

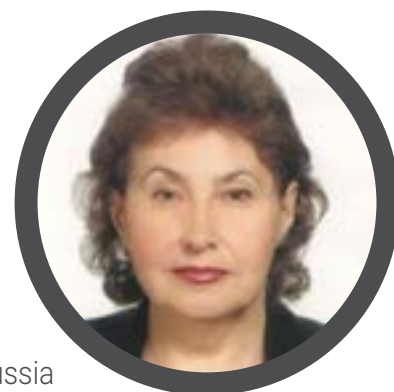
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## NEW APPROACHES TO PREPARATION OF FINE PRODUCTS FROM BIRCH BARK AND THEIR APPLICATIONS

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**E**xtracative compounds of outer birch bark contain up to 40% of the mixture of pentacyclic triterpenoids and betulin is the main of them. Medical properties of birch bark extracts have been known for a long time in folk medicine. We suggested new methods of synthesis betulin, allobetulin and acyl derivatives of betulin directly from birch bark without preliminary separation of betulin by combined stages of betulin extraction and its acylation with acetic, propionic or butyric acids. The structure of betulin derivatives have been identified with chromatography and mass spectrometry, FTIR and NMR spectroscopy. It was found that this compound exhibits a broad range of biological activity, including its applications as an anti-cancer agent. The purpose of this work was to obtain fine products from birch bark and study their applications in medical and veterinary sciences.

### Biography

Svetlana Kuznetsova has completed his Candidate's and Doctor's dissertations at Siberian State University of Science and Technology. She has worked as Chief Researcher at Institute of Chemistry and Chemical Technology SB-RAS, Federal Research Center "Krasnoyarsk Science Center SB RAS" and as Professor of Analytical and Organic Chemistry Department of Siberian Federal University. She has published more than 60 papers in reputed journals and 35 patents an invention.

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