

III Symposium "Mechanics of Inelastic Media and Structures"

Bad Honnef, FRG, September 9–14, 1984.

ACTIVITY of the Polish Academy of Sciences, Committee of Mechanics is aimed at planning and organizing various events contributing to further development of mechanics in Poland. Organization of international and bilateral scientific meetings is an example of such activity. Let us mention here such events like numerous bilateral symposia on various aspects of mechanics, and namely: 5 Polish–French, 4 Polish–Soviet, 3 Polish–Italian, 3 Polish–British and 3 Polish–Swedish meetings.

The first Polish–German Symposium "Mechanics of Inelastic Media and Structures" organized in Warsaw in 1978 was a natural consequence of traditional and frequent scientific contacts between the West German and Polish specialists on mechanics representing academic centres of both the countries. The second and third meetings of this type took place in the Bad Honnef Physical Centre (near Bonn) in 1981 and in September 1984. The German Organizing Committee of the latter symposium consisted of the following members: Prof. TH. LEHMANN (Ruhr-University Bochum), Prof. H. LIPPMANN (Technical University, Munich), Prof. O. MAHRENHOLTZ (Technical University, Hamburg–Harburg), while the Polish Committee was represented by Prof. S. KOCAŃDA (Military Technical Academy, Warsaw), Prof. Z. MRÓZ (Polish Acad. of Sci., IFTR), the late Prof. A. SAWCZUK, Prof. W. SZCZEPIŃSKI (IFTR, Chairman of the Committee of Mechanics), Prof. Z. WASZCZYSZYN (Technical University, Cracow). Dr R. BOGACZ from the IFTR served as the Scientific Secretary of the Symposium.

55 scientists from both the countries participated in the meeting, 29 of them representing various Polish centres such like the IFTR (Warsaw), the Technical Universities of Cracow, Białystok, Łódź and Poznań, the Warsaw University and the Military Technical Academy in Warsaw. The 26 German participants came from the Ruhr University in Bochum, the Technical Universities in Munich, Braunschweig, Berlin and the Universities of Essen, Hannover and Dortmund.

46 papers were presented during the meeting, eight of them being prepared jointly by Polish and German authors. The program was divided into six sections dealing with the following topics:

1. Damage and fracture of materials, crack propagation, creep, relaxation and fatigue.
2. Stability of mechanical systems, variational and numerical methods in mechanics.
3. Experimental methods and modelling.
4. Theory of plasticity and viscoplasticity.
5. Dynamics of deformable media, elastic and inelastic wave propagation in continuous media.
6. Stability of engineering structures.

The vivid discussions which followed the papers presented were frequently continued in the evenings; they proved the existence of numerous problems of common

interest dealt with simultaneously in the FRG and in Poland, and several interesting results of international cooperation were achieved. In addition to the high scientific level of the papers presented at the symposium, flawless organization of the meeting contributed to its success. Moreover, the meeting proved that the direction of scientific research developed in both countries coincides with the current development trends of modern mechanics stimulated by the actual dynamic development of modern technology.

The present issue of the *Archives of Mechanics* contains some of the papers presented at the Symposium.

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