

## **Colloquium**

### **Organic Solar Cells - The Path to Commercial Success**

**Moritz Riede**

**University of Oxford, UK**

Organic solar cells, an emerging solar cell technology based on organic semiconductors, have the potential to become the cheapest form of electricity, beating even silicon photovoltaics. However, having the potential is not sufficient, unless it's realised. Organic solar cells have come a far way, from power conversion efficiencies of less than 1% in the early days, to now reaching nearly 20% in the laboratory. Similarly, lifetimes have significantly improved with reports exceeding 20 years. Current and future applications include such as building integrated photovoltaics or portable electronics, and already now organic solar cells have the smallest environmental footprint of all solar technologies. However, the challenges on the road to large scale commercialisation of organic solar cells is not small. This presentation will highlight some of the key advances and remaining key challenges and tries to give an outlook on the potential of organic solar cells.

***Friday, March 25<sup>th</sup> 2022***

***04:00 PM***

***Auditorium, TIFR-H***