EUROPE



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Organic solar cells are a low cost complement to conventional silicon solar cells. In addition to being flexible, transparent and light weight, they also create the lowest environmental impact of all renewable energies. However, organic materials can easily degrade when exposed to air, light and heat, lowering their efficiency. Dr. Vida Engmann is working on the stabilisation of the active layer in organic solar cells (the component most vulnerable to degradation) by using combinations of chemical compounds to protect the cells from oxidation.

"These chemicals act in a similar way to those used in sun cream to block UV rays from harming our skin," she explains. "I would love to contribute to stable, durable organic solar cells becoming available in the marketplace, and ultimately, creating a carbon neutral world."

As a child, Dr Engmann was always fascinated by libraries and embraced the joy of learning, encouraged by her mother. "Each book could take you to a different, exciting yet unknown universe, from mathematical riddles to Japanese letters, chemical reactions and Greek mythology," she recalls. "As a scientist exploring the unusual world of polymers, I always come across a compelling new question I want to solve, and that's why I stay in science."

For women scientists, finding a balance in life and work is made harder by social constructs that frame women as caretakers in the home and men as active workers and strategic thinkers, Dr Engmann believes. And despite evidence proving there is no difference between women and men in terms of cognitive or leadership abilities, gender bias still restricts women from fulfilling their potential in the world of science. This starts with limited opportunities for grant funding, journal reviewing and academic recruitment, and culminates with women losing confidence in their abilities, which can affect their career choices and lead them to settle for less ambitious roles.

"To create the next generation of women scientists, young girls must see women in science as a mainstream trend," she concludes. "Only then will we be able to attract the best and brightest minds, of both genders, to solve the world's most pressing scientific challenges. I feel honored to be part of this important task."

