CRC CI RESEARCH CONFERENCE 2003

"ARUP'S RESEARCH NEEDS"

- Large independent consulting engineering group
- 6000 people worldwide
- All aspects of the Built Environment
- Design, innovation, meeting technical challenges



ARUP R&D

Explicit Research

- 60 people in ARD Group, serving external clients
 - internal clients

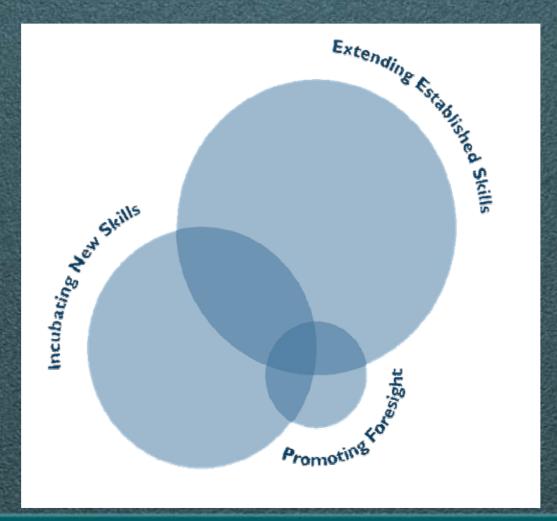
- DTF, BIF, DIF \$A25M pa
- Collaborations

Implicit Research

Project-based

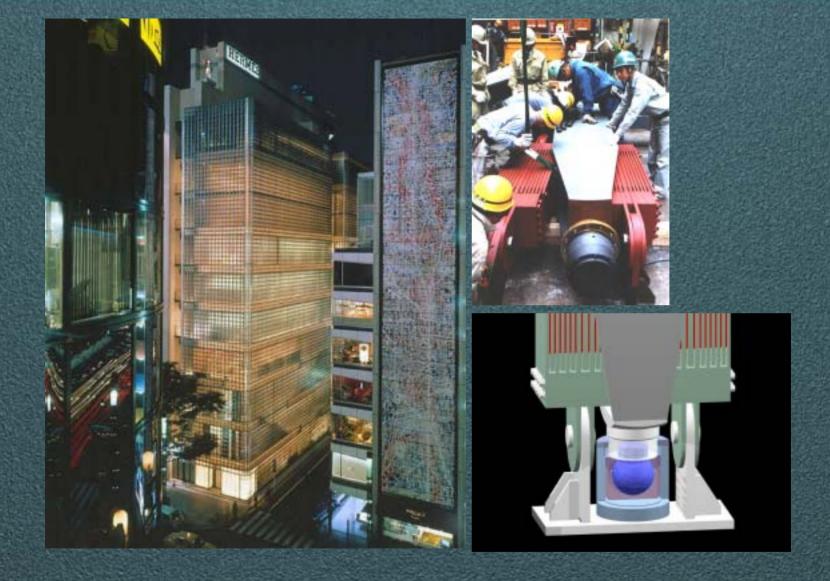


What to Spend it on? (including collaborations)

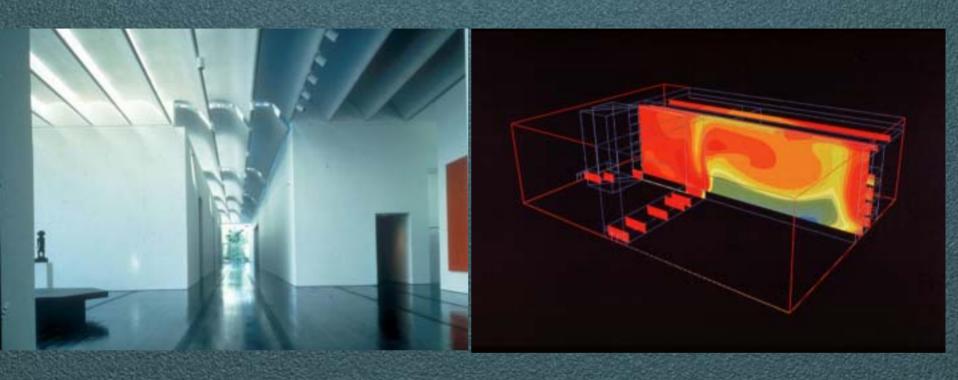


Extending Established Skills

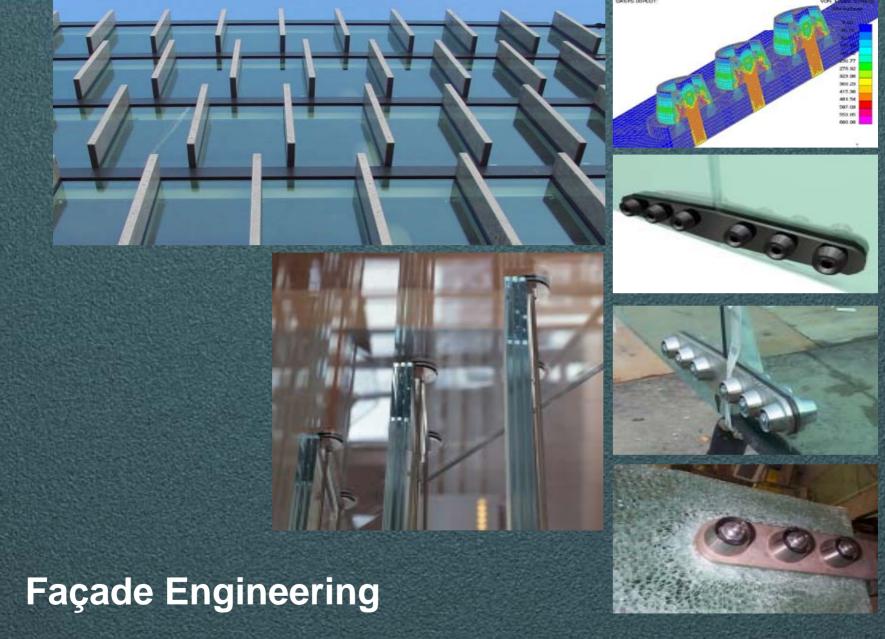
- Structural
- MEP
- Materials Science
- Geotechnics
- Transportation Planning
- Façade Engineering
- Acoustics



Base Isolation Systems



Under-Floor Air Supply Systems



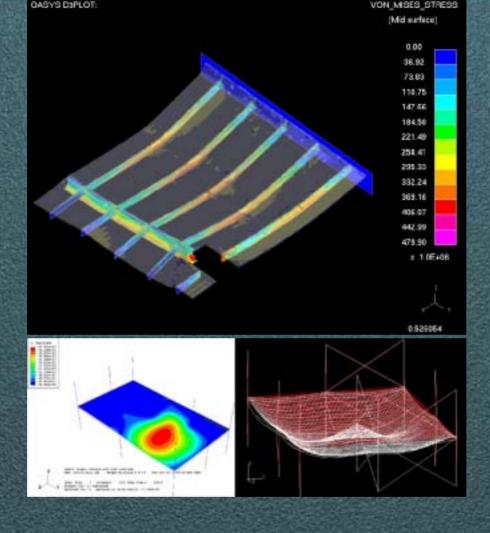
Incubating New Skills

- Building Physics
- Vehicle Design
- Fire Modelling
- Product Design
- Renewable Energy

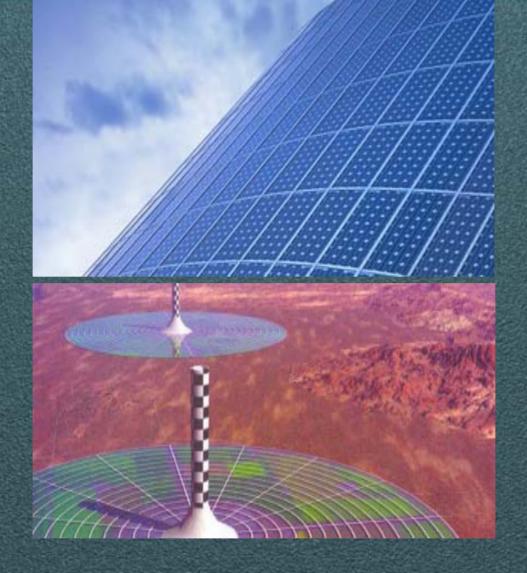




Vehicle Design



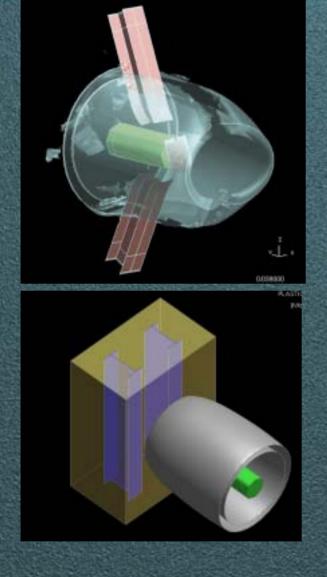
Fire Modelling



Renewable Power

Promoting Foresight

- Risk / Robustness / Security
- Workplace of the Future
- Biomimicry
- 3D CAD / Virtual Environments
- Corporate Consulting



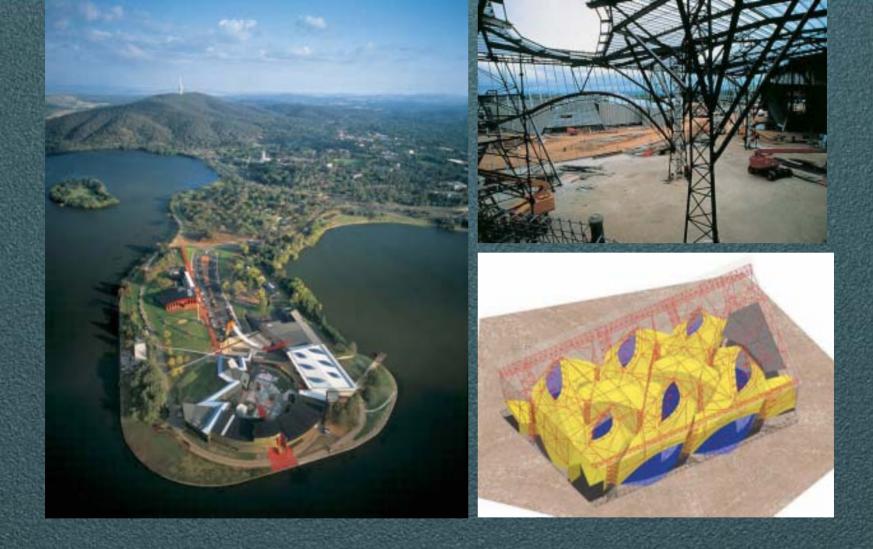


Risk / Robustness





Biomimicry



3D CAD / uses of IT

....Product Research / Process Research...



