

**Tripartite Seminar on  
“Results and Plans for Support of Long-Term Effective Sustainability  
of the Russian NMC&A System”**

**Seminar to be held in Obninsk, Russia, November, 2013**

**SEMINAR AGENDA**

**Tuesday, November 12, 2013**

**7:30-8:30 Breakfast**

8:00-10:30 Registration of participants

10:30-11:30 Opening remarks and welcome from RF (A. Goverdovski - IPPE, V. Pitel - Rosatom, D. Bokov - Rostechнадзор), DoE US (J. Thomas), EC (P. Meylemans – DG JRC)

**11:30-12:00 Coffee Break**

**Session 1. Achievements and future challenges of the State NMC&A system  
infrastructure upgrading.**

12:00-12:30 Enhancement of the State Nuclear Materials Control and Accounting System in the Russian Federation  
V.A. Pitel, State Corporation “Rosatom”, Moscow

**12:30-14:00 Lunch. Posters Installation.**

14:00-14:30 Upgrading the Current Facility NMC&A System for More Effective Nuclear Security  
Connie Hall, US

14:30-15:00 Nuclear Material Accounting and Control (NMAC) as an Important and Necessary Part of a Facility’s Nuclear Security Measure  
Noah G. Pope, IAEA

15:00-15:30 SCC of Rosatom – information and analytical center for the State MC&A System Russia  
A.I. Baranov, A.I. Yerygin, FSUE SCC, Moscow

**15:30-16:00 Coffee Break**

16:00-16:30 The current status of the legal regulatory framework of the Russian State Nuclear Materials Control and Accounting System  
V.A. Pitel, V.A. Romanov, A.V. Stepashko, State Corporation “Rosatom” , B.G. Ryazanov, SFUE SSC RF - IPPE, Russia

16:30-17:00 NM C&A regulatory framework  
G.G. Aleshkin, SEC NRS, Moscow, Russia

17:00-17:30 The final results of establishing and the plans of development of the Russian NMCA training system  
V.A. Pitel, V.A. Romanov, A.V. Stepashko, State Corporation “Rosatom” , B.G. Ryazanov, SFUE SSC RF - IPPE, Russia

17:30-18:00 Special aspects of NM C&A measurement traceability in the nuclear power area  
G.E. Novikov, D.V. Starkov, State Corporation “Rosatom”, Moscow

**19:00 Welcome Reception**

## Wednesday, November 13, 2013

**7:30-8:30**

**Breakfast**

### **Session 1. Achievements and future challenges of the State NMC&A system infrastructure upgrading. Continued.**

9:00-9:30

Enhancement of NM C&A hardware and methodological support in the framework of the U.S. –Russian cooperation  
A.S. Sviridov, V.V. Sviridova, FSUE VNIIA, Moscow, Russia

9:30-10:00

Development of the RMTC Non-Destructive Assay Laboratory: from the training courses to methodological support of enterprises  
S.A. Bogdanov, G.M. Bezhunov, V.M. Gorbachev, B.G. Rayzanov, N.S. Rykov, V.V. Talanov, FSUE SSC RF - IPPE, Obninsk, Russia

10:00-10:30

Special aspects of NM NDA measurement methodology development for accounting and confirmatory measurements. Regulatory documents, reference materials, measuring equipment  
M.A. Semenov, S.L. Levunin, A.S. Antushevskiy, S.N. Shlygin, A.A. Efremova, A.V. Filonova, FSUE "PA "Mayak", Ozersk, Russia

**10:30-11:00**

**Coffee Break**

11:00-11:30

Proposals on methodological support of NM C&A confirmatory measurements  
S.E. Kondratov, FSUE RFNC VNIIEF, Sarov, Russia

11:30-12:00

VNIIA- JRC (Ispra) cooperation in the nuclear materials control and accounting area (TASIS program). The results and lessons learned from establishing the test laboratory at the VNIIA with the purpose to certify NM C&A devices and instruments  
A.S. Sviridov, A.A. Lavrushin, FSUE VNIIA, Moscow, Russia,  
Pascal Dransart, ITU JRC EC, Ispra, Italy

12:00-12:30

VNIIA- JRC (Ispra) cooperation in the nuclear materials control and accounting area (TASIS program). The results and lessons learned from implementation of modern sealing systems,  
A.S. Sviridov, V.Yu. Chebykin, FSUE VNIIA, Moscow, Russia,  
Pascal Dransart, ITU JRC EC, Ispra, Italy

**12:30-14:00**

**Lunch**

14:00-14:30

The fundamentals of modeling the processes of performance evaluation for the nuclear materials control and accounting system  
Yu.A. Sinyakov, V.V. Blinov, JSC VNIINM, Moscow, Russia

14:30-15:00

Human factor in support of the sustainability plan  
S.T. Shchetnikova, V.Yu. Chukov, G.V. Lavrentieva, FSUE SRI SPA Luch, Podolsk, Russia

15:00-15:30

Establishing the nuclear security culture in Ukraine  
A.V. Gavrilyuk-Burakova, Nuclear Research Institute of the Ukrainian NAS MPC&A TC named after J. Kuzmich, Kiev, Ukraine

**15:30-16:00**

**Coffee Break**

16:00-16:30

On the methods of sampling size calculation in the State Nuclear Materials Control and Accounting System  
V.I. Seredkin, JSC "Ural Electrochemical Integrated Plant", Novouralsk, Russia

16:30-17:00

Control and accounting of spent nuclear fuel  
I.V. Gusakov, L.P. Gabelnikova, A.I. Baranov, FSUE "FCNRS", Moscow, Russia

17:00–18:00

Discussion on Poster Presentations

**19:00**

**Dinner**

## Thursday, November 14, 2013

**7:30-8:30 Breakfast**

### **Session 2. Achievements and future challenges of the facility NMC&A systems upgrading.**

9:00-9:30 The final results of enhancement and prospects for the development of the MC&A system at the FSUE MCC. Yu.P. Anufriev, FSUE MCC, Zheleznogorsk, Russia

9:30-10:00 The issues of nuclear materials control and accounting at the enterprises of shipbuilding industry. I.T. Guriev, FSUE "Krylov State Research Center", St. Petersburg, Russia

10:00-10:30 Implementation of NP-030-12 requirements at the JSC "Siberian Chemical Combine" V.V. Drozd, JSC "Siberian Chemical Combine", Seversk, Russia

**10:30-11:00 Coffee Break**

11:00-11:30 Work plans on long-term sustainability of the nuclear materials control and accounting system at the institute  
V.V. Belov, FSUE "RFNC VNIITF named after Acad. E.I. Zababakhin", Snezhinsk, Russia

11:30-12:00 The current status of NM C&A hardware and methodological support at the FSUE "PA "Mayak". M.A. Semenov, S.L. Levunin, I.A. Sinev, FSUE "PA "Mayak", Ozersk, Russia

12:00-12:30 An experience in configuration management for the system of MPC&A in FSUE SRI SPA "Luch". S.E. Shmelev, V.Yu. Chukov, G.V. Lavrentieva, FSUE SRI SPA Luch, Podolsk, Russia

**12:30-14:00 Lunch**

14:00-14:30 Work progress and prospects of NM C&A measurement support at the SSC NIIAR  
A.P. Malkov, JSC "SSC NIIAR", Dimitrovgrad, Russia

14:30-15:00 The EC contribution to the rehabilitation program of temporary waste storage facilities at Andreeva Bay: automated NM C&A system  
D.A. Plyshevskaya, FSUE FCNRS, Moscow, Russia

15:00-15:30 NM Control and Accounting Arrangement in Rosenergoatom Concern  
V.A. Luppov, M.I. Simagina, JSC "Rosenergoatom", Moscow, Russia

**15:30-16:00 Coffee Break**

16:00-16:30 MC&A System Operation and Upgrading at the FSUE RFNC VNIIEF. Types of Procurement, Implementation Tools and Methods.  
V.P. Bushmelev, S.S. Zhikharev, FSUE RFNC VNIIEF, Sarov., Russia

16:30-17:00 The Results of NMC&A System Implementation and Upgrading in the SSC RF-IPPE.  
V.S. Serdechny, S.A. Bogdanov, V.G. Dvukhsherstnov, V.I. Stasuk, G.A. Myakishev, B.G. Ryazanov, SSC RF-IPPE, Obninsk

17:00-17:30 Arrangement of the State Nuclear Materials Control and Accounting and Application of IAEA Safeguards in the JSC "International Uranium Enrichment Center"  
Panasyuk A.D. (JSC «IUEC»), Pikhtin E.G. (JSC "Angarsk Electrolysis Chemical Complex" ("AEChC"), Angarsk, Russia

17:30-18:00 Discussion on Poster Presentations

**19:00 Banquet.**

## Friday, November 15, 2013

**7:30-8:30 Breakfast**

### **Session 3. Achievements and future challenges of the Rostekhnadzor overview and Rosatom control of NMC&A system.**

- 9:00-9:30 Arrangement and implementation of the State –level nuclear materials control and accounting status monitoring by the State Corporation “ROSATOM” as one of the elements for the State Nuclear Materials Control and Accounting System enhancement  
A.V. Stepashko, State Corporation “Rosatom”, Moscow, Russia
- 9:30-10:00 NP-030-12: inspection of implementation and difference from NP-030-05  
D.A. Bokov, Rostekhnadzor, Moscow, Russia
- 10:00-10:30 NM C&A system control and inspection at the Siberian and Far East sites. Inspection activities enhancement and development prospects  
M.M. Zubairov, A.B. Nikolaev, Rostekhnadzor, Novosibirsk, A.A. Krivolapov, Rostekhnadzor, Seversk, Russia
- 10:30-11:00 Coffee Break**
- 11:00-11:30 The current status and development prospects of the Russian State NM C&A system oversight activities at nuclear facilities with the application of technical devices  
G.V. Shporta, CMTU Rostekhnadzor, Obninsk, Russia
- 11:30-12:00 NM C&A violations analysis  
T.M. Anikina, SEC NRS, Moscow, Russia
- 12:00-12-30 **Wrap-up and Closing Remarks**
- 12:30-14:00 Lunch**

**Seminar Committee Meeting**

**Departure**

## Posters

No.	Titles	Author's Names
1.	Determination of Fissile Material Mass in the Fuel of Spent Fuel Assemblies with High Initial Enrichment	A.V.Bushuev, A.F.Kozhin, V.N.Zubarev, T.B.Aleeva, E.V.Petrova NRNU MEPhI, Moscow
2.	Development of the methods to measure uranium-235 contents in depleted and natural uranium using high - and low-resolution gamma-spectrometers	Yu.A. Gradoboev, N.V. Skovoroda, JSC Chepetsky Mechanical Plant, Glazov, Udmurtia, V.V. Talanov, N.S. Rykov, S.A. Bogdanov, FSUE SSC RF - IPPE, Obninsk
3.	The research of applicability of gamma-spectrometric systems for the measurements of uranium mass in the fixed rests contained in the technological tanks after the UF <sub>6</sub> evaporation	G.M. Bezunov, V.V. Talanov, B.G. Ryazanov, FSUE SSC RF - IPPE, Obninsk
4.	On the statistical criteria for sampling control in the storage of containers with nuclear materials	A.M. Zlobin, V.I. Yuferev, FSUE RFNC VNIIEF, Sarov
5.	Performance evaluation of MC&A system based on the Bayesian approach	A.M. Zlobin, I.I. Safronov, V.I. Yuferev, FSUE RFNC VNIIEF, Sarov
6.	The test of the HMS-4 system for NM measurement means for the usage at the Rosatom organizations for NMCA goals	E.A. Kapitanov, FSUE VNIIA, Moscow
7.	A pilot NM scrap measurement program to be used for NM C&A purposes at the "ROSATOM" enterprises	E.A. Losenko, V.V. Sviridova, FSUE VNIIA, Moscow, V.Yu. Popyrin, JSC "Novosibirsk Chemical Concentrates Plant", Novosibirsk, M.A. Semenov, S.L. Levunin, FSUE "PA "Mayak", Ozersk., Russia
8.	The status of development of technique for the U and Pu identification by gamma-spectrometers with low resolution	N.V. Moshkina, V.V. Sviridova, FSUE VNIIA, V.V. Talanov, FSUE SSC RF - IPPE, Obninsk, M.A. Semenov, FSUE "PA "Mayak", Ozersk
9.	Operability analysis of the weighing systems supplied by the U.S. NL to weigh NMs at the Siberian Chemical Combine	I.S. Shishkov, A.P. Yarygin, JSC "Siberian Chemical Combine", Seversk
10.	Portable Equipment Development and Testing for NM Detection and Express-Identification	S.F. Razinkov, D.A.Sivachev, V.V.Stepashkin, A.M.Kokorin, S.V.Tsybriaev, S.E. Kondratov, D.V. Glukhodedev, G.M.Skripka FSUE RFNC VNIIEF, Sarov
11.	The drawing experience of the machine-reading marking on the NMCA subjects at IPPE	V.G. Dvuchsherstnov, V.I. Regushevski, FSUE SSC RF - IPPE, Obninsk
12.	On the implementation of criteria for the anomalies detection in process of physical inventory taking at MBA where NM is transformed	V.K. Goryunov FSUE SSC RF - IPPE, Obninsk
13.	Possible Use of Gadolinium-Doped Liquid Scintillators as an Alternative to He-3 Counters in the Moderator	I.A. Ivanin, A.E. Shmarov, FSUE RFNC VNIIEF, Sarov