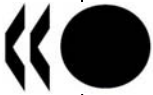


Unclassified

NEA/RWM/SORPTION(2005)2



Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

05-Oct-2005

English - Or. English

**NUCLEAR ENERGY AGENCY
RADIOACTIVE WASTE MANAGEMENT COMMITTEE**

**NEA/RWM/SORPTION(2005)2
Unclassified**

Sorption Project

Workshop on Sorption: Conclusion of NEA Sorption Project Phase II and Status Analysis of Sorption Modelling for PA

Final Programme

**10-11 October 2005
NEA HQ
Issy-les-Moulineaux, France**

JT00190956

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English - Or. English



WORKSHOP ON SORPTION:

***CONCLUSION OF NEA SORPTION PROJECT PHASE II
AND STATUS ANALYSIS OF SORPTION MODELLING FOR PA***

***NEA BUILDING, 7TH FLOOR,
ISSY-LES-MOULINEAUX (PARIS, FRANCE)***

10 - 11 OCTOBER 2005

A workshop organised by the
OECD/Nuclear Energy Agency

Final Programme

1. WORKSHOP AIMS

The goals of the workshop are to:

- provide an overview and illustration of the main project results, with emphasis on merits and limitations of thermodynamic sorption models (TSMs) and recommendations on their use;
- share ideas and stimulate discussion on the best use and practical implementation of “top-down” and “bottom-up” TSM approaches for PA-relevant materials of different complexity;
- achieve a clear picture of the importance of uncertainty in K_d for various performance assessments, of the potential of TSMs for strengthening the respective safety cases, and of the corresponding present and plausible future needs for TSM-based quantification of radionuclide sorption.

2. WORKSHOP STRUCTURE

The workshop is organised into the following main sessions:

- *Session I:* Key results of the NEA Sorption Project, Phase II;
- *Session II:* Thermodynamic sorption model (TSM) approaches for complex materials;
- *Session III:* Implementation of TSMs in PA programmes, present status, future plans, challenges & needs.

Annex 1 presents the final agenda of the workshop.

3. WORKSHOP CHAIRPERSONS

During the sessions, the work of the chairperson will be to introduce speakers, keep the session on schedule, keep in mind the objectives of the workshop, and motivate participants for discussion.

4. PRACTICAL INFORMATION/ORGANISATION

The workshop is an NEA workshop and organised in the framework of the OECD Nuclear Energy Agency, Sorption Project.

The OECD/NEA is kindly hosting the workshop at Issy-les-Moulineaux, France on 10 and 11 October 2005.

5. PARTICIPATION

Participation in the workshop is limited to approximately 50 persons.

6. WORKING LANGUAGE

English will be the working language of the workshop.

7. ORAL PRESENTATIONS

Presenters are requested to provide an electronic version of their oral presentations in advance of the workshop to the NEA Secretariat (Katia-Karina Le Bot, Katia-Karina.lebot@oecd.org with copy to Sylvie Voinis, sylvie.voinis@oecd.org).

8. REPORTING

The workshop will be reported in the form of a short report consisting of a short summary of main findings (about 5 pages), the agenda of the workshop and the list of participants.

9. LOCAL ARRANGEMENTS

The workshop will take place on 7th floor at NEA HQ in Issy-les-Moulineaux, France.
Please look at: <http://www.nea.fr/html/general/nea-access.html>

Accommodation

Please look at [<http://www.nea.fr/html/general/hotels.html>] to get a list of hotels near the NEA.

FINAL AGENDA

Day 1 - 10 October 2005

09:00 9:30	Introduction Welcome, purpose and topics of workshop Overview of Sorption Project Phase I & II	<i>M. Askarieh, S. Voinis</i>
09:30-10:30	Session I: Key results from Phase II <ul style="list-style-type: none"> • Complexity of PA-relevant substrates and relevance for sorption models • Key results and assessment of sorption models • Key issues in the consistent application of thermodynamic sorption models (TSMs) • Management of uncertainty in K_d • Recommendations for TSM approaches 	Chair: <i>M. Askarieh</i> <i>J. Davis, M. Ochs, T. Payne</i>
10:30-11:00	Coffee break	
11:00-12:30	Session I, (cont'd).	Chair: <i>M. Askarieh</i>
12:30-14:00	Lunch	
14:00-15:00	Session II: Thermodynamic sorption model (TSM) approaches for complex materials Part I: Introduction and examples <ul style="list-style-type: none"> • Introduction to the session • Examples: <ul style="list-style-type: none"> ○ Single minerals in clay/tuff systems ○ Bentonite ○ Sediments, weathered rock/fracture filling 	Chair: <i>S. Altmann</i> <i>S. Altmann</i> <i>D. Turner</i> <i>M. Ochs</i> <i>J. Davis</i>
15:30-16:00	Coffee break	
16:00-18:00	Session II, (cont'd) Part II: Application of thermodynamic sorption models: strengths and limitations of “top-down” and “bottom-up” approaches, practical issues <ul style="list-style-type: none"> • Introduction: Different models for different tasks • Model parameters (fitted, other sources, chemical plausibility), data needs/bases, TDB • Practical usefulness and scientific defensibility • Application to intact systems, link with transport 	Chair: <i>S. Altmann</i> <i>M. Ochs</i> <i>J. Davis, T. Heath, J. Lützenkirchen</i> <i>T. Payne, V. Brendler</i> <i>J. Davis, M. Ochs</i>
18:00	Closing of sessions I and II	

Day 2 - 11 October 2005

	Session III: Implementation of TSMs in PA programmes, present status, future plans & challenges, needs	<i>Chair: M. Randall</i>
09:00-10:30	Summary of Day 1, outlook on Day 2	<i>S. Altmann</i>
	Presentations and detailed discussions: Selection of K_d for PA as a function of (evolving) conditions: Examples and viewpoints of PA and regulatory agencies	
	<ul style="list-style-type: none"> • Bentonite EBS 	<i>E. Giffaut, P. Sellin</i>
	<ul style="list-style-type: none"> • Clayrock (Boom/Opalinus Clay) 	<i>A. Dierckx/L. Wang B. Schwyn</i>
10:30-11:00	Coffee break	
11:00-12:00	Presentations and detailed discussions: cont.	
	<ul style="list-style-type: none"> • Near-surface formations/US sites 	<i>D. Turner, J. Davis</i>
12:00-13:30	Lunch	
13:30-15:00	Presentations and detailed discussions: cont.	
	<ul style="list-style-type: none"> • Crystalline rock/fractures • Viewpoint of regulators 	<i>L. Knight H. Wanner, B. Sagar, B. Stromberg</i>
15:00-15:30	Coffee break	
15:30-17:00	Session III: Discussion	<i>Chair: P. Hernan</i>
	<ul style="list-style-type: none"> • Critical/less critical issues for using TSMs in PA • Foreseeable requirements for successful future TSM applications in PA • Discussion of priorities for a possible Phase III 	<i>Panel: M. Askarieh, S. Altmann, J. Bruno, J. Davis, A. Dierckx, , P. Larue, M. Hakanen, M. Ochs, S. Voinis</i>
17:00-17:15	Closing of the session III and workshop	<i>M. Askarieh</i>