

6[™] INTERNATIONAL EXHIBITION FOR

POWER ELECTRONICS, ENERGY AND ENERGY SAVING

POST SHOW REPORT









Ministry of Industry and Trade of the Russian Federation State Duma Committee on Energy Federal Agency for Science and Innovations Federal Fund for the Development of Electronic Technology



Moscow Government

JSC 'Ruselectronics'

Russian Technologies State Corporation



Association of Manufacturers of Electronic Equipment and Devices



FACTS AND FIGURES



'For about the past five years we have taken part in the Power Electronics exhibition, as well as in ExpoElectronica. I can confidently say that each time we participate in these projects we receive an influx of new customers. This year, we also wanted to attract more customers. Our stand was visited by a large number of competent professionals, which was very pleasing'.

V. Kostylev, Gammamet, research & production enterprise Head of the Power Electronics Laboratory

- Exhibition area 980* sqm
- Over 80* exhibitors
- Companies from 6* countries: Germany, Italy, Belarus, Russia, UK and Switzerland
- 2240* specialist visitors from 32 subjects of the Russian Federation and 13 countries

* According to the results of the official audit by RussCom IT Systems. Detailed information on the audit results can be found at www.auditexpo.ru





OFFICIAL EVENTS

The official opening ceremony took place on 1 December and was attended by the following guests:

M. Puchkov, Deputy Chief of the Department of Energy and Resource Efficient Technologies, Office of Exploratory Research and New Technology, Federal Agency for Science and Innovation;

A. Vasilyev, General Director, Pulsar;

P. Mashevich, General Director, Angstrem-M;

A. Kurlyandsky, General Director, Elektronintorg;

I. Lubina, Executive Director, Primexpo Itd;

V. Vorotyntsev, Director, Electronics Exhibitions Department, Primexpo Itd.

'With the increased interest of governments in energy efficiency and energy saving, and the development of power electronics, such events are of special significance. This is confirmed by the actual results of the exhibition - contracts for the purchase of new equipment, increased efficiency of existing facilities, active sharing of experiences within the business events, and the expansion of business cooperation with foreign companies.'

Y. I. Borisov, Deputy Minister of Industry and Trade of the Russian Federation





OFFICIAL EVENTS

The International Specialised Conference 'Power Electronics – A Key Technology for Russian Industry in the 21st Century' took place for the first time on 1 December, within Power Electronics, the 6th International Exhibition for Power Electronics, Energy and Energy Saving. Power electronics is the area of electronics associated with the conversion of electric power and the commutation of power electronic circuits.

'This is the first time I have attended the Power Electronics conference and exhibition, and I was pleasantly surprised by both of these events. Firstly, I would like to acknowledge the good organisation: one could really feel the attention of the organisers to the exhibitors and visitors.

The conference was attended by representatives - mostly CEOs, top managers and specialists - of almost all the domestic companies and some foreign firms involved in the development and manufacture of power electronics products. The varied subject-matter of the talks was interesting for its relevance and because Russian power electronics and its future development were discussed, which was facilitated by the fact that the conference was attended by the Deputy Chairman of the State Duma Committee on Science and High Technologies and a representative of the Federal Agency for Science and Innovation. The attention to the issues under discussion was so great that the hall was full, and even after the lunch break more visitors and exhibitors came.

I believe that this event is very useful and really showed that the Russian power electronics industry, despite all the cataclysms of the 90s and the international economic crisis, is working well, creating quality products, and has clear prospects for development.

M.A. Korolev,

Vice Dean, Faculty of Electronics and Computer Technologies, Moscow Institute of Electronic Technology; Doctor of Technical Sciences; Professor; Honoured Scientist of Russia In the recovery period following the global economic crisis, greater attention is being given worldwide to developing and applying energy-saving technologies. The role and significance of power electronics are becoming all the more relevant as about two thirds of all generated electric power is consumed in a transformed (in terms of parameters) form.

The conference demonstrated innovative scientific achievements in the most important industries, as well as technologies and products by Russian and international companies in the field of power electronics and energy.

The professional community were able to see the latest developments in the field of power electronics, which are used in such industries as: the fuel and energy sector, the military industrial complex, industrial production, transport, communications and telecommunications, housing and communal services, and many other areas of industry.



OFFICIAL EVENTS

The following topics were discussed at the conference:

- The current state of technological development, and the competitiveness of Russian and international manufacturers in the field of power electronics
- The prospects for the development of power electronics at major Russian enterprises: Pulsar, Angstrem, IKB Iskra, Electrovipryamitel
- · Legislative provision of the electronics industry
- Advanced training for electronics specialists
- · New power electronics technologies for energy saving
- The new electronics components base and its application in power electronics devices
- Electrical equipment for the electromechanical transmissions of different modes of transport
- The prospects for the development of heavy duty silicon power semiconductor devices
- Microelectronic solutions for power electronics
- High-voltage semiconductor technology

'The main purpose of our participation in the conference was to talk about our achievements in the technology of devices and to provide information on future developments. The presentation provoked great interest, which means we achieved our goal.'

> **E. Tsyplakov,** Leading expert on semiconductor devices, ABB Switzerland Ltd Semiconductors





OFFICIAL EVENTS

The following people took part in the conference and free discussion:

V. Osipov,

Vice-chairman, State Duma Committee on Science and High Technology;

M. Puchkov,

Deputy Chief of the Department of Energy and Resource Efficient Technologies, Office of Exploratory Research and New Technology, Federal Agency for Science and Innovation;

A. Vasilyev,

General Director, Pulsar;

P. Mashevich, General Director, Angstrem;

A. Gordeev, Technical Director, IKB Iskra;

A. Ivanov,

Director, Technical Marketing Department, Phoenix Contact Rus;

M. Korolev,

Vice-chancellor, Moscow Institute of Electronic Technology;

V. Stakhin,

Director of scientific centre, Moscow Institute of Electronic Technology;

A. Surma,

Deputy Director, SUE All-Russian Electrotechnical Institute;

S. Florentsev,

General Director, Ruselprom - Electroprivod;

E. Tsyplakov,

Leading specialist on semiconductor devices, ABB Switzerland Ltd Semiconductors.



'Energy saving and the introduction of new facilities in the energy sector remain the most important issues for Russian industry. Different types of energy are used in every sphere of our lives, and the main task now is increasing the economic efficiency of Russiaís energy sector. This exhibition has excellent prospects, and will help to ensure the rapid development of the industry. Many of the exhibitors and visitors are highly skilled professionals who come to the capital each year to look for new technologies and sign profitable contracts.'

Y.A. Lipatov,

Chairman of the State Duma Committee on Energy

CONFERENCE STATISTICS

The conference was attended by over 100 directors and industry professionals, and the traditional company seminars were visited by about 400 companies. Over the years of the exhibition, we have created a unique database of companies and organisations, in various industries throughout Russia, which use power electronics equipment. This has enabled us to make the event as broad as possible in terms of the countries and regions represented.

Conference participants

The conference was attended by leading experts from Moscow and St.Petersburg; Chelyabinsk, Ivanovo, Kaluga, Kursk, Lipetsk, Moscow, Nizhny Novgorod, Novgorod the Great, Novosibirsk, Omsk, Penza, Ryazan, Saratov, Sverdlovsk, Tomsk, Ulyanovsk and Voronezh Chelyabinsk regions; Krasnoyarsk Territory; Komi Republic; Belarus, Estonia and Switzerland.

Conference participants by position, %:

- 26.0 Director
- 30.0 Leading specialist21.0 Engineer-developer
- 12.0 Researcher
- 11.0 Sales specialist

Conference participants by specialisation, %:

- 25.0 Manufacturers and suppliers of electronic components
- 23.0 Manufacturers and suppliers of power modules
- 11.0 Power plants
- 11.0 Research institutes and universities
- 10.0 Machine building plants
- 7.0 Industrial enterprises
- 7.0 Government representatives
- 5.0 Media

'Our participation in exhibitions is necessary, regardless of the economic situation nationally and worldwide. The main purpose of participating in the exhibition and the conference was to give a company presentation and attract specialists of manufacturing companies, such as Semelab, as well as to present two areas of development, one of which is unique.' **A. Gordeev,**

> Technical Director, IKB Iskra, Ulyanovsk



BUSINESS PROGRAMME

There were 6 business events within the exhibition:

• Seminar:

'New solid state relays and microcircuits with galvanic separation for special and widespread application'

Organiser: JSC Proton

• Seminar:

'New JSC Elektrovypryamitel power semiconductor devices for promising areas of power electronics'

Organiser: JSC Electrovypryamitel

• Seminar:

'New Mitsubishi IGBT Modules for medium and high power applications'

Organiser: Mitsubishi Electric Europe B.V.

• Seminar:

'SKIIP 4 - an intelligent power module for high-power applications'

Organiser: Semikron

• Seminar:

'FUJI Electric seminar'

Organiser: IGBT-Electronics

• Seminar:

'New power electronics products and technologies by Infineon Technologies AG'

Organiser: Infineon Technologies AG (Germany)



'In our view, the exhibition is a forum for meeting with the participants of this market. Our main goals were to meet with customers and partners, talk about solutions and innovations, and demonstrate our presence in the market. We held several meetings and had a successful stand.'

> **I.G. Zverev,** Director General Infneon Technologies RUS LLC

AWARDS CEREMONY

On the first day of the exhibition, 'Russky' restaurant (WTC Congress Centre) was the venue for the official Gala Reception, during which the awards ceremony took place.

The organisers presented awards to the following companies:

For the Best Newcomer	INNOVATIVE TECHNOLOGY CENTRE AZIMUT
For the Best Stand	SYMMETRON GROUP
Most Active Participation in the Business Programme	ELECTROVIPRYAMITEL
For active media support	FINESTREET MEDIA GROUP
For helping to organsise the conference	ELEKTRONIKA TSNII
For active participation in the conference	SPE PULSAR
For active participation in the conference	ABB SWITZERLAND LTD.
For active participation in the conference	PHOENIX CONTACT RUS



'The main purpose of participating in the exhibition was, on the one hand, to expand the sales market for the company's services and products by attracting new clients, and, on the other, to monitor the demand of the target audience in order to develop new areas and coordinate existing ones. An exhibition and the format of Power Electronics, in our view, is the best way to achieve this. In addition, for many exhibitors and visitors, ITC Azimut really was a discovery this season, which we believe to be the best way to develop the business next season.

We think that the current market situation will allow ITC Azimut to consolidate its position in the Russian power electronics market, through maximum efficiency and dedication, and the skill and efforts of our partners, which include Primexpo.'

> V. Yakushkin, Authorized representative, ITC Azimut

P & W & R X Electronics

STATISTICS: EXHIBITORS

95,5% of participants were satisfied with the quantity of visitors
100% of participants have mentioned the highest level of visitors competence
97% of participants plan to participate in 'Power Electronics, Energy and Energy Saving' in 2010

Aims of participation, %: **Company specialisation**, %: 47.2 - Power Semiconductors 97.3 – To establish new business contacts 73.0 – To build company image 44.4 – Power Supplies 67.6 – To launch new products / services 38.9 – Power converters 56.8 – To gather market information 30.6 – Sensors 51.4 – To find end-customers of company goods / services 30.6 – Transistors 27.8 – Integrated Circuits and Optoelectronics 43.2 – To designate presence in the market 40.5 – To monitor competitors 27.8 – Passive Components 32.4 – To sell products and/or services 25.0 – Mass media 22.2 – Intelligence in Motion 13.5 – To find a distributor 22.2 – Assemblies and Subsystems 19.4 – Transformers Exhibitors' geography, %: 16.7 – Automation systems 42.5 – Moscow 16.7 – Energy efficiency and energy saving 23.3 – St.Petersburg 13.9 – Magnetics and Core Materials 11.0 – Central Federal District 11.1 – Electric power industry 6.9 – Foreign countries 8.3 – Testing and measuring 6.8 – Siberian Federal District 5.6 – Power Quality 6.8 – Volga Federal District 2.8 – Thermal management 6.8 – CIS 4.1 - North-West Federal District Number of potential clients attending the stand, %: 29.7 – 50–100

- 49.4 100-300
- 14.0 Less than 50
- 6.9 More than 300

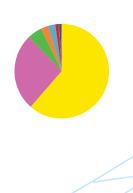
STATISTICS: VISITORS

94,0 % – trade visitors

89,9 % – visitors influenced decision-making on product/service purchase

According to the official exhibition audit, in 2009 the exhibition and conference were visited by 2240 specialists from 13 countries: Russia, Spain, Israel, UK, Ukraine, Belarus, Moldova, Poland, Germany, Japan, South Korea and Estonia.

And from 32 subjects of the Russian Federation: Moscow and St. Petersburg; Vladimir, Vologda, Voronezh, Ivanovo, Kaluga, Kursk, Leningrad, Lipetsk, Moscow, Nizhny Novgorod, Novosibirsk, Orel, Pskov, Rostov, Ryazan, Samara, Sverdlovsk, Tver, Tomsk, Tula, Ulyanovsk, Chelyabinsk, Yaroslavl and Perm Regions; and the Republics of Bashkortostan, Mari El, Mordovia, Tatarstan, Udmurtia and Chuvashia.



Visitors' geography, %:

- 61.2 Moscow
- 26.4 Central Federal District
- 4.9 Volga Federal District
- 2.5 St.Petersburg
- 2.5 Foreign countries
- 1.0 CIS
- 0.5 Siberian Federal District
- 0.5 North-West Federal District
- 0.1 Ural Federal District







Main aims of visiting, %:

- 82.3 To find out about new technology and products
- 37.6 To establish new business contacts
- 29.9 To gather market information
- 23.2 To find new distributor
- 22.9 To maintain existing business relations
- 15.9 To visit exhibitors' seminars and presentations
- 8.0 To visit conference
- 7.5 To buy products and / or services
- 6.4 To sell products and / or services
- 6.4 To monitor competitors
- 0.3 Other

Visitors' interest in the main sections of the exhibition, %:

- 62.6 Power Supplies
 51.6 Power Semiconductors
 42.1 Integrated Circuits and Optoelectronics
 41.8 Power converters
 39.2 Sensors
 37.9 Transistors
 28.0 Transformers
 27.8 Passive Components
 26.6 Automation systems
 24.2 Electric power industry
 22.5 Magnetics and Core Materials
- 22.3 Power Quality
- 19.7 Testing and measuring
- 18.9 Intelligence in Motion
- 17.9 Development Software
- 13.2 Assemblies and Subsystems
- 12.7 Energy efficiency and energy saving
- 11.2 Thermal management
- 10.1 Servo-technology / Actuators
- 4.7 Mass media
 1.6 Other

'We are participating in the project for the third time. This year, we again wanted to remind people about our company and products, which we presented on our stand. We managed to communicate with a large number of competent professionals. I am confident that participating in such projects is necessary even during a crisis, so that, even after a year or two, people remember our company and contact us.'

> **D. Tkachev,** Head of Marketing Planar

'This is the second time we have taken part in the exhibition. Our impressions are excellent –the show is properly organised. We made a lot of contacts and gained useful information, particularly regarding the applicability of our products. If it were not for this exhibition, we would have far more difficulty choosing the right area for further development. I think we achieved our goals of participation. At the exhibition, we received a comprehensive response to all our questions. Even after our first time at the event, we were able to determine the direction of development and choose the product range. We now supply 80% of the lighting market, and there is the motor market, which we are also trying to develop. I would, of course, like to increase the number of exhibitors and exhibition area, and see more Russian manufacturers.'

K. Khalapyan , General Director, Nucon



STATISTICS: VISITOR

Industrial affiliation of companies-visitors, %:

38.5 – Electronics, electrotechnology 33.5 – Military-industrial complex 17.8 – Mechanical engineering 15.5 – Instrument making 11.9 – Aerospace construction 8.2 – Fuel and energy industry 8.0 – Telecommunications 4.5 – Motor-car construction 4.2 – Medicine 4.2 – Petrochemical industry 3.5 – Construction 2.2 – Safety systems 2.1 – Metallurgical industry 0.6 – Insurance and finance 0.5 – Other

Nature of business, %:

- 59.2 Manufacturing
- 42.2 Scientific research
- 10.8 Wholesale trade / Distributions
- 5.7 Services
- 5.1 Engineering and development
- 4.9 Information services/consulting
- 4.6 Telecommunications and radio
 - 3.3 Transport / Logistics
- 2.8 Retail
- 1.9 Security services
- 0.9 Administrative authorities
- 0.8 Other

'We are participating in this exhibition for the first time. Our impressions, of course, are only positive. I would like to mention the excellent organisation. I am pleased that we managed to gain a lot of useful information, see new developments, and communicate with professional visitors, of whom there were many. The objectives of our participation were to study the market and learn about the latest products. We were able to achieve these goals by talking with the exhibitors and visitors. I believe that, during this crisis, we need to promote our products and continue to take part in these projects. We plan to participate in the Power Electronics exhibition next year. For our company, this project brings greater benefits than larger exhibitions, because of its specific specialisation.

R. Loskutov, Marketing manager, JSC Energiya



30 November - 2 December 2010 Crocus Expo, Moscow, Russia

See you next year!



7th International Exhibition

POWER ELECTRONICS, ENERGY AND ENERGY SAVING

Organisers:



Tel.: +7 (812) 380 6003/07 Fax: +7 (812) 380 6001/00 E-mail: power@primexpo.ru

www.powerelectronics.ru