

AEGIS

Birmingham,

UK,

HYPOSURFACE©

1999-2001

The Aegis Hyposurface is a dECOi project, designed principally by Mark Goulthorpe and the dECOi office with a large multi-disciplinary team of architects, engineers, mathematicians and computer programmers, among others. This team included a Professor Mark Burry, who was working at Deakin University at the time, along with various others from Deakin, including Professor Saeid Navahandi and Dr Abbas Kouzani. Please see below for a full list of the members of the project team.

This project was developed for a competition for an interactive art-work for the foyer of The Birmingham Hippodrome Theatre. The piece is a faceted metallic surface that has potential to deform physically in response to electronic stimuli from the environment (movement, sound, light, etc). Driven by a bed of 896 pneumatic pistons, the dynamic 'terrains' are generated as real-time calculations.

The piece marks the transition from autoplasmic (determinate) to alloplasmic (interactive, indeterminate) space, a new species of reciprocal architecture.

CURRENT**STATUS**

Aegis will be on show at the 'Non Standard Architectures' exhibition at the Centre Pompidou in Paris:
December 10 2003 - March 1 2004.

SIAL have contributed to three of the projects on show: *Aegis*, *Paramorph II*, and *Blue Gallery*, and have produced the exhibition multimedia. Mark Burry is one of the four essayists in the accompanying catalogue (summary).

FULL PROJECT TEAM

- » **Client:** The Birmingham Hippodrome Theatre
- » **Concept:** Mark Goulthorpe of dECOi Architects
- » **Design Team:** Mark Goulthorpe, Prof. Mark Burry, Oliver Dering, Arnaud Descombes
- » **Design/Implementation:** Prof. Mark Burry, The School of Architecture & Building, Deakin University, Australia with Grant Dunlop
- » **Mathematics and Programming:** Dr Alex Scott, University College London; Peter Wood, Victoria University of Wellington, NZ; Xavier Robitaille, University of Montreal, Canada
- » **System Engineering/Design:** Prof. Saeid Navahandi, Dr Abbas Kouzani, Intelligent Systems Research Group, The School of Engineering & Technology, Deakin University, Australia
- » **Mathematics:** Dr Alex Scott, Prof. Keith Ball, University University College London
- » **Engineering:** David Glover of Group IV, Ove Arup & Partners, London, UK
- » **Facade Consultant:** Sean Billings of Billings Design Associates, Ireland

- » **Rubber Research:** RAPRA, UK, Burton Rubber, UK
- » **Adhesive Research:** Loctite Ltd, UK
- » **Pneumatic Systems/Fabrication:** Univer Ltd, Bradford, UK
- » **Facet Manufacture:** Spanwall Ltd, Ireland
- » **Sponsorship:** National Endowment for Science, Technology and the Arts (NESTA), UK, The Arts Council, UK
- » **Art Consultant:** Vivien Lovell of Modus Operandi, formerly the Public Art Commissions Agency (PACA)