



## 10th JUBILEE EUROPEAN CONFERENCE-EXHIBITION ON NON-DESTRUCTIVE TESTING

On June 7–10, 2010 10th Jubilee European Conference-Exhibition on Non-Destructive Testing (10th ECNDT) was held in Moscow. It had a record number of countries-participants over the entire period of conducting such forums — representatives of 65 countries came to Moscow. Total number of registered participants was 1021 persons, participants of conference and exhibition — 1230 persons. Moscow was granted the right to host this event as a result of competition in EFNDT session in Vienna in 2005. 10th ECNDT President was appointed to be V.V. Klyuev, Academician of RAS, President of the Russian Society on Non-Destructive Testing and Technical Diagnostics. Scientific Committee was formed from representatives of 43 countries, and it included 153 known scientists and leaders of national NDT societies.

In keeping with the program of 10th ECNDT a plenary session was held, in which six presentations were made: V.V. Klyuev (Russia) «Nanotechnologies and nanodiagnostics»; Prof. V. Krsteji (Croatia) «EFNDT positioning in European quality infrastructure»; N.A. Makhutov, Corresp.-Memb. of RAS (Russia) «Diagnostics of the state of objects and risk monitoring in large-sized projects»; Dr. M. Farley, ICNDT President (Great Britain) «ICNDT activity in the sphere of international certification of NDT personnel»; Prof. U. Ewert (Germany) «Prospects for mobile computer tomography»; Prof. V.P. Vavilov (Russia) «Thermographic non-destructive testing: brief history, state-of-the-art and tendencies».

Then meetings were conducted in 25 sessions, in which 703 presentations were made on various methods, directions and problems in the field of non-destructive testing and technical diagnostics (NDT and TD).

The following events took place during the Conference:

- EFNDT General Assembly, in which new members of the Board of Directors were elected, report of EFNDT Board of Directors was presented, and updated EFNDT Bylaws were approved;

- ICNDT General Assembly chaired by Dr. M. Farley, ICNDT President, which addressed the following issues: ICNDT 2009 report, coordination of ICNDT operation procedures, discussion of membership fees, 2010–2011 budget, presentation of certificates to new members, interim report on preparation for 18th World Conference on NDT (18th WCNDT), reports of regional divisions;

- EFNDT BoD meeting devoted to 10th ECNDT, discussion of the strategic plan, financial report, 2010–2011 budgets, refinement of EFNDT operation proce-

dures, incorporation of new members, as well as planning the next meeting, which it was proposed to hold in Kiev;

- two meetings of Academia NDT International chaired by Dr. J. Nardoni, President of the Academia, in which 25 full members of Academia from 17 countries of the world took part. 7 new full members and 2 honorary members were elected into Academia. Total number of Academia NDT members is 44 academicians from 21 country. A decision was taken to raise the number of Academia members to 100 in the next 2–3 years, widening of representation geography being important here;

- ICNDT Executive committee meeting in which documents for discussion in ICNDT General Assembly, and key issues of WG1 and WG3 activities were considered, as well as incorporation of new members from Central Asia region;

- Forum on qualification, certification and accreditation. Forum participants representing more than 20 countries discussed the latest changes in ISO 9712 and EN 473 standards and submitted a proposal on uniting the requirements of these standards and creating a common standard on NDT personnel certification;

- EFNDT–ASNT meeting devoted to the features of functioning of American NDT Committee. In addition, issues of NDT personnel training and certification in the USA were considered, in particular a new innovation program aimed at attracting and supporting young specialists;

- meeting of ISO TC 1135 «Non-Destructive Testing», in which more than 60 participants from 20 countries of the world took part.

One of the Conference events was an exhibition of NDT means, in which more than 190 companies from 16 countries and 32 national NDT societies in 151 booths took part.

More than one thousand NDT instruments and systems with application of acoustic, ultrasonic, radiation, vibration, electromagnetic, magnetic, thermal and other testing methods, information booths of ICNDT, EFNDT, national NDT societies of European, Asian, American and African countries were presented in the exhibition.

An innovation competition chaired by Dr. M. Douglas (Canada) was held during the exhibition.

10th ECNDT Diplomas were awarded to six innovative developments:

- small-sized betatron for 2.5 MeV energy for field operation (GOU VPO Tomsk Polytechnic University, RI of Introscopy);

- ACOUSTIC EYE system for NDT of internal condition of tubes of heat exchangers, steam generators and other industrial facilities, having tubes in their structures («Spektr» Ltd.);

- automated facility for eddy current control of bearing rings VISTKON (UNITEST GROUP);

- magnetostriction generators of higher power waveguide waves (Souhtwest Research Institute);

- automated unit «Shilo» for testing girth welds in tube-tubesheet system (TSNK Laboratory);

- AVGUR-T system for external and internal AUST of welded joints and base metal of pipelines and welded T-joints with coverplates (SPC «Ekho+» Ltd.).

In a specially equipped hall leading world manufacturers made 16 presentations of the most advanced equipment. Presentation by Harry Passi (Sonotron NDT Company) on «Ultrasonic testing with phased array application. Result visualization in keeping with

the actual geometrical dimensions and shape of the object of control», as well as US flaw detector on phased arrays ISONIC 2009 generated participants' interest.

As part of Exhibition activities, a competition of exponent companies for the «Best Booth of ECNDT 2010» was held. By the results of an anonymous poll of more than 300 specialists a commission headed by D. Gilbert, Editor-in-Chief of Insight Journal, determined the winners. These were booths of the following companies: OLYMPUS, Spektr, General Electric, South African Institute for NDT (in the nomination «Best Booth of the National NDT Society»).

In the official meeting devoted to closing of the 10th Jubilee Conference its results were summed up and countries-organizers of the next international conferences were presented, namely of 18th International Conference in SAR, and 11th European Conference in Czechia in 2014.

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## INTERNATIONAL CONFERENCE ON WELDING CONSUMABLES

The 5th International Conference «Welding consumables. Technologies. Production. Quality. Competitiveness», devoted to the 20th anniversary of Association «Elektrod», took place in Artyomovsk, Donetsk region, in the period of June 7–11, 2010. The organizers of the Conference were Association «Elektrod» of enterprises of CIS countries and CJSC «Artemmashzavod «VISTEK». 44 specialists from 29 enterprises and organizations of Ukraine, Russia and Kazakhstan participated in the work of the Conference. I.M. Livshits, the president of the Association, general director of CJSC «SVAMA», opened the work of the Conference. N.I. Yatchenko, general director of VISTEK, delivered a welcome speech to the participants of the Conference. Prof. V.N. Shlepakov, leading staff scientist of the E.O. Paton Electric Welding Institute, presented the greeting speech of Prof. B.E. Paton to the participants of the Conference.

The program of the Conference included 25 papers and presentations, many of which were included into the Collection prepared by the International Association «Svarka». One part of the papers was devoted to covered electrodes and technology of their manufacture, and another part described the problems of development, production and application of solid wires, flux-cored wire and fluxes for mechanized arc welding. During two plenary sessions the lecturers presented their papers, commented upon their content before the participants of the Conference and answered the questions of the audience.

In the paper «Methods of modernization and development of electrodes for manual arc welding and surfacing» Dr. I.N. Vornovitsky (OJSC SPA «TSNIIT-MASH») explained new criteria of quality and algorithm of processes of development of electrodes to solve the problems of providing high quality of their manufacturing and stability of welding-technological characteristics. On the example of operation of preparation of coating mass the advantages of intensive mixers over roller ones in improvement of key characteristics of electrodes, such as productivity (increases), losses of metal for waste and spattering (decrease), manoeuvrability of electrode (improves) are shown. O.V. Dzyuba (SPC «Svarochnye materialy», Krasnodar) reported about new technology of increase of modulus of liquid glasses designed for manufacturing welding consumables. For this purpose the methods of electrolysis were suggested to be used, applied for desalination of sea water. In the paper some properties of obtained soluble-glass materials are analyzed.

I.M. Livshits («Izhorskie svarochnye materialy», Ltd., RF) reported in his speech that the results of optimization of the technology of manufacturing of flux of the grade 48 KRF-16, intended for welding of structures of nuclear power plants, allowed considerable decrease of sulphur and phosphorus content in deposited metal.

I.N. Zvereva, engineer (OJSC «MKM-METIZ», Magnitogorsk, RF) told about advantages of lubrica-