

Annual Report 2010





(From left) Aurelia Mosse, Anca Gabriela Bejenariu and Associate Professor Anne Ladegaard Skov at "Exhibition: 1:1 – research by design" where some of the exposed objects are based on EAPs developed at DTU Chemical Engineering.

SHAPING REALITY WITH ELECTROACTIVE POLYMERS

Associate Professor Anne Ladegaard Skov leads a pioneering group in the ElectroActive Polymer (EAP) field within the Danish Polymer Center (DPC) at DTU Chemical Engineering. EAPs can be applied as devices for harvesting energy from waves, muscle-like actuators, or new materials for loudspeakers and have a range of innovative uses in the medical field. But EAPs are also of interest to designers who can use them for innovative and groundbreaking interior or industrial design. In 2010, students from DTU Chemical Engineering and the Royal Academy of Fine Arts met in workshops and meetings where

they exchanged ideas and know-how, a cooperation initiated by interior design student Aurelia Mosse who experiments with EAPs in interior and industrial design.

"EAP research is a relatively new field, and there is an open exchange of ideas and results between groups internationally," says Ladegaard Skov. "We have participated in workshops in the USA and Europe and it is obvious that no single group can lift the whole research task. Of course we have to patent our best ideas, but generally there is a consensus on creating synergy."

While Ladegaard Skov's EAP research focuses mainly on areas like renewable energy, loudspeaker technology, and medical application, interaction with the designers from the Royal Academy of Fine Arts has given valuable feedback and inspiration.

"Mosse's interior design using EAPs points to ways that elements from nature can become interior design elements in innovative ways," says Ladegaard Skov. "And in her exhibitions, she shows the possibilities of these new materials in ways that appeal to the broader public."