

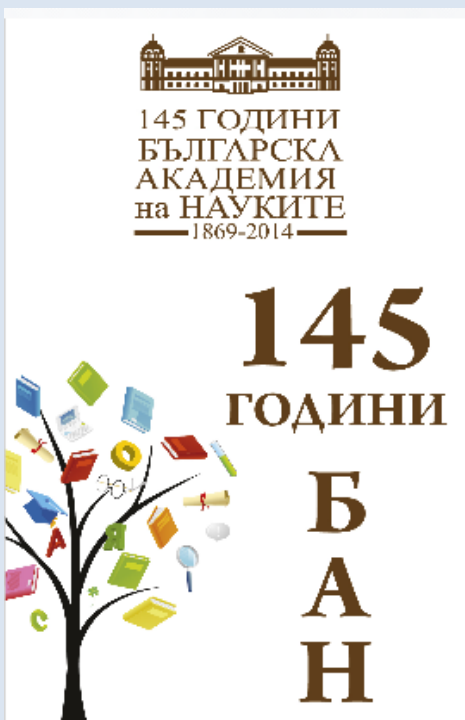
PROGRAM of the
**Eleventh International
 Conference on Electron Beam Technologies (EBT 2014),**
 8-12 June 2014,
 Varna, Complex Grand Hotel Varna-St. St. Konstantin and Elena, Bulgaria



The Conference is organized by
THE INSTITUTE OF ELECTRONICS AT THE BULGARIAN ACADEMY OF SCIENCES
In cooperation with

- THE TECHNOLOGICAL CENTRE OF ELECTRON BEAM AND PLASMA TECHNOLOGIES, Sofia
- UNION OF ELECTRONICS, ELECTRICAL ENGINEERING AND TELECOMMUNICATIONS – Bulgaria

***The conference is devoted to
 145 Jubilee of Bulgarian Academy of Sciences***



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LOCAL ORGANIZING COMMITTEE

- K. Vutova – co-chairman; E. Koleva – co-chairman
 V. Vasileva, V. Donchev

8 June 2014
Sunday

Arrival and registration day

18.00	Registration	EBT 2014 Conference office - Lobby of the Grand Hotel Varna
19.00	Welcome cocktail party for participants and the all accompanying persons	Lobby-bar of the Grand Hotel Varna

9 June 2014
Monday

Monday morning sessions

10.00-10.10	Opening Ceremony
SS1	Chairman: Prof. Georgi Mladenov
10.10-10.40	Invited talk <u>Electro-optical devices by electron beam technique: polymer dispersed liquid crystal materials</u> <u>Ulrich Maschke¹, Mohamed Bouchakoura², Yazid Derouichea², and Zohra Bouberka^{1,3}</u> 1) Unité Matériaux et Transformations (UMET), Université Lille 1 - Sciences et Technologies, France 2) Faculty of sciences and technology, University of Ziane Achour, Djelfa, Algeria 3) Laboratoire Physico-Chimie des Matériaux - Catalyse et Environnement, Université des Sciences et de la Technologie d'Oran «USTO», Oran, Algeria

10.40-10.50 Coffee break

SS2	Chairman: Dr. Goesta Mattaush
10.50-11.10	<u>High angle, high integrity beam deflection</u> <u>Colin Ribton</u> <i>Electron Beam Processes, TWI Ltd., Cambridge, UK</i>
11.10-11.30	Company Presentation Von Ardenne GmbH, Dresden, Germany <u>M. Neumann</u>
11.30-12.00	Invited talk <u>Numerical Modeling of Parameters of the Plasma, Generated during Electron Beam Welding</u> <u>D. N. Trushnikov, G. M. Mladenov</u> 1) Perm National Research Polytechnic University, Perm, Russian Federation; 2) Institute of electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria
12.00-12.20	Company Presentation Kurt J. Lesker Co. Ltd. <u>P. Szanto</u>

12.00-14.00 Lunch (in the hotel restaurants)

Monday afternoon sessions

SS3	Chairman: Assoc. Prof. Dmitrii Trushnikov
14.00-14.20	<u>Accurate diagnostic of electron beam characteristics</u> <u>U. Reisgen, S. Olschok, S. Ufer,</u> <i>RWTH Aachen University, Welding and Joining Institute, Aachen, Germany</i>
14.20-14.40	<u>Electron beam characterization at changes of EBW process parameters</u> <u>E. Koleva, G. Mladenov, M. Kardjiev, D. Todorov</u> <i>Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria</i> <i>University of Chemical Technology and Metallurgy - Sofia, Bulgaria</i> <i>TC EPTT Ltd. - Sofia, Bulgaria</i>

14.40-15.00	Seam tracking during electron beam welding in air Vladimir Ya. Braverman, Vladimir S. Belozertsev, Valeriy V. Bogdanov, Nikolay V. Uspenskiy, Alexander E. Beniyash* M.F. Reshetnev Siberian State Aerospace University, Krasnoyarsk, Russia *Institute of Materials Science of Leibniz University (Hanover)
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15.00-15.10 Coffee break

SS4	Chairman: Prof. Victor Dragunov
15.10-15.30	Electron beam welding of elements supporting structure of the front wall module blanket ITER Sliva A.P., Dragunov V.K., Goncharov A.L., Terentyev E.V., Gribkov M.S. National Research University "Moscow Power Engineering Institute", Moscow, Russian Federation
15.30-15.50	EBW of austenitic stainless steel and ODS ferritic steel Petr Havlík, Pavel Šohaj, Jan Kouřil, Rudolf Foret, Ivo Dlouhý Brno University of Technology, Faculty of Mechanical Engineering, Institute of Materials Sciences and Engineering, Brno, Czech Republic
15.50-16.10	Model-Based Quality Optimization of EBW of steel E. Koleva, D. Trushnikov, V. Belenkiy, G. Mladenov, S. Angelov, D. Todorov Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria Perm National Research Polytechnic University, Perm, Russian Federation University of Chemical Technology and Metallurgy - Sofia, Bulgaria TC EPTT Ltd. - Sofia, Bulgaria

16.10-16.20 Coffee break

SS5	Chairman: Assoc Prof. Elena Koleva
16.20-16.40	Electron beam welding superconducting Niobium cavities Igar L. Pobal, Siarhei Yurevich Physical Technical Institute of the National Academy of Sciences of Belarus, Belarus
16.40-17.00	Reconstruction of Irradiated Specimens T. Vesely, Martin Herynk UJV Řež, a. s. Husinec - Řež, Czech Republic
17.00-17.20	Decomposition of a vegetative biomass by electron-beam irradiation and heating A. V. Ponomarev, P. K. Metreveli, A. K. Metreveli, A. V. Bludenko, V.N. Chulkov A.N.Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences

Monday Poster session PS1 17.30-18.40

1	Morphological, electrical, optical and electro-optical properties of polymer/liquid crystal systems Y. Derouiche^{1,2,3}, M. Bouchakour¹, K. Koynov², F. Dubois⁴, Z. Boubarka^{1,5} and U. Maschke¹ 1) Unité Matériaux et Transformations (UMET), Université Lille 1 - Sciences et Technologies, France 2) Max-Planck Institute of Polymer Research, Mainz, Germany 3) Laboratoire des dispositifs des micro-ondes et matériaux pour les énergies renouvelables, Faculté des Sciences et Technologies, Université Ziane Achour, Djelfa, Algeria 4) Unité de Dynamique et Structure des Matériaux Moléculaires (UDSMM), Université du Littoral – Côte d'Opale, Calais, France 5) Laboratoire Physico-Chimie des Matériaux - Catalyse et Environnement, Université des Sciences et de la Technologie d'Oran «USTO», Oran, Algeria
2	Radiation-induced degradation of two organic pollutants from aqueous solutions of TiO₂ nanocomposites Zohra Boubarka^{1,2}, Abdelouahab Nadim², A. Khalil Benabbou¹ and Ulrich Maschke² 1) Laboratoire Physico-Chimie des Matériaux - Catalyse et Environnement, Université des Sciences et de la Technologie d'Oran «USTO», Oran, Algeria 2) Unité Matériaux et Transformations (UMET), Université Lille 1 - Sciences et Technologies, France
3	Electron beam radiation as powerful tool to degrade some toxic organobrominated derivatives Abdelouahab Nadim^{1,2}, Yassine Agguine^{1,2}, Said Eddarir², Zohra Boubarka^{1,3} and Ulrich Maschke¹ 1) Laboratoire Physico-Chimie des Matériaux - Catalyse et Environnement, Université des Sciences et de la Technologie d'Oran «USTO», Oran, Algeria 2) Laboratoire de Chimie Bioorganique et Macromoléculaire (LCBM), Faculté des Sciences et Techniques,

	<p>Université Cadi Ayyad, Guéliz, Marrakech, Morocco 3)Unité Matériaux et Transformations (UMET), Université Lille 1 - Sciences et Technologies, France</p>
4	<p><u>Ion current collected from generated plasma during EBW</u> <i>D.Trushnikov¹, G.Mladenov^{2,3}, V.Ya.Belenkiy⁴, E.Koleva^{2,3}</i>, 1)The department for Applied Physics, Perm National Research Polytechnic University, Perm, Russian Federation 2) Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria 3) Technology Centre of Electron Beam and Plasma Technologies and Techniques, Sofia, Bulgaria 4) The department for Welding Production and Technology of Constructional Materials, Perm National Research Polytechnic University, Perm, Russian Federation</p>
5	<p><u>Control of electron beam welding of plates, using beam current of back plate side</u> <i>E.Koleva^{1,2},D.Trushnikov³, V.Ya.Belenkiy⁴, G.Mladenov^{1,2}</i>, 1) Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria 2) Technology Centre of Electron Beam and Plasma Technologies and Techniques, Sofia, Bulgaria 3)The department for Applied Physics, Perm National Research Polytechnic University, Perm, Russian Federation 4) The department for Welding Production and Technology of Constructional Materials, Perm National Research Polytechnic University, Perm, Russian Federation</p>
6	<p><u>Simulation evaporation processes in electron beam welding</u> <i>D.N. Trushnikov, E.S. Salomatova, A.I. Tsaplin, V.Ya. Belenkiy</i> Perm National Research Polytechnic University, Perm, Russian Federation</p>
7	<p><u>Compensation of the effect of magnetic fields on the electron beam position in the process of electron beam welding</u> <i>Valery D. Laptanok, Alexandra A. Druzhinina, Alexander V. Murygin, Yury N. Seregin</i> Siberian State Aerospace University named after academician M. F. Reshetnev, Krasnoyarsk, Russian Federation</p>
8	<p><u>Mechanism of onset of keyhole depth fluctuations at beam welding process</u> <i>Vasilyev A.A., Erofeev V. A., Sudnik V. A.</i> Tula State University, Russia</p>
9	<p><u>Modern problems and development methods of an electron beam welding systems</u> <i>Alexey V. Shcherbakov, Alexey L. Goncharov, Alexey S. Kozhechenko, Alexey K. Gordenko, Andrei P. Sliva, Vladimir N. Balashov, Victor K. Dragunov, Viktor P. Rubtsov</i> Moscow power engineering institute, Moscow, Russian Federation</p>
10	<p><u>Influence of electron beam's oscillations on weld's structure formation of dissimilar materials on an example steel with bronze</u> <i>Tatyana V. Olshanskaya, Gleb L. Permyakov, Vladimir Y. Belenkiy, Dmitriy N. Trushnikov</i> Perm National Research Polytechnic University, Perm, Russian Federation</p>
11	<p><u>Electron beam additive manufacturing</u> <i>Matthias Wahl</i> Evobeam GmbH, Germany</p>
12	<p><u>Structure and properties management of cast α-Titanium alloys, produced by electron beam skull melting with electromagnetic stirring</u> <i>Mikhail M. Voron¹, Alexander N. Doniy²</i> 1) Phisico-technological institute of metals and alloys National academy of science of Ukraine 2) National technical university of Ukraine "Kiev polytechnic institute", Physical engineering faculty, Department of metal science, Ukraine</p>
13	<p><u>The electron-beam treatment of water polluted by humic acids and lignin</u> <i>P. K. Metreveli, A. K. Metreveli, A. V. Ponomarev,</i> A.N.Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences</p>
14	<p><u>Surface alloying of titanium alloys with refractory elements by electron-beam processing</u> <i>I.A. Bataev¹, M.G. Golkovskii², N.K. Kuksanov², A.A. Ruktuev¹ I.A. Polyakov¹ and A.A. Bataev¹, V.V. Samoilenko¹</i>, 1) Novosibirsk State Technical University, Novosibirsk, Russia 2) Budker Institute of Nuclear Physics SB RAS, 11, Akademika Lavrentieva prospect, Novosibirsk, 630090 Russia</p>
15	<p><u>Experience of 30 Years Operation of EB treatment installation at PODOLSKKABEL plant</u> <i>N.K. Kuksanov¹, M.N. Stepanov², A.I. Rojkh²</i> ¹⁾ Budker Institute of Nuclear Physics, Novosibirsk, Russia ²⁾ "Podolskkabel" JSC, Moskow region, Russia</p>
16	<p><u>The exploitation of concentrated energy flows for welding and protective coating production</u> <i>M.V. Radchenko, Yu.O. Shevtsov, T.B. Radchenko, D.A. Nagorniy</i></p>

17	<u>Micro-arc oxidation of aluminum alloy</u> E. Krivosova, A. Gorchakov, I. Ponomarev Perm National Research Polytechnic University, Russia
18	<u>Optical and structural investigation of Tungsten-based oxide films, deposited by electron beam evaporation</u> K. Vutova, V. Vassileva, A. Stoimenov, E. Koleva, K. Gesheva, T. Ivanova, G. Bodurov, G. Mladenov Institute of Electronics, Bulgarian Academy of Sciences Central Laboratory of Solar Energy and New Energy Sources, Bulgarian Academy of Sciences

19.30 Dinner in a restaurant of the hotel

10 June 2014

Tuesday

Tuesday morning sessions

SS6	Chairman: Prof. Vladimir Engelko
9.30-9.50	<u>Tendency of development of DC type ELV accelerators for industrial application and research experiments</u> N.K. Kuksanov, Yu.I. Golubenko, P.I.Nemytov, R.A. Salimov, S.N. Fadeev, A.I. Korchagin, A.V. Lavruchin, V.G. Cherepkov, V.A. Semenov, M.G. Golkovsky Budker Institute of Nuclear Physics, Novosibirsk, Russian Federation
9.50-10.10	<u>Electron Beam Technology for Environmental Conservation -</u> Bumsoo Han, Jinkyu Kim, Yuri Kim, SeungTae Jung, EB TECH Co., Ltd. 550 Yongsan-dong Yuseong-gu, Daejeon 305-500, Rep. of Korea
10.10-10.30	<u>Surface layer modification by large-area pulsed electron beams</u> Renate Fetzer, Alfons Weisenburger, Georg Mueller Karlsruhe Institute of Technology (KIT), Germany

10.30-10.40 Coffee break

SS7	Chairman: Dr. Colin Ribton
10.40-11.00	<u>Surface engineering improvements and opportunities with electron beams</u> T. M. Pinto¹, A. Buxton¹, K. Neailey², S. Barnes², ¹) TWI Ltd, Cambridge, UK ²) WMG, International Manufacturing Centre, University of Warwick, Coventry, UK
11.00-11.20	<u>Electron beam heat treatment of aircraft engine combustion chamber casings, made of precipitation-hardened heat-resistant Chrome-Nickel alloys</u> P.D.Zhemanyuk, I.A.Petrik, O.V. Gnatenko, Y.A. Marchenko Motor Sich JSC, Ukraine
11.20-11.40	<u>Principles of choice of electron beam coating in up-to-date production of aircraft engine parts</u> P. D. Zhemanyuk, I. A. Petrik, O. V. Gnatenko, V. S. Yefanov, Motor Sich JSC, Zaporozhye, Ukraine
11.40-12.00	<u>TiAlCN/VCN Nanoscale Multilayer PVD Coatings Deposited by the Combined High Power Impulse Magnetron Sputtering / Unbalanced Magnetron Sputtering, (HIPIMS/UBM) Technology Dedicated to Machining of Al and Ti Alloys</u> P.Eh. Hovsepian¹, A.P. Ehasarian¹, I. Petrov², ¹)Sheffield Hallam University, United Kingdom, ²)Frederick Seitz Materials Research Laboratory and University of Illinois, Urbana,USA

12.20-14.00 Lunch (in the hotel restaurant)

Tuesday afternoon sessions

SS8	Chairman: Prof. Papken Eh. Hovsepian
14.00-14.20	<u>Technological electron beams parameters evaluation based on the optical radiation in a vacuum</u>

	Alexey L. Goncharov, Victor K. Dragunov, Andrey P. Sliva, Maksim A. Portnov, Egor V. Terentyev, Alexey V. Scherbakov <i>National Research University "Moscow Power Engineering Institute", Moscow, Russian Federation</i>
14.20-14.40	<u>Source of radial converging electron beam for modification of long-length cylindrical targets</u> V. Engelko <i>Efremov Inst. of Electrophysical Apparatus. St.Petersburg, Metallostroy, Russia</i>
14.40-15.00	<u>Non-vacuum electron beam cutting is the new high performance process</u> T. Hassel¹, N. Murray¹, A. Beniyash¹, N. Rempe², S. Kornilov² 1) <i>Institute of Materials Science, Leibniz University of Hannover, Germany</i> 2) <i>Elion Ltd., Tomsk, Russia</i>

15.00-15.10 Coffee break

SS9	Chairman: Prof. Katia Vutova
15.10-15.40	Company presentation <u>Variable shaped beam lithography for micro- and nanotechnology - Vistec Electron Beam GmbH, Jena Germany</u> Wolfgang Dorl, Hartmut Schacke, Ines Stolberg
15.40-16.00	<u>Maskless lithography cluster for low and medium volume manufacturing</u> Viacheslav V. Kazmiruk, Ilya G. Kurganov, Tatiana N. Savitskaja <i>Institute of Microelectronics Technology And High Purity Materials, RAS Chernogolovka, Moscow district, Russia</i>

16.20-16.30 Coffee break

SS10	Chairman: Dr. Matthias Neumann
16.30-16.50	<u>Economic and conservative numerical scheme for non-stationary heat model for EBMR</u> V. Donchev, K. Vutova, T. Chernogorova <i>Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria</i> <i>Sofia University, Faculty of Mathematics and Informatics, Sofia, Bulgaria</i>
16.50-17.10	<u>Effects of beam patterns on removal of phosphorous in silicon by electron beam melting</u> Shuang Shi, Yi Tan, Dachuan Jiang, Wei Dong, Shutao Wen <i>School of Materials Science and Engineering, Dalian University of Technology, Dalian, China</i> <i>Key Laboratory for Solar Energy Photovoltaic System of Liaoning Province, Dalian, China</i>
17.10-17.30	<u>Modern electron beam technologies and equipment for melting and physical vapor deposition of different materials</u> M. I. Grechanyuk, A. G. Melnyk, I. M. Grechanyuk, V. G. Melnyk, D. V. Kovalchuk <i>SPE Eltechmash, Vinnytsa, Ukraine; JSC NVO Chernova Hvilya, Kiev, Ukraine</i> <i>National Technical University of Ukraine „Kiev Polytechnic Institute</i>

Tuesday poster session PS2

17.50-18.50

1	<u>Pulse width dependence of the self-ignited plasma using a plasma-based ion implantation</u> K. Shimono, N. Fujimura, H. Noguchi, H. Toyota, Y. Shiray, T. Tanaka, K. Vutova <i>Hiroshima Institute of Technology, Hiroshima, Japan</i> <i>Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria</i>
2	<u>Electron beam melting's operator biology protection from X-rays utilizing depleted Uranium</u> Y. Metelkin <i>OAo "VNIINM", Moscow, Russian Federation</i>
3	<u>Composite materials with a metal matrix condensed from vapor phase: Dispersion strengthened metals</u> Nikolay Grechanyuk, Igor Grechanyuk, Olena Khomenko, Andrey Melnik, Vera Grechanyuk <i>Frantsevich Institute for Problems of Materials Science of NASU, Ukraine</i>
4	<u>Composite materials with a metal matrix condensed from vapor phase: Microlayer materials</u> Nikolay Grechanyuk, Igor Grechanyuk, Olena Khomenko, Andrey Melnik, Vera Grechanyuk <i>Frantsevich Institute for Problems of Materials Science of NASU, Ukraine</i>
5	<u>Composite materials with a metal matrix condensed from vapor phase: Microporous materials</u> Nikolay Grechanyuk, Igor Grechanyuk, Olena Khomenko, Andrey Melnik, Vera Grechanyuk

	<i>Frantsevich Institute for Problems of Materials Science of NASU, Ukraine</i>
6	<u>Simulation of time of current increasing in impulse triode high voltage glow discharge electron guns</u> Igor V. Melnyk <i>National Technical University of Ukraine „Kiev Polytechnic Institute“, Faculty of Electronics, Electronic Devices Department</i>
7	<u>Electro-optical characteristics of the beams generated by the electron plasma sources</u> V. Gruzdev, V. Zalesski <i>Polotsk State University, Belarus</i>
8	<u>Electron beam welding machines with plasma cathode gun</u> Sergey Belyuk, Igor Osipov, Alexander Rau, Grigory Semenov <i>Tomsk Electron Technologies (TETa Ltd), Tomsk, Russia</i>
9	<u>Study of electron beam resists: Negative tone HSQ and positive tone SML300</u> I. Kostic, A. Bencurova, A. Konecnikova, P. Nemeč, A. Ritomsky, E. Koleva, K. Vutova, G. Mladenov <i>Slovak Academy of Sciences, Institute of Informatics, Bratislava, Slovakia</i> <i>Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria</i>
10	<u>Electron beam micromachining of plastics</u> Libor Dupák <i>Institute of Scientific Instruments of the ASCR, v. v. i.; Brno, Czech Republic</i>
11	<u>The microstructure of the surface layers by laser and laser-microplasma doping</u> V. D. Sheliagin, V. M. Spivac, A. V. Bematsky, M. S. Tirsu <i>Institute of Electric Welding "Paton", Ukraine</i> <i>National Technical University of Ukraine "Kiev Polytechnic Institute"</i> <i>Acad. of Sciences - Moldova, Institute Energetiki, Kishinev, Moldova</i>
12	<u>Laser scalpel</u> Viktor M. Spivak¹, Vladislav Y. Khaskin², Mikhay S. Tirshu³ 1) <i>National Technical University of Ukraine "Kiev Polytechnic Institute".</i> 2) <i>Institute of Electric welding behalf of the Paton (Ukraine)</i> 3) <i>Energy Institute of the Academy of Sciences of Moldova</i>
13	<u>Preliminary estimation of incident ion energy by using simulation software (PEGASUS)</u> Hideaki Kozai¹, Nobuyuki Fujimura¹, Hiromitsu Noguchi¹, Hiroshi Toyota¹, Yoshito Shirai² and Takeshi Tanaka¹, K.Vutova³ 1) <i>Hiroshima Institute of Technology, Hiroshima, Japan</i> 2) <i>KOANKEISO CO., Ehime, Japan</i> 3) <i>Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria</i>
14	<u>Comparison of plasma spectral characteristics using a plasma-based ion implantation</u> Hiromitsu Noguchi¹, Nobuyuki Fujimura¹, Kazuhiro Shimono¹, Hiroshi Toyota¹, Yoshito Shirai² and Takeshi Tanaka¹ 1) <i>Hiroshima Institute of Technology, Hiroshima, Japan</i> 2) <i>KOANKEISO CO., Ehime, Japan</i>
15	<u>Spore-forming bacteria sterilization using Plasma-based ion implantation</u> Koji Kakugawa^{1,2}, Taiki Mataka², Hiromitsu Noguchi³, Kazuhiro Shimono³, Nobuyuki Fujimura³, Yoshinobu Tsuchiya¹, Kazuhisa Ono¹ and Takeshi Tanaka³ 1) <i>Department of Food Science and Biotechnology, Faculty of Life Sciences, Hiroshima Institute of Technology, Hiroshima, Japan</i> 2) <i>Department of Applied Information Science, Faculty of Applied Information Science, Hiroshima Institute of Technology, Hiroshima, Japan</i> 3) <i>Major in Electrical and Electronic Engineering, Graduate School of Science and Technology, Hiroshima Institute of Technology, Hiroshima, Japan</i>
16	<u>Estimation of self-ignited plasma density by using plasma-based ion implantation</u> Nobuyuki Fujimura¹, Kazuhiro Shimono¹, Hiromitsu Noguchi¹, Hiroshi Toyota¹, Yoshito Shirai² and Takeshi Tanaka¹ 1) <i>Hiroshima Institute of Technology, Hiroshima, Japan</i> 2) <i>KOANKEISO CO., Ehime, Japan</i>
17	<u>Electron beam melting and recycling of Nickel</u> V. Vassileva, K. Vutova, V. Donchev, A. Stoimenov, Dinesh Amalnerkar, Nagegownivari Munirathnam <i>Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria</i>
18	<u>Development and generalization of scientific and educational information book in field of nanoelectronics</u> Spivak V.M¹, Koleva E.G², Vlasiuk A.G¹.

	1) National Technical University of Ukraine "Kiev Polytechnic Institute". 2) Institute of electronics, Bulgarian Academy of Sciences
19.30	Official Conference Dinner Meeting in front of the hotel 5*
	11 June 2014 Wednesday
	Wednesday morning session
SS11	Chairman: Prof. Takeshi Tanaka
9.30-9.50	<u>Gas discharge electron sources - proven and novel tools for thin-film technologies</u> Goesta Mattausch, Burkhard Zimmermann, Fred Fietzke, Jens-Peter Heinss, Benjamin Graffel Falk Winckler, Frank-Holm Roegner, Christoph Metzner FEP - Fraunhofer Institute for Electron Beam and Plasma Technology, Dresden, Germany
9.50-10.10	<u>Characterisation of electron beams generated by a plasma cathode gun</u> N. Rempe¹, S. Kornilov¹, A. Beniyash², N. Murray², T. Hassel², C. Ribton³ 1) Elion Ltd.; 634045 Tomsk, Russia; 2) Institute of Materials Science, Leibniz University of Hannover; D30823 Garbsen, Germany; 3) TWI Ltd.; CB21 6AL Cambridge, UK
10.10-10.30	<u>A novel RF excited plasma cathode electron beam gun design</u> Sofia del Pozo¹, Colin N. Ribton², David R. Smith¹ 1) Electronic and Computer Engineering, Brunel University, Middlesex, UK 2) TWI Ltd, Cambridge, UK
10.30-10.50	<u>Recent Progress in Development of Gas-Discharge Electron Beam Guns Providing Extension of Their Technological Capabilities</u> V.G.Melnyk, I.V.Melnyk, B.A.Tugai, D.V.Kovalchuk National Technical University of Ukraine „Kiev Polytechnic Institute“, Faculty of Electronics, Electronic Devices Department; JSC NVO Chernova Hvilya, Kiev, Ukraine
10.50-11.20	Closing of the official part of the conference
12.00-13.00	Lunch
13.00	Excursion: 13,00 Meeting in front of the hotel

12 June 2014
Thursday

Departure day