NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.
A programming system with macroinstructions was set up by collaborators of the Steklov Institute under the guidance of L. V. Kantorovich. Its principal characteristics are as follows: (1) use of macroinstructions, i.e., instructions that release a sequence of individual operations; (2) introduction of operations referring to "sub-quantities", such as the rows and columns of a matrix regarded as a quantity; (3) generalization of the concept of formula, in a way which allows for the nature of the quantities involved in using a formula. If, for instance, the summands in an addition instruction are numbers, an ordinary addition is performed, but if the summands are vectors, then a vector addition is carried out. These properties make it possible to use the system for a concise programming of algorithms involved in solving systems of linear equations, in certain difference methods, and in analytic transformations. No reference is made to any particular computer.