

## Program

### 47<sup>th</sup> Midwest/Southeast Photosynthesis Conference

All events will take place virtually. Links and detailed instructions will be sent to registrants in advance of the meeting. All times are in Eastern Standard Time (EST).

#### Friday, Oct. 22, 2021

- 4:00-4:10 pm**      **Opening remarks**
- 4:10-5:10 pm**      **Session I**
- 4:10-4:30          Colin Gates  
Kinetics and targeting of Vipp1 aggregation in cyanobacteria
- 4:30-4:50          Shrameeta Shinde  
Thermodynamics plays an important role in enhancing terpene productivity in cyanobacteria
- 4:50-5:10          Amit Kumar Singh  
Multi-layer Regulation of Rubisco in Response to Altered Carbon Status in *Synechococcus elongatus* PCC 7942
- 5:10-6.10 pm**      **Keynote Lecture**  
Prof. Barry Bruce  
Tetrameric Photosystem I in Cyanobacteria: Structural Functional, and Evolutionary Implications
- 6:10-8:00 pm**      **Poster Session I** (Poster presenters 1-17)
- 8.00 pm +**          **Online Social Hour: Go to <https://spatial.chat/s/47thMWSE>**

#### Saturday, Oct. 23, 2021

- 10:00-11:00 am**      **Session II**
- 10:00-10:20      Patricia Walker/Anesha Sengupta  
Engineering natural competence into the fast-growing cyanobacterium *Synechococcus elongatus* UTEX 2973
- 10:20-10:40      Chris Gisriel  
High-resolution cryo-EM structure of photosystem II from the mesophilic cyanobacterium, *Synechocystis* sp. PCC 6803
- 10:40-11:00      Anton Avramov  
Functional role of D1-E189 ligand during the light driven assembly of nature's water oxidizing complex
- 11:00-11:20 am**      **Coffee Break**
- 11:20-12.00 am**      **Session 3**
- 11.20-11.40 am      Amit Srivastava  
A Simple Electrostatic Model for Accurate Prediction of Mutation-Induced Frequency Shifts in Water-Soluble Chlorophyll Proteins

11.40-12.00 am Collin Steen  
Interplay between LHCSR proteins and state transitions govern the NPQ response in intact cells of *Chlamydomonas* during light fluctuations.

12:00-2.00 pm **Poster Session II** (Poster presenters 18-34)

2:00-3:00 pm **Keynote Lecture**  
Prof. Greg Engel  
Understanding the Design Principles of Photosynthetic Light Harvesting: Controlling quantum beats in 2D electronic spectra of the FMO complex using redox chemistry

3:00-3.15 pm **Awards presentation**