Japan TC Chapter of PV Global Technical Committee
Japan TC Chapter of PV Materials Global Technical Committee
Joint Meeting Summary and Minutes

Japan Standards Winter 2014 Meetings
Wednesday, December 10, 2014, 1:30 p.m. – 3:30 p.m.
SEMI Japan office, Tokyo, Japan

Next Committee Meeting
TBD

Committee Announcements (optional)
None

**Table 1 Meeting Attendees**

**PV Committee/Co-Chairs:** Kazuhiko Kashima (GlobalWafers Japan), Masaaki Yamamichi (AIST), Hiromu Takatsuka (Mitsubishi Heavy Industries)

**PV Materials Committee/Co-Chairs:** Kazuhiko Kashima (GlobalWafers Japan), Takashi Ishihara (Mitsubishi Electric), Tetsuo Fukuda (AIST)

**SEMI Staff:** Chie Yanagisawa

**Attendee:** 4 + 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>AIST</td>
<td>Yamamichi</td>
<td>Masaaki</td>
<td>Mitsubishi Electric</td>
<td>Ishihara</td>
<td>Takashi</td>
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<tr>
<td>AIST</td>
<td>Fukuda</td>
<td>Tetsuo</td>
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<tr>
<td>GlobalWafers Japan</td>
<td>Kashima</td>
<td>Kazuhiko</td>
<td>SEMI Japan</td>
<td>Yanagisawa</td>
<td>Chie</td>
</tr>
</tbody>
</table>

*alphabetical order by company name*

Japan TC Chapter of PV Global Technical Committee

**Table 2 Leadership Changes**

None

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

None

**Table 4 Authorized Ballots (or move to Section 7, New Business)**

None

**Table 5 Authorized Activities (or move to Section 7, New Business)**

None

**Table 6 New Action Items (or move to Section 8, Action Item Review)**

None

**Table 7 Previous Meeting Actions Items (or move to Section 8, Action Item Review)**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Assigned to</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>20140911-1</td>
<td>Masaaki Yamamichi (AIST)</td>
<td>To prepare the explanatory materials for the survey of the merger of PV GTC and PV Materials GTC to the TC members in Japan =&gt; CLOSE</td>
</tr>
<tr>
<td>20140911-2</td>
<td>Chie Yanagisawa (SEMI Japan)</td>
<td>To send out the survey of the merger of PV GTC and PV Materials GTC to the TC members in Japan and to get feedback from them by the two weeks after the distribution. =&gt; CLOSE</td>
</tr>
</tbody>
</table>
Japan TC Chapter of PV Materials Global Technical Committee

Table 8 Leadership Changes

None

Table 9 Ballot Results (or move to Section 4, Ballot Review)

None

Table 10 Authorized Ballots (or move to Section 7, New Business)

None

Table 11 Authorized Activities (or move to Section 7, New Business)

None

Table 12 New Action Items (or move to Section 8, Action Item Review)

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<tr>
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Table 13 Previous Meeting Actions Items (or move to Section 8, Action item Review)

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<tr>
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</thead>
<tbody>
<tr>
<td>20140911-3</td>
<td>Chie Yanagisawa (SEMI Japan)</td>
<td>To ask the patent holder, NPC, for an LOA for these two potentially material patented technology. =&gt; CLOSE</td>
</tr>
</tbody>
</table>
1 Welcome, Reminders, and Introductions

Masaaki Yamamichi (AIST), co-chair, called the meeting to order at 1:30 p.m. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous joint meeting.

<table>
<thead>
<tr>
<th>Motion:</th>
<th>To approve the previous meeting minutes as written.</th>
</tr>
</thead>
<tbody>
<tr>
<td>By / 2nd:</td>
<td>Tetsuo Fukuda (AIST) / Kazuhiko Kashima (GlobalWafers Japan)</td>
</tr>
<tr>
<td>Discussion:</td>
<td>None</td>
</tr>
<tr>
<td>Vote:</td>
<td>3 in favor and 0 opposed. Motion passed.</td>
</tr>
</tbody>
</table>

3 Liaison Reports

3.1 China PV TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the China PV TC Chapter as attached.

Attachment: 01_China Photovoltaic Committee Liaison Report20141021

3.2 Europe PV Materials TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the Europe PV Materials TC Chapter as attached.

Attachment: 02_141022_Europe_PVMat_LiaisonReport

3.3 North America PV Materials TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the North America PV Materials TC Chapter as attached.

Attachment: 03_NA Liaison Report PV Materials 20141118

3.4 Taiwan Photovoltaic TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the Taiwan Photovoltaic TC Chapter as attached.

Attachment: 04_Taiwan PV Liaison Report Dec 8 2014

3.5 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) gave the SEMI Staff Report as attached.

Attachment: 05_SEMI Staff Report 2014 December_R0.4

Japan PV TC Chapter

4 Ballot Review

None

5 Subcommittee & Task Force Reports

None

6 Old Business

None
7 New Business
None

8 Action Item Review
8.1 Open Action Items
There is no open action item.
8.2 New Action Items
There is no new action item.

Japan PV Materials TC Chapter

9 Ballot Review
None

10 Subcommittee & Task Force Reports
10.1 Japan PV Materials Task Force
Tetsuo Fukuda (AIST), co-leader, reported nothing new except for the receipt of LOA for 5532, which would be reported at “Old Business section” of this meeting.

11 Old Business
Chie Yanagisawa reported the SEMI Japan sent the LOA request to NPC Incorporated and the completed LOA was received at SEMI Japan on November 4, 2014. The Japan TC Chapter of PV Materials Global Technical Committee confirmed the LOA at the meeting on December 10, 2014.

12 New Business
None

13 Action Item Review
13.1 Open Action Items
There is no open action item.
13.2 New Action Items
There is no new action item.
14 Old Business for Japan TC Chapters of PV Committee and PV Materials Committee

14.1 Discussion for the reorganization

On reorganization of the PV related activities in Japan region Chie Yanagisawa (SEMI Staff) reported the result of the survey for the reorganization distributed to the Japan TC members of both PV Global Technical Committee and PV Materials Global Technical Committee and there were few responses.

Tetsuo Fukuda stated that the Japan TC Chapter of PV Materials Global Technical Committee shall remain and the Japan TC Chapter of PV Global Technical Committee should remain in order to watch the activities other than PV Materials in the other regions.

All attendees agreed that:

- The Organizations of Japan TC Chapters of both PV GTC and PV Materials GTC keep as they are.
- TC Chapters in some locales to review their organizations to align with the scopes of PV GTC and PV Materials GTC. It is recommended to establish PV Materials TC Chapters and transfer relevant task forces as needed.

15 Next Meeting and Adjournment

The next joint meeting of the Japan PV TC Chapter and the Japan PV Materials TC Chapter to be decided.

Respectfully submitted by:
Chie Yanagisawa
Senior Standard Coordinator
SEMI Japan
Phone: +81.3.3222.5863
Email: cyanagisawa@semi.org

Minutes approved by:
Kazuhiko Kashima (GlobalWafers Japan), Co-chair / PV/PV Materials
April 27, 2015
Takashi Ishihara (Mitsubishi Electric), Co-chair / PV Materials
April 27, 2015
Tetsuo Fukuda (AIST) / PV Materials
April 27, 2015

Table 14 Index of Available Attachments #1

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<tr>
<td>01</td>
<td>China Photovoltaic Committee Liaison Report20141021</td>
<td>04</td>
<td>Taiwan PV Liaison Report Dec 8 2014</td>
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<tr>
<td>02</td>
<td>141022_Europe_PVMat_LiaisonReport</td>
<td>05</td>
<td>SEMI Staff Report 2014 December_R0.4</td>
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<tr>
<td>03</td>
<td>NA Liaison Report PV Materials 20141118</td>
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<td></td>
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</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 [SEMI Staff Name] at the contact information above.