

Date: Thursday, 27 August 2015
Time: 5.30 - 7.00 pm
Venue: Seminar Room 4001, Sydney Nanoscience Hub, The University of Sydney

To celebrate the **International Year of Light**, CUDOS is **hosting a set of presentations** describing how scientific breakthroughs in the understanding of light have changed and improved our lives. Using **Nobel prizes awarded for light-related research** as a guide, an inspirational group of Sydney University Professors will discuss how our understanding of light has changed since the early 20th century, how this understanding has helped change society for the better, and how it helps us understand our place on earth and beyond.

SPEAKER: MIN CHEN

Milestones in understanding the light-driven process of photosynthesis

“Improving photosynthetic efficiency is one strategy for solving the energy and food crises of today, because without plants there can be no life on Earth.” – Professor Min Chen

Harvesting the sun is increasingly becoming an option for sustainable energy. Sunlight has proved inexhaustible over geological time and the amount reaching the earth's surface vastly surpasses the biological energy needs of all life forms on earth.

Photosynthesis - the process by which light energy is harvested and the energy stored by biological systems – has been studied for more than 400 years. In the last hundred years, since 1915, there have been ten Nobel Prizes awarded to photosynthesis research. In this fascinating talk, Professor Min Chen discusses the history and critical importance of this research to the future of humanity.



Following the presentation light refreshments will be served. There will be an opportunity to explore the photosynthetic reaction and to participate in hands-on activities, courtesy of the **School of Biological Sciences**. A rainbow of lights will be tested to determine which parts of the spectrum plants utilise and which they discard. You can also test your colour vision with the Ishihara Colour Blind charts and learn more about our light-detecting cone cells.

Registration is not required, but please arrive early as seating is limited.



Min Chen is a Professor in Plant Molecular Biology in the School of Biological Sciences at the University of Sydney and Node Leader as part of the ARC Centre of Excellence for Translational Photosynthesis.

She obtained her Bachelors and Masters degrees from North-East Normal University, China. She has held academic positions in China and Germany and received her PhD in Plant Molecular Biology in 2003 from the University of Sydney. In 2011 Min was named Science Minister's Prize for Life Scientist of the Year and is considered the unquestioned world expert on the biology and biochemistry of photosynthetic cyanobacteria that utilise alternative pigments to chlorophyll a.

Her current research interest is the red-shifted chlorophylls in photosynthesis and their potential application in improving the efficiency of photosynthesis for bioenergy and agriculture.

For further information visit our webpage at
www.cudos.org.au/nobelprizesForLight

