

# Project of the station “Fast Processes” at the source of synchrotron radiation SKIF

Ten K A<sup>1,3,@</sup>, Pruel E R<sup>1</sup>, Rubtsov I A<sup>2</sup>,  
Kashkarov A O<sup>1</sup>, Arakcheev A S<sup>2,3</sup>, Bukhtiyarov A V<sup>2</sup>,  
Zolotarev K V<sup>2,3</sup>, Zubavichus Ya V<sup>2</sup>, Konovalova A Yu<sup>2</sup>,  
Kuper K E<sup>2,3</sup>, Studennikov A A<sup>2</sup>, Kazantsev S R<sup>3</sup>,  
Shekhtman L I<sup>3</sup>, Tolochko B P<sup>4</sup>, Garmashev A Yu<sup>5</sup>,  
Petrov D V<sup>5</sup>, Smirnov E B<sup>5</sup>, Mikhailov A L<sup>6</sup>, Spirin I A<sup>6</sup>,  
Titova V B<sup>6</sup> and Kurepin A E<sup>7</sup>

<sup>1</sup> Lavrentyev Institute of Hydrodynamics of the Siberian Branch of the Russian Academy of Sciences, Lavrentyev Avenue 15, Novosibirsk 630090, Russia

<sup>2</sup> Synchrotron Radiation Facility—Siberian Circular Photon Source “SKIF” of the Borekov Institute of Catalysis of the Siberian Branch of the Russian Academy of Sciences, Nikol’skiy Prospekt 1, Kol’tsovo, Novosibirsk Region 630559, Russia

<sup>3</sup> Budker Institute of Nuclear Physics of the Siberian Branch of the Russian Academy of Sciences, Lavrentyev Avenue 11, Novosibirsk 630090, Russia

<sup>4</sup> Institute of Solid State Chemistry and Mechanochemistry of the Siberian Branch of the Russian Academy of Sciences, Kutateladze 18, Novosibirsk 630128, Russia

<sup>5</sup> Federal State Unitary Enterprise “Russian Federal Nuclear Center—Academician Zababakhin All-Russian Research Institute of Technical Physics”, Vasilieva 13, Snezhinsk, Chelyabinsk Region 456770, Russia

<sup>6</sup> Federal State Unitary Enterprise “Russian Federal Nuclear Center—All-Russian Research Institute of Experimental Physics”, Mira Avenue 37, Sarov, Nizhniy Novgorod Region 607188, Russia

<sup>7</sup> Joint Stock Company “State Research Institute of Mechanical Engineering named after V. V. Bakhirev”, Prospekt Sverdlova 11a, Dzerzhinsk, Nizhny Novgorod Region 606002, Russia

@ kten276@gmail.com

A national source of synchrotron radiation of the 4th generation with an energy of 3 GeV SKIF will be built at the Novosibirsk Scientific Center. “Fast Processes” is one of six first priority beamlines that are planned for construction within this project. The main task of the station “Fast Processes” is to carry out experiments with characteristic scales of process change from pico to microseconds.