- 214 (15 Dec., 1968).
- 18 Cowperthwaite, M. & Zwisler, W. H., The JCZ equations of state for detonation products and their incorporation into the TIGER code, 6th Symp. (Intern.) on Detonation, NSWC(1976): 162.
- 19 Kamlet, M. J. & Dickinson, C., Chemistry of detonations. 3. Evaluation of the simplified calculational method for Chapman-Jouguet detonation pressures on the basis of available experimental information, J. Chem. Phys., 48, 1 (1968): 43.
- 20 Ross, M., A high-density fluid-perturbation theory based on an inverse 12th-power hard-sphere refer ence system, ibid, 71, 4 (1979): 1567.
- 21 Ree, F. H., Postdetonation behavior of condensed high explosives by modern methods of statistical mechanics, 7th Symp. (Intern.) on Detonation (June 15-19, 1981).
- 22 Finger, M., et al., The effect of elemental composition on the detonation behavior of explosives, Proc. 6th Symp. on Detonation, D. J. Edwards, Ed. (1976): 710-722.
- 23 Mader, C. L., Numerical modeling of detonations (1979).
- 24 & Craig, W. R. LA-5865 (1975).
- 25 秦承森。一维邓轰不定常增长研究概况。凝聚炸药爆轰和冲击起爆学木交流会论文(1982)。

ESTIMATION OF DETONATION PRESSURE OF CONDENSED EXPLOSIVES BASED ON MICROSCOPIC DESCRIPTION OF THE DETONATION PRODUCTS

Tang Cang-ya Zhou Fu-xin Chen Zhi-ying (Institute of Mechanics, Academia Sinica)

Abstract

In this paper, the characteristics of several equations of state which have been used in the detonation property calculations with direct method are reviewed. The differences among the detonation pressure estimates with these equations of state and the problems in these estimates are discussed.



国际计算力学协会成立

过去20年来,计算力学这一学科领域业已形成并取得极大进展。该领域的贡献遍及许多学科如理论力学、实际工程计算、数值分析和计算机科学。为了促进计算力学最新发展水平的提高,现已成立国际计算力学协会(IACM: International Association of Computational Mechanics),以便更迅速地传播这一领域中的最新进展。该协会有三条主要宗旨:1.通过论文和报告的交流,以及今后学术会议提供的信息,迅速向会员传播科学进展,2.协调科技会议,3. 定期举行 IAC M科学会议。协会将每季出版一期会刊,内容包括协会各成员组织所发表论文和报告一览表,将举行的会议与短期讲座方面的一般消息与信息。创刊号将于1984年初出版。会刊联系地址为: The Editors,IACM Bulletin: Dept-of Civil Engng., Univ. of Wales, Swansca SA 2PP 8, United Kingdom。

冯振兴摘译自: Comput. Meths. Appl. Mech. Engng., 43, 1 (1984).