



Title: Meeting of the WP3 Diffraction Subcommittee

Thursday 19.11.2020 at 09:30-14:00 CET via videoconference Chair: Arsen Goukassov, LLB Participants:

Subcommittee members:

Arsen Goukassov, LLB // WP3 PIK Werner Schweika, ESS // WP3 PIK Martin Meven, TUM // WP3 PIK Anatoliy Balagurov, JINR // WP3 PIK Vyacheslav Em, NRC KI // WP3 PIK Vladimir Hutanu, FC Juelich // WP3 PIK Anatoliy Senyshyn, TUM // WP3 PIK

PNPI speakers and attendees:

Sergey Grigoriev, NRC KI PNPI // WP3 PIK Vladimir Voronin, NRC KI PNPI // WP3 PIK Igor Zobkalo, NRC KI PNPI // WP3 PIK Alexander Kurbakov Igor Golosovskii Yuri Chernenkov Alexei Bykov Sergey Gavrilov Evgenia Nigmatullina Yuri Kireenko Invited guests:

Excused

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Brief Description:

The CREMLINplus kick-off meeting of the Diffraction Subcommittee of WP3 was held on the 19 November 2020 via videoconference.

The meeting was attended by committee members, PNPI scientists S. Grigoriev, V. Voronin, A. Kurbakov, I. Zobkalo, Yu Chernenkov, I. Golosovsky as speakers. A number of PNPI staff participating in the construction of diffraction suite at PIK reactor also took part in the meeting.

The aim of the kick-off meeting was to outline the work plan and structure of the project as well as to come up with the first set of recommendations on instrument projects.



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In an introductory speech, NRC KI PNPI's Deputy Director for International Activity, Sergey Grigoriev, presented the objectives of WP3 of CREMLINplus. Instrument subcommittees (including the subcommittee for neutron diffraction) shall provide specific recommendations on construction and layout of instruments at PIK, which shall be complemented by recommendations from technical subcommittees on moderators and neutron optics, detectors and sample environment. The goal of the Diffraction Subcommittee is to support the joint development of the diffraction instruments at PIK reactor.

Deputy Director for Science Vladimir Voronin presented the current status of the PIK reactor, its instrumentation and commissioning schedule. The reactor should attain megawatts power in December 2020 and five "first-day" stations are under construction in the reactor hall. Other neuron instruments will be realized in the framework of the national program of the development of neutron and synchrotron research in Russia, financially approved for the period 2020-2027.

In the following talks project leaders presented the instruments proposed for construction: DIPOL polarized Neutron diffractometer (I. Zobkalo), High Resolution powder diffractometer D1 (A. Kurbakov), DC-1 thermal single crystal 4-circle diffractometer (Yu. Chernenkov) and High Intensity powder diffractometer D3 (I. Golosovsky) Each presentation was followed by a 15-minute discussion.

The subcommittee members appreciated the presentations given by the PNPI scientists and were satisfied to see the detailed technical design and specification reports (CDRs).

After a closed session among the members of the subcommittee, the subcommittee has come up with a set of recommendations for each diffractometer, which was reflected in the minutes of the meeting. The next meeting will take place in February-March 2021.

Materials from the kick-off diffraction subcommittee meeting, including the agenda, available slides from the talks, and the minutes of the meeting can be found on PNPI website [https://oiks.pnpi.spb.ru/cremlinplus-pnpi].





