▶ AINUR BASHEYEVA, SVETLANA LUTSAK, *On quasivarieties generated by some finite modular lattices.*

Department of Algebra and Geometry, L.N. Gumilev Eurasian National University, 13 Kazhymukan, 010008, Astana, Kazakhstan; Department of Computational and Data Science, Astana IT University, 55/11 Mangilik El Avenue, 010000, Astana, Kazakhstan.
E-mail: basheyeva3006@gmail.com.
Department of Mathematics and Computer Science, M. Kozybayev North Kazakhstan University, 86 Pushkin, 150000, Petropavlovsk, Kazakhstan.
E-mail: sveta_lutsak@mail.ru.

In 1970 R. McKenzie proved that any finite lattice has a finite basis of identities. However the similar result for quasi-identities is not true. That is, there is a finite lattice that has no finite basis of quasi-identities (V.P. Belkin 1979). These results naturally arose the problem: Which finite lattices have finite bases of quasi-identities? The problem was suggested by V.A. Gorbunov and D.M. Smirnov in 1979. In 1984 V.I. Tumanov found sufficient condition consisting of two parts under which the locally finite quasivariety of modular lattices has no finite (independent) basis of quasi-identities. Also he conjectured that a finite (modular) lattice has a finite basis of quasi-identities if and only if a quasivariety generated by this lattice is a variety. In general, the conjecture is not valid. In 1989 W. Dziobiak found a finite lattice that generates finitely axiomatizable proper quasivariety. However the Tumanov's conjecture for modular lattices is still open.

The main goal of this work is to present a specific finite modular lattice such that the quasivariety generated by this lattice does not satisfy all conditions of Tumanov's theorem and has no finite basis of quasi-identities. The proof of this result gives many examples of finite lattices that confirm Tumanov's conjecture.

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