

Founders

- Frithiof Niordson, Solid Mechanics
- Frank Engelund, Hydraulic Laboratory
- Erik Hansen, Applied Mathematical Physics
- Kristian Refslund, Fluid Mechanics



DCAMM

Danish Center for Applied Mathematics and Mechanics

Pauli Pedersen

Congratulations to all of us
for 40 years of cooperation



Cooperating Institutes

- 1969 Solid Mechanics, Hydraulic, Applied Mathematical Physics, Fluid Mechanics
- 1970 Structural Research
- 1976 Ocean Engineering
- 1983 Numerical Analysis
- 1990 Mathematics
- 1994 Mathematical Modelling incl. Applied Mathematical Physics and Numerical Analysis
- 2000 Mechanical Engineering incl. Solid Mechanics, Fluid Mechanics, Ocean Engineering and Structural Research
- 2001 Mechanical Engineering, Aalborg University
- 2001 Building Technology, Aalborg University
- 2009 Risø

Furthermore, 8 members and Foreign members



DCAMM

Founded 27 th October 1969, by 4 institutes
Solid Mechanics, Fluid Mechanics, Hydraulics,
and Applied Mathematical Physics

Statutes signed 4 th May 1970, by 5 institutes
Including Structural Research Laboratory

Purpose of promoting research through cooperation

It started with little, else than enthusiasm and a belief that
progress in science depends more on cooperation than on
organization

First in 1972 the Center had its own budget



Further Congress and Symposia

- August, 1984 held in Kgs. Lyngby (with 820 + 220 participants): XVI th I C T A M congress (gave the basis for DCAMM Støttefond)
- August, 1992 held in Kgs. Lyngby I U T A M Symposium on Optimal Design with Advanced Materials
- October 1994 held in Vedbæk 25 Anniversary Symposium
- July 2002 held in Kgs. Lyngby DCAMM international Symposium on Challenges in Applied Mechanics



Specific GOALS of DCAMM

- Organize periodic and occasionally seminars and symposia
- Organize courses within its domain
- Assist in exchanging personals between the cooperating institutes
- Promote contacts between Danish and foreign scientists within its domain
- Publication of reports and data about the scientific work in the center



DCAMM Støttefond

- Based on a surplus of 180.000 DKK from The 1984 I C T A M congress, organized by DCAMM
- The primary goal is to encourage contacts between members of the center
- Until now supported 12 internal DCAMM symposia
- The original capital of 180.000 DKK is unchanged in DCAMM Støttefond and only the interests are used



Initial International Symposia

- March 5 and 6, 1973 with foreign guest lectures by: Koiter, Ziegler, Germain, Collatz, Noble, Berndt, Alblas, Olszak, Longuet-Higgins
- March 3 and 4, 1975 with foreign guest lectures by: Lighthill, Hult, Clarkson, Peregrine, Como and Grimaldi, Mroz, Spencer, Rieder, Palm
- May 31 - June 3, 1977 (GAMM/DCAMM congress with 500 participants) with general lectures by: Giesekus, Hadeler, Jeffrey, Magnus, Moffatt, Nickel, Werner, Young
- May 16 to 18, 1979 (MIÅU/DCAMM symposium in Aarhus) with foreign guest lectures by: Gjevik, Lions, Barnard, Becker, Lepik



DCAMM Reports

Statements in 2009 after 40 years

- Until 2005 no less than 700 reports have been published by the center and distributed all over the world.
- Until 2009 reports 701 - 742 have been published by the center and made available at the DCAMM homepage.
- Almost all of the reports have later on appeared as papers in recognized international scientific journal.
- Number of downloads of the papers from the DCAMM homepage are low.
- The scientific reports, that are issued by the center, seem now to be of minor importance for the young researches associated to the center.

39 Annual reports distributed all over the world.



DCAMM Internal Symposia

- 1987 in Sandbjerg with 34 participants
- 1989 in Hirtshals with 53 participants
- 1991 in Rønne with 61 participants
- 1993 in Gl.Avernæs with 63 participants
- 1995 in Maribo with 78 participants
- 1997 in Ebeltoft with 80 participants
- 1999 in Kolding with 76 participants
- 2001 in Orenas with 74 participants
- 2003 in Ringkøbing with 69 participants
- 2005 in Kobæk with 73 participants
- 2007 in Silkeborg with 81 participants
- 2009 in Sørup with 107 participants



DCAMM Graduate Research School

The "first" period 1997 - 2003,

supported by a generous grant from Forskerakademiet

Number of courses

1997 5 courses, 1998 7 courses, 1999 7 courses,
2000 8 courses, 2001 5 courses, 2002 3 courses, 2003 1 course

The "second" period 2004 - 2010,

supported by a generous grant from the Danish Agency for
Science, Technology and Innovation

Number of courses

2004 3 courses, 2005 8 courses, 2006 7 courses,
2007 8 courses, 2008 6 courses, 2009 7 courses, 2010 ?

Also fellowship for Ph.D projects, see homepage.



DCAMM Reports

Statements in 1989 after 20 years

- The scientific reports, that are issued by the center, are the true trademark of it. From the very beginning the requirement of quality was set at a level used by recognized international scientific journals with referees.
- Until 1989 no less than 400 reports have been published by the center and distributed all over the world. Almost all of them have later on appeared as papers in recognized international scientific journal.
- To maintain a high quality of the scientific reports may possible cause a problem in the future. Several forces act more or less strongly against quality. The pressure for quantity is just one of them.



The future for DCAMM

- A number of centers now exist, and must prove themselves.
- DCAMM is a brand, internationally well-known with respect. This should not be lost.
- The future of the DCAMM reports?
- The future of the DCAMM research school?
- The future of the DCAMM seminars?
- No principal change in the DCAMM internal symposia.

Congratulations and my best wishes for the future of DCAMM



DCAMM Special Events

DCAMM Annual Speaker

- 2006 Hassan Aref
- 2007 John W. Hutchinson
- 2008 William K. George
- 2009 Norman Fleck

DCAMM Day for Industry

- 2008 at Aalborg University
- 2009 at Technical University of Denmark



Foreign guests and seminars

- With Denmark being a very small country, our international contacts are of fundamental importance.
- We have been fortunate to have very many scientific visitors, some of them stayed for prolonged period and gave courses.
- A great deal of our seminars are given by foreign guests.
- Looking back, we note that international contacts obtained as a young researcher will often continue for life.
- It seems difficult to keep the DCAMM tradition for seminars, i.e., to keep each other informed of our activities.

