

The Society of Rheology 88th Annual Meeting - Tampa, Florida

Program Updates

- Paper SC6 [Monday, 1:30, Audubon B (Track 1)] has been withdrawn.
- Paper BA13 [Monday, 4:50, Audubon DEF (Track 2)] has been added:

Helping the Cornea Stay in Shape

Julia A. Kornfield

Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA 91125

The cornea of the eye is a remarkable collagen-based hydrogel that is 78%wt water, yet it has the strength to serve as a stable optical element despite continuous tension due to intraocular pressure. The cornea's balance of clarity and permeability with mechanical strength is maintained by the constant degradation and replacement of its constituents. When these are out of balance either due to excessive degradation or insufficient replacement, the cornea begins to bulge outward (e.g. keratoconus). Through a Caltech-UCSF collaboration we have developed a gentle method to reinforce the tissue using photoactivated crosslinking activated by visible light (using green light to activate the photosensitizer eosin Y). The treatment shows low toxicity to the cells in the corneal stroma (keratocytes) and behind it (corneal endothelial cells).

- Paper SG14 [Monday, 5:15, White Ibis (Track 3)] will be presented by Norman J. Wagner.
- Paper SG19 [Tuesday, 11:40, White Ibis (Track 3)] has been withdrawn.
- Paper SC28 [Tuesday, 5:15, Audubon B (Track 1)] will be presented at 2:45.
- Paper SC23 [Tuesday, 2:45, Audubon B (Track 1)] will be presented at 5:15.
- Paper PO15 [Wednesday, 6:00, Foyer-Stairs/Windows (Poster Session)] has been withdrawn.
- Paper PO46 [Wednesday, 6:00, Foyer-Stairs/Windows (Poster Session)] has been withdrawn.
- Paper PO78 [Wednesday, 6:00, Foyer-Stairs/Windows (Poster Session)] has been added. The paper is previously SC48 [Thursday, 11:15, Audubon B (Track 1)].
- Paper NF20 [Thursday, 8:40, Audubon DEF (Track 2)] has been withdrawn.
- Paper SC48 [Thursday, 11:15, Audubon B (Track 1)] has been moved to PO78 [Wednesday, 6:00, Foyer-Stairs/Windows (Poster Session)].
- Paper SC49 [Thursday, 11:40, Audubon B (Track 1)] will be presented at the 11:15 time slot.
- Paper NF25 [Thursday, 11:15, Audubon DEF (Track 2)] has been withdrawn.