Compound Semiconductor Materials Europe TC Chapter
Meeting Summary and Minutes

April 1st, 2025
04:30 PM – 06:00 PM CEST
Online

TC Chapter Announcements

Next TC Chapter Meeting
November 18-21, 2025, SEMICON Europa. Check www.semi.org/en/standards for the latest update.

Table 1 Meeting Attendees

Co-Chair: Arnd Weber (SiCrystal), Christian Kranert (Fraunhofer IISB)
SEMI Staff: Kevin Nguyen (SEMI)

Company	*Last*	*First*
Wolfspeed	*Barbieri*	*Tom*
Infineon Technologies Austria AG	*Broxtermann*	*Mike*
SOITEC	*Cela*	*Enrica*
Scientic Visual	*Cheze*	*Caroline*
WD Advanced Materials	*Ciraldo*	*John*
Infineon Technologies Austria AG	*Fey*	*Julian*
Fraunhofer IISB	*Kranert*	*Christian*
Freiberger Compound Materials GmbH	*Kretzer*	*Ulrich*
Self	*Kronwasser*	*Judy*
Wolfspeed	*Rao*	*Shailaja*
GlobalWafers	*Sanna*	*Cristina*
SiCrystal	*Weber*	*Arnd*

Italic indicates online participant. Bold indicates in-person attendance.

Table 2 Leadership Changes

WG/TF/SC/TC Name	*Previous Leader*	*New Leader*
None		

Table 3 Committee Structure Changes

Previous WG/TF/SC Name	*New WG/TF/SC Name or Status Change*
None	

Table 4 Ballot Results

Document #	*Document Title*	*Committee Action*
7280	Line-Item Revision to SEMI M83-0820 Test Method For Determination Of Dislocation Etch Pit Density In Monocrystals Of Iii-V Compound Semiconductors	Refer below.
	Line Item 1 - Editorial changes	Passed as balloted
	Line Item 2 - Change Etching time in Table 1 and 2	Passed as balloted
	Line Item 3 - Update section 9	Passed as balloted

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

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

Table 5 Ratification Ballot Results

Document #	*Document Title*	*ISC A&R Action*	*A&R Forms*
R7225	New Standard: Specification for Silicon Carbide Engineered Substrates	Approved, pending publication	

Note 1: **Passed** Ratification ballots will be submitted to SEMI publication for final processing.

Note 2: **Failed** Ratification ballots were returned to the originating task forces for re-work and re-balloting or abandoning.

Table 6 Authorized Activity

#	*Type*	*SC/TF/WG*	*Details*
None			

#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

#	*When*	*TF*	*Details*
None			

Table 8 New Action Items

Item #	*Assigned to*	*Details*
None		

Table 9 Previous Meeting Action Items

Item #	*Assigned to*	*Details*	*Status*
None			

1 Welcome, Reminders, and Introductions

1.1 Arnd Weber called the meeting to order at 04:30 PM. Attendees introduced themselves. Kevin Nguyen presented meeting reminders on antitrust, intellectual property issues and effective meeting guidelines.

2 Review of Previous Meeting Minutes

2.1 The TC Chapter reviewed the minutes of the previous meeting.

Motion:	To approve the meeting minutes
By / 2nd:	By: Christian Kranert / Fraunhofer IISB Second: Shailaja Rao / Wolfspeed
Discussion:	None
Vote:	10-0. Motion passed.

3 Task Force Reports

3.1 *SiC-Task Force*

3.1.1 Arnd Weber reported the TF has been reviewing SEMI M81, Guide to Defects Found in Monocrystalline Silicon Carbide Substrates. Little progress is made, due to lack of resources.

3.2 *5-year Review Task Force*

3.2.1 The TF leader is not available. No report.

3.3 *Test Methods Task Force*

3.3.1 Christian Kranert reported no activity.

3.4 *SIC Epi-Defects Task Force*

3.4.1 Christian Kranert reported on the progress made regarding Document 7160, New Standard: Guide for Defects Found in Homoepitaxial Layers of Silicon Carbide. The topic is complex, but the task force has been meeting regularly.

3.5 *Silicon Carbide Engineered Substrate Task Force*

3.5.1 Enrica Cela reported that the Ratification Ballot for Document R7233, New Standard: Specification for Silicon Carbide Engineered Substrate, has passed. Publication is pending. Kevin will forward the proof copy once the draft has been processed by Publications.

4 Ballot Review

4.1 Doc. 7280, Line Item Revision of SEMI M83-0820, Test Method for Determination of Dislocation Etch Pit Density in Monocrystals of III-V Compound Semiconductors

4.1.1 Passed as balloted. Refer to attachment for details.

Attachment: 7280 Procedural Review

5 Liaison Reports

5.1 *NA CSM TC Chapter*

5.1.1 Kevin Nguyen reported the TC Chapter has not been meeting for a while. However, the NA Co-chairs would like to remain open to monitor progress in other regions.

5.2 *China CSM TC Chapter*

5.2.1 Kevin Nguyen reported. Of note:

- Last meeting
  - Dec 6, 2024
- Next meeting
  - June 2025
- SNARFs granted one year extension.
  - Doc. 6767, TEST METHOD FOR GBIR，SBIR，SFQR and SORI OF SILICON CARBIDE WAFERS BY OBLIQUE INCIDENT INTERFERENCE METHOD
  - Doc. 6769, TEST METHOD FOR RESIDUAL STRESS OF SILICON CARBIDE WAFERS BY PHOTOELASTIC EFFECT
- Authorized Activities
  - New Standard: Specification of Multiple Materials Substrate for GaN Epitaxial Growth for HB-LED
  - New Standard: Specification of High Purity Silicon Carbide Powder for SiC Crystal
- Authorized Ballot in cycle 2-2025
  - Doc. 6769C, New Standard: Test Method for Residual Stress of Silicon Carbide Wafers by Photoelastic Effect

Attachment: CSM China TC Chapter Liaison Report Dec 2024

5.3 *Japan CSM TC Chapter*

5.3.1 Kevin Nguyen reported. Of note:

- Last meeting
  - Thursday, December 12, 2024
  - SEMICON Japan 2024
- Next meeting
  - Monday, June 30, 2025
  - SEMI Japan, Tokyo, Japan + OVTCCM (Hybrid)
- Authorized Ballot
  - Doc. 7211A, Line Item Revision to SEMI M92-0423, Specification for 4H-SiC Homoepitaxial Wafer
- SiC Epitaxial Wafer Liaison Task Force

- Considers including 200.0 mm 4H-SiC epitaxial wafers in SEMI M92, Specification for 4H-SiC Homoepitaxial Wafer by submitting another SNARF.

Attachment: CSM_JA TC Chapter Liaison Report_March 2025_R1

6 New Business

6.1 5 year review

6.1.1 Arnd presented a list of documents due for five-year review under the Europe Compound Semiconductor program. One of these is *SEMI M82-0820, Test Method for the Carbon Acceptor Concentration in Semi-Insulating Gallium Arsenide Single Crystals by Infrared Absorption Spectroscopy, which is approaching its five-year review deadline. Christian noted that the update may only require a line-item revision. Arnd will review the document and may prepare a SNARF at the next meeting.

6.2 Kevin Nguyen suggested that members consider developing a program related to Compound Semiconductor Materials or education on new Standards. This could take the form of a webinar or an in-person event.

6.2.1 Arnd stated that he would consider the technical aspects, including the properties and physics of silicon carbide, and how these elements could be integrated into a cohesive program. This item may be placed on the next committee's agenda.

7 Next Meeting and Adjournment

7.1 The next meeting is scheduled for November, 2025 in conjunction with SEMICON Europa in Munich, Germany. Arnd requested to avoid other program being taken place at SEMICON Europe. Refer to http://www.semi.org/standards for the list of meeting schedules.

Having no further business, adjournment was at 6:00 PM CEST.

Respectfully submitted by:

Kevin Nguyen,
SEMI Standards Operations Manager
Phone: 408-943-7997
Email: knguyen@semi.org

Minutes tentatively approved by:

Arnd Weber (SiCrystal)	
Christian Kranert (Fraunhofer IISB)	

Table 10 Index of Available Attachments#1

Title
7280 A&R
R7225 A&R
CSM China TC Chapter Liaison Report Dec 2024
CSM_JA TC Chapter Liaison Report_March 2025_R1

#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.