University of Huddersfield Repository

Taylor, Andrew and Unver, Ertu

Practice based 3D surface design research: Zooplankton Lamp & Particle fluid lamp

Original Citation


This version is available at http://eprints.hud.ac.uk/12760/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

• The authors, title and full bibliographic details is credited in any copy;
• A hyperlink and/or URL is included for the original metadata page; and
• The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/
ZOOPLANKTON LAMP

Concept: Surface Design as an emergent material practice is evolving rapidly through interdisciplinary research, and digital technologies for concept design and production. The research aims to explore this emergence by generating organic 3D morphologies and to reflectively record this making process and the experiences for future learning and teaching practice. The Zooplankton lamp is first in a series of practice based collaborations, nature design experiments, product development and exhibition installations between Surface design and 3D digital design practitioners.

PARTICLE FLUID LAMP

Concept: The research by Ertu Unver has used the particle physic tools in 3D modelling software to create water animations. At the appropriate moment a time frame is selected or frozen to create an instantaneous 3D computer model. The model can be then digitally fabricated to create a unique form or product. The droplet lamp is created using computational fluid dynamics and physic based animation techniques to generate a fluid form and design iterations. Particles are programmed to be affected by resistance, frictions, collisions, bouncing and gravity values which all creates a unique flow. The particles representing the liquid, flow through and around a defined surface form generating random surfaces which can become unique artefacts and products.