

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

EUROMECH Colloquium No: 426

Title: Swirling Flows

Dates and location: 16 – 20 September, Bergen – Troms, Norway

Chairperson: Professor Helge I. Andersson, NTNU, Trondheim, Norway

Co-Chairperson: Professor Sergey V. Alekseenko, ITP, Novosibirsk, Russia

Is there need of another Colloquium on the same or a related subject? Which year? Yes, in 2 – 3 years

Full registration fee: 750 EURO (including full board accommodation in 4 days)

What other funding was obtained? ERCOFTAC, Research Council of Norway, EOARD, local support

What were the participants offered? The full fee included single-cabin accommodation, three daily meals, the technical programme, Book of Abstracts, social activities

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

Number of non-members of EUROMECH (full registration fee): 21

Number of participants from each country (the fee was waived for 6 participants):

Austria	_____	Germany	3	Romania	_____
Belgium	_____	Great Britain	5	Russia	8
Byelorussia	_____	Greece	_____	Slovakia	_____
Bosnia	_____	Hungary	_____	Slovenia	_____
Bulgaria	_____	Ireland	_____	Spain	_____
Croatia	_____	Italy	2	Sweden	4
Czech Republic	_____	Latvia	_____	Switzerland	_____
Denmark	1	Lithuania	_____	Ukraine	1
Estonia	1	Netherlands	2	Yugoslavia	_____
Finland	_____	Norway	7	Turkey	_____
France	4	Poland	_____	Others	_____
Georgia	_____	Portugal	_____	Total	38

Please turn

26/10/2001

Helge Andersson

EUROMECH 426 was organized jointly by the Norwegian University of Science and Technology (NTNU) in Trondheim and Institute of Thermophysics in Novosibirsk and took place onboard a vessel sailing from Bergen to Tromsø on September 16th - 20th 2001. The colloquium was also approved by the ERCOFTAC Scientific Programme Committee as an ERCOFTAC event. There were 38 participants from 11 countries, 5 from outside Europe (i.e. eastern Russia). There were 38 oral presentations, of which 4 were extended keynote presentations.

The aim of the colloquium was to provide an opportunity for European scientists to present and discuss the outcome of their latest research on swirling motions in inviscid, viscous and turbulent fluid flow. Swirling flows occur in a wide range of applications, both in geophysics and engineering. The intention was to bring together people from different fields of applications, as well as a mix of theoreticians, experimentalists and computers, in order to highlight unresolved issues and enhance the understanding of the complex flow physics associated with swirling flow phenomena. This was achieved in a friendly and informal atmosphere while the scenic coastline of Norway passed by outside the conference room.

The presentations were grouped into thematic sessions according to their subject area: vortical flows I & II, rotor-stator flow, stability and vortex breakdown, confined flows, system rotation, coherent structures, and applications. Some of the sessions were opened with a keynote lecture to set the scene. These were:

Coherent and Vortical Structures by S.V. Alekseenko (Institute of Thermophysics, Novosibirsk)

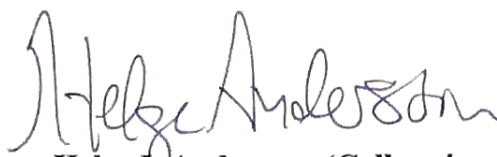
Confined and Agitated Swirling Flows by J. Derksen (Delft University of Technology, Delft)

Intense Columnar Atmospheric Vortices by D. Etling (University of Hannover, Hannover)

Rotating Disks and Swirling Flows by J.M. Owen (University of Bath, Bath)

A book of abstracts was made available to the participants. The participants have been invited to submit full-length manuscripts to the international journal "*Flow, Turbulence and Combustion*".

Dr Martin Wosnik, Dept of Thermo and Fluid Dynamics, Chalmers University of Technology (Gothenburg, Sweden) received a 200 EURO EUROMECH grant.



Helge I. Andersson (Colloquium Chairman)

October, 26 2001