Japan Liquid Chemicals Committee  
Meeting Summary and Minutes  
SEMI Japan Standards Spring 2014 Meetings  
Friday, April 11, 2014, 15:20-17:00  
SEMI Japan, Tokyo, Japan

Next Committee Meeting  
SEMI Japan Standards Summer 2014 Meetings  
Monday, June 30, 2014, 15:00-17:00  
SEMI Japan, Tokyo, Japan

Table 1 Meeting Attendees
Co-Chairs: Hiroshi Tomita (Toshiba), Hiroyuki Araki (Dainippon Screen Manufacturing)  
SEMI Staff: Chie Yanagisawa (SEMI Japan)  
Attendee: 13 + SEMI: 1

<table>
<thead>
<tr>
<th>Company</th>
<th>Last</th>
<th>First</th>
<th>Company</th>
<th>Last</th>
<th>First</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dainippon Screen Manufacturing</td>
<td>Araki</td>
<td>Hiroyuki</td>
<td>Nihon Entegris</td>
<td>Nagafuchi</td>
<td>Takuya</td>
</tr>
<tr>
<td>Swagelok</td>
<td>Ishida</td>
<td>Noritsugu</td>
<td>Advance Electric Company</td>
<td>Sasao</td>
<td>Kimihito</td>
</tr>
<tr>
<td>Kanto Chemical</td>
<td>Ishikawa</td>
<td>Norio</td>
<td>Organo</td>
<td>Sugawara</td>
<td>Hiroshi</td>
</tr>
<tr>
<td>AIST</td>
<td>Kato</td>
<td>Haruhisa</td>
<td>Toshiba</td>
<td>Tomita</td>
<td>Hiroshi</td>
</tr>
<tr>
<td>Particle Measuring Systems</td>
<td>Kato</td>
<td>Kazutoshi</td>
<td>Nihon Pall</td>
<td>Tsuzuki</td>
<td>Shuichi</td>
</tr>
<tr>
<td>Rion</td>
<td>Kondo</td>
<td>Kaoru</td>
<td>Kurita Water Industries</td>
<td>Yokoi</td>
<td>Ikunori</td>
</tr>
<tr>
<td>Nihon Pall</td>
<td>Mizuno</td>
<td>Takehito</td>
<td>SEMI Japan</td>
<td>Yanagisawa</td>
<td>Chie</td>
</tr>
</tbody>
</table>

* alphabetical order by last name

Table 2 Leadership Changes

<table>
<thead>
<tr>
<th>Group</th>
<th>Previous Leader</th>
<th>New Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrapure Liquid Evaluation Study Group</td>
<td>Leader was not appointed when the Study Group was set up at the last TC Chapter meeting.</td>
<td>Kaoru Kondo (Rion) and Hiroshi Sugawara (Organo) were appointed.</td>
</tr>
<tr>
<td>Liquid Chemicals ESD Study Group</td>
<td>Leader was not appointed when the Study Group was set up at the last TC Chapter meeting.</td>
<td>Keiichi Yamakawa (Nihon Gore) and Takuya Nagafuchi (Nihon Entegris) were appointed.</td>
</tr>
<tr>
<td>5-year-review Task Force</td>
<td>Koichi Ishikawa (ACE) stepped down from the leader, since the task force was discharged.</td>
<td>---</td>
</tr>
</tbody>
</table>

Table 3 Ballot Results (or move to Section 4, Ballot Review)

Passed ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.  
Failed ballots and line items were returned to the originating task forces for re-work and re-balloting.

<table>
<thead>
<tr>
<th>Document #</th>
<th>Document Title</th>
<th>Committee Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>5421A</td>
<td>New Standard: “Test Method for Particle Removal Performance of Liquid Filter Rated Below 30 nm with ICP-MS”</td>
<td>Passed with editorial changes</td>
</tr>
</tbody>
</table>
Table 4 Authorized Ballots
None.

Table 5 Authorized Activities
Listing of all new TFOFs, SNARFs, and other activities approved by the committee.

<table>
<thead>
<tr>
<th>#</th>
<th>Type</th>
<th>SC/TF/WG</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>Study Group</td>
<td>Ultrapure Liquid Evaluation Study Group</td>
<td>*The name of Ultrapure Water Evaluation Study Group was changed to Ultrapure Liquid Evaluation Study Group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Study Group</td>
<td>To discuss the evaluation method for the quality of liquid chemical and ultrapure water at POP/POU of semiconductor cleaning equipment</td>
</tr>
</tbody>
</table>

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

Table 6 New Action Items (or move to Section 8, Action Item Review)
None.

1 Welcome, Reminders and Introductions
Hiroshi Tomita (Toshiba), committee co-chair, called the meeting to order at 15:20. Self-introductions were made followed by the agenda review.

2 Required Meeting Elements
The meeting reminders on program membership requirement, antitrust issues, intellectual property issues and international effective meeting guidelines, were reviewed by SEMI staff, Chie Yanagisawa.

3 Review of Previous Meeting Minutes
The committee reviewed the minutes of the previous meeting held on December 3, 2013.

Motion: To approve the minutes of the previous meeting held on December 3, 2013 with adding Noritsugu Ishida (Swegelok) to the attendee list and modifying some minor errors.
By / 2nd: Takuya Nagafuchi (Nihon Entegris) / Takehito Mizuno (Nihon Pall)
Discussion: None
Note: 11 in favor and 0 opposed. Motion passed.

Attachment: 01_131203_Japan-LC_Minutes_Final

4 SEMI Staff Report
Chie Yanagisawa (SEMI Japan) gave the SEMI staff report. This report included as following points.

- Global SEMI Events
- Global Standards Meetings Schedule
- Ballot Critical Dates
- Publication Update
- Contact Information
5 Liaison Reports

5.1 Liquid Chemicals North America TC Chapter

Chie Yanagisawa gave the North America Liaison Report. This report included as following points.

- Leadership
- Organization Chart
- Meeting Information
- New Activities
- Ballot Review Summary
- Upcoming Ballots
- Task Force Reports
- Next Meeting Schedule

Attachment: 03_NA LChem Report April 2014 MT

5.2 Gases and Liquid Chemicals Europe TC Chapter

None.

6 Ballot Review


<table>
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<tr>
<th>Document #</th>
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<tr>
<td>5421A</td>
<td>New Standard: “Test Method for Particle Removal Performance of Liquid Filter Rated below 30 nm with ICP-MS”</td>
<td>Passed with editorial changes.</td>
</tr>
</tbody>
</table>

Attachment: 04_Ballot-Review_5421A

7 Task Force Reports

7.1 Diaphragm Valve Task Force

Kimihito Sasao (Advance Electric Company), co-leader, reported there was no update.

7.2 Welding Fitting Task Force

Kimihito Sasao (Advance Electric Company), co-leader, reported there was no update.

7.3 5-year-review Task Force

Koichi Ishikawa (ACE), the leader did not attend the meeting. Some decisions concerned to this task force would be made at the Old Business Section below.

7.4 Liquid Filter Task Force

Takehito Mizuno (Nihon Pall), the co-leader, reported that the Ballot 5421A was reviewed with one reject vote and one accept with comment vote, and passed with editorial changes.

He mentioned that he sent a message in order to confirm what the voter intended in his reject vote, since Section A1-7 of Appendix 1 explains what this Negative mentioned in Ballot 5421A. Then, the notes of UPW Filtration TF / F63 TF joint meeting held on March 31, 2014 were provided, which proposed that the reject vote would be withdrawn if the document was revised according to one of the TF’s suggestions. Takehito Mizuno continued that
the Japan Liquid Chemicals TC Chapter concluded that neither of two suggestions was technically relevant to the negative of the reject vote for Ballot 5421A, so that the Ballot passed.

Takehito Mizuno commented that it could be considerable that the Liquid Filter Task Force would communicate with the related members of North America Chapter about those suggestions in the future as needed.

7.5 Liquid-borne Particle Counter Task Force

Kaoru Kondo (Rion), the co-leader, reported there was no update.

7.6 Ultrapure Water Evaluation Study Group

Hiroshi Sugawara (Organo), the co-leader, reported the following items.

- The meetings were held on January 24, March 14 and April 11.
- The name of “Ultrapure Water Evaluation Study Group” was changed to “Ultrapure Liquid Evaluation Study Group” at the meeting on April 11, 2014.

7.7 Liquid Chemicals ESD Study Group

- The meetings were held on January 24, March 14 and April 11.
- The study group initially discussed the evaluation method with ultrapure water, but shifted to the evaluation method with organic solvent solution.

8 Old Business

8.1 Previous Meeting Action Items

Chie Yanagisawa reviewed the previous meeting action items.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC131203-01</td>
<td>SEMI Japan Staff</td>
<td>To ask the leader, Koichi Ishikawa (ACE), whether or not the 5-year-review Task Force should continue to work on Doc. 5064 (Revision to SEMI F66-1011).</td>
</tr>
</tbody>
</table>

Koichi Ishikawa (ACE), the leader, responded to the message of the Action Item by Chie Yanagisawa (SEMI Japan) as above that the 5-year-review Task Force decided to discontinue working on Doc. 5064 (Revision to SEMI F66-1011) since the related SEMI Standards were in “inactive” status with little possibility of revision by the North America Chapter.

8.2 Status of SEMI F66-1011

<table>
<thead>
<tr>
<th>Motion:</th>
<th>To get SEMI F66-1011 “Specification for Port Marking and Symbol of Stainless Steel Vessels for Liquid Chemicals” inactive status</th>
</tr>
</thead>
<tbody>
<tr>
<td>By / 2nd:</td>
<td>Hiroyuki Araki (Dainippon Screen Mfg.) / Shuichi Tsuzuki (Nihon Pall)</td>
</tr>
<tr>
<td>Discussion:</td>
<td>None</td>
</tr>
<tr>
<td>Vote:</td>
<td>12 in favor and 0 opposed. <strong>Motion passed.</strong></td>
</tr>
</tbody>
</table>

8.3 Status of 5-year-review Task Force

There is no activity in 5-year-review Task Force, since Doc. 5064 (Revision to SEMI F66-1011) was discontinued.

<table>
<thead>
<tr>
<th>Motion:</th>
<th>To discharge 5-year-review Task Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>By / 2nd:</td>
<td>Hiroyuki Araki (Dainippon Screen Mfg.) / Takuya Nagafuchi (Nihon Entegris)</td>
</tr>
<tr>
<td>Discussion:</td>
<td>None</td>
</tr>
<tr>
<td>Vote:</td>
<td>12 in favor and 0 opposed. <strong>Motion passed.</strong></td>
</tr>
</tbody>
</table>
9 New Business

9.1 Change of Study Group name

The name of “Ultrapure Water Evaluation Study Group” was changed to “Ultrapure Liquid Evaluation Study Group”.

9.2 Announcement of Leadership of Study Groups

The leadership was announced as following since the leaders were not appointed when the Study Groups were set up at the last TC Chapter meeting on December 3, 2013.

9.2.1 Ultrapure Liquid Evaluation Study Group => Kaoru Kondo (Rion) and Hiroshi Sugawara (Organo)

9.2.2 Liquid Chemicals ESD Study Group => Keiichi Yamakawa (Nihon Gore) and Takuya Nagafuchi (Nihon Entegris)

10 Action Item Review

None.

11 Next Meeting and Adjournment

The next meeting of the Japan Liquid Chemicals TC Chapter is scheduled for Monday, June 30, 2014, 15:00-17:00 at SEMI Japan, Tokyo, Japan.

Having no further business, a motion was made by Hiroshi Tomita, co-chair, to adjourn the Japan Liquid Chemicals TC Chapter meeting at JPR Conference room #1, SEMI Japan office. The meeting unanimously adjourned at 17:00.

Respectfully submitted by:
Chie Yanagisawa
Sr. Coordinator, Standards & EHS
SEMI Japan
Phone: +81.3.3222.5863
Email: cyanagisawa@semi.org

Minutes approved by:
Hiroshi Tomita (Toshiba), Co-chair
Hiroyuki Araki (Dainippon Screen Manufacturing), Co-chair

Table 8 Index of Available Attachments #1

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>131203_Japan-LC_Minutes_Final</td>
</tr>
<tr>
<td>2</td>
<td>SEMI Staff Report 2013 Dec_R0.1</td>
</tr>
<tr>
<td>3</td>
<td>NA LChem Report Dec 2013 MT PT</td>
</tr>
<tr>
<td>4</td>
<td>Ballot-Review_5421A</td>
</tr>
</tbody>
</table>

#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 Naoko Tejima at the contact information above.