



UTMIS is a non-profit-making network of companies, research institutes and university departments working in the field of fatigue of materials, which aims to support their work by:

- providing and publishing information, and spreading awareness of fatigue effects
- closer cooperation between parties
- improving levels of knowledge
- performing projects to support work in the field
- raising the profile of the area with research funding organisations.

UTMIS was established 2000 and is operated as a non-profit-making association, financed by its members fees. Currently we are about forty members among companies, research institutes and university departments. (For membership, see below.)

ACTIVITIES

Network Meetings are organized three times a year where participants are given the opportunity to

- listen to technical presentations from both the fatigue colleagues within the association as from invited speakers,
- meet to exchange information during informal forms.

At the first meeting in January-February an annual meeting of negotiations are conducted and at a connecting seminar given primarily graduate students in our universities the opportunity to talk about their jobs.

The spring meeting in May-June is more focused on issues that are confronted with in industrial practice such as the use of software for fatigue design, use of manuals and materials databases. In ordinary cases the spring meeting has a theme as for example welding or reliability. At the spring meeting the winner in the graduates working contest gives the opportunity to present their work.

The autumn network meeting takes the form of a higher course of two days to an internationally recognized fatigue expert speaker. Examples on committed speakers are Keith Miller, England, Reinhard Pippan, Austria, Georges Cailletaud, France, Yukitaka Murakami, Japan, Mike Brown, England, Tim Davis, England, Bo Bergman, Sweden, Darrell Social, USA, Grzegorz Glinka, Canada, Michael Vormwald, Germany and Morris Sonsino, Germany.

UTMIS disseminates information via e-mail newsletters. This provides a means for members to publicise courses, seminars, projects etc. that they are planning, and also to be notified of others' conferences, seminars and courses, both national and international. In addition to up-to-date news, the organisation's web site carries general information on its members, links to relevant literature, and details of courses, conferences and current projects.

Projects and interest groups formed when necessary of focused work in any area with participants who have common or similar problems. Examples on conducted work:

- A project in rubber fatigue, which included both methods of calculation and testing of the base material and the component.
- In "Project Robin" the correlation between calculations of the fatigue strength of a single component of the castings was investigated. The calculations were carried out for pulsating tensile load and for pulsating compressive load. The results from the calculations were also compared with results from testing.

- In a successive project, "Robin II", new comparisons between calculations were made in which all participants had access to the same material data. Here the fatigue strength was calculated for a gearwheel in two variants – sinter steel and casehardening steel. The comparison was made between calculations as well as against tests.

UTMIS provides a contact point for research councils and funding organizations. One objective of this is that, by presenting information on its members' jointly formulated requirements, the result should be greater investment in fatigue-related working areas, primarily on the national level.

UTMIS also works to encourage greater international cooperation in the field of materials fatigue. In this, it is assisted by the fact that its Board is Sweden's national member of ESIS (European Structural Integrity Society).

HOW TO BECOME A MEMBER?

The membership is:

4 250 SEK/year for university departments and companies with less than ten employees

12 750 SEK/year for companies with between 10 and 250 employees

21 250 SEK/year for companies with more than 250 employees

85 000 SEK/year for corporate groups.

Membership of an organization eligible for free participation in all events for any number of participants and access to all information on the website.

For further information, please contact Torsten Sjögren (chairman) (torsten.sjogren@ri.se) or at the address or phone below. When applying for membership, please give the name and size of your company, contact by e-mail, phone number and full address, and an address list for those within the company who want to receive our mailings.