

## summary

In 1955 I. Vekua [133]-[136] raised the problem of investigation of elastic cusped plates, i.e., such ones whose thickness on the part of the plate boundary or on the whole one vanishes. Investigation of elastic cusped plates, considered as 3D ones, may occupy 3D domains with, in general, non-Lipschitz boundaries. In 1965 he offered analogous models for standart shells [2]. In both papers he considered a very important investigation of well-posedness of BVPs (boundary value problems) of peculiar types which could arise in the case of cusped shells. In practice, such plates and beams are often encountered in spatial structures with partly fixed edges, e.g., stadium ceilings, aircraft wings, submarine wings etc., in machine-tools design, an in cutting-machines, planning machines, in astronautics, turbines and in many other application fields of engineering. The problem mathematically leads to equation of setting and solving of boundary value problems for even order equations and systems of elliptic type with the order degeneration in the statical case and of initial boundary value problems for even order equations and systems of hyperbolic type with the order degeneration in the dynamical case.(for corresponding investigations see the survey [3],[4] and also I. Vekua's comments in[5] (p.86) and [12]).

Prismatic shells and plates are widely used in modern engineering structures and technology. hence it is important to construct and investigate algorithms of approximation of three-dimensional models of them by two-dimensional.

In [23] N. Chinchaladze constructed hierarchical models for elastic cusped symmetric prismatic shells (i.e., plates of variable thickness with cusped edges). Using I. Vekua's dimension reduction method, governing systems are derived and in the Nth approximation of hierarchical models BVPs and IBVPs are set. [6]

The present work is devoted to construction of A Survey of Results on Cusped plates by bending in the modification  $N = 2$  approximation of Hierarchical models of I. Vekua's. Using I. Vekua's dimension reduction method, governing systems are derived and in the Nth approximation of hierarchical models BVPs and IBVPs are set. There is considered A Survey of Results on Cusped plates by bending and Bvps are set and investigat.