

## **2020 Russian Federation Section of The Combustion Institute Report**

Section Website: <https://www.comb-inst-rus-section.com>

Section Chair: Smirnov N.N.

Section officers and members with titles:

Smirnov N.N., Chairman

Assovskiy I.G., Deputy Chair

Yakush S.E., International Secretary

Vasil'yev A.A., Chairman of the Siberian regional department

Assovskiy I.G., Chairman of Central regional department

Silnikov M.V., Chairman of the North Western regional department

Minaev S.S., Chairman of Far East regional department

Amosov A.P., Chairman of the Ural- Volga regional department

Board Committee members:

Azatyany V.V.

Korobeinichev O.P.

Levin V.A.

Manelis G.B.

Marshakov V.N.

Surzhikov S.T.

Fomin V.M.

Frolov S.M.

Ulybin V.A.

Honorary members:

Lippanov A.M.

Fortov V.E.

Titov V.M.

Board Committee secretary:

Tyurenkova V.V.

Members of the Russian Federation Section:

Active Members            120

Non-Student Members    80

Student Members         40

Section meetings and workshops since 2018:

- 20-24 August 2019, Ufa, Bashkortostan, the board meeting within the frame of 12 All-Russian Congress on Fundamental Problems of Theoretical and Applied mechanics. More than 50 members of Russian Section of CI attended.
- 19-24 April 2020, Suzdal, within the frame of 15-th All-Russian Symposium on Combustion and Explosion. The meeting was cancelled due to COVID19.
- 14-th International Conference on "Technical devices against terrorist and criminal explosion" was held in St. Petersburg on 1-3 October 2018 under the auspice of Russian Academy of Rocket and Artillery Sciences, Saint Petersburg University of the EMERCOM (Ministry of Emergency) and

Combustion Institute Russian Section. Organizers: M.V. Silnikov, N.N. Smirnov, S.P. Medvedev, M.V. Chernyshov, V.V. Adushkin. (<https://www.npo-sm.ru/konferencii/>)

- 7th Memorial Seminar of Professor Boris E. Gelfand was held in St. Petersburg on 1-2 October 2018 under the auspice of Russian Academy of Rocket and Artillery Sciences, Saint Petersburg University of the EMERCOM (Ministry of Emergency) and Combustion Institute Russian Section. Organizers: M.V. Silnikov, N.N. Smirnov, S.P. Medvedev, M.V. Chernyshov, V.V. Adushkin. (<https://www.npo-sm.ru/konferencii/>)
- Fire Safety of Space Vehicles, 5th Space Flight Safety Symposium of the International Academy of Astronautics and Russian Section of the Combustion Institute was organized in St. Petersburg Sept 24-27, 2018, CI organizers – N.N. Smirnov, M.V. Silnikov (Russian Section). (<http://sfs-spb.ru/>)
- Session on Combustion and Detonation was organized within the frame of 47th International Summer School-Conference Advanced Problems in Mechanics (APM 2019). Russia, St. Petersburg June 22 – 27, 2019. Co-Chairmen: D. A. Indeitsev, A.M. Krivtsov, CI organizers: V.A. Levin, T.A. Zhuravskaya. (<http://www.apm-conf.spb.ru/apm-2019>)
- 16-th Russian young scientists Conference on “Problems of explosion safety and antiterrorism” organized by Russian Academy of Rocket and Artillery Sciences, Saint Petersburg University of the Ministry of Emergency and Combustion Institute Russian Section in Saint Petersburg 24-26 April 2019. CI Organizers: M.V. Silnikov, N.N. Smirnov, M.V. Chernyshov. [www.npo-sm.ru/conf\\_blasts12.php](http://www.npo-sm.ru/conf_blasts12.php)
- NINTH INTERNATIONAL SEMINAR ON FIRE AND EXPLOSION HAZARDS St. Petersburg, Russia | April 21-26, 2019 CI Organizer: A.Yu. Snegirev | [www.isfeh9.org](http://www.isfeh9.org)
- Fire Safety of Space Vehicles, 5th Space Flight Safety Symposium of the International Academy of Astronautics and Russian Section of the Combustion Institute was organized in St. Petersburg Sept 24-27, 2019, CI organizers – N.N. Smirnov, M.V. Silnikov (Russian Section). (<http://sfs-spb.ru/>)
- 15-th Russian Scientific and Practical Conference on “Technical devices against terrorist and criminal explosion” was held in St. Petersburg on 1-3 October 2019 under the auspice of Russian Academy of Rocket and Artillery Sciences, Saint Petersburg University of the EMERCOM (Ministry of Emergency) and Combustion Institute Russian Section. Organizers: M.V. Silnikov, N.N. Smirnov, M.V. Chernyshov, V.V. Adushkin. (<https://www.npo-sm.ru/konferencii/>)
- 8th Memorial Seminar of Professor B.E. Gelfand was held in St. Petersburg on 1-2 October 2017 under the auspice of Russian Academy of Rocket and Artillery Sciences, Saint Petersburg University of the EMERCOM (Ministry of Emergency), Saint Petersburg State technical University named after D.F. Ustinov (Voenmech) and Combustion Institute Russian Section. Organizers: M.V. Silnikov, N.N. Smirnov, S.P. Medvedev, M.V. Chernyshov, V.V. Adushkin. (<https://www.npo-sm.ru/konferencii/>)
- 9-th International Conference “Space Challenge of the XXI Century” (SPACE'2019), 7-11 October 2019, Yaroslavl, Russia. Chairmen CI: I.G. Assovskiy. N.N. Smirnov. <https://www.comb-inst-rus-section.com>
- Session on Combustion Phenomena organized within the frame of 48th International Summer School-Conference Advanced Problems in Mechanics (APM 2020). Russia, St. Petersburg June 22-26, 2020. Online regime. Co-Chairmen: D. A. Indeitsev, A.M. Krivtsov, session organizer: N.N. Smirnov. (<http://www.apm-conf.spb.ru/>)

#### Other activities:

- Scientific seminar for undergraduate students and postgraduate students on “Detonation and combustion” named after I.N. Zverev was organized by the faculty of Mechanics and Mathematics

Moscow M.V. Lomonosov State University. Periodicity: once per week, commencement: since 1 September through 20-th December, and since 7-th February through 20-th May. Seminar chair – Smirnov N.N., seminar secretary – Tyurenkova V.V.

- Scientific seminar of the central regional department of the Combustion Institute Russian section is being held in Moscow hosted by the Institute for Problems in Mechanics (Vernadskogo, 101). Organizers: M.T.Surzhiykov, S.E. Yakush. Periodicity: 6 sessions per year.
- A session on Gas and Waves Dynamics and Detonation was organized within the frames of XXIV International Conference of students, Ph.D. students and young professionals “Lomonosov-2019”, held in Moscow M.V. Lomonosov State University. Chairman of Organizing Committee – V.A. Sadovnichiy, session organizers – R.I. Nigmatulin, N.N. Smirnov.
- The scientific team of Central regional department of the International Combustion Institute Russian Section (Smirnov N.N., Assovskii I.G., Tyurenkova V.V.) participates in a joint space experiment of NASA, ESA, Roskosmos, JAXA “SAFFIRE” (Spacecraft Fire Experiment) on measurements of materials burning rate under low gravity conditions in the space capsule environment using Cygnus unit as a test site after its separation from the International Space Station.
- Terrorism being the major contemporary threat to Mankind Combustion Institute Russian Section supported a series of both International and National conferences aimed at antiterrorist activities with participation of students and young professionals.
  - Annual Russian young scientists Conference on “Problems of explosion safety and antiterrorism” organized by Russian Academy of Rocket and Artillerist Sciences, Saint Petersburg University of the Ministry of Emergency and Combustion Institute Russian Section held in Saint Petersburg in April. Organizers: M.V. Silnikov, N.N. Smirnov.
  - International Conferences "Technical devices against terrorist and criminal explosions" organized under the auspice of Russian Academy of Rocket and Artillery Sciences, Saint Petersburg University of the EMERCOM of Russia and the Combustion Institute Russian Section. These science and Practical conferences are held in Saint Petersburg annually in October. Organizers: M.V. Silnikov, N.N. Smirnov, V.V.Adushkin.

#### Awards:

- The medal is established to commemorate the outstanding scientist in the field of Physical Chemistry, USSR State Prize winner, academician of Russian Academy of Natural Sciences Professor Boris Efimovich Gelfand (18.02.1941 – 03.10.2010). The B.E.Gelfand medal is awarded by the Russian Section of The Combustion Institute. <https://www.comb-inst-rus-section.com/gelfand-medal>

#### Special Achievements:

- The Board Committee secretary Veronika Tyurenkova was awarded the medal of the Russian Academy of Sciences for young scientists for her contribution "Mathematical models for combustion of liquid and solid fuels in a stream of oxidant" by the Decree of presidium of Russian Academy of Sciences #93 dated June 16, 2020.