

PREFACE

The XXIth Russian Particle Accelerator Conference (RuPAC 2008) has been held at the Zvenigorod, Moscow region, September 28 – October 3, 2008. It was organized by Lebedev Physical Institute (FIAN), Joint Institute for Nuclear Research (JINR), Budker Institute of Nuclear Physics (BINP) of Siberian Branch (SB) of Russian Academy of Sciences and Scientific Council for Accelerators of Russian Academy of Sciences and was hosted by the boarding house “Zvenigorodskiy RAN” of FIAN. The Conference was supported by the Russian Foundation for Basic Research, which, like at previous conferences in the series, has sponsored a few young scientists that made possible for fourteen of them to attend the Conference. The conference scope provided a forum for exchange of new information and discussion in the field of acceleration science and engineering: particle beam physics, new projects of particle colliders, new accelerator designs and modernization of existing accelerator facilities for basic researches and applications (having an emphasize on medical applications). The scientific programme included

- Modern trends in accelerators
- Colliders
- Particle dynamics in accelerators and storage rings, cooling methods, new methods of acceleration
- High intensity cyclic and linear accelerators
- Heavy ions accelerators
- Synchrotron radiation sources and free electron lasers
- Magnetic, power supply, and vacuum systems
- Superconducting accelerators and cryogenics
- RF power structures and systems
- Control and diagnostic systems
- Ion sources and electron guns
- Medical and industrial applications
- Radiation problems in accelerators

On RuPAC 2008 The Accelerator Prizes for young physicists and engineers for the best work presented at the Conference have been nominated for the first time. The First Prize was attributed to Dmitry Berkaev (BINP) who presented the report “Status and Progress VEPP-2000” and The Second Prize – to Alexei Markin (IHEP, Protvino) presented the report “Upgrade of Feedback Loops in Accelerating Cavities of U70”. The Prizes were presented by solution of the Selection Committee formed at the Conference and chaired by Boris Sharkov, co-chairman of RuPAC’2008.

The Conference Proceedings are published in the form of the CD-ROM distributed to the participants. Processing of the electronic files of the contributions prior to, during and after the Conference was fulfilled by the RuPAC team composed of persons experienced in preparation of the Proceedings of several Conferences (RuPAC, EPAC, and others), which are the members of the Joint Accelerator Conferences Website (JACoW) collaboration – Maxim Kuzin (BINP), Evgenya Shirikova and Alexandr Philippov (both JINR). The final version was published at the JACoW site in the early days of November.

The success of the RuPAC 2008 can be attributed to the efforts of the Organizing Committees, the local staff of the boarding house “Zvenigorodskiy RAN” of FIAN, and, of course, to all of the participants.

Andrey Lebedev, Chair of Organizing Committee of the XXIth Russian Particle Accelerator Conference
Boris Sharkov, Co-Chair of the XXIth Russian Particle Accelerator Conference
Igor Meshkov, Co-Chair of Programme Committee of the XXIth Russian Particle Accelerator Conference