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ERRATUM TO: "CONDITIONAL SOLVABILITY OF THE BOUNDARY VALUE PROBLEM OF A SELF-ADJOINT OPERATOR-DIFFERENTIAL EQUATIONS IN A SOBOLEV-TYPE SPACE", In: *Int. J. Appl. Math.*, 32, No 3 (2019), 469-478; by

M.A. Labeeb, A.B.I. Ahmed, L. Rashed; doi: 10.12732/ijam.v32i3.8

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**Abstract:** This is a critical note sent to Editor-in-Chief of the journal. The comments are based on a personal view of the author, on whose works the discussed paper is based in parts.

AMS Subject Classification: 34A12, 34G10, 34K10, 35J40, 47D03 Key Words: initial-boundary value problems, operator-differential equation, complicated characteristic, self-adjoint operator, intermediate derivative operator

The mentioned paper is dedicated to the issues of solvability in the Sobolevtype space of the fifth order of the initial-boundary value problem for one class of operator-differential equations of the fifth order.

Unfortunately, I have to make the following remarks:

- 1. In this paper, the authors do not give a motivation for studying the considered initial-boundary value problem for a class of operator-differential equations of the fifth order.
- 2. Despite the fact that the authors state that they consider the initial-boundary value problem, they investigate the equation on the entire real axis. Definition 1.2 introduced by the authors is erroneous.

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3. The authors indicate that Theorem 2.1 provides the association between the norms of operators of intermediate derivatives and the solvability conditions of the problem (1.1), (1.2). But it is not true. At that, the given theorem is formulated incorrectly.

- 4. In the paper, the authors claim to provide accurate estimates of the norms of the intermediate derivatives operators, which are used to determine the solvability conditions. I would like to note that in the paper, they did not find exact estimates of the norms of the intermediate derivatives operators, but instead obtained estimates that has nothing to do with the solvability conditions of the so-called "initial-boundary value problem".
- 5. Theorem 2.4, which should be the major result of the paper, is erroneous. In this theorem, there is some quantity "kappa", which pops up out of nowhere. Moreover, again the solvability conditions indicated in this theorem have nothing to do with the solvability conditions of the so-called "initial-boundary value problem".

It seems that in the field of the theory of solvability of operator-differential equations the authors do not possess necessary proficiency, and therefore cannot use appropriately the results of other authors.

Editorial Note: We are sorry that during the reviewing process, the appointed reviewers might not observe the weak issues in the paper, may be being misled by its valuable topic and the strong works in References list, on which it was partly based at least formally.