One of the reasons why solar modules fail in the field is the insufficient cross-linking of ethylene vinyl acetate (EVA) caused by vacuum lamination process deviations or unstable EVA foil materials. The current standard tests are slow, destructive, manual, inaccurate and patchy. LayTec’s new off-line metrology system X Link provides fast, automated, non-destructive and accurate evaluation of EVA cross-linking degree immediately after lamination. It can be integrated in every solar module production line and offers 100% coverage for process and quality control. The high precision measurements are performed through the backsheet without damaging the laminated surface. They take only a few seconds, do not influence the performance of the tested module and have a precision of ±1.5%.

With X Link’s direct feedback, the lamination process can be quickly optimized for better cross-linking quality by adjusting the heating zones and the duration of lamination. The result is a perfect lamination process, which is the key to high-quality modules. The new off-line version of X Link will be presented at the SNEC PV Power Generation Conference & Exhibition in Shanghai in May (Booth E3/802-803) and Intersolar Europe in Munich in June (Booth A5/258). For an appointment at the booth and for further technical details about X Link please contact mail@laytec.de.

LayTec participates in EU funded research project

LayTec is proud to announce its participation in the Seventh Framework Programme (FP7) funded by the European Union (cordis.europa.eu/fp7). Together with several other companies, LayTec will work in a research project led by Germany’s largest research organization – Fraunhofer-Gesellschaft. The goal is the development of in-line high throughput manufacturing technologies for application in energy storage, solar energy production and light weight construction for aerospace. LayTec will contribute to the development of process control concepts based on in-line monitoring methods allowing direct correlation of synthesis parameters with nanomaterial structure and composition.

Further expansion of customer service team

While the number of LayTec’s in-line metrology tools used worldwide is growing, LayTec is keen on keeping customer satisfaction on the highest level and expands its service team. We are happy to introduce Markus Wendt – a new member of our service team who will be responsible for installations and customer support. Markus studied mechanical and energy engineering in Leipzig and devoted his diploma theses to “Space-resolved characterization of thin film solar cells”. In 2007-2009 he worked at Helmholtz-Zentrum in Berlin as a development engineer on implementing white light scattering and laser light scattering in physical vapor deposition processes (PVDs). Before joining LayTec, Markus worked on implementing in-line process control at a leading German thin film solar cell manufacturer. We welcome Markus in our team!