

EUROMECH

EUROPEAN MECHANICS SOCIETY

Final Report

Date: 16.02.1996

Please send this report to the Secretary-General of EUROMECH, Professor Bengt Lundberg, School of Engineering, Uppsala University, Box 534, S-751 21 Uppsala, Sweden, within one month after the Colloquium.

General

EUROMECH Colloquium No: 331

Dates: 14 -17 March 1995

Title: "Flows with Phase Transition"

Co-Chairman: Prof. G.E.A. Meier, Prof. G.H. Schnerr, Prof. J. Zierep

Place and country: DLR Göttingen, Institut of Fluid Mechanics, Germany

Is there need of another colloquium on the same subject? Which year?

Finance

Conference fee: DM 280,--

The fee included: DM 60,--
(European Mechanics Society)

Funding: Fees + donations, support by the board of the DLR, Cologne + the Deutsche Forschungsgemeinschaft, Bonn

Accommodation (type and cost): Hotels and Hostels, private arrangements

Meals: 7 meals and 1 banquet
at the DLR canteen, covered by the Colloquium

Participation

Number of participants from each country:

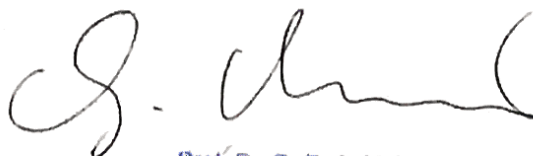
Austria	_____	Germany	<u>30</u>	Rumania	<u>1</u>
Belgium	_____	Great Britain	<u>3</u>	Russia	<u>6</u>
Bielorussia	<u>1</u>	Greece	_____	Slovakia	_____
Bosnia	_____	Hungary	_____	Slovenia	_____
Bulgaria	_____	Ireland	_____	Spain	_____
Croatia	_____	Italy	_____	Sweden	_____
Czech Republic	<u>2</u>	Latvia	_____	Switzerland	<u>3</u>
Denmark	_____	Lithuania	_____	Ukraine	_____
Estonia	_____	Netherlands	<u>2</u>	Yugoslavia	_____
Finland	_____	Norway	_____	Others	<u>6</u>
France	<u>7</u>	Poland	<u>2</u>		
Georgia	_____	Portugal	_____	Total	<u>63</u>

The Colloquium "Flows with Phase Transition" had 43 lectures in total. A detailed view on the different contributions can be achieved by the attached programm and the book of abstracts (DLR-Mitteilung 94-11).

Many two-phase phenomena and their coupling to flow fields have been discussed in the elaborate programm of the colloquium. The first three sessions were devoted to nonequilibrium phase transition and were dealing with nucleation phenomena, with droplet growth and gasdynamic applications. After a short session about vapour bubbles with two lectures the following 5th session was devoted to the wave propagation in liquid-vapour mixtures. The 6th session was dealing with droplets, sprays and reactive flows. The 7th session focused attention on modelling and dynamics of two-phase flows with some interesting contributions explaining experimental findings theoretically. The final 8th session on film condensation and evaporation was mainly dealing with the influence of walls on the condensation and evaporation in flows.

Theoretical, numerical and experimental contributions have been in a very good balance. All presentations had lively discussions, and the exchange of opinions from different fields of research gave usefull impact of ideas to the lecturers.

The technical organisation of the colloquium was carried out by some employees of the DLR Institute of Fluid Mechanics without any problems. Some grants and travel money were given to 13 participants who otherwise could not have been attending the EUROMECH Colloquium. Several donations from industry and some other companies contributed to the financial budget. More considerable financial contributions were given by the board of the DLR, Cologne and the Deutsche Forschungsgemeinschaft, Bonn-Bad Godesberg. A final deficit will be carried by the Institute of Fluid Mechanics of the DLR.



Prof. Dr. G. E. A. Meler