Beata Konikowska obtained M.Sc. in mathematical sciences with honours (discipline: numerical methods) from the Warsaw University, Faculty of Mathematics, Informatics and Mechanics, in 1970. She wrote her Master's thesis (on formalization of the notion of a continuous time computing machine) under the supervision of Prof. Zdzisław Pawlak, similarly as her later Ph.D. thesis, constituting a continuation of the Master's thesis. In 1970-73 she attended Ph.D. studies at the Institute of Mathematics of the Polish Academy of Sciences, and following that joined the Computation Center of the Polish Academy of Sciences (at present – Institute of Computer Science PAS), where she has been working until now. In 1977 she obtained Ph.D. in mathematical sciences in the area of computer science, and in 2006 – the Doctor of Science degree (Polish: habilitation). Since 2007, she has held the position of the Deputy Director for Scientific Affairs in ICS PAS, as Associate Professor.

Scientific interests of Prof. Konikowska start with the subject of formalizing the notions of computation and computing machine, which, besides the subject of her M.Sc. thesis, was also reflected by the subject of her Ph. D. thesis, concerning the notion of an analog computer. Then she joined the research of Prof. Pawlak on rough sets and the general notion of an information system he had defined. The next stage was her passing in late 1970s to the MetaSoft group headed by Prof. Jacek Blikle, dealing with software specification and validation. It was there that she encountered many-valued logics used in that area, developing a full proof system for a 3-valued logic for the above purpose combining McCarthy's connectives with Kleene quantifiers.

Since that time, the main subject of Prof. Konikowska's research have been non-classical logics (mainly multi-valued ones) and proof systems for such logics – first based on semantic tableaux, and then – under the influence of Prof. Ewa Orłowskiej, who she cooperated with -non Rasiowa-Sikorski style systems (known at present also as "dual tableaux"). Using them successfully for many logics motivated by computer science problems, she at the same time tried to promote them as much as possible in the logical milieu abroad – among others, by a survey paper in Theoretical Computer Science and a 3-hour tutorial at Tableaux 2000.

For over 10 years prof. Konikowska has been cooperating closely with Prof. Arnon Avron from Tel Aviv university – an excellent specialist in proof theory and the author of the notion of hypersequent, as well as of the notion of a non-deterministic logical matrix (Nmatrix), which has allowed to considerably extend the class of logics equipped in finite semantics – and will be the subject of the lecture in Opole. Up to now, her cooperation with prof. Avron has covered subjects like a finite proof system for Goedel logic, a general method for generating analytic proof systems for many-valued logics based on finite Nmatrices, including calculi of ordinary Gentzen sequents for logics with "sufficiently expressive" languages, logics of information sources and a processor extending Belnap's results, rough set logics, and recently – a method for generating uniform analytic proof systems for paraconsistent logics from the famous LFI family.