

President of the Symposium:

F. J. Dahlkamp, Germany

Programme Committee:

Chair: C. Ganguly
J. Slezak

Members: R. Vance, NEA; G. Zaluski, CAN;
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R. Villas Boas, BRA; X. Liu, CPR;
P. Bruenton, FRA; A. Boytsov, RUS;
F. Killar, NEI; S. Kidd, WNA

IAEA Secretariat:

Scientific Secretaries: C. Ganguly
J. Slezak

Rapporteurs: P. Waggitt
H. Tulsidas

Conference Coordination: E. Posta
T. Alexander

Administrative Support: K. Ajvazi

Location of the Symposium:

International Atomic Energy Agency
Vienna International Centre (VIC)
Building C
IAEA Board Room
Wagramer Strasse 5
1400 Vienna
Austria

Tel.: (43 1) 2600 21336

Fax: (43 1) 2600 29325

Working Language: English

Resolutions: No resolutions may be submitted for consideration on any subject; no votes will be taken.

TIMETABLE

MONDAY, 22 June 2009

08:00-10:00 Registration
10:00-12:30 Opening Session
12:30-14:00 Lunch Break
14:00-15:35 Topical Session 1
15:35-16:05 Coffee/Tea Break
16:05-18:20 Topical Session 1 (cont'd)
18:20-18:30 Discussions and Summary
19:00-20:30 IAEA Cocktail Reception

TUESDAY, 23 June 2009

09:00-10:00 Topical Session 2
10:00-10:30 Coffee/Tea Break
10:30-11:10 Topical Session 2 (cont'd)
11:10-11:20 Discussions and Summary
11:20-12:30 Topical Session 3
12:30-14:00 Lunch Break
14:00-15:30 Topical Session 3 (cont'd)
15:30-16:00 Coffee/Tea Break
16:00-17:15 Topical Session 3 (cont'd)
17:15-17:30 Discussions and Summary

WEDNESDAY, 24 June 2009

09:00-10:20 Topical Session 4
10:20-10:50 Coffee/Tea Break
10:50-12:30 Topical Session 4 (cont'd)
12:30-12:40 Discussions and Summary
12:40-14:00 Lunch Break
14:00-15:45 TC Session
15:45-16:15 Coffee/Tea Break
16:15-17:30 TC Session (cont'd)
17:30-18:00 Discussions, Summaries and Recommendations

14:00-17:30 Poster Session

THURSDAY, 25 June 2009

09:00-10:30 Topical Session 5
10:30-11:00 Coffee/Tea Break
11:00-12:30 Topical Session 5 (cont'd)
12:30-14:00 Lunch Break
14:00-15:30 Topical Session 5 (cont'd)
15:30-15:40 Discussions and Summary
15:40-16:00 Coffee/Tea Break
16:00-17:30 Topical Session 6
17:30-17:45 Discussions and Summary
19:30 Social Dinner sponsored by Cameco Corporation, Canada at Melker Stiftskeller, 1st district Vienna, Schottengasse 3
Tel: 533 55 30
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FRIDAY, 26 June 2009

09:30-09:50 Introductory Speech
09:50-10:10 Panelists' Introductions
10:10-11:45 Discussions
11:45-12:30 Closing Remarks

Posters will be on display throughout the Symposium.

A poster session will be held on Wednesday from 14:00 to 17:30.

MONDAY, 22 June 2009**08:00-10:00 Registration****10:00-12:30 OPENING SESSION**

Y. Sokolov
Deputy Director General
IAEA

M. McMurphy
Keynote Speaker
France

F. J. Dahlkamp
President of the Symposium
Germany

R. Vance
Uranium Group Secretariat
OECD/NEA

C. Ganguly
Scientific Secretary
IAEA

J. Slezak
Scientific Secretary
IAEA

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
111	Y. Sokolov	IAEA	Welcome address
55	F.J. Dahlkamp	Germany	The uranium world in transition from stagnancy to revival
112	C. Ganguly, J. Slezak	IAEA	IAEA activities on uranium resources and production and databases for the nuclear fuel cycle
113	M. McMurphy	France	Keynote address
72	R. Vance	OECD/NEA	A long-term view of uranium supply and demand

12:30-14:00 Lunch Break

14:00-18:30 **TOPICAL SESSION 1**
Uranium markets and economics

Chair: **R. Vance, OECD**
Co-chair: **A. Boytsov, Russian Federation**

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
52	G. Capus	France	Nuclear power has a bright outlook and information on uranium resources is our duty
85	K. Welham	United Kingdom	4 years on: Review of Market Developments
97	M. Roche	Australia	Uranium Stewardship – the unifying foundation
114	A. Petoe	IAEA	Safeguards obligations related to uranium/thorium mining and processing

15:35-16:05 **Coffee/Tea Break**

7	A. McKay	Australia	A review of uranium resources, production and exploration in Australia
22	J. Marlatt	Canada	Paradigmatic shifts in exploration process: The role of industry-academia collaborative research and development in discovering the next generation of uranium ore deposits
118	O. Gorbatenko	Kazakhstan	Uranium markets and economics: Uranium production cost
79	A. Boytsov	Russian Federation	Uranium mining capabilities in the Russian Federation
33	W. Cong	China	Nuclear industry in China
63	R. Gupta	India	Technical developments in uranium mining and milling in India

18:20-18:30 **Discussions and Summary**

19:00-20:30 **IAEA Cocktail Reception**

TUESDAY, 23 June 2009**09:00–11:20** **TOPICAL SESSION 2:
Social licensing in UPC****Chair:** **M. Iles, Australia**
Co-chair: **M. Fairclough, Australia**

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
104	R. Gladue	Canada	AREVA's social licensing experience in Northern Saskatchewan, Canada
75	A. Dari	Niger	Social licensing in the uranium cycle production (case of Niger)
115	P. Waggitt	IAEA	Uranium mining and stakeholder engagement in the Northern Territory, Australia

10:00-10:30 **Coffee/Tea Break**

106	Y. Marignac	France	Environmental protection in the management of closed uranium mining sites in France: a pluralistic expertise approach for assessing short, medium and long term options
21	M. Franklin	Brazil	Social license and environmental protection: When compliance with regulations is not enough

11:10-11:20 **Discussions and Summary**

11:20–17:30

TOPICAL SESSION 3
Uranium exploration and geology

Chair: C. Macdonald, Canada
Co-chairs : M. Matolin, Czech Republic
A. Bisset, Australia
M. Cuney, France

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
81	L. Ainslie	South Africa	Uranium exploration, resources and production in South Africa
9	M. Fairclough	Australia	South Australian Uranium Mineral Systems: A spectrum of mineralization across the ages and across styles ('uranium is where you find it')
61	A. Chaki	India	An overview of uranium exploration strategy in India
12:30-14:00	Lunch Break		
1	A. Khaldi	Algeria	The exploration of the uranium in the Hoggar, Central Sahara. Algeria: Typology of uraniferous occurrences discovered and prospects revival
43	L. Gonzalez-Oviedo	Colombia	Uranium exploration in Paipa and Iza area (Colombia), new contributions (preliminary report)
88	F. Howari	USA	Potential and existing uranium resources of the Middle East and North Africa
45	M. Matolin	Czech Republic	Levelling airborne and ground gamma-ray spectrometric data to assist uranium exploration
15:30-16:00	Coffee/Tea Break		
29	G. Wood	Canada	The application of borehole seismic techniques in mine development at the millennium
11	A. Bisset	Australia	Applied electromagnetic methods in the search for shallow unconformity related uranium mineralisation in Australia
94	S. Fedyanin	Uzbekistan	Geophysical testing of low-grade uranium ore technogenic formations
17:15-17:30	Discussions and Summary		

WEDNESDAY, 24 June 2009

09:00– 12:40 **TOPICAL SESSION 4**
Uranium mining and processing

Chair : **C. Edwards, Canada**
Co-chairs : **V. Benes, Czech Republic**
 A. Castillo, Argentina

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
79	A. Boytsov	Russian Federation	Elkon – A new world class Russian uranium mine
86	G. Catchpole	USA	Licensing status of new and expanding in-situ recovery uranium projects in the United States
91	N. W. Reynolds	USA	Uranium potential and socio-political environment for uranium mining in the eastern United States of America with emphasis on the Coles Hill uranium deposit
56	M. Csovari	Hungary	Experience gained from the former uranium ore processing and the remediation of the site in Hungary

10:20-10:50 **Coffee/Tea Break**

23	C. Edwards	Canada	Underground milling of uranium ores
17	L. A. Gomiero	Brazil	Converting the Caetité mill process to enhance uranium recovery and expand production
12	D. Marsh	Australia	Development and expansion of the Langer Heinrich Operation in Namibia
87	J. Otton	USA	In-situ recovery uranium mining in the United States: Overview of production and remediation
110	A. Castillo	Argentina	Uranium production cycle: Argentina situation

12:30-12:40 **Discussions and Summary**

12:40-14:00 **Lunch Break**

14:00-17:30 **POSTER SESSION, Poster Area C04**

14:00-18:00 **TC WORKSHOP, Board Room**

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
	TBD		TC structure and strategy
	TBD		TC procedures

15:45-16:15 **Coffee/Tea Break**

6	L. Lopez	Argentina	Overview of the recent IAEA national technical cooperation projects on uranium exploration in Argentina
116	J. Slezak	IAEA	Technical officer's experience in supporting TC projects implementation

17:30-18:00 **Discussions, Summaries and
Recommendations**

THURSDAY, 25 June 2009

09:00–12:30 **TOPICAL SESSION 5**
Environmental and regulatory issues

Chair: **F. Killar, NEI**
Co-chairs: **M. Franklin, Brazil**
 S. Saint-Pierre, WNA
 V. Riazantsev, Ukraine

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
10	M. Iles	Australia	Uranium in aquatic sediments: Where are the guidelines?
30	S.B. Xie	China	The composite interception technology of biochemistry for uranium pollution control at the uranium tailings
15	H. Maerten	Germany	Uranium ISR mine closure – general concepts and model-based simulation of natural attenuation for South-Australian mine sites
100	E. Bonnardel-Azzareli	WNTI	An overview of the international transport of uranium concentrates

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

78	F. Carvalho	Portugal	Environmental remediation and radioactivity monitoring of uranium mining legacy in Portugal
24, 25	D. Schryer, G. Soare	Canada	The regulatory perspective on radiation protection in Canadian uranium mines / Regulatory oversight of uranium mines and mills
76	J. F. Facetti	Paraguay	Uranium mining in Paraguay: An opportunity to improve the environmental regulations in Paraguay
26	D. Chambers	Canada	Issues in developing a new uranium mine in Canada

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

14:00-15:40 **TOPICAL SESSION 5 (CONT'D)**
Environmental and regulatory issues

Chair: **F. Killar, NEI**
Co-chairs: **M. Franklin, Brazil**
 S. Saint-Pierre, WNA
 V. Riazantsev, Ukraine

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
54	P. Schmidt	Germany	Uranium mining and milling environmental liabilities management in Germany – lessons learned during almost two decades of implementation of the WISMUT rehabilitation project
84	V. Riazantsev	Ukraine	Screening assessment of radionuclide migration in groundwater from the 'Dneprovskoe' tailings impoundment (Dneprodzerzhynsk City) and evaluation of remedial options
71	W. Swiegers	Namibia	The Namibian uranium mining model: Voluntary sector initiatives underpinned by a regulatory safety net ensures best practice
98	S. Saint-Pierre	WNA	WNA's worldwide overview on front-end nuclear fuel cycle growth, health, safety and environmental issues

15:30-15:40 **Discussions and Summary**

15:40-16:00 **Coffee/Tea Break**

16:00-17:45 **TOPICAL SESSION 6**
Human resources development

Chair: **M. Cuney, France**
Co-Chairs: **A. Chaki, India**
 J. Trojacek, Czech Republic

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
108	M. Cuney	France	Training and education in uranium geology and exploration
109	J. Trojacek	Czech Republic	WNU-School of uranium production: An international training centre
90	S. Brown	USA	The United States uranium recovery industry and the current nuclear renaissance: A health physicists perspective
117	J. Slezak	IAEA	The IAEA support to training and education in uranium production cycle – a new task
53	J.L. Petitclerc	France	Cooperation with emerging countries in advanced mining training programmes involving an industrial partner

17:30-17:45 **Discussions and Summary**

19:30 **Social Dinner**

FRIDAY, 26 June 2009

09:30–12:30 **PANEL DISCUSSION**

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
27	G. Grandey	Canada	Introductory speech: Building for success in troubled times

09:50-10:10 **Panelists' Introductions**

10:10-11:45 **Discussions**

11:45-12:00 **Closing remarks by the
President of the Symposium**

12:00-12:30 **F. J. Dahlkamp and the
Scientific Secretaries
C. Ganguly and J. Slezak**

POSTERS

Posters will be on display throughout the Symposium.

Poster authors are requested to be at their posters
at the Poster Session on Wednesday, 23 June from 14:00–17:30.

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
99	S. Kidd	WNA	Developments on uranium
34	E. Batjargal , E. Sodnom	Mongolia	Uranium in Mongolia
14	E. Becker	Australia	The geology of the Kayelekera uranium mine
4	R.E. Bianchi	Argentina	Exploration for uranium in Argentina: New policies of reactivation
28	C. Cosma, L. Balu, N. Enescu, G. Wood , C. O'Dowd	Canada	Advanced seismic techniques applied to structural characterization of mine development sites
89	P. Goodell , F. Howari, A. Salman	USA	Proposed metallogenic and tectonic classification of uranium ore deposits types
24	M.E. A. Ibrahim	Egypt	Uranium and REE resources of South Eastern Desert of Egypt
31	X. Liu , J. Pan	China	Spatio-temporal distribution of uranium deposits in Mesozoic – Cenozoic Era in China
5	L. López	Argentina	The main geological types of uranium deposits in Argentina
35	O.F. Matine , J.M. Marcelina	Mozambique	Uranium exploration and exploitation in Mozambique – past, present and future
60	P.S. Parihar , R. Mohanty, A. Majumdar	India	Uranium mineralization in late cretaceous sandstones in parts of Meghalaya, India
26	L.K. Nanda , V.J. Katti, P.B. Maithani	India	Prospects and potentialities for uranium in North Delhi Fold Belt: A case study from Rohil, Rajasthan, India
27	A.K. Rai , S. Zakaulla, A. Chaki	India	Proterozoic stratabound carbonate rock (dolostone) hosted uranium deposits in Vempalle formation in Cuddapah basin, India
92	W. Sierra	Uruguay	Uranium prospecting in Uruguay
32	F. Nie, X. Liu , Z. Yan, M. Jiang, A. Chen, K. Shen	China	Interlayered oxidation mineralization of uranium in Sandstone: A case from Bayanwula, Erlan Basin, Inner Mongolia, China
51	B. Oluma	Ethiopia	Uranium exploration in Ethiopia
13	A. Otto, J. Jory, J. Thom, E. Becker	Australia	Metasomatic uranium mineralization of the Mount Isa North Block
28	U. Konka , K.K. Achar, P.B. Maithani	India	Proterozoic unconformity related uranium mineralization in the Srisailam and Palnad Sub-Basins of Cuddapah Basin, Andhra Pradesh, India
48	S.I. Rabie	Egypt	Nuclear Materials Authority (NMA) activities in exploring its uranium resources, Egypt

<i>No. of Paper IAEA-CN-175/</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
95	I. Rivas , D. Salas	Venezuela	Uranium prospecting in Venezuela
74	M.O. El Hamet , Z. Idde	Niger	Uranium resources of Niger
8	J.L. Mair	Australia	The giant Kvanefjeld specialty metals project, Greenland: A future uranium supplier
2	A. Becis , H. Guettaf, K. Ferhat, T. Semaoune, K. Hanou, F. Ferrad, K. Yacoubi	Algeria	Elaboration of uranium ore concentrate by direct precipitation
40	C. Chayavadhanangkur	Thailand	The extraction of uranium and thorium from Monazite in Thailand
47	E. De La Torre , A. Guevara	Ecuador	Phosphoric ore treatment by roasting it with sodium carbonate and leaching it with ammonium citrate for the recovery of soluble phosphate and uranium
68	V. Gostilo , A. Sokolov, V. Kuzmenko	Latvia	On-line spectrometric control of technological processes in nuclear fuel cycle
7	A. McKay , I. Lambert, L. Carson	Australia	What is world's best practice for in situ leach uranium mining?
62	A. K. Sarangi	India	Geological characteristics of Indian uranium deposits influencing mining and processing techniques
65	A.K. Suri , S.K. Ghosh, N.P.H. Padmanabhan	India	Recent pilot plant experience on alkaline leaching of low grade uranium ore in India
80	I. Solodov	Russian Federation	The experience of using oxidants for ancient roll-front type uranium deposits In Situ Leach mining in the Russian Federation
18	A. Costa Barreto , E.M. Luttenbarck Batalha, A.D.L. Mayerhoff	Brazil	Legal aspects related to the decommissioning, operation and implementation phases of the uranium mines belonging to the Indústrias Nucleares do Brasil - INB
19	E.M. Luttenbarck Batalha , A. Costa Barreto, A.D.L. Mayerhoff	Brazil	Licensing process of a uranium ore mining and milling facilities located in the State of Bahia, Brazil
16	C.G. Silveira da Costa	Brazil	Radiation safety and environmental protection issues of uranium mines and mills in Brazil
93	S.M. Hall , J.K. Otton	USA	Environmental impacts and issues of In-Situ leach uranium mining in the United States of America
64	A.H. Khan , V.D. Puranik, H.S. Kushwaha	India	Radiological safety in mining of low grade uranium ores: Four decades of monitoring and control in Indian mines
44	M. Neznal , I. Gnojek, L. Thinová, L. Neubauer	Czech Republic	Temporal changes of radioactive contamination of Ploučnice River Inundation Area
22	A.G.F. Said	Egypt	The radiation protection programme at the Nuclear Materials Authority of Egypt

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Representatives of the press, radio, television or other information media and members of the public, the latter as "observers", may also be authorized to attend, but without the right to take part in the proceedings.

PUBLICATIONS

Proceedings

The proceedings of the symposium, including the findings and recommendations, will be published by the IAEA as soon as possible after the symposium.

Orders

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STI/PUB/1259	The Uranium Production Cycle and Raw Materials for the Nuclear Fuel Cycle – Supply and Demand, Economics, the Environment and Energy Security, Proceedings of an International Symposium held in Vienna, 20 - 24 June, 2005	2006

TECDOCs No.

1363	Guidelines for Radioelement Mapping Using Gamma Ray Spectrometry Data	2003
1396	Recent developments in uranium resources and production with emphasis on in situ leach mining	2004
1403	The long term stabilization of uranium mill tailings, Final report of a CRP 2000-2004	2004
1409	Treatment of liquid effluent from uranium mines and mills, Report of a CRP 1996-2000	2004
1425	Developments in uranium resources, production, demand and the environment	2005
1428	Guidebook on environmental impact assessment for in situ leach mining projects	2005
1463	Recent developments in uranium exploration, production and environmental issues	2005

FORTHCOMING SCIENTIFIC MEETINGS SCHEDULED BY THE IAEA

2009

Int'l Conference on Opportunities and Challenges for Water Cooled NPP's
in the 21st Century
27-30 October, Vienna, Austria

Int'l Conference on Fast Reactors and Related Fuel Cycles - Challenges
and Opportunities
7-11 December, Kyoto, Japan

Int'l Conference on Effective Nuclear Regulatory Systems
14-18 December, Cape town, South Africa

For information on forthcoming scientific meetings, please consult the
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2010

Int'l Conference on Human Resource Development for Introducing and
Expanding Nuclear Power Programmes
14-18 March, Abu Dhabi, United Arab Emirates

Int'l Conference on Management of Spent Fuel from Nuclear Power
Reactors
31 May-4 June, Vienna, Austria

Int'l Conference on Operational Safety Experience and Performance of
Nuclear Power Plants and Fuel Cycle Facilities
21-25 June, Vienna, Austria

23rd IAEA Fusion Energy Conference
11-16 October, Daejeon, Republic of Korea

Int'l Conference on Challenges Faced by Technical and Scientific Support
Organizations (TSO) in Enhancing Nuclear Safety and Security
25-29 October, Tokyo, Japan

Symposium on International Safeguards: Preparing for Future Verification
Challenges
1-5 November, Vienna, Austria

Int'l Symposium on Standards, Applications and Quality Assurance in
Medical Radiation Dosimetry
9-12 November, Vienna, Austria

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