical Microscopy after Preferential Etching

Table 8 SNARF(s) Granted a One-Year Extension: None

#	*TF*	*Title*	*Expiration Date*

Table 9 SNARF(s) Abolished: None

#	*TF*	*Title*

Table 10 Standard(s) to receive Inactive Status: None

Standard Designation	*Title*

Table 11 New Action Items:

Item #	*Assigned to*	*Details*

Table 12 Previous Meeting Action Items: none

Item #	*Assigned to*	*Details*

1 Welcome, Reminders, and Introductions

Dr. Naoyuki Kawai called the meeting to order at 14:30. Attendees introduced themselves. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed.

Attachment: Required_Elements_Reg_20150327_E+J_2016NewStdTemplate,
Silicon Wafer Japan TC (2018.10.02) R0.1

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: To approve the meeting minutes on April 19, 2019
By / 2nd: T. Nakai (SUMCO) / R. Takeda (Global Wafers Japan)
Discussion:
Vote: 8/0 Motion passed

Action Item: None
Attachment: Silicon Wafer Japan TC (2019.04.19) R0.1

3 Liaison Reports

3.1 GCS

Although Doc. 6425: Line Item Revision to SEMI M1-0918, Specification for Polished Single Crystal Silicon Wafers was submitted to Cycle 3 with appropriate approval, some contexts of actual draft for cycle 3 was modified after that after the approval, without any approval process. Therefore, Doc. 6425 will be failed at the ballot review during SEMICON West period.

Under the current Regulations, background statement is not included in the scope of voting. However, if there are technical problems in the background statement, it should also be subject to voting. Si GCS would like to consult with Regulations SC.

3.2 *Silicon Wafer North America TC Chapter*

See attached the liaison report. Task force activities are reported at each task force report.

Action Item: None,

Attachment: NA Silicon Wafer TC Liaison Report July 2019 v1

3.3 *Silicon Wafer Europe TC Chapter*

No report since there was no meeting after the last Japan TC Chapter meeting.

Action Item: None,

Attachment: None,

3.4 *JSNM / M4S (Material Standards Study Group for Semiconductor Supply Chain) Report*

The report was given by Mr. R. Takeda. The organization of the study group was introduced.

There are three groups focus on FT-IR carbon concentration evaluation method group, PL carbon concentration evaluation method group and Epi resistance evaluation method group.

Action Item: None,

Attachment: None,

3.5 *SEMI Staff Report*

J. Collins (SEMI) gave the SEMI Staff Report. See the attachment for details. Of note, J. Collins reported forming of the China Chapter of Compound Semiconductor materials Standards Committee was approved during SEMICON West 2019.

Action Item: none,

Attachment: SEMI Staff Report 2019_0722_v1.0,

4 Ballot Review: None

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

No ballot review at this meeting.

Action Item: none

Attachment: none

5 Subcommittee and Task Force Reports

5.1 *International 450mm Shipping Box Task Force / JA Shipping Box Task Force*

No report was given at this meeting

Action Item: none,

Attachment: none,

5.2 *International Advanced Wafer Geometry Task Force/Japan Advanced Wafer Geometry Task Force*

- The report was given by Mr. M. Yoshise. Of notes;

Mr. Yoshise introduced draft document of #6506 and #6168. The context of those two documents were shared with the task force members and were introduced at the TC Chapter meeting, however, the background statements were not prepared. The task force will write the background statement after this meeting and get GCS approval for submit them to cycle 7 of 2019.

Action Item 1: Mr. M. Yoshise and Task Force to create background statement for #6506 and #6168,

Action Item 2: Staff to send request email for Si GCS approval for ballot authorization #6506 and #6168

Attachment: AWG Report 2019.08.02,

IRDS_Metrology_July2019_meetingInformation

M67 M68 & IRDS for M49

- Disbandment of Japan Advanced Wafer Geometry Task Force

  There has been no activity for a long time, and the task force has no plans for further work.

Motion: To disband the Japan Advanced Wafer Geometry Task Force
By / 2nd: M. Yoshise (Wafer Information Service) / T. Nakai (SUMCO)
Discussion:
Vote: 6/0 Motion passed

5.3 *International Polished Wafers Task Force*

No special topic was reported at this meeting.

Action Item: none,

Attachment: none,

5.4 International Epitaxial Wafers Task Force

No special topic was reported at this meeting.

Action Item: none,

Attachment: none,

5.5 International Annealed Wafers Task Force

No special topic was reported at this meeting.

Action Item: None,

Attachment: None,

5.6 International SOI Wafers Task Force

No special topic was reported at this meeting.

Action Item: none,

Attachment: none,

5.7 International Terminology Task Force

No special topic was reported at this meeting.

Action Item: none,

Attachment: none,

5.8 International Test Methods Task Force / Japan Test Method Task Force

R. Takeda (Global Wafers Japan) reported. See attached report.

5.8.1 Ballot submission

- Test Method for Bulk Microdefect density and Denuded Zone Width in Annealed Silicon Wafers by Optical Microscopy after Preferential Etching Technique

Motion:	To submit ballot to Cycle 7 regarding Doc. 6526A: Test Method for Bulk Microdefect density and Denuded Zone Width in Annealed Silicon Wafers by Optical Microscopy after Preferential Etching Technique.
By / 2nd:	R. Takeda (Global Wafers Japan) / T. Nakai (SUMCO)
Discussion:	
Vote:	7/0 Motion passed

Action Item: The task force to submit the ballot documents to cycle 7

Attachment: Test Method TF Meeting Minutes_2019.7.31 rev1

5.9 International Advanced Automated Surface Inspection Task Force

M. Ikota reported. Of note;

- Doc.6500: Line item revision to SEMI M58-1109 (Reapproved 0614) Test Method for Evaluating DMA Based Particle Deposition Systems and Processes
  - This document will be submitted to Cycle 7 for the review at the SEMICON Europa.
- Doc.6363 Revision of SEMI M52-0214 GUIDE FOR SPECIFYING SCANNING SURFACE INSPECTION SYSTEMS FOR SILICON WAFERS FOR THE 130 nm TO 11 nm TECHNOLOGY GENERATIONS.
  - Task force is planning to submit the draft document for ballot at SEMICON Europa.
- SNARF for Revision of SEMI M53-0219 - Practice for Calibrating Scanning Surface Inspection Systems Using Certified Depositions of Monodispere Reference Spheres on Unpatterned Semiconductor Wafer Surfaces is in two weeks review period.
  - Ratification ballot was submitted to Cycle 6
- The task force will submit reapproval ballot for M35-1114: SEMI M35-1114 - Guide for Developing Specifications for Silicon Wafer Surface Features Detected by Automated Inspection.

Action Item: None

Attachment: IAASI_SEMICON_West_08_July_2019

Int’l Advanced Automated Surface Inspection Task Force 2019.08.01

6 Old Business

6.1 *Previous Action Items*

All previous action items are closed.

Action Item: None,

Attachment: None,

6.2 3-year Project Period

None

6.3 Consideration of 5-year Review

None

7 New Business

7.1 No new business

Action Item: None

Attachment: None

8 Next Meeting and Adjournment

The next meeting is scheduled for December 12, 13:00 17:00

at Conference Tower, Tokyo Big Sight, Tokyo Japan

Adjournment: 17:30.

Respectfully submitted by:

Junko Collins

Standards & EHS

SEMI Japan

Phone: 81.3.3222.5819

Email: jcollins@semi.org

Minutes tentatively approved by:

Tetsuya Nakai (SUMCO), Co-chair	<Date approved>
Naoyuki Kawai (Meiji University), Co-chair	<Date approved>

Table 13 Index of Available Attachments[#1]

Title	*Title*
Required_Elements_Reg_20150327_E+J_2016NewStdTemplate	AWG Report 2019.04.19
NA Silicon Wafer TC Liaison Report April 2019 v1	IAASI_NA_Spring_01Apr_2019
Int'l Advanced Automated Surface Inspection Task Force	SiW_Agenda_181213_R0.1
SEMI Staff Report 2019_0409_v1_Si	Test Method TF Meeting Minutes_2019.4.17

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.