

COMPUTER AIDED GEOMETRIC DESIGN
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Special Issue:
Applications of Geometric Modeling in the Life Sciences

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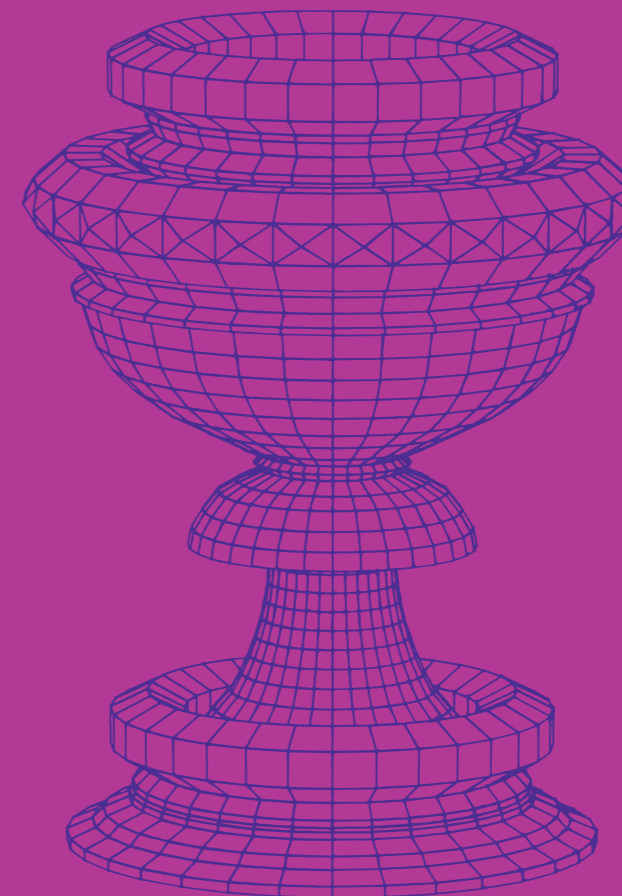


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Special Issue: Applications of Geometric Modeling in the Life Sciences



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Hans Wolters & Bernd Hamann

COMPUTER AIDED GEOMETRIC DESIGN

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Front cover. The cover picture shows a computer drawing of a chalice, first developed by Paolo Uccello (1397–1475). Uccello's hand-drawing was the first extant complex geometrical form rendered according to the laws of linear perspective (Perspective Study of a Chalice, Drawing, Gabinetto dei Disegni, Uffizi, Florence, ca. 1430–1440).

Scope

The journal *Computer Aided Geometric Design* is for researchers, scholars, and software developers dealing with mathematical and computational methods for the description of geometric objects as they arise in areas ranging from CAD/CAM to robotics and scientific visualization. The primary objects of interest are curves, surfaces, and volumes such as splines (NURBS), meshes, subdivision surfaces as well as algorithms to generate, analyze, and manipulate them. This journal will report on new developments in CAGD and its applications, including but not restricted to the following:

- Mathematical and Geometric Foundations
- Curve, Surface, and Volume generation
- CAGD applications in Numerical Analysis, Computational Geometry, Computer Graphics, or Computer Vision
- Industrial, medical, and scientific applications

Aims

The aim is to collect and disseminate information on computer aided geometric design in one journal. To provide the user community with methods and algorithms for representing geometric objects. To illustrate computer aided geometric design by means of interesting applications. To combine curve and surface methods with computer graphics. To explain scientific phenomena by means of visualization. To concentrate on the interaction between theory and application. To expose unsolved problems of the practice.

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