

ARMOR solar power films and Raynergy Tek intensify cooperation

ARMOR solar power films, the industrial leader in manufacturing organic photovoltaics (OPV) - located in France and Germany - and Taiwanese Raynergy Tek Inc., a fine chemical company specialized in organic semiconductor materials for organic photovoltaics and photodetectors, announce that they have started to intensify their cooperation.

ARMOR solar power films, the industrial leader in manufacturing organic photovoltaics (OPV) - located in France and Germany - and Taiwanese Raynergy Tek Inc., a fine chemical company specialized in organic semiconductor materials for OPV and organic photodetectors (OPD), announce that they have started to intensify their cooperation in the development of novel semiconducting materials to improve the characteristics of OPV modules further. The German part of ARMOR solar power films – formerly known as OPVIUS – is driving the development through its R&D facilities in Nuremberg in close cooperation with the partner in Taiwan.

"Raynergy Tek has outstanding competencies in the development of OPV and OPD materials. Their know-how in improving these materials is unique in our understanding and demonstrated by several power conversion efficiency records over the last years. We are sure that this cooperation will lead to the introduction of novel, improved materials in the near future. Such improved materials are available already, but it is clear that there is some way to cover from lab to fab." quotes Dr. Ralph Paetzold CEO of ARMOR solar power films GmbH, who is leading the operations in Germany.

Organic semiconductor materials are based on carbon which is formed into longer molecule chains, so-called oligomers or polymers. This is why organic electronics is sometimes also referred to as "plastic electronics". The huge benefit of such materials is that they can be chemically designed to be soluble in standard solvents and thus can be printed or coated like a standard ink. This makes know-how about printing and coating, an industry sector led by European companies, directly available to this new technology.

"I believe this partnership opens-up to extraordinary development prospects for our solar activity with a supplier of high quality" comments Hubert de Boirsedon Chairman and CEO of ARMOR solar power films.

"We are very delighted to further intensify the cooperation with ARMOR solar power films. For us as a material specialist it is very important to get feedback from a manufacturer's perspective along the development line to design the properties of our materials to the needs of our partners," adds Dr. Phoebe Tan, CEO of Raynergy Tek. *"We strive to create materials that can be used in the manufacturing lines of our partners and not just allow for their use in research laboratories. To take up this challenge in the appropriate way we need high qualified input and guidance and therefore highly value the cooperation."*

The usage of well-designed organic semiconductors in combination with printing and coating technologies has clear benefits not only for the product itself but also for the environment and the society. The resulting photovoltaic film is free of rare earth metals and toxic elements, is 100% recoverable and has a so called energy payback time (EPBT) of less than three months. As the manufacturing is accomplished on fully industrialized printing and coating lines it is a technology that can bring back the PV module manufacturing to Europe.

ARMOR press contact :
Laure de Salins (Giotto)
+33 1 48 74 18 62 / l.desalins@giotto-cr.com

Raynergy Tek press contact :
Ms. Y.C. Hsu
Info@raynergytek.com Tel: +886 3 6663266

About ARMOR

ARMOR specialises in the industrial formulation of inks and the coating of thin layers onto thin films. The Group is the global market leader in the design and manufacture of thermal transfer ribbons for printing variable traceability data on labels and flexible packaging. The European market leader in innovative and sustainable printing services and consumables, the Group is a pioneer in the development and production of industrial inks and innovative materials, such as organic solar films, coated collectors for electric batteries and bespoke filaments for additive manufacturing. With an international presence, ARMOR has nearly 2,000 employees in some 20 different countries. In 2019 it posted annual revenue of €280m. Each year the group invests nearly €30m in industrial equipment and R&D. ARMOR is a responsible company committed to stimulating innovation within society. www.armor-group.com

About Raynergy Tek

Raynergy Tek Incorporation was established in September 1st 2014, dedicate themselves as a material science and technology driven company, focusing on innovating the proprietary next generation solution processable organic semiconductors in emerging optoelectronic applications, in specific energy harvesters and photodetectors. Raynergy Tek now holds more than 70 patent families and 373 patents worldwide. The head office is located in Hsinchu, Taiwan, including state-of-the-art chemistry equipments to develop and produce kilogram scale of the next generation of organic semiconductors as well as a device engineering prototyping facility to evaluate the performance materials and device processes to bridge the gap from lab to manufacturing line. Overall, their expertise team comprises of highly skilled personnel, among which 70% of them are talents with Ph.D. level in the related organic electronic field. (i.e. Chemistry, Materials Science and Device Physics). Raynergy Tek pledges to be customer orientated with highest commitment level to push the frontier of organic electronic technology. For more information, please contact info@raynergytek.com



Photo credit : Raynergy Tek