

## North America Chapter Liquid Chemicals Committee Meeting Summary and Minutes

NA Fall 2015 Meetings

November 3, 2015

SEMI HQ, San Jose, California

Next Committee Meeting

April 5, 2016

NA Spring 2016 meetings

### Table 1 Meeting Attendees

**Co-Chairs:** Frank Flowers (PeroxyChem)

**SEMI Staff:** James Amano

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
General Electric	Dale	Chuck	CT Associates	Van Schooneveld	Gary
PeroxyChem	Flowers	Frank	KMG Chemicals	Rogers	Steven
Intel	Hadder	Don	Canon U.S.A.	Tsunoda	Takaaki
Enviro-energy Solutions	McIntosh	Bob			
Mega Fluid Systems	Murai	Koh	SEMI	Amano	James

### Table 2 Leadership Changes

<i>Group</i>	<i>Previous Leader</i>	<i>New Leader</i>
NA TC Chapter	Frank Parker (ICL)	Open

### Table 3 Ballot Results

**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.

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
5621C	New Preliminary Standard: Guide for Determining the Quality of Ion Exchanged Resin Used in Polish Applications of Ultrapure Water System	<b>Passed</b>
5831A	Revision to SEMI C27-0708, Specifications and Guideline for Hydrochloric Acid with title change to: Specification and Guide for Hydrochloric Acid	<b>Failed</b>

### Table 4 Authorized Ballots

<i>#</i>	<i>When</i>	<i>SC/TF/WG</i>	<i>Details</i>
5944	Cycle 2-2016	F63 Revision TF	Revision to SEMI F63-0213, Guide for Ultrapure Water Used in Semiconductor Processing

**Table 5 Authorized Activities**

#	Type	SC/TF/WG	Details
	TFOF Revision	High Purity Liquid Assemblies & Systems TF	Formerly named the F31, F39, and F41 Rewrite TF
	TFOF Revision	High Purity Materials & Components TF	Formerly named the F57 Revision TF

NOTE 1: 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**

Item #	Assigned to	Details
2015Nov#1	James Amano	James Amano to draft TC Chapter Co-Chair job description and forward to Frank and Don for review
2015Nov#2	James Amano	James Amano to distribute F41 revision SNARF to global Liq Chem membership for mandatory two-week review.
2015Nov#3	James Amano	James Amano to distribute slurry SNARF to global Liq Chem membership for mandatory two-week review

## 1 Welcome, Reminders, and Introductions

Frank Flowers called the meeting to order at 14:00. 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 meeting.

**Motion:** To approve as written.  
**By / 2<sup>nd</sup>:** Koh Murai/Don Hadder  
**Discussion:** None  
**Vote:** 7-0

## 3 Liaison Reports

### 3.1 Japan Liquid Chemicals TC Chapter

James Amano reported Of note:

- Liquid Chemicals ESD Study Group
  - Since the all tasks have been finished, the SG was disbanded, and Keiichi Yamakawa / NihonGore and Takuya Nagafuchi / Nihon Entegris were relieved of the SG co-leader position.
- Liquid Filter Task Force

- LOA of Doc. 5421A, New Standard: “Test Method for Particle Removal Performance of Liquid Filter Rated Below 30 nm with ICP-MS” was submitted. Will be published soon.

**Attachment:** 1510\_JA\_LC\_LiaisonR\_R0.0.ppt

### 3.2 Europe Liquid Chemicals TC Chapter

James Amano reported. Of note:

Meeting at SEMICON Europa (October 8)

- Five ballots adjudicated
  - Technical changes made to address negatives on three ballots which will undergo new ratification ballot process
  - Two other ballots failed and will be revised and reballoted for review at next TC Chapter meeting.
- Presentations
  - ITRS Update
    - Neuber/AMAT
  - ElectroStatic Discharge : A Challenge in ultra high purity fluid handling
    - Jochen Ruth/PALL

**Attachment:** Gas and LiqChem update to ERSC 20151007 v1.ppt

### 3.3 SEMI Staff Report

James Amano (SEMI) gave the Staff Report. Of note:

- Upcoming NA Meetings
  - NA Spring, April 4-7, 2016, at SEMI HQ in San Jose, California
  - SEMICON West, July 11-14, 2016, San Francisco, California
- 9 ballot cycles for 2016
  - <http://www.semi.org/Standards/Ballots>
- SEMI Standards Publications
  - Total SEMI Standards in portfolio: 949
- New Requirements/Process Reminders for TC Chapter Meetings from December 2014 Regulations
  - Standards Document Development Project Period
    - Project period shall not exceed 3 years (Regs 8.3.2)
    - If document development activity is found to be continuing, but cannot be completed within the project period, TC Chapter may grant one-year extension at a time, as many times as necessary.
  - SNARF Review Period
    - A submitted SNARF for a new, or for a major revision to an existing, Standard or Safety Guideline is made available to all members of a TC Chapter’s parent global technical committee for two weeks for their review and comment. (Regs 8.2.1)
    - If the SNARF is submitted at a TC Chapter meeting, the committee can review and approve, but the SNARF will need to be distributed for two weeks and then approved via GCS.

- Procedures for Correcting Nonconforming Titles of Published Standards Document (PM Appendix 4)
  - Some Standards qualify for a special procedure where a line item change can be used to correct the titles. Otherwise, the corrective action will likely require a major revision.

**Attachment:** SEMI Staff Report (10 22 2015) LC.ppt

#### 4 Ballot Review

5621C	New Preliminary Standard: Guide for Determining the Quality of Ion Exchanged Resin Used in Polish Applications of Ultrapure Water System	Passed
5831A	Revision to SEMI C27-0708, Specifications and Guideline for Hydrochloric Acid with title change to: Specification and Guide for Hydrochloric Acid	Failed

**Action Item:** James Amano to forward 5621C for GCS and subsequent A&R approval.

**Attachment:** 5621CProceduralReview.doc

#### 5 Subcommittee & Task Force Reports

##### 5.1 F31, F39, F41 Rewrite TF

For the sake of clarity, the TF will be renamed “High Purity Liquid Assemblies and Systems Task Force”

**Motion:** To approve the new TF name

**By / 2<sup>nd</sup>:** Chuck Dale/Don Hadder

**Discussion:** None

**Vote:** 7-0

Koh Murai presented a SNARF for Revision to SEMI F41-0699, Guide for Qualification of a Bulk Chemical Distribution System Used in Semiconductor Processing

**Action Item:** James Amano to distribute F41 revision SNARF to global Liq Chem membership for mandatory two-week review.

##### 5.2 Five-year review TF

- Standard: Owner
- C1: Jean-Marie Collard
- C62, C63: Suhas Ketkar

##### 5.3 Ultra Pure Water Filtration/F63TF

- Ballot 5621C, New Preliminary Standard: Guide for Determining the Quality of Ion Exchanged Resin Used in Polish Applications of Ultrapure Water System, was reviewed and approved at today’s meeting.

##### 5.4 Analytical Test Methods Task Force

- Ballot 5831A, Revision to SEMI C27-0708, Specifications and Guideline for Hydrochloric Acid with title change to: Specification and Guide for Hydrochloric Acid, was reviewed and failed at today’s meeting.
- Don Hadder presented a SNARF for slurry (below in New Business) Action Item:.

##### 5.5 Ion Exchange TF

- Working on F63, F61, F67, F75. F63 ballot (5944) should be ready for ballot in Cycle 2-2016: Revision to SEMI F63-0213, Guide for Ultrapure Water Used in Semiconductor Processing

**Motion:** To issue 5944 in Cycle 2-2016  
**By / 2<sup>nd</sup>:** Slava Libman/Koh Murai  
**Discussion:** None  
**Vote:** 5-0

## 6 New Business

### 6.1 *New SNARF for Slurry*

Don Hadder addressed the committee on this topic. He presented a draft SNARF for New Standard: Test Method for Determining Density of Chemical Mechanical Polish (CMP) Slurries. This test method would define the method for measuring density of slurries and define to what temperature the sample is to be measured at. Also, this test method would define the number of significant figures to which the resulting measurement should be reported at on the corresponding Certificate of Analysis (CoA).

**Action Item:** James Amano to distribute slurry SNARF to global Liq Chem membership for mandatory two-week review

## 7 Action Item Review

### 7.1 *Open Action Items*

James Amano (SEMI) reviewed the open action items. These can be found in the Open Action Items table at the beginning of these minutes.

## 8 Next Meeting and Adjournment

The next meeting of the North American Liquid Chemicals TC Chapter is scheduled for April 5 during the NA Spring 2016 at SEMI HQ in San Jose, California.

#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](http://www.semi.org). For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.