Prof. Dr. Christopher Barner-Kowollik

For over two centuries, chemists assumed that photochemical reactions were most effective when using light at a molecule's peak absorption wavelength. Professor Barner-Kowollik overturned this principle, demonstrating that lower-energy wavelengths can lead to more efficient chemical transformations. This discovery is currently reshaping the field of photochemistry, enabling the redesign of photochemical processes – which are widely used to create the materials and products that surround us – with significantly lower energy consumption and much higher efficiency.

He has developed and supported highly collaborative large teams, often across continents. He has authored close to 800 peer-reviewed publications in leading journals, which have been cited over 51,500 times (h index 115).

Christopher has been awarded a wide array of national and international awards, including from the German Helmholtz Association, the UK Macro Group, the Belgian Polymer Group, the European Polymer Federation, the Royal Australian Chemical Society, the Royal Society of New South Wales and the Australian Academy of Science. In 2023 he received the Centenary Prize of the Royal Society of Chemistry. He is a fellow of several learned societies, including the Australian Academy of Science.