

GENERAL INFORMATION

XXXVIII Summer School **Advanced Problems in Mechanics 2001** is organized by Institute for Problems in Mechanical Engineering of Russian Academy of Sciences (IPME RAS) under patronage of Russian Academy of Sciences and Gesellschaft für Angewandte Mathematik und Mechanik (GAMM). APM'2001 is the twenty-ninth in a series of annual summer schools held by Russian Academy of Sciences. The main purpose of the meeting is to gather specialists from different branches of mechanics providing a platform for a cross-fertilization.

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- **P.A. Zhilin** (St. Petersburg State Technical University, IPME RAS)
- **F. Ziegler** (Technical University, Vienna, Austria)

SCIENTIFIC PROGRAM

The main topic of the School is concerned with the current problems of fundamental and applied mechanics, including, but not restricted to

- solid mechanics
- fluid and gas mechanics
- wave motion and acoustics
- nonlinear oscillations, chaos, stability and control
- dynamics of rigid bodies
- numerical analysis
- computational mechanics
- mechanical and civil engineering applications

Four different forms of presentations are offered, namely, plenary lectures (1 hour), presentations at minisymposia (30 minutes), short communications (20 minutes), and poster. Working language is English. **To the attention of Russian participants:** Russian language as an exception can be used **only in posters**, but even for posters English is strongly recommended. Regrettably we can not provide simultaneous translation, and we must strongly require all oral presentations to be in English, since the School will be really international.

MINISYMPOSIA AND CHAIRS

- Damage and fracture (N.F. Morozov, B.N. Semenov, and Yu.V. Petrov)
- Large plastic deformations at an intensive dynamic loading (S.F. Golovashchenko)
- Mechanics of generalized continua (P.A. Zhilin)
- Mechatronics and structronics (A.K. Belyaev and A. Guran)
- Nonlinear constitutive equations. Phase transitions (V.A. Palmov and A.B. Freidin)
- Nonlinear dynamics and chaos in engineering structures (M. Wiercigroch and A.M. Krivtsov)
- Powders and grains (D. Harris)
- Rigid body dynamics (P.A. Zhilin and E.A. Ivanova)
- Synchronization and vibrational mechanics (I.I. Blekhan)
- Waves (D.A. Indeitsev and D.P. Kouzov)

CALL FOR PAPERS

Prospective participants are asked to fill the registration form and to return it by e-mail to the Organizing Committee. Participants who wish to present a paper have to submit a one page A4 abstract in English (\LaTeX format). The registration form `card.txt`, and the sample file, `abstract.tex`, can be downloaded from the conference website. Authors are advised to submit the abstract of their presentation and the registration form via e-mail to `apm2001@eng.abdn.ac.uk`

Deadline for the abstract submission: February 15, 2001.

Notification of acceptance: March 20, 2001.

After the conference a bound volume of proceedings will be published. The papers for the proceedings (8 pages for a short communication or for a poster, 12 pages for a minisymposium presentation, 15 pages for an invited lecture) must be sent in both electronic form (\LaTeX), via e-mail and in a camera ready form at A4 (all margins are 2.5 cm, 12 pt, article). Two hardcopies are required. Further details can be obtained from our website `http://www.eng.abdn.ac.uk/~apm2001`

Deadline for the paper submission: September 20, 2001.

REGISTRATION FEE

The conference fee at \$190 for foreign participants and \$15 for participants from Russia covers the postage, organization costs, and proceedings.