Servicios a empresas Laboratorio Solar

Service	Software/Equipment	Capabilities	Sector
Solar Data Analysis	e.g. Python	Big data Performance analysis for utility scale power plants; Degradation studies; Techno-economic analysis of soiling and cleaning optimization strategies ; Spatial and Temporal variability of PV performance	Renewable Energy; PV sector
Soiling Studies	e.g. Soiling Chamber	Anti-soiling coatings testing; Artificial Soiling simulation	PV module manufacture; Solar Glass industry
Thermal Analysis	e.g. COMSOL Multiphyscics	Prediction of thermal behaviour in PV systems; Modelling of PV cooling system;	PV module manufacture; PV solar cell assembly
Thermal Characterization	IR lamps; Thermoelectric Heating/Cooling Station	Current, voltage and power temperature coefficients (IEC Standards 60891)	PV module manufacture; PV solar cell assembly
Indoor testing	Multiflash Solar Simulator; Continuos Solar Simulator, laser light source	Current-voltage characterization at standard test conditions (STC); Spectral response measurement	PV module manufacture; PV solar cell assembly, laser converters

Semiconductor Device Simulation	e.g. Silvaco TCAD	Design of solar cell architectures; Design of photovoltaic power converter architectures; Physical Study of solar cells; Physical Study of photovoltaic power converters; Optimisation of solar cells; Optimisation of photovoltaic power converters	CPV architectures; Solar cell design; Solar Energy
Data Analysis	e.g. Matlab	Data Analysis; Creation of small programs to evaluate electrical models; Creation of small programs to execute simulators as Silvaco TCAD;	Solar Energy
Design and engineering of photovoltaic systems	e.g. Phyton, PVGIS, Matlab, etc.	Design and performance evaluation of PV systems, including floating and agrivoltaics	Solar Energy

LITEJA (Laboratorio Interdisciplinar en el Campus Científico-Tecnológico de Linares)

En el Laboratorio Interdisciplinar del Campus Científico-Tecnológico de Linares se realiza una Investigación científica en Ingeniería Geológica, Hidrogeología, Petrología, Exploración de Recursos Mineros, Medio Ambiente, Ingeniería Civil o incluso la auscultación arqueológica. Dado el carácter aplicado de estas líneas de trabajo, el laboratorio tiene un claro potencial en Transferencia de Conocimiento para la asesoría técnico-científica a organismos de las distintas administraciones, así como a empresas privadas y públicas.