

SEMI Standards Staff Report

标准
Normen
規格
Standards
標準
立
준
Стандарты

R0.2a

2010 June Meetings

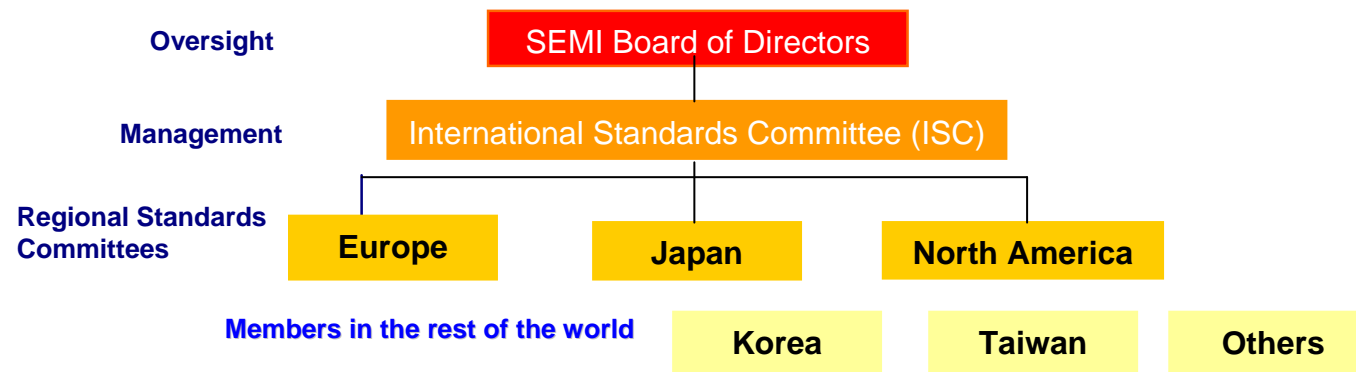
SEMI Japan Standards Dept.



General Information

标准
Normen
規格
Standards
標準
기준
Стандарты

グローバル技術委員会 構成・階層



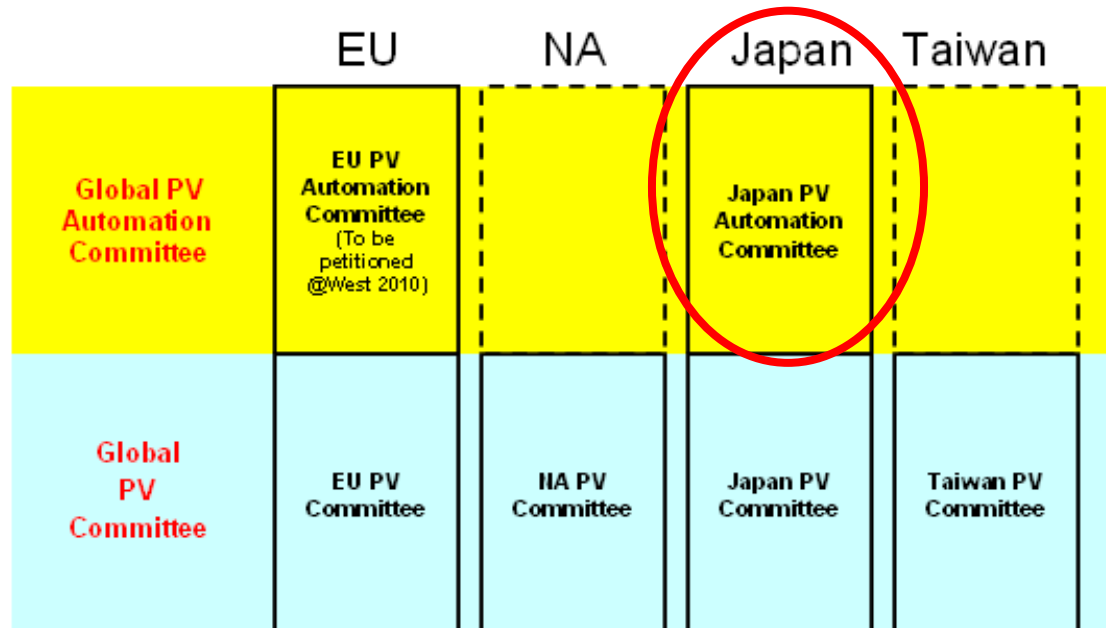
技術委員会
(20 Global
Technical
Committees)

Automated Test Equipment	Assembly & Packaging	FPD Mask	FPD CF & Optical	FPD Factory Automation
EHS	Facilities	Gases	Liquid Chemical	FPD Metrology
Information & Control	Metrics	Micropatterning	Physical Interfaces & Carriers	Traceability
Compound Semiconductor Materials	Silicon Wafer	MEMS	PV	PV Automation

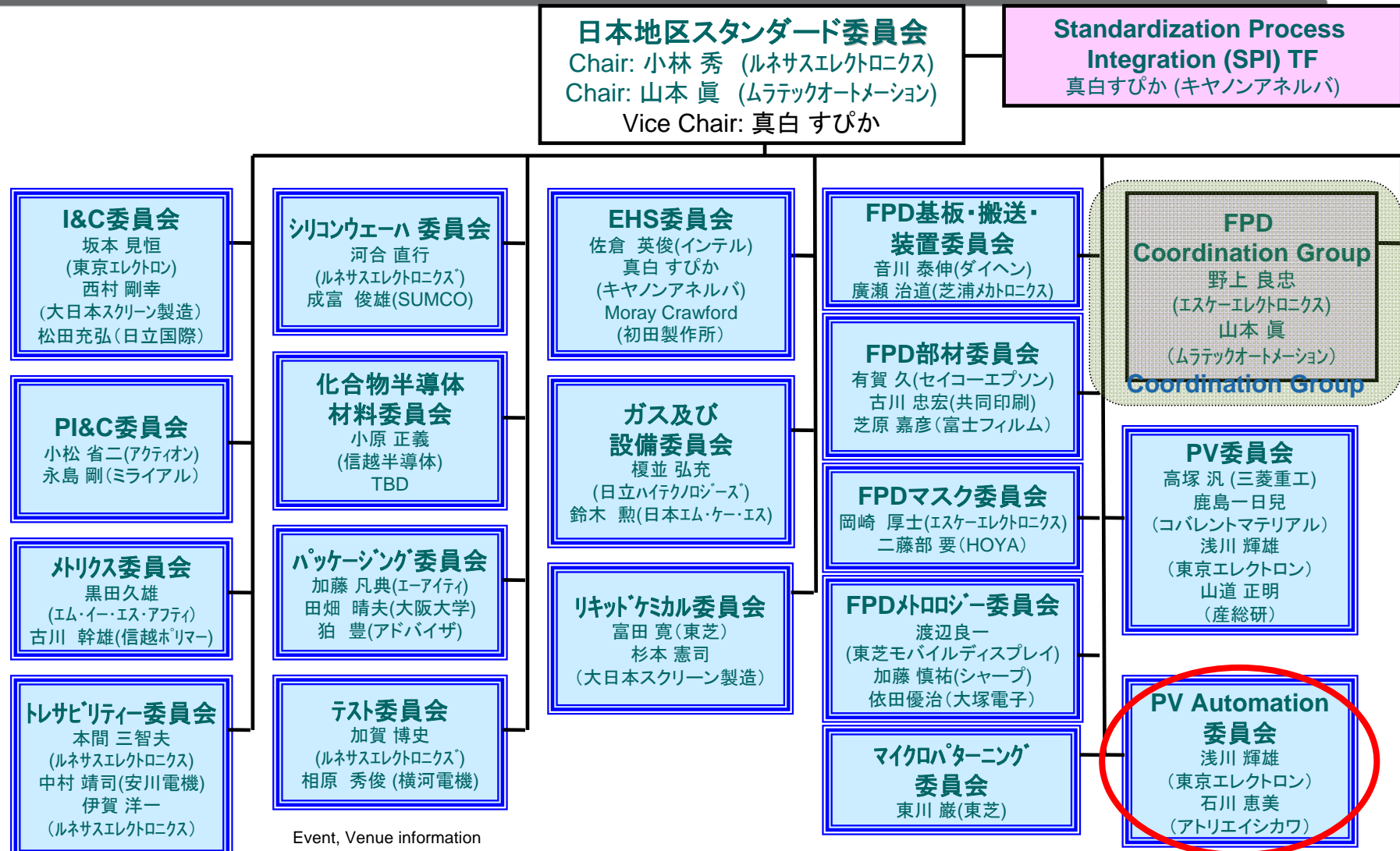


技術委員会の新設

- **Global/Japan PV Automation Committee**
 - 6月1日付でISC承認された
 - 7月2日 (PVJapan2010併催) キックオフ
 - EU PV Automation CommitteeはWestで請願予定

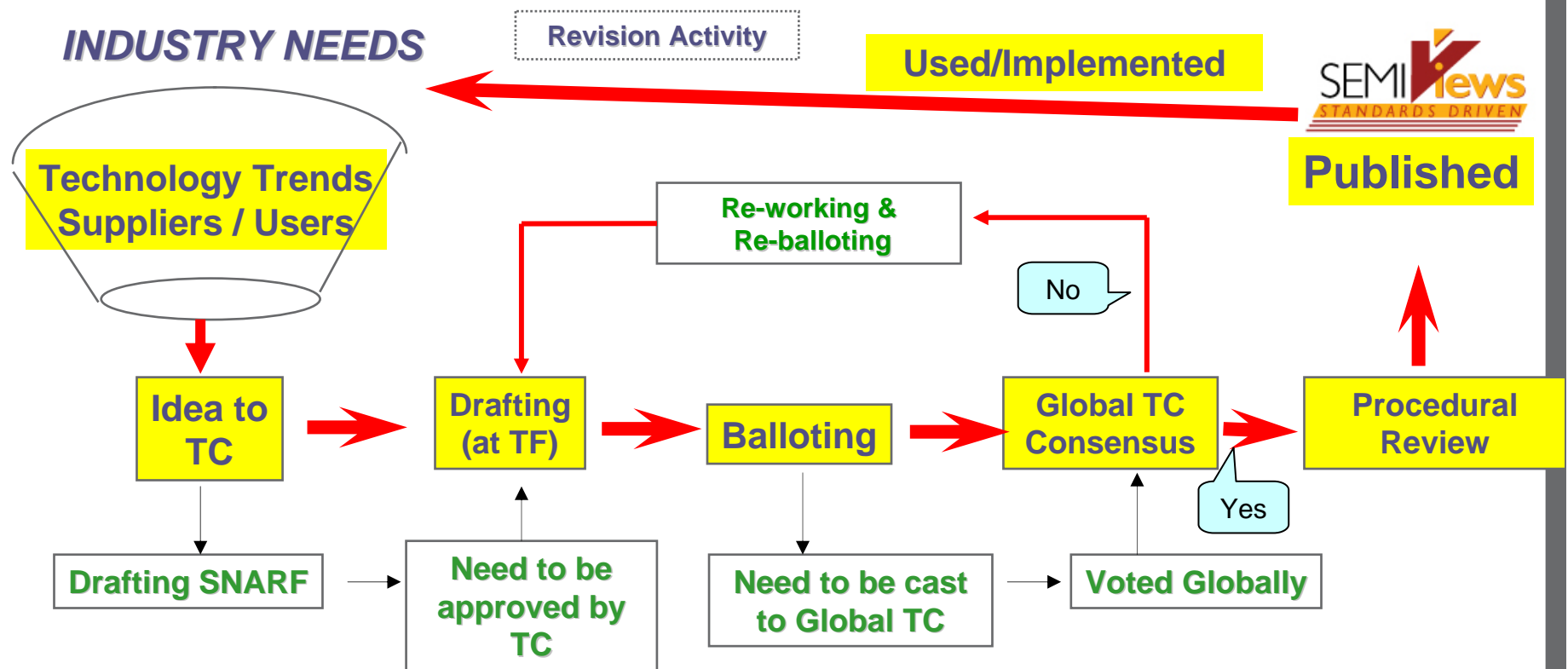


技術委員会の新設 日本地区TC構成 (2010年6月1日現在)

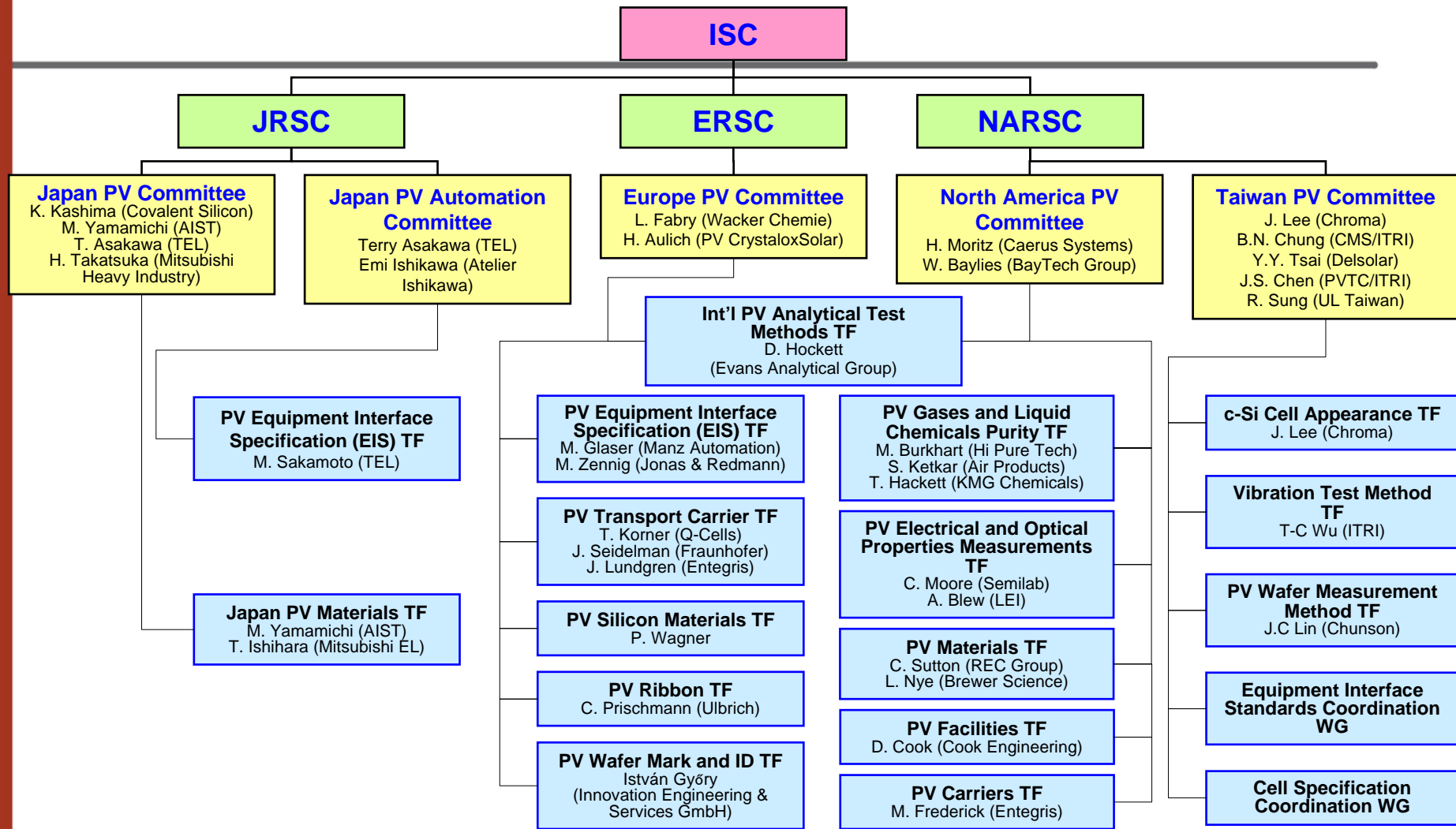


Procedures <General>

SEMI Standards Development Cycle



SEMI PVスタンダード委員会組織



出版されたPV系スタンダード

No	Title	
SEMI PV01-0709	Test Method For Measuring Trace Elements In Photovoltaic-Grade Silicon By High-Mass Resolution Glow Discharge Mass Spectrometry	高分解能グロー放電質量分析を用いたシリコン太陽電池用シリコン原料中の微量元素測定に関するテスト方法
SEMI PV02-0709	Guide For PV Equipment Communication Interfaces (PVECI)	PV製造装置通信インタフェース
SEMI PV03-0310	Guide For High Purity Water Used In Photovoltaic Cell Processing	時刻同期とTS-CLOCK オブジェクト定義の仕様
SEMI PV04-0710	Specification for Range of 5th Generation Substrate Sizes for Thin Film Photovoltaic Application	薄膜用第5世代基板サイズ
AUX017-0310	Auxiliary Information for Contactless Measurement of Carrier Recombination Lifetime in Silicon Wafers and Ingots	シリコンウェーハとインゴットにおけるCarrier Recombination Lifetimeの非接触測定

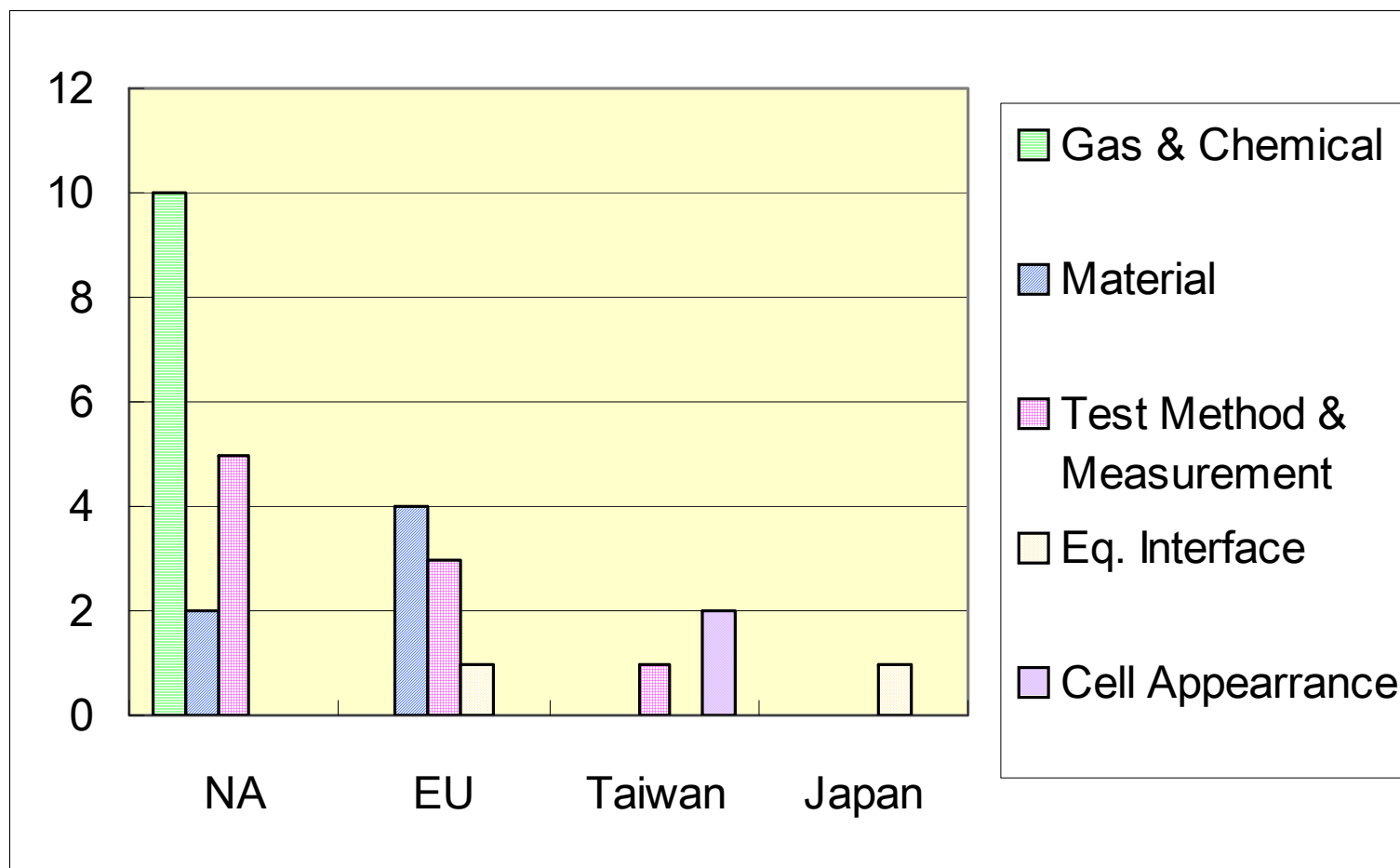
開発中のPV系ドキュメント

出典: PVJ2010併催
「PV Automationワークショップ」

Doc #	Title	地域	Status	分野
4581	Specification for 150 mm, 156mm, and 200mm Wafer and Cell Transfer Carriers for Use in PV Manufacturing.	NA	提案	Material
4675A	Test Method for the Measurement of Elemental Impurity Concentrations in Silicon Feedstock by Bulk Digestion, Inductively-Coupled-Plasma Mass Spectrometry	NA	開発中	Test Method & Measurement
4726	Test Method for Non-destructive measurement of the Sheet Conductance, Sheet Resistance, Mobility, Dopant Density of the substrates	NA	提案	Test Method & Measurement
4728	Revision to SEMI M16, Specification for Polycrystalline Silicon	EU	提案	Material
4735A	Guide for Oxygen (O2), Bulk, Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4738A	Test Method for Contactless Excess-Charge-Carrier Recombination Lifetime Measurement in Silicon Wafers, Ingots, and Bricks Using an Eddy-Current Sensor	NA	開発中	Test Method & Measurement
4739B	Guide for Argon (Ar), Bulk, Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4740B	Guide for Hydrogen (H2), Bulk, Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4741B	Guide for Nitrogen (N2), Bulk, Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4753B	Test Method For Excess Charge Carrier Decay In PV Silicon Materials By Non-Contact Measurements Of Microwave Reflectance After A Short Illumination Pulse	EU	開発中	Test Method & Measurement
4768	Test Method For Instrumental Neutron Activation Analysis (INAA) Of Silicon	EU	開発中	Test Method & Measurement
4793	Guide for Hydrochloric Acid Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4794A	Specifications for Hydrofluoric Acid, Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4795	Guide For Nitric Acid, Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4796A	Specifications for Phosphoric Acid Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4797	Specifications For Silane (SiH4), Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4800	Specifications for Connector Ribbon	EU	提案	Material
4801	Test Methods for Ribbon Quality	EU	提案	Test Method & Measurement
4803	Specification for Wafer and Cell Transport Carriers for use in crystalline PV Manufacturing	EU	提案	Material
4804	Specification for Single Substrate Tracking for Photovoltaic Equipment	EU	提案	Eq. Interface
4805	Specification For Virgin Silicon Feedstock Materials For Photovoltaic Applications	EU	開発中	Material
4825	Test Methods for Hg Probe Measurements of Crystalline Silicon PV Materials and Devices	NA	提案	Test Method & Measurement
4826	Specification for Silicon Wafers for Use as Photovoltaic Solar Cells to replace SEMI M6-1108, Specification For Silicon Wafers For Use As Photovoltaic Solar Cells	NA	開発中	Material
4832A	Guide For Phosphorus Oxychloride, Used In Photovoltaic Applications	NA	開発中	Gas & Chemical
4833	Specification for Color reference cell	Taiwan	提案	Cell appearance
4834	Detection of c-Si PV cell surface visible defects	Taiwan	提案	Cell appearance
4848Info	Generic Equipment Model for Thin Film Photovoltaic Manufacturing (GEM-PV)	Japan	開発中	Eq. Interface
4921	Guide for Specifying BRDF Metrics to Monitor the Surface Roughness and Texture of PV Materials	NA	開発中	Test Method & Measurement
4997	Test Method for Mechanical Vibration of c-Si PV Modules in Shipping Environment	Taiwan	提案	Test Method & Measurement

各地区の特色

開発中のPV系ドキュメントの分布



スタッフレポート

標準
Normen
規格
Standards
標準
기준
Стандарты

前回ERSC(6月10日)で廃止された EU地区の技術委員会

SEMI INTERNATIONAL STANDARDS

SEMI Europe Regional Standards Organization

Co-chairs: Jean-Marie Collard – Solvay Chemicals, Werner Bergholz - Jacobs University of Bremen

Compound Semiconductor Materials Committee

C: R. Bindemann - FCM
C: A. Weber - SiCrystal

Gases & Liquid Chemicals Committee

C: J-M Collard – Solvay Chemicals
C: G. Ferrier - Air Products
VC: G. De Vos - FFEM

EHS Committee

C: B. Planting – ASML
C: open

Equipment Automation Committee

C: A. Honold - InReCon (I&C, PIC, Metrics)
C: M. Carrubba - Numonyx (I&C, PIC)
C: L. Pfitzner - FhG IISB (Metrics)
VC: F. Petzold - Trustsec (I&C)

Facilities Committee

C: D. Rutterswoerden - M+W Zander
C: J. Schuchart - Siemens

MEMS Committee

C: U. Behringer - UBC

Photovoltaic Committee

C: L. Fabry - Wacker Chemie
C: H. Aulich - PV Crystalox Solar

Micropatterning Committee

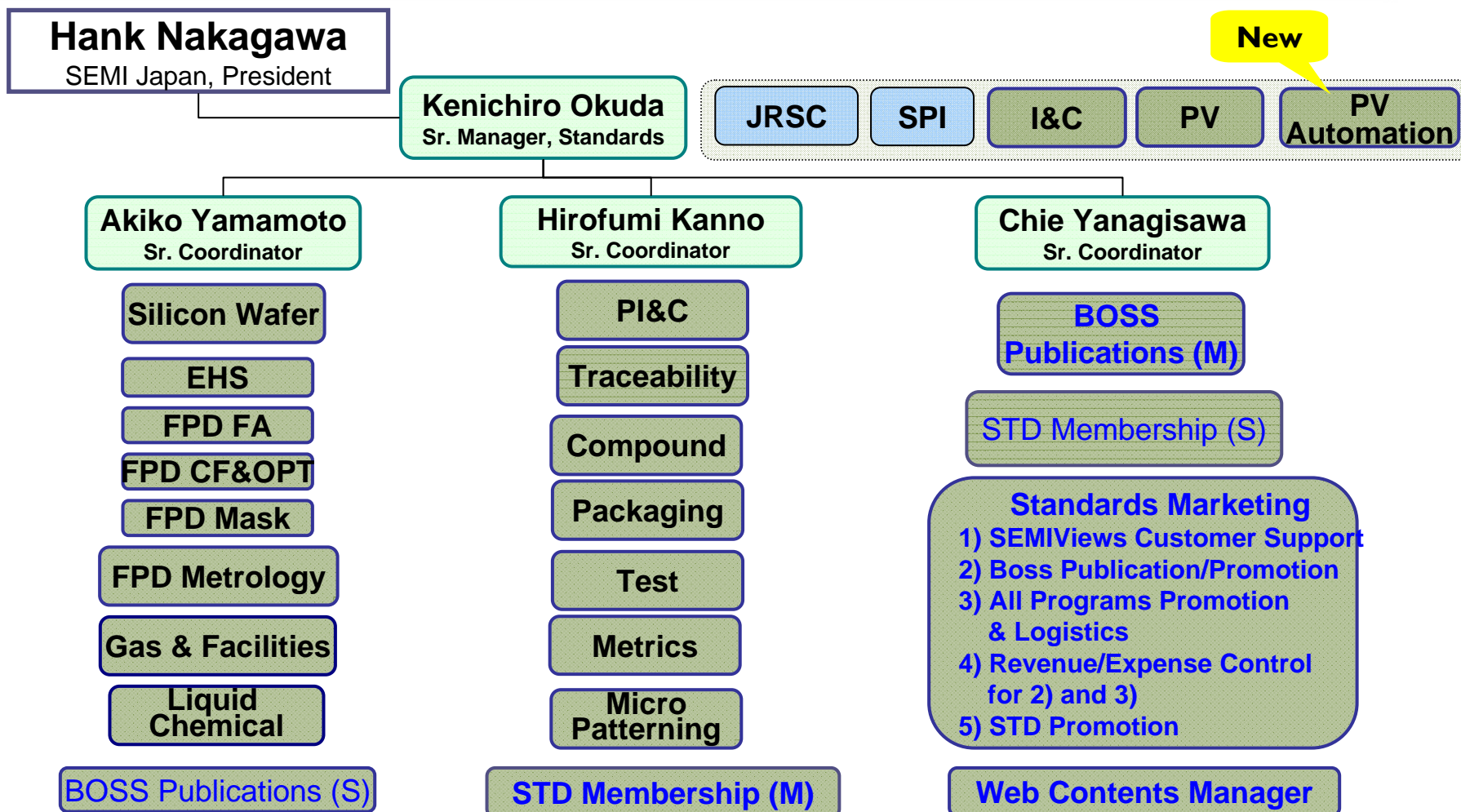
C: U. Behringer - UBC
C: J. Waelpoel – ASML

Silicon Wafer Committee

C: W. Bergholz - Jacobs University of Bremen
C: P. Wagner - Consultant

SEMIジャパン スタンドダードスタッフ組織

(as of June 1, 2010)



手續審查結果 (1/2)

2010年4月 實施手續審查 (2010年7月出版)

- 新規:5件
 - 日本地区発:0件
 - 他地区発:5件
 - (NA PIC) E156, 450 AMHS Stocker
 - (NA Silicon) M76, Developmental 450 Polished Single Crystal Silicon Wafers
 - (NA Trace) T20.3, Authentication Service Communication for Preventing / Detecting Semiconductor Counterfeit Products
 - (NA I&C) E157, Module Process Tracking
 - (Taiwan FPD) D59, 3D Display Terminology
- 改訂他
 - 改訂:9件、再承認:18件
 - 撤回:4件
 - E24-92, Cluster Tool Module Interface
 - E106-1104, Overview Guide to SEMI Standards for PIC for 300 mm Wafers
 - MF399-00a, Test Method For Thickness Heteroepitaxial Or Polysilicon Layers
 - P38-1103, Absorbing Film Stacks and Multilayers on EUV Mask Blanks
- 手續審查不通過:2件
 - NA Gases
 - 4786A: Revision of F4-1000
 - 4788: Re-approval of F78-0304

手続審査結果 (2/2)

2010年5月 実施手続審査 (2010年7月出版)

- 新規: 3件
 - 日本地区発: 3件
 - (JA FPD M&C) D60, Test Method of Surface Scratch Resistance for FPD Polarizing Film and its Materials
 - (JA PV) PV4, 5th Gen Substrate Sizes Range for Thin Film PV Application
 - 日本地区開発で最初のスタンダード
 - (JA PIC) AUX-018, FOUP/Load Port Interoperability Report
 - 他地区発: 0件
- 改訂他
 - 改訂: 1件、再承認: 4件、撤回: 0件
- 手続審査不通過: 0件

出版状況 “0710版”内訳

- 45 total:
 - 9 New (7 main, 1 sub, 1 AUX)
 - 上記には下記のNew mainが含まれます
 - SEMI E158, Mechanical Specification for Fab Wafer Carrier Used to Transport and Store 450 mm Wafers (450 FOUP) and Kinematic Coupling
 - » 昨年12月に手続審査通過済で、その後、本年5月時点でLOAが揃い出版可能となった
 - 22 Re-approvals
 - 10 Revisions
 - 4 Withdrawals

出版状況 “0710版”の分野別規格数

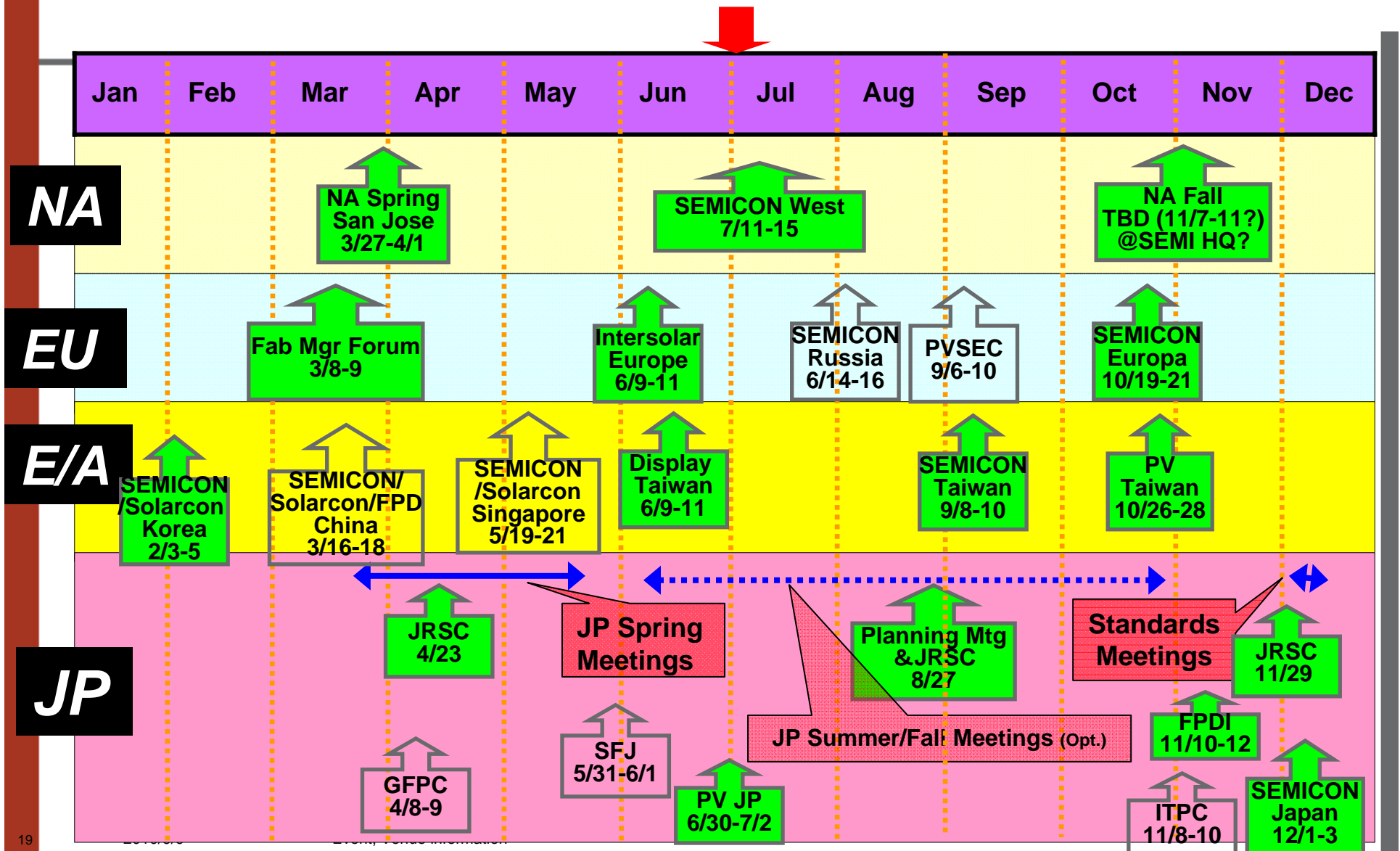
Volume:	Main Docs	Sub Docs	
Hardware	89	14	
Software	68	31	
Facilities	103	0	
FPD	54	0	
Gases	40	0	
Materials	62	16	
MEMS	8	0	
Microlitho	44	0	
Packaging	83	16	
Photovoltaic	4	0	
Process Chem	44	0	
Safety	24	0	
Silicon Materials	68	0	
Traceability	19	8	
Total:	710	85	795

出版状況

SEMIVIEWS累計アクセス件数 (Top 20)

順位	スタンダード番号	Reader+	Reader	Total
1	S2	1868	303	2171
2	S8	577	120	697
3	S22	589	75	664
4	S1	622	40	662
5	E5	518	80	598
6	M1	364	62	426
7	E10	340	33	373
8	C1	242	115	357
9	E30	265	67	332
10	S3	305	6	311
11	S23	295	4	299
12	S26	291	3	294
13	E15.1	210	71	281
14	E84	231	31	262
15	S6	240	17	257
16	S10	230	25	255
17	E87	174	15	189
18	F47	160	21	181
19	E40	150	29	179
20	S7	158	10	168

SEMI Standards Event Calendar 2010



New PPT Template



Thank you!

Any Question?

Critical Dates for SEMI Standards Ballots – Submission Deadlines and Voting Periods

- Cycle 4 (Committee Meetings after July 5, 2010)
 - Ballot Submission Date: May 17, 2010
 - Voting Period Starts: May 31, 2010
 - Voting Period Ends: June 30, 2010
- Cycle 5 (Committee Meetings after September 13, 2010)
 - Ballot Submission Date: July 30, 2010
 - Voting Period Starts: August 9, 2010
 - Voting Period Ends: September 8, 2010
- Cycle 6 (Committee Meetings after October 18, 2010)
 - Ballot Submission Date: August 30, 2010
 - Voting Period Starts: September 13, 2010
 - Voting Period Ends: October 13, 2010
- Cycle 7 (Committee Meetings after November 22, 2010)
 - Ballot Submission Date: October 4, 2010
 - Voting Period Starts: October 18, 2010
 - Voting Period Ends: November 17, 2010