EUROMECH Final Report

EUROPEAN MECHANICS SOCIETY

Please send this report to the Secretary General of EUROMECH, within one month after the Colloquium.

EUROMECH Colloquium No: 398

Title: Fluid Structure Interaction in Ocean Engineering

Dates and location: October 11-14,1999, Hamburg, Germany

Chairperson: Prof. Dr.-Ing. Edwin Kreuzer

Co-Chairperson: Prof. Dr.-Ing. Otto vonEstorff

Is there need of another Colloquium on the same or a related subject? Which year?
After three years in another country on a related subject.

Full registration fee: 180.00 DEM

What other funding was obtained?
Reimbursement of costs of travel and living expenses for participants from Eastern Europe by the DFG.

What were the participants offered?
Programme including a booklet of Extended Abstracts.

Number of members of EUROMECH (reduced registration fee): 13

Number of non-members of EUROMECH (full registration fee): 19

Number of participants from each country:

Austria		Germany	21	Romania	
Belgium		Great Britain		Russia	3
Byelorussia		Greece		Slowakia	
Bosnia		Hungary		Slovenia	
Bulgaria	2	Ireland		Spain	
Croatia		Italy		Sweden	
Czech Republic		Latvia		Switzerland	
Denmark		Lithuania		Ukraine	1
Estonia		Netherlands		Yugoslavia	
Finland		Norway		Turkey	
France	1	Poland	4	Others	
Georgia		Portugal		Total	32

Please turn

Scientific Report

The scientific programme was opened on Monday, October 11, 1999 by Prof. Dr.-Ing. E. Kreuzer, followed by the welcoming address by the Vice-President of the Technical University Hamburg-Harburg, Prof. Dr. Wolfgang Bauhofer.

Ten sessions took place from Monday afternoon till Thursday noon.

The scientific programme comprised 23 lectures of 30 minutes each including discussion. The topics of the sessions were the following:

- Vibrational analysis of ship-like structures with FEM, BEM, and coupled FE/BE methods,
- Fluid-structure behaviour after impact loading,
- Stability and bifurcation analysis of offshore structures and ships,
- Non-linear phenomena of flexible ship-like and offshore structures,
- Shape optimisation of floating structures,
- Scour at underwater pipelines,
- Experimental investigations of the behaviour of fixed and floating offshore structures,
- Underwater robot dynamics,
- Underwater cable dynamics.

Details about the lectures presented in the sessions are provided with the extended abstracts collected in the enclosed booklet "Programme and Abstracts".

The colloquium brought together scientists from mechanics, physics, and mathematics and promoted a vigorous exchanges of ideas. The broad spectrum of topics from different areas of science and the spectrum of applications underline the interest in the topic "Fluid Structure Interactions".

Proceedings will not be published.

On Tuesday, October 12, 1999 in the afternoon an excursion was offered. The excursion was well received.

November, 13, 1999