



PV Committee China TC Chapter
PV Materials Committee China TC Chapter
Joint Meeting Summary and Minutes

China Fall Standards Meeting 2024

Nov 20th, 2024, 10:00-17:00

Chengdu, Sichuan

TC Chapter Announcements

Next TC Chapter Meeting

TBD, China, 2025

Table 1 Meeting Attendees

Italics indicate virtual participants

Co-Chairs: Dengyuan Song (DASOLAR)

SEMI Staff: Cassie Li, Ein Wu, Sara Ma

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
DASOLAR	Song	Dengyuan	LINTON	Li	Zhixin
DASOLAR	Cui	Yuhui	RUNERGY	Chen	Rulong
DASOLAR	Zhang	Kangping	TONGRUN	Zhou	Chengjun
DASOLAR	Zhang	Ming	GCL	Xu	Meng
Leascend	He	Tanggui	Longi	Wang	Xinshe
Spire Solar	Wang	Tong	Talesun	Qian	Hongqiang
CSI	Zhang	Guangchun	AikoSolar	Fukui	Kenji
CSI	Lv	Ruirui	Leadmicro	Li	Weiming
NAURA	Li	Buzhong	Leadmicro	Su	Yunshan
NAURA	Sun	Pengtao	Red Solar	Cai	Xianwu
NAURA	Tian	Tao	JYT	Guo	Dawei
SANY	Chen	Jia	JYT	Chen	Hui
Mindomg Dianli	Lv	Jinbiao	Cathcend	Niu	Xinwei
TCL Zhonghuan	Zhang	Xuenan	JA Solar	Gong	Ruhao
Trinasolar	Zhou	Wei	JA Solar	Ma	Haotian
Risen Energy	Yang	Bochuan	YONGXIANG	Liu	Yifeng
Huasun Solar	Chen	Jingwei	Valiant	Li	Yanhong
GNETEK	Yao	Huawen	Valiant	Yan	Lei
LINTON	Liu	Erfei	AikoSolar	An	Xiexie
Sinosico	Yan	Dazhou	Gonda	Zhang	Weiming
Chint Solar	Lin	Sainv	Trinasolar	Tang	Aifeng
Chint Solar	Gan	Zhao	Metron	Zhang	Yinjiu
Trinasolar	Zhou	Yujia	Metron	Yi	Jiayang



<i>Yingli</i>	<i>Li</i>	<i>Yingye</i>	<i>ZCRI</i>	<i>Wang</i>	<i>Tongtong</i>
<i>SJTU</i>	<i>Zhang</i>	<i>Zhen</i>			

Table 1 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
<i>PV</i>		
None		
<i>PV Material</i>		
None		

Table 2 Committee Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
<i>Photovoltaic</i>	
None	
<i>Photovoltaic Materials</i>	
None	

Table 3 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
<i>PV</i>		
None		
<i>PV Materials</i>		
None		

#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 4 Activities Approved by the GCS between meetings of the TC Chapter

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
<i>Photovoltaic</i>			
None			
<i>Photovoltaic Materials</i>			
None			

Table 5 Authorized Activities

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

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
<i>PV</i>			
	SNARF	Crystalline Silicon Solar Cell Task Force	New standard: Specification for Property requirements of finger pastes for TOPCon Cell with Laser assisted firing Process
	SNARF	PV Module Task Force	New standard: Test Method for PV modules Intensify Aging in Cold Environmental Conditions
<i>PV Materials</i>			



Table 5 Authorized Activities

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

#	Type	SC/TF/WG	Details
	SNARF	PV Silicon Wafer Task Force	Reapproval of SEMI PV90-0319, Guild for Material Requirements of Internal Feeders Used in Mono-crystal Silicon Growers

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF>

Table 6 Authorized Ballots

#	When	TF	Details
<i>PV</i>			
7166	Cycle1-2025	Crystalline Silicon Solar Cell Task Force	Revision to SEMI PV79-0818, Test Method for Exposure Durability of Photovoltaic (PV) Cells to Acetic Acid Vapor
7249	Cycle1-2025	PV Equipment Task Force	Revision to SEMI PV81-0318, Guide for Specifying Low Pressure Horizontal Diffusion Furnace
<i>PV Materials</i>			
None			

Table 7 SNARF(s) Granted a One-Year Extension

#	TF	Title	Expiration Date
<i>Photovoltaic</i>			
None			
<i>Photovoltaic Materials</i>			
None			

Table 8 SNARF(s) Abolished

#	TF	Title
<i>PV</i>		
None		
<i>PV Materials</i>		
None		

Table 9 Standard(s) to receive Inactive Status

Standard Designation	Title
<i>Photovoltaic</i>	
None	
<i>Photovoltaic Materials</i>	
None	



Table 10 Table 10 Standard(s) to receive Withdrawal Status

<i>Standard Designation</i>	<i>Title</i>
<i>PV</i>	
None	
<i>PV Materials</i>	
None	

Table 11 New Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
	DASOLAR & ECOPV	SEMI SCC PV Carbon Emission Reduction Task Force

Table 12 Previous Meeting Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
None		

1 Welcome, Reminders, and Introductions

Committee co-chair Dengyuan Song called the meeting to order at 10:30.

2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

Motion: To approve the minutes of the previous meeting as written

By / 2nd: Zhixin Li (Linton)/ Tao Xu (SINOSICO)

Discussion: None

Vote: 28Y - 0 N. Total 28 companies. Motion Passed.

Attachment: 3 China PV&PVM TC Joint Spring Meeting Minutes 20240516-v2

3 Liaison Reports

None

4 SEMI Staff Report

Cassie Li (SEMI) gave the SEMI Staff Report. Of note:

Action Item:

- Standards Technical Committees
- 2024 Critical Dates for SEMI Standards Ballots
- SEMI Standards Publications
- A&R SC Membership
- Organization chart for China PV Committee
- Organization chart for China PVM Committee



- China PV&PV Materials TC Update

Attachment: 4 SEMI Staff Report2024.11.20

4.1 *Other SDO (Standards Development Organization) Update*

- None

5 **Ballot Review**

None

6 **Subcommittee and Task Force Reports**

6.1 *PV Silicon Raw Materials Task Force*

None

7 **SNARF Abolished**

None

8 **Liasion Report**

Cassie Li (SEMI) reported for the Liasion Report of Taiwan region. This report contained information on:

Action Item:

- Meeting Information
- Leadership / Leadership Changes
- Committee Structure Changes
- Organization Chart
- Ballot Results
- Activities Approved via GCS
- Authorized Activities / Other Activities
- Authorized Ballots
- SNARF(s) Granted One-Year Extension
- Abolished SNARFs
- Inactive Status
- Task Force Highlights
- Five-Year Review

Attachment: 5 PV Taiwan Liaison Report_20240626_R1

9 Task Force Report

9.1 Crystalline Silicon Solar Cell Task Force

Rulong CHEN (Runergy) reported for the Crystalline Silicon Solar Cell Task Force. This report contained information on:

Action Item:

- Introduced the task force's leaders and members
- Introduced published standards.
- Working on
 - 7166: Revision to SEMI PV79-0818, Test Method for Exposure Durability of Photovoltaic (PV) Cells to Acetic Acid Vapor
- New SNARF
 - Specification of Multiple Materials Substrate for GaN Epitaxial Growth aiming at HB-LED

Attachment: 6 2024 年秋季会议-电池工作组汇报 20241120

9.2 PV Module Task Force

Wei ZHOU (TrinaSolar) reported for the PV Module Task Force. This report contained information on:

Action Item:

- Introduced the task force's leaders and members
- Introduced published standards
- Information Sharing
 - TC90/CPIA Standard System Architecture
 - IEC WG2/TC90/CPIA Standard (Module related)
 - TC90/CPIA Standard Projects in progress
 - TC90/CPIA Standard Projects in progress (cont.)

Attachment: 7 SEMI PV Module TF Report 2024-11-20(final)

9.3 PV Equipment Task Force

Buzhong Li (NAURA) reported for the PV Equipment Task Force. This report contained information on:

Action Item:

- Introduced the task force's leaders and members
- Introduced published standards
- Working on
 - Doc 7055, Guide for Tube PECVD Graphite Boat Materials for Solar Cell Production



- Doc 7249, Revision to SEMI PV81-0318, Guide for Specifying Low Pressure Horizontal Diffusion Furnace

Attachment: 8 2024 年 SEMI PV 秋季会议-设备工作组汇报 PPT -NAURA (密级：不涉密)

9.4 PV Silicon Wafer Task Force

Yitong Shen (TZE) reported for the PV Silicon Wafer Task Force. This report contained information on:

Action Item:

- Introduced the task force’s leaders and members
- Introduced published standards
- Working on
 - Doc 7251, New Standard: Specification for Tungsten Wire Used for PV Silicon Wafer Slicing

Attachment: 9 SEMI PV Silicon Wafer Task Force_Nov. 20th,2024

10 Old Business

10.1 Refer to Table 12 Previous Meeting Action Items

11 New Business

11.1 New SNARFs

11.1.1 SNARF, Specification for Property requirements of finger pastes for TOPCon Cell with Laser assisted firing Process

Motion: Approve the SNARF.
By / 2nd: Weiming Zhang (Gonda) / Zhixin Li (Linton)
Discussion: Wei Zhou(Trina Solar): This is a standards about special performance.
Vote: 19 in favor and 0 opposed 0 abstain. (Total 19 companies.) Motion passed.

Attachment: 14 用于 TOPCon 激光辅助烧结电池的细栅浆料的特殊性能要求规范 overview-V2

11.1.2 SNARF, New Standard: Test Method for PV modules Intensify Aging in Cold Environmental Conditions

Motion: Approve the SNARF.
By / 2nd: Kangping Zhang(DASOLAR) / Weiming Li (Leadmicro)
Discussion: Sainv Lin (Chint Solar): At the last TF meeting, the Photovoltaic Industry Association did not recommend duplicate project establishment
Dengyuan Song(DASOLAR):. The project contents are completely non-conflicting
Vote: 17 in favor 3 abstain and 1 opposed (Total 21 companies.) Motion passed.

Attachment: 15 寒冷环境条件下光伏组件加强老化测试方法 overviewV2



11.2 Requests for ballots in Cycle 1 of 2025

11.2.1 Doc.7166, Revision to SEMI PV79-0818, Test Method for Exposure Durability of Photovoltaic (PV) Cells to Acetic Acid Vapor

Motion: Approve Document 7166 for Letter Ballot in Cycle 1-25.

By / 2nd: Ruirui Lv (CSI) / Zhixin Li (Linton)

Discussion: Dengyuan Song(DASOLAR): The scope of application must be distinguished

Vote: 24 in favor and 2 abstain. (Total 26 companies.) Motion passed.

Attachment: 11 20241120 Revision to SEMI PV79-0817 -- Draft Document 7166 V1

11.3 Requests for ballots in Cycle 1 of 2025

11.3.1 Doc.7249, Revision to SEMI PV81-0318, Guide for Specifying Low Pressure Horizontal Diffusion Furnace

Motion: Approve Document 7249 for Letter Ballot in Cycle 1-25.

By / 2nd: Pengtao Sun (NAURA) / Zhixin Li (Linton)

Discussion: Dengyuan Song(DASOLAR): Different devices have different low voltages, so there will be no problem after limiting them.

Weiming Li (Leadmicro): OK

Dengyuan Song(DASOLAR): Please double check your grammar.

Vote: 25 in favor and 1 abstain. (Total 26 companies.) Motion passed.

Attachment: 12 Document 7249 report- GUIDE FOR SPECIFYING LOW PRESSURE HORIZONTAL DIFFUSION FURNACE-V1.1 (密级：不涉密)

11.4 Five-Year-Review

11.4.1 5-Year-Review SNARF, Reapproval of SEMI PV90-0319, Guide for Material Requirements of Internal Feeders Used in Mono-crystal Silicon Growers

Motion: Approve the SNARF for 5-Year-Review.

By / 2nd: Erfei Liu (Linton) / Dazhou Yan (Sinosico)

Discussion: Dazhou Yan (Sinosico): What material is the bottom plate made of?

Erfei Liu (Linton): Quartz

Vote: 24 in favor and 2 opposed. (Total 26 companies.) Motion passed.

Attachment: 10 5767B - Std-Photovoltaic Reapproval of SEMI PV90-0319-连城

11.5 SNARF(s) Granted a One-Year Extension

None

12 Next Meeting and Adjournment

The next meeting of the PV & PV Materials China TC Chapter is TBD.

For more information, please visit Standards Calendar at <http://www.semi.org/en/standards>



Adjournment: 17:10

Respectfully submitted by:

Cassie Li

SEMI China

Phone: 86-21-60277645

Email: cassieli@semi.org

Minutes tentatively approved by:

Dengyuan Song (DASOLAR), PV Committee and PV Materials Committee China TC Chapter Co-chair	2024/12/4
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Table 13 Index of Available Attachments#1

<i>Title</i>	<i>Title</i>
1 Chinese SEMI Standard Meeting Reminders	2 China PV Standards Committee Fall Meeting 2024 Final Agenda
3 China PV&PVM TC Joint Spring Meeting Minutes 20240516-v2	4 SEMI Staff Report2024.11.20
5 PV Taiwan Liaison Report_20240626_R1	7 SEMI PV Module TF Report 2024-11-20(final)
6 2024年秋季会议-电池工作组汇报 20241120	8 2024年 SEMI PV 秋季会议-设备工作组汇报 PPT - NAURA (密级: 不涉密)
9 SEMI PV Silicon Wafer Task Force_Nov. 20th,2024	10 5767B - Std-Photovoltaic Reapproval of SEMI PV90-0319-连城
10 SNARF_PV90-0319 LINTON	11 20241120 Revision to SEMI PV79-0817 -- Draft Document 7166 V1
12 Document 7249 report- GUIDE FOR SPECIFYING LOW PRESSURE HORIZONTAL DIFFUSION FURNACE-V1.1 (密级: 不涉密)	14 SNARF_Specification for Specific property requirements of finger pastes for TOPCon Cell with Laser assisted firing Process
14 用于 TOPCon 激光辅助烧结电池的细栅浆料的特殊性能要求规范 overview-V2	15 SNARF_Test Method for PV modules intensify aging in cold environmental conditions
15 寒冷环境条件下光伏组件加强老化测试方法 overviewV2	

#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.