

ANNEX
6th International seminar of Structural Morphology
WG
“Morphogenesis”
General organization of the program

Themes and lectures

1. Nature

- Key words : form emergence, self organization, adaptive design, evolutionary design, structural rationality, form languages, mathematics and geometry of forms.
- **Edgar Stach** + Ture Wester + Michael Balz

2. Cognitive aspects

- Key words : methods and techniques of representation, description of form, free form representation, form perception and mental representation, cognitive processes.
- **Tuba Kocaturk** + Birgitta Dresp + ???

3. Design methods and strategies

- Key words : architects engineers and other morphogenesis users
- **Rivka Oxman** + René Motro + Oliva Salinas

4. Structural performance and constructibility

- Key words : structural behaviour, production and assemblage included as constraint variables, keeping forms, structural behaviour and optimization of forms in nature, rainflow iso curvatures, warping, grid homogeneization.
- **Andrew Borgart** + Jeroen Coenders + Bernard Maurin

5. Design tools, software environments for morphogenesis

- Keywords : computational mechanics, structural optimization, SO and MO optimization, LP and NLP methods, Continuous and discrete variables, heuristic methods, ESO and extended ESO methods,
- **Hiroshi Ohmori** + Andrew Borgart + Alain Marty (or Marine Bagneris)

6. New materials and structural systems

- Keywords : adaptive, changing, growing, phase changing materials. Tactility. Composite, fibres, membranes..._Deployable, controlled structural systems
- **Arno Pronk** + **Manfred Grohmann** + **Nicolas Pauli**

This could give $6 \times 3 = 18$ lectures (25 ' duration) + 6 discussions (20 ' each) 7,5 hours of lectures and 2 hours of discussions on themes. A final round table could be organized to synthesize the whole discussions. Each chair of themes would present a short report (6 x 10') allowing a debate ending in more promising research ways. (2 hours).

23 of october	24 of october
Introduction	
Theme 1 1h 35 (3 lectures + discussion)	Theme 5 1h 35 (3 lectures + discussion)
Theme 2 1h 35 (3 lectures + discussion)	Theme 6 1h 35 (3 lectures + discussion)
Lunch time	Lunch time
Theme 3 1h 35 (3 lectures + discussion)	General Reports and discussion 3 hours
Theme 4 1h 35 (3 lectures + discussion))	Closure

Attending people

A/ All nominated people in the program (including those who are not known now)

C/ Invitation of the President

B/ Advertisement for all EC members

C/ Members of Structural Morphology Group, including members of Free Form Design subgroup, and members of Computational Morphogenesis.

Budget

We can expect between 50 and 70 people, with individual fee of around 100 USD fees for the two days (lunches, reception, room reservation with electronic facilities)

Publications

A special Issue of the Journal of International Association for Shell and Spatial Structures will be devoted to this international seminar of structural morphology on “**Morphogenesis**”.

This issue will contain six papers, one by theme, under the direction of the nominated leader of the theme, and a concluding paper by the chairman of the seminar.