**The Solar Market consists** of a huge diversity of manufacturers of industrial products running many different processes yet still facing similar challenges. There is more and more pressure to achieve high product quality and reduce costs in order to stay one step ahead of the competition.

**Typical applications in the solar industry**

### UV/Vis & UV/Vis/NIR
- Measurements for Silicon Wafers/Cells by UV/Vis/NIR
- Optical Characterization of Glass and Reflectors by UV/Vis/NIR
- Aging Behavior by UV/Vis/NIR
- Characterization of Nanomaterials by UV/Vis/NIR

### Differential Scanning Calorimetry
- Measurement of Polymer Encapsulants for Solar Cells by DSC
- DSC Analysis of Solar Battery Active Layer Materials
- Curing Determination of EVA for Solar Panel
- Study of Epoxy Materials

### Thermogravimetry
- Characterization of Polymers using TGA
- Adhesive Characterization using TG-IR
- Determination of EVA using TG-IR and TG-GC/MS

### FTIR & FTIR Microscopy
- Development of Advanced Polymers by FT-IR/NIR
- Measurement of Silicon Wafers/Cells at Ambient/Subambient Temperatures by FT-IR
- Determination of Infrared-Optical Properties of Polymer Films
- Raw Material Identification
- Impurity Measurements using FTIR & FTIR Microscopy

### Elemental Analysis
- Determination of Silicon Purity by ICP-OES or ICP-MS
- Purity/Impurities of Different Materials by ICP-OES or ICP-MS

**With our instruments and expertise, we can help you:**
- Save money and ensure effective quality control
- Streamline your processes for outstanding operational efficiency
- Implement cost effective solutions by reverse engineering

**Solar industry value chain**

- **R&D**
  - Improving cell efficiency and developing new materials.

- **Supplier**
  - Purity of and impurities in raw materials and process chemicals.

- **Process**
  - Efficient and process-oriented quality testing.

- **Solar Cell**
  - QA/QC of solar cell components and final solar cell. Aging and defect analysis.

- **Solar PV System**
  - QA/QC of solar PV components.

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