

**February 27, 2020**

**Blue Hall**

**10:00 – 12:30**

**Opening of the Cardiostim-2020 Congress**

member of the RAS, professor A.Sh. Revishvili (Moscow)  
member of the RAS, professor S.F. Bagnenko (St. Petersburg)  
member of the RAS, professor S.A. Boytsov (Moscow)  
member of the RAS, professor S.V. Popov (Tomsk)  
member of the PASA, professor D.F. Egorov (St. Petersburg)

Opening speech:

member of the RAS, professor S.F. Bagnenko (St. Petersburg)  
member of the RAS, professor A.Sh. Revishvili (Moscow)  
member of the PASA, professor D.F. Egorov (St. Petersburg)

**Plenary session 1**

**Chairpersons:**

member of the RAS, professor A.Sh. Revishvili (Moscow)  
member of the RAS, professor S.F. Bagnenko (St. Petersburg)  
member of the RAS, professor S.A. Boytsov (Moscow)  
member of the RAS, professor S.V. Popov (Tomsk)  
member of the PASA, professor D.F. Egorov (St. Petersburg)

1. Member of the RAS, professor A.Sh. Revishvili (Moscow) "The arrhythmologist – reality or fiction in the 21<sup>st</sup> century?" – 45 minutes.
2. Member of the RAS, professor S.A. Boytsov (Moscow) "Federal project 'Fight against cardiovascular diseases' " – 45 minutes.
3. Associate Professor of Medical Sciences R.E. Batalov (Tomsk) "Etiopathogenetic aspects of treatment of atrial fibrillation" – 45 minutes.

Break 12:30–12:40

**February 27, 2020**

**Blue Hall**

**12:40 – 14:10**

**Plenary session 2**

**Chairpersons:**

member of the RAS, professor A.Sh. Revishvili (Moscow)  
member of the PASA, professor D.F. Egorov (St. Petersburg)

"Professional standard"

Meeting of the board of the Society of arrhythmology of the Russian Federation, members of the Society and all the participants of the Cardiostim-2020 Congress.

Resolution and discussion, voting.

Lunch break 14:10 – 15:30

**February 27, 2020**

**Blue Hall**

**15:30-17:30**

### **Plenary session 3**

#### **Chairpersons:**

professor S.A. Saiganov (St. Petersburg)  
Associate Professor of Medical Sciences Yu.E. Teregulov (Kazan)  
associate member of the RAS, professor A.L. Khokhlov (Yaroslavl)

1. Professor S.A. Saiganov (St. Petersburg) "Supplementary professional medical education: yesterday, today, tomorrow" – 45 minutes.
2. Associate Professor of Medical Sciences Yu.E. Teregulov (Kazan) "Alexander Filippovich Samoilov is a pioneer of clinical electrocardiography". The movie – 30 minutes.
3. Associate member of the RAS, professor A.L. Khokhlov (Yaroslavl) "Clinical pharmacology in Arrhythmology: yesterday, today, tomorrow" – 45 minutes.

**February 27, 2020**

**Hall Red 7**

**11:00 – 12:30**

**Biosense Webster Technological Seminar "New Level of Complex Tachyarrhythmias  
Visualisation"**

**Workshop on Mapping using CARTO 3 Simulator**

Break 12:30-13:00

**February 27, 2020**

**Hall Red 7**

**13:00 – 14:30**

**Biosense Webster Technological Seminar "New Level of Complex Tachyarrhythmias  
Visualisation"**

**Workshop on Mapping using CARTO 3 Simulator**

Break 14:30-16:30

**February 27, 2020**

**Hall Red 7**

**16:30 – 18:00**

**Biosense Webster Technological Seminar "New Level of Complex Tachyarrhythmias  
Visualisation"**

**Workshop on Mapping using CARTO 3 Simulator**

**February 27, 2020**

**Hall Green 5**

**11.30-13.30**

**Master class**

**Boston Scientific/Cardiomedics**

**Festina lente.**

**Follow-up of the patients with implanted pacemakers.**

**Kostyleva O.V.**

**February 27, 2020**

**Hall Green 8**

**14:20–16:20**

**Medtronic Symposium**

## **"Cryo club: practical expert advice"**

### **Chairpersons:**

Ph. D. in Medicine F.G. Rzaev (Moscow)  
Associate Professor of Medical Sciences K.V. Davtyan (Moscow)  
Ph. D. in Medicine, O.V. Sapelnikov (Moscow)  
S. Boveda (Toulouse, France)

1. F.G. Rzaev (Moscow), S.A. Termosesov (Moscow), M.V. Gorev (Moscow), K.V. Davtyan (Moscow), M.S. Kharlap (Moscow), S.V. Korolev (Moscow), E.A. Ivanitsky (Krasnoyarsk), I.Sh. Sagitov (Ufa), D.V. Kryzhanovsky (St. Petersburg), O.V. Sapelnikov (Moscow), E.B. Maikov (Moscow), S.A. Aivazyan (Nizhny Novgorod), M.S. Rybachenko (Moscow), E.A. Artyukhina (Moscow), E.N. Mikhailov (St. Petersburg) "Practical guidelines by the Russian working party of AF cryoablation experts" – 20 minutes.
2. S. Boveda (Toulouse, France) "Prospects for the development of cryoballoon ablation. The Achieve catheter maneuvers – how to improve visualization of signals from pulmonary veins?" – 20 minutes.
3. F.G. Rzaev (Moscow) "Cryoablation of the left atrium with persistent AF – what does it change? – 20 minutes.
4. S.A. Aivazyan (Nizhny Novgorod ) "Monitoring of esophageal temperature during AF ablation – is it necessary and how to do it given Russia's circumstances?" – 20 minutes.
5. K.V. Davtyan (Moscow) "Cryoballoon isolation of the pulmonary veins: interesting findings of loop ECG monitoring" – 20 minutes.
5. Discussion, summing up, closing of the symposium – 20 minutes.

Break 16:20–16:30

**February 27, 2020**

**Hall Green 8**

**16:30 – 18:00**

**Medtronic Symposium**

**"Direct His bundle stimulation is a truly physiological stimulation"**

### **Chairpersons:**

Professor D.S. Lebedev (St. Petersburg)  
Professor L. Geller (Budapest, Hungary)

1. D.S. Lebedev (St. Petersburg ) "His bundle stimulation – the Renaissance" – 20 minutes.
2. M.V. Didenko (St. Petersburg) "Physiology and Anatomy of the His bundle" – 15 minutes.
3. L. Geller (Budapest, Hungary) "International experience of His bundle pacing" – 20 minutes.
4. S.N. Krivolapov (Tomsk) "Analysis of a clinical case" – 20 minutes.
5. M.M. Los (St. Petersburg) "Implantation procedure and subsequent patient management – vision of the industry" – 10 minutes.
6. Discussion, summing up, closing of the symposium – 5 minutes.

**February 27, 2020**

**Hall Green 9**

**13:00 – 14:30**

**ABBOTT lunch-symposium**

**"The future of ventricular tachycardia therapy"**

professor Paolo Della Bella (Milan, Italy)  
Associate Professor of Medical Sciences E.A. Ivanitsky (Krasnoyarsk)

1. E.V. Lyan (Bad Bevensen, Germany) "Contact force measurement technology as a universal high-precision tool for the treatment of complex tachycardia" – 25 minutes.
2. Dr. Paolo Della Bella (Milan, Italy) "Mapping of ventricular tachycardia: how high-density mapping changes strategies and treatment outcomes" – 30 minutes.
3. A. Abdrakhmanov (Nur-Sultan, Kazakhstan) "Ablation of ventricular arrhythmias in children" – 25 minutes.
4. Discussion – 10 minutes.

Break 14:30–14:50

**February 27, 2020**

**Hall Green 9**

**14:50 – 16:20**

**Biosense Webster Symposium**

**"How can we effectively treat any tachyarrhythmia with the help of only one system?"**

Chairpersons:

Professor D.S. Lebedev (St. Petersburg)

Associate Professor of Medical Sciences E.A. Ivanitsky (Krasnoyarsk)

Associate Professor of Medical Sciences A.B. Romanov (Novosibirsk)

1. Matthew Wright (England) "Predictability and effectiveness in the treatment of atrial fibrillation" – 15 minutes.
2. K.V. Davtyan (Moscow) "New visualization functions in the treatment of patients with atypical flutter" – 15 minutes.
3. E.N. Mikhailov (St. Petersburg) "Effective approach to the diagnosis and treatment of VT" – 15 minutes.
4. E.A. Ivanitsky (Krasnoyarsk) "Methods for optimizing the treatment of VES" – 15 minutes.
5. G.A. Gromyko (Moscow) "Reducing the use of X-ray and the possibility of intracardiac ultrasonics" – 15 minutes.
6. Discussion – 15 minutes.

Break 16:20–16:30

**February 27, 2020**

**Hall Green 9**

**16:30 – 18:00**

**Symposium supported by Boston Scientific/Cardiomedics**

**"New technologies in the treatment of patients at high risk of sudden cardiac death"**

Chairpersons:

Dr. D.N. Khomutinin (Tyumen)

Associate Professor of Medical Sciences E.A. Ivanitsky (Krasnoyarsk)

1. D.N. Khomutinin (Tyumen) "Happiness to live without endocardial electrodes" – 20 minutes.
2. E.A. Ivanitsky (Krasnoyarsk) "How to choose the right patient? Subcutaneous defibrillator implantation technique" – 20 minutes.
3. A. Prokopenko "S-ICD world clinical experience, patient observation" – 20 minutes.

**February 27, 2020**

**Hall Green 10**

**10:00-18:00**

**The XII international Symposium  
"Electronics in medicine. Monitoring, diagnostics, therapy"**

**Presidents:**

member of the RAS Yu.V. Gulyaev (Moscow)  
associate member of the RAS V.A. Cherepenin (Moscow)  
associate member of the RAS R.M. Yusupov (St. Petersburg)

**Chairperson of the scientific and organizational committees:**

professor K.V. Zaychenko (St. Petersburg)

**Under the patronage of:**

Russian Academy of Sciences  
Ministry of education and science of the Russian Federation  
Ministry of health and social development of the Russian Federation  
Institute of radio engineering and electronics of the RAS  
Pavlov First St. Petersburg State Medical University  
National medical research center n.a. V.A. Almazov  
St. Petersburg Institute of Informatics and automation of the RAS  
Institute of analytical instrumentation of the RAS  
St. Petersburg State Electrotechnical University (LETI)

**Information support:**

Biomedical Radioelectronics magazine (Moscow)

**Scientific committee:**

K.V. Zaichenko (St. Petersburg) – Chairperson  
S.F. Bagnenko (St. Petersburg)  
M.M. Galagudza (St. Petersburg)  
D.F. Yegorov (St. Petersburg)  
V.E. Ermakova (St. Petersburg)  
V.E. Kurochkin (St. Petersburg)  
L.T. Sushkova (Vladimir)  
Z.M. Yuldashev (St. Petersburg)

**Organizing committee:**

K.V. Zaichenko (St. Petersburg) – Chairperson  
D.F. Yegorov (St. Petersburg)  
N.A. Korenevsky (Kursk)  
V.P. Omelchenko (Rostov-on-Don)  
N.N. Potrakhov (St. Petersburg)  
S.V. Selishchev (Moscow)

**Executive secretaries:**

A.A. Zhmyleva (St. Petersburg)  
D.M. Ustinova (St. Petersburg)

**The XII international Symposium**

**"Electronics in medicine. Monitoring, diagnostics, therapy"**  
**Session 1**  
**"Medical and technical issues in cardiology and cardiac surgery"**  
**Hall Green 10**  
**10:00-11:40**  
**Chairperson:**  
professor Z.M. Yuldashev (St. Petersburg)

1. E.A. Altay, A.S. Kremlev (St. Petersburg) "Formation of an integrated approach for analyzing the processing of electrocardiographic measurement information".
2. A.P. Nemirko, L.A. Manilo, B.E. Alekseyev, P.Yu. Timofeyeva (St. Petersburg) "Method of automatic display and analysis of the dynamics of correlation rhythmogram for long-term recordings of ECG signals".
3. K.S. Shtarev (St. Petersburg) "Comparative analysis of two methods of electrocardiography - HR ECG and HF ECG, as well as prospects for their further development"
4. V.V. Kislukhin, E.V. Kislukhina (Moscow) "Mathematical modeling of sinus arrhythmia (SA)".
5. A.A. Zhmyleva, M.N. Luchkova, E.S. Saitova (St. Petersburg) "Methodological and technical aspects of studying HF components of the electrocardiosignal".
6. K.V. Zaichenko, E.P. Logachev. (St. Petersburg) "Selection and localization of feature points of the electrocardiosignal".

Break 11:40–11:50

**The XII international Symposium**  
**"Electronics in medicine. Monitoring, diagnostics, therapy"**  
**Session 2**  
**"Electronics in functional diagnostics"**  
**Hall Green 10**  
**11:50 – 13:20**  
**Chairperson:**  
professor K.V. Zaychenko (St. Petersburg)

1. K.V. Zaichenko, A.A. Zhmyleva (St. Petersburg) "Features of adaptive signal processing using high fidelity electrocardiography".
2. A.V. Frolov, A.P. Vorobyov, O.P. Melnikova, V.P. Krupenin, V.B. Polyakov, T.G. Vaykhanskaya (Minsk (Belarus), Perm) "Software and hardware complex for predicting life-threatening arrhythmogenic events".
3. S.M. Gerashchenko, V.G. Polosin, S.I. Gerashchenko, M.V. Markulyova (Penza) "Probabilistic approach of isoline drift compensation in monitoring systems for bifunctional biomedical signals".
4. K.R. Kiseleva, M.N. Luchkova, E.S. Saitova (St. Petersburg) "Review of modern research methods for electrocardiosignals".
5. K.V. Zaichenko, B.S. Gurevich (St. Petersburg) "Features of implementation of bioelectric signals processing by acousto-optic devices".
6. B.S. Gurevich (St. Petersburg) "Features of wavelet processing of bioelectric signals".
7. A.A. Zhmyleva (St. Petersburg) "Methods of recording and registering an electrocardiogram signal in electrocardiographic studies on experimental animals".

Lunch break 13:20 – 14:50

**The XII international Symposium**

**"Electronics in medicine. Monitoring, diagnostics, therapy"**

**Session 3**

**"Procedures and devices for Monitoring and diagnostics"**

**Hall Green 10**

**14:50 – 16:20**

**Chairperson:**

professor B.S. Gurevich (St. Petersburg)

1. D.A. Varezchnikov, M.V. Markulyova, V.G. Polosin, F.K. Rakhmatulloev, A.V. Pushkaryova (Penza) "Non-invasive cardiognostics in the phase space of entropy–parametric potential".
2. M.G. Potudanskaya, E.Yu. Mosur, V.V. Goltypin (Omsk) "Factor analysis of hemoglobin derivatives and blood glucose levels for patients with type I diabetes".
3. A.A. Zhmyleva, D.M. Ustinova (St. Petersburg) "Methods for organizing storage and selection of information for electrocardiographic studies using high fidelity electrocardiography".
4. N.M. Shelyakina, G.A. Mashevsky, M.I. Skalinskaya (St. Petersburg) "Neural networks as a tool for differential diagnosis of inflammatory bowel diseases".
5. N.R. Musabekova, Ch.A. Efendiev, A.T. Ragimov (Baku, Azerbaijan) "Modern X-ray apparatus supplemented with video channel and computer".
6. N.R. Musabekova, Ch.A. Efendiev, A.T. Ragimov (Baku, Azerbaijan) "Recognition of disease focus by the iris of the eye with the use of television technology".

Break 16:20–16:30

**The XII international Symposium**

**"Electronics in medicine. Monitoring, diagnostics, therapy"**

**Session 4 (round table)**

**Hall Green 10**

**16:30-17:30**

**Chairperson**

professor K.V. Zaychenko (St. Petersburg)

Discussion of reports not included in the program, current problems of modern medical electronics, organizational aspects of the following symposiums "Electronics in medicine. Monitoring, diagnostics, therapy."