

A Cyanobacterial Photosystem I-Photosystem II-Phycobilisome Megacomplex

Scientific Achievement

A complex of Photosystem I, Photosystem II and the phycobilisome antenna complex has been isolated and characterized using mass spectrometry and ultrafast spectroscopy.

Significance and Impact

This research addresses the spatial relationship of the photosystems and the coupling of the antenna system to the reaction center.

Research Details

- A megacomplex of PSI/PSII/PBS was prepared using a His-tagged PSII and protein cross-linking.
- Mass spectrometry was used to identify protein subunits that are in proximity.
- Ultrafast spectroscopy was used to monitor energy flow in the complex.

