Nuh Aydin (aydinn@kenyon.edu), 201 N. College Rd., Gambier, OH 43022, and Lakhdar Hammoudi* (hammoudi@ohio.edu), 101 University Drive, Chillicothe, OH 45601. Al-Kashi's Miftah al-Hisab: a 21st century translation and reading.

The mathematics book Miftah al-Hisab written in Arabic by al-Kashi in 1427 is considered as the synthesis and culmination of Islamic progress in mathematics at the time. The translation of the Miftah into English started by the authors is now in its final stages of publication by Birkhauser: volume 1 on Arithmetic has just been published in the summer of 2019, volume 2 on Geometry is being edited, and the upcoming volume 3 on Algebra is being completed. Volumes 2, and 3 are works of the authors with Ghada Bakbouk.

Luckey's seminal work on this monumental book has mended the course of research in history of mathematics as a whole and that of Islamic mathematics in particular. In this talk, the authors report on their findings, mainly in Arithmetic and Geometry, that should add to the edifice of a more inclusive universal history of mathematics. (Received September 16, 2019)