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# GASTVORTRAG

## Holly Rushmeier

Yale University, USA



### “Modeling Material Appearance for Computer Graphics Applications”

#### Abstract:

Modeling the appearance of physical materials is an essential component in the computer generation of synthetic photorealistic imagery. Recent progress in material appearance modeling will be surveyed, with an emphasis on modeling aged and weathered materials and on perceptual experiments. Capturing aging phenomena in a form that can be applied to new digital objects requires drawing on the engineering and science literature on modes of aging, using newly developed scanning and vision systems and novel mathematical analysis. Perceptual experiments draw on both knowledge of the human vision system, physical modeling and constraints of graphics rendering. Future directions for research in material appearance modeling will be discussed.

#### Biography:

Holly Rushmeier is a professor of computer science at Yale University. She received the BS, MS, and PhD from Cornell University. Since receiving the PhD she has held positions at Georgia Tech, NIST and IBM TJ Watson Research. Her current research focuses on scanning and modeling of shape and appearance properties, and on applications in cultural heritage. Her past projects include a project to create a digital model of Michelangelo's Florence Pieta and models of Egyptian cultural artifacts in a joint project between IBM and the Government of Egypt. Dr. Rushmeier serves on the editorial boards of ACM Transactions on Perception, Computer Graphics Forum, IEEE Computer Graphics and Applications and ACM Journal on Computing and Cultural Heritage. She has been papers chair or co-chair for several conferences including the ACM SIGGRAPH conference and IEEE Visualization.

**Datum:** 10. März 2009 15:30 Uhr s.t.

**Ort:** TU Wien, Favoritenstr. 9, Stiege 1, 5. Stock, Seminarraum E186

