

EUROMECH

EUROPEAN MECHANICS SOCIETY

Final Report

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

EUROMECH Colloquium No: 373

Title: Modelling and Control of Adaptive Mechanical Structures

Dates and location: 11-13 March 1998, Magdeburg, Germany

Chairman: U. Gabbert

Co-Chairman: E. Breitbach, H.S. Tzou

Is there need of another Colloquium on the same or a related subject? Which year? no

Full registration fee: 460,00 DM

What other funding was obtained? DFG-fund for participants from Eastern Europe

What were the participants offered? Conference proceedings, lunch, refreshments

Number of members of EUROMECH (reduced registration fee): 11

Number of non-members of EUROMECH (full registration fee): 58

Participants with no registration fee: 51 (local org. committee),

Number of participants from each country: 5 (DFG-funded for Eastern Europe)

Austria	<u>2</u>	Germany	<u>92</u>	Romania	<u>1</u>
Belgium	<u>2</u>	Great Britain	<u> </u>	Russia	<u>3</u>
Byelorussia	<u> </u>	Greece	<u> </u>	Slovakia	<u> </u>
Bosnia	<u> </u>	Hungary	<u> </u>	Slovenia	<u> </u>
Bulgaria	<u>2</u>	Ireland	<u> </u>	Spain	<u>2</u>
Croatia	<u> </u>	Italy	<u> </u>	Sweden	<u>3</u>
Czech Republic	<u> </u>	Latvia	<u> </u>	Switzerland	<u> </u>
Denmark	<u>1</u>	Lithuania	<u> </u>	Ukraine	<u>2</u>
Estonia	<u> </u>	Netherlands	<u> </u>	Yugoslavia	<u> </u>
Finland	<u> </u>	Norway	<u> </u>	Others	<u>4</u>
France	<u> </u>	Poland	<u>1</u>	Total	<u>115</u>
Georgia	<u> </u>	Portugal	<u> </u>		

Please turn

Scientific Report

EUROMECH Colloquium 373

Modelling and Control of Adaptive Mechanical Structures

Chairman: U. Gabbert (Magdeburg)

Co-Chairmen: E. Breitbach (Braunschweig), H.S. Tzou (Kentucky)

EUROMECH 373 was held from March 11th – 13th, 1998, at the Upstalsboom Hotel Ratswaage Magdeburg. There were 74 participants from 14 countries, among them 25 participants from industry. Members of the local organisation committee and PhD students boosted the total to 115. There were 48 presentations which have been collected as the published proceedings. After reviewing most of the papers will be published in a volume of the VDI Fortschrittsberichte, Düsseldorf.

An excellent opening speech of the colloquium was given by the prime minister of Sachsen-Anhalt, Dr. Höppner.

The main objective of the Colloquium was to provide a forum for scientists and engineers for discussing recent developments in the field of adaptive structures.

The scientific activities were addressed in the following 11 sessions

- Adaptive Structures Technology
- Adaptive Material Systems and Actuators
- Damage Detection in Smart Materials
- Finite Elements for Adaptive Structures
- Control of Adaptive Structures (I, II)
- Multilayered Structures and Composites
- Modelling of Adaptive Structures (I, II)
- Neural Networks and Shape Detection
- Optimization of Adaptive Structures
- Adaptive Structural Systems (I, II)
- Application of Adaptive Structures

The opening session contained three extended lectures by H. Baier (München) on "Analytical and Experimental Results for Active Noise Control", J. Holnicki-Szulc (Warszaw) on „Adaptive Structures with Semi-Active Interface“ and H. Preumont (Brüssel) on „Active Tendon Control of Large Trusses“.

There was time enough to discuss all papers in detail. Several participants used the offer of the hosts to visit the laboratories of the research centre Innovationskolleg „Adaptive Mechanische Systeme“ at the Magdeburg University.

At the evening of the second day a banquet was held in the main hall of the Palais am Fürstenwall. Otto von Guericke, the famous Magdeburgian scientist and mayor, visited the Palais after dinner. He gave a very interesting overview about his life and presented some of his well known experiments regarding the vacuum.

At the end of the conference the overwhelming consensus of comments received from the participants was that the meeting was very successful.

Please use additional pages if needed. Put date and signature at the end.

3 7. 1998
U. Gabbert