: News Release



For the first time ever, Sony Chemical & Information Device Corporation has displayed its metal-ribbon connecting material for solar cells, as well as its encapsulation resin with backsheet, which has flame resistant properties and is used to encapsulate cells. The products were exhibited at the 24th European Photovoltaic Solar Energy Conference and Exhibition (commonly known as PV-SEC), which was held from September 21 - 25, 2009 in the city of Hamburg, Germany, and which features the largest conference and exhibition related to photovoltaic power generation in Europe.

The exhibition gathers together about 943 companies, including solar cell and module manufacturers, production and evaluation equipment manufacturers, parts and component manufacturers, and more. There were displays from not only European representatives such as Q.CELLS (Germany) and Isofoton (Spain), but also First Solar (United States), Sharp, Kyocera, and others. What was particularly eye-catching at the venue was the prevalence of Chinese companies such as Suntech (China), which comprised 10% of the displays, putting them next after the 50% comprised by local German companies. The majority of them were cell and module manufacturers, and their desire to penetrate the European market was strongly felt.



Q.CELLS (Germany)

First Solar (United States)





Kyocera

Suntech (China)

Canadian Solar (China)



The organic thin film-type flexible solar cell from the Konarka booth

At the exhibition there was a great deal of participation by not only photovoltaic module manufacturers, but also manufacturers of cell and module production equipment and facilities, which gave the sensation that the solar power industry is steadily taking off. Furthermore, a 156 mm SQ cell that uses single-crystal silicon, which generates enormous energy, was on display at the Q.CELLS booth, while an organic thin film-type flexible solar cell in a R2R format that is roughly 70 cm wide was being exhibited by Konarka (United States). At their booth, they announced that they would begin mass production (annual production capacity of 1 GW), which attracted attention in that this would make them the third such manufacturer capable of mass production at a scale of 1 GW, right after First Solar and Suntech.



Product displays for Solar Cell Conductive Film and flame resistant encapsulating resin with backsheet



[Zoom]

Solar Cell Conductive Film-

SP102F1



[Zoom] Encapsulating resin with backsheet *Tentative Solar Cell Conductive Film that we displayed at the event differs from conventional solder mounting in that the material allows for low temperature compression bonding at 180°C, there is little stress on the cell during mounting, and it allows for thin-type designs. In an industry where 230°C solder mounting and 260°C solderfree mounting are the norm, there was interest in our SP102F1, which allows for connections at less than 200°C, and we were enthusiastically questioned by a great many cell and module manufacturers. Additionally, someone from a cell manufacturer told us, "Now that I know about this new mounting material, I can examine the commercialization of new thin-type cells which were previously impossible." It was meaningful that we were able to talk with people from cell manufacturers who we normally don't have the opportunity to discuss business with, and also able to approach cell design from the mounting material.

What is more, we drew attention to the fact that our flame resistant encapsulation resin with backsheet (Tentative) can improve the safety of modules. It does this by suppressing the electrode corroding substances which arise through hydrolysis of the widely used Ethylene-Vinyl Acetate (EVA) resin, and by imbuing the main component of urethane resin with flame resistant properties to guard against the risk of fires caused by abnormal heat from defective areas in the cell known as hot spots.



A scene from our booth

Booth reception

A sales member from Sony Chemical Europe in the middle of a business discussion

For the conference, there were about 1,500 announcements via posters (1,222) and orally (302), making this year's event a success. Last year there were numerous announcements of third generation PVs, while this year there were close to about 260 announcements apiece for crystal related, thin-film related, and new technologies (about the same number).



Panel display floor

Click here for inquiries related to this matter.