Details for each VIPERLAB infrastructure

Country	Host Institute	Name	Abbreviation	Contact person
DE	HZB	HZB: Photoelectron spectroscopy tool	XPS/HAXPES	Regan Wilks regan.wilks@helmholtz-berlin.de Johannes Frisch johannes.frisch@helmholtz-berlin.de
		HZB: MPP-Ageing System for Perovskite Solar Cells	MPP-Ageing	Antonio Abate antonio.abate@helmholtz-berlin.de Hans Köbler hans.koebler@helmholtz-berlin.de
		Tandem Aging Rig for Indoor Stress Test	TARIS	Steve Albrecht steve.albrecht@helmholtz-berlin.de Bor Li bor.li@helmholtz-berlin.de
IT	UNITOV	CHOSE: Sheet-to-sheet single junction perovskite module	CHOSE-S2S	Aldo Di Carlo aldo.dicarlo@uniroma2.it
		CHOSE: Mechanically stacked silicon/perovskite tandem cell	CHOSE-STACKED	Aldo Di Carlo aldo.dicarlo@uniroma2.it
		CHOSE: Material development	CHOSE-MATERIALS	Claudia Barolo claudia.barolo@unito.it
DE	FRAUNFOFER	FRAUNHOFER: Wet chemical processing of perovskite and perovskite - silicon tandem solar cells	wetPSC	Patricia Schulze patricia.schulze@ise.fraunhofer.de
		FRAUNFOFER: Vacuum processing of perovskite and perovskite - silicon tandem solar cells (Evaporation, ALD, Sputtering)	vacPSC	Patricia Schulze patricia.schulze@ise.fraunhofer.de
		FRAUNHOFER: Characterization of PSCs (global: IV/EQE, camera-based: PLI/LIT, 4microscopic: µPL, S5EM)	charPSC	Martin Schubert martin.schubert@ise.fraunhofer.de
		FRAUNHOFER: Advanced nano-characterization of PSCs (defect localization: LED SoSim & High Resolution Hyper Spectral Imaging, Nanoanalytics: TEM, TOFSIMS, XPS/UPS	nanoPSC	Dr. Christian Hagendorf christian.hagendorf@csp.fraunhofer.de

ES	CENER	CENER: Accredited PV Module testing Lab	SOLPVLAB	Ana Belén Cueli abcueli@cener.com
		CENER: Modelling Capacity	MODELAB	Eugenia Zugasti ezugasti@cener.com
NL	TNO	TNO: S2S Perovskite Process Line	S2S P2L	Sjoerd Veenstra sjoerd.veenstra@tno.nl
CH	EPFL	EPFL/CSEM: Multi-source evaporator for the deposition of inorganic perovskites or its inorganic precursors, compatible with flat and textured c-Si wafers up to 6 inches.	Lesker	Quentin Jeangros quentin.jeangros@epfl.ch
		EPFL/CSEM: Multi-source magnetron sputtering tool for the deposition of charge carrier-selective contacts, transparent conductive oxides and metal electrodes (ITO, IWO, NiO, MoOx, SnOx, Ag, etc.).	Evatec Clusterline	Arnaud Walter arnaud.walter@csem.ch
		EPFL/CSEM: Aatomic layer deposition system for buffer layer deposition (SnOx, AlOx).	Picosun R-200	Quentin Jeangros quentin.jeangros@epfl.ch
		EPFL/CSEM: Tools for the characterisation of the optoelectronic and structural properties of perovskite tandems	Metrology	Quentin Jeangros quentin.jeangros@epfl.ch
AT	AIT	AIT: Tool set for thin film coatings	AIT-coating	Theodoros Dimopoulos Theodoros.Dimopoulos@ait.ac.at Neha Bansal Neha.Bansal@ait.ac.at
		AIT: Characterization and reliability tools of photovoltaics, as required for accreditation tests of PV modules	AIT-testing	Ankit Mittal ankit.mittal@ait.ac.at Rita Ebner rita.ebner@ait.ac.at
DE	JUELICH	Juelich: Roll-to-Roll coating line for solution processable semiconductor deposition and process development	R2R-Coating Line	Jens Hauch j.hauch@fz-juelich.de
		Juelich: Automated Materials and Device Application Platform for the screening and process optimization of solution processable semiconductors	AMANDA	Jerrit Wagner j.wagner@fz-juelich.de

BE	imec	ThinFilm PV lab	TFPV lab	Aranzazu Aguirre aranzazu.aguirre@imec.be
FR	CEA	Damp heat Climatic chambers	DH CC	Stephane Cros Stephane.Cros@cea.fr Malek Benmansour Malek.Benmansour@cea.fr
		Continuous Light Climatic Chamber	CL CC	
		Water Vapour Permeameter	WV P	
		Helium Permeameter	He P	
		Side permeation measurement (optical test)	PK T	
		Electrical characterization line	El Ch	
		Advanced Characterization tools (EL, PL)	Adv Ch	
UK	SU	PV Manufacturing and Testing Facilities	PV Manu & Test	Silvia Villarroya-Lidon s.villarroya-lidon@swansea.ac.uk Trystan Watson T.M.Watson@Swansea.ac.uk
IT	ENEA	Lab for tandem perovskite/silicon solar cells	ENEA Tandem Lab	Paola Delli Veneri paola.delliveneri@enea.it Franco Roca franco.roca@enea.it
		CRESCO Computing Lab	CRESCO HP	Massimo Celino massimo.celino@enea.it Franco Roca franco.roca@enea.it