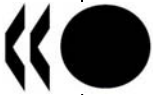


**Unclassified**

**NEA/RWM/IGSC(2004)16**



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

**05-Sep-2005**

**English - Or. English**

**NUCLEAR ENERGY AGENCY  
RADIOACTIVE WASTE MANAGEMENT COMMITTEE**

**NEA/RWM/IGSC(2004)16  
Unclassified**

**Integration Group for the Safety Case (IGSC)**

**2nd AMIGO WORKSHOP ON:  
LINKAGE OF GEOSCIENTIFIC ARGUMENTS AND EVIDENCE IN SUPPORTING THE SAFETY  
CASE**

**FINAL PROGRAMME**

**20-22 September 2005  
Toronto, Canada**

**JT00188767**

**Document complet disponible sur OLIS dans son format d'origine  
Complete document available on OLIS in its original format**

**English - Or. English**





**2<sup>nd</sup> AMIGO Workshop on**  
**LINKAGE OF GEOSCIENTIFIC ARGUMENTS AND**  
**EVIDENCE IN SUPPORTING THE SAFETY CASE**

**TORONTO, CANADA**

**20-22 SEPTEMBER 2005**

**A workshop organised by the**  
**OECD/NEA**

**and hosted by**  
**OPG**

**FINAL PROGRAMME**



## 1. GENERAL CONTEXT

AMIGO is the OECD/NEA international project on “Approaches and Methods for Integrating Geologic Information in the Safety Case”. It is implemented by a Steering Group<sup>1</sup> formed from the Integration Group for the Safety Case (IGSC) and the NEA Secretariat. The fundamental purpose of AMIGO is to enhance geoscience contributions to the safety case for disposal of nuclear waste through the exchange of information and ideas on the collection and integration of geologic information in repository siting and design, safety assessment models and other studies that could contribute to overall arguments for safety.

AMIGO is concerned with a wide range of geological information, including geophysical, hydrogeological, geochemical and structural. In the past, the emphasis on geoscience contributions has been on the development of a description of the geosphere for use in safety assessment modelling. It is now fully recognized, however, that geoscience also plays an important role in activities that include site selection, repository design, the development and application of alternative conceptual models of the geosphere, and (more generally) development of multiple lines of evidence to support a safety case. AMIGO is also concerned with techniques to strengthen the communication and understanding of geoscience contributions to the safety case.

AMIGO is structured as a series of bi-annual topical workshops that examine various elements of the iterative site-characterisation process and its co-ordination with safety assessment and the safety case. Its general focus is on the topics:

1. role of the geosphere and its representation in the safety case;
2. capabilities of site characterisation versus the needs of safety assessment modelling and the safety case; and
3. procedures that encourage integration of a wide range of geoscience information to better contribute to the safety case.

Specific issues of interest include practical experience in geologic data collection methods including traceability, alternative and complementary interpretative methods, conceptual geosphere model development, building confidence in numerical system analyses, exploring reasoned geological arguments, iteration of data collection and modelling, and presentation to a broad range of audiences of geosphere contributions to the safety case. A proceedings and summary are prepared for each workshop.

Most participants at the AMIGO workshops are site characterisation and safety assessment practitioners with experience in either sedimentary or crystalline rock settings. The AMIGO-1 workshop was held in Yverdon-les-Bains, Switzerland on 3-5 June 2003, hosted by the Swiss National Cooperative for the Disposal of Radioactive Waste (Nagra), the Swiss Federal Nuclear Safety Inspectorate (HSK) and the University of Bern. The AMIGO-2 workshop will be held in Toronto, Canada on 20-22 September 2005, hosted by Ontario Power Generation (OPG).

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1. Klaus-Jürgen Röhlig (GRS Köln, Chair), Johan Andersson (SKB representative), Rick Beauheim (SNL), Gérard Bruno (IRSN), Andreas Gautschi (Nagra), Mark Jensen (OPG), Patrick Lebon (Andra), and Sylvie Voinis (NEA Secretariat).

## 2. FOCUS OF THE AMIGO-2 WORKSHOP

The main thrust of AMIGO-2 is how geoscientific arguments and evidence are linked in supporting a safety case. Emphasis is given to the extrapolation and transfer of geoscientific information in time and space as well as to the practicalities of collecting, linking and communication of this information. Presenters are directed to address the following specific topic(s) and related questions for presentation during the second plenary session.

- Potentials and limits of the use of geohistory to understand current features and conditions and possible future evolutions. Discussion will include observations and conclusions concerning the development of scenarios for safety assessments and consider the following questions:
  - Is the interpretation unique?
  - Which uncertainties most affect the predictions?
  - How do we deal with these uncertainties?
  - How can present and past data be used to extrapolate future behaviour?
  - How can geohistory support scenario development?
- The transferability of data and information from other sites (repository sites, natural analogues or “generic” URLs). Discussion will consider the following questions:
  - Which data and information did you transfer and for what purpose?
  - Is there uncertainty associated with the transfer and how do you manage it?
  - Is the transfer specific to a particular site or has it broader application?
  - In a broader sense, what knowledge of concepts and processes is most amenable to transfer between sites?
- Potentials and limits of the collection of geoscientific data and information for characterising the site. Questions to be examined include the following:
  - Does avoiding impairment of the long-term safety of a site place restrictions on site characterisation?
  - What types of data have been integrated?
  - What uncertainties most affect site characterization?
  - How are these uncertainties addressed?
- Requirements for documentation of geoscientific data and understanding used to characterize a repository site (often called geosynthesis) and to support development of the safety case and its communication. This topic will deal with the following questions:
  - How do you balance diverse input from various disciplines to synthesise lines of evidence?
  - What regulatory guidance exists for structuring the documentation?
  - What are the needs and mechanisms for interaction between regulators and implementers during the site characterisation?
  - What processes exist to deal with issue resolution between implementer and regulator?
  - How do you ensure that the documentation supports the needs of the scientific community reviewing the safety assessment?

### 3. SCIENTIFIC PROGRAM COMMITTEE, CHAIRPERSONS AND RAPPORTEURS

The AMIGO-2 Scientific Programme Committee<sup>2</sup> is responsible for the workshop organisation, and specifically responsible to define the general format of the workshop and conditions of participation, choose and describe the technical sessions and working groups to be convened, identify chairpersons and rapporteurs for plenary and working group sessions, prepare the instructions for the authors, and review the proceedings.

Each session of the workshop and each working group will have a chairperson whose responsibilities are to introduce speakers and keep the session on schedule, steer discussion and questions to follow the objectives of the workshop, encourage and motivate interactions, and assist the rapporteur to prepare (1) an oral summary of discussions for the round-up plenary session and (2) a written contribution for the proceedings. The chairpersons will also review the workshop proceedings prior to publication.

Each working group will have a rapporteur, selected from the AMIGO Steering Group. The responsibilities of the rapporteur are (with assistance from the chairperson) to prepare and present an oral summary of the working group discussion at the round-up plenary session of the workshop and prepare a written summary of the working group discussions and conclusions for inclusion in the workshop proceedings.

### 4. WORKSHOP STRUCTURE

The workshop will last three days, and will be organised into three plenary sessions plus a working group session with four parallel groups.

- The first *plenary session* will be presentations by the workshop host, OPG.
- The second *plenary session* will be devoted to presentations related to the four topics described in Section 3. Oral presentations will be about 50 minutes in length, of which 5 to 10 minutes will be reserved for discussion.
- Three *Working Group sessions* (morning-afternoon-morning) will be devoted to discussion of the topics listed in Annex A. Each Working Group will typically include a range of specialists with expertise in geoscience, engineering, and integration activities. These Groups have two main tasks: (1) for the topic under discussion, compile information and recommendations that are relevant and pragmatic, especially for possible use internationally in supporting a safety case; and (2) develop suggestions to guide studies to support future safety cases. Introductory 10 to 15-minute presentations will be given pertinent to the topic of the working group to begin the first session.
- The final round-up *plenary session* will pull together conclusions of each Working Group and the workshop as a whole. Potential topics for subsequent workshops may also be discussed.

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2. Rick Beauheim (SNL, chairperson), Johan Andersson, (JA Streamflow; SKB representative), Bruce Goodwin (OPG representative), Mark Jensen (OPG, co-chairperson and host), Vincent Nys (AVN), Shizong Lei (CNSC), Georges Vigneron (Andra), and Sylvie Voinis (NEA Secretariat)

Two special topical presentations will serve as breaks for the working group sessions. These presentations are selected from fields other than nuclear waste management to give insight into how similar challenges are met by other geoscientists.

## **5. PARTICIPATION**

The AMIGO-2 Workshop is open to organisations of all NEA Member Countries active in the field of nuclear waste management. The aim of AMIGO is to share the experiences of geoscientists and safety assessors and so each participating organisation may nominate two representatives. All attendees are expected to take active part in the discussions at the Workshop.

## **6. MEETING LOGISTICS**

English is the working language of the Workshop and the proceedings. Oral presentations during the plenary sessions may make use of an overhead projector or a portable computer projector (for presentations using PowerPoint). Computer projectors will also be available in the working group meeting rooms. We encourage you to send an electronic version of your oral presentation in advance of the workshop.

## **7. INSTRUCTIONS FOR AUTHORS AND REPORTS**

The plenary sessions will consist of invited presentations addressing the main workshop topics. In addition, workshop participants are encouraged to present experiences from their national programmes related to the focus of AMIGO-2.

Authors should provide an extended abstract (approximately four pages including figures). A ready-to-be-published version should be supplied within one week of the end of the workshop. A one-page abstract is satisfactory for presentation in the working group sessions.

A compilation of abstracts will be distributed to all participants at the workshop. The workshop proceedings will be published by the NEA and will consist of a summary of the presentations, discussion, and lessons learnt at the workshop, the written summaries of the working group discussions, and the final written version of each presentation. The Scientific Programme Committee and members of the SG will review the proceedings before publication. A copy of the proceedings will be distributed free of cost to all Workshop participants. To facilitate publication of the proceedings, authors should carefully follow the instructions presented in ANNEX B because submissions will be reproduced without further editing or reformatting. Also attached is the Grant of Publication Rights, which should be filled in and duly signed by the author and returned by mail with a paper copy of your paper.



## 8. LOCAL ARRANGEMENTS

Local arrangements for the Workshop are being coordinated by Ontario Power Generation. The workshop will include a Workshop Dinner to be held 20 September and an optional technical tour of the Sir Adam Beck Hydraulic Development on 23 September.

Lunch will be provided as well as morning and afternoon coffee during the workshop. Questions regarding local arrangements should be made to Mark Jensen at [mark.jensen@opg.com](mailto:mark.jensen@opg.com) or +1 416 592 8672.

### *Accommodation*

The Kingbridge Centre  
125750 Jane Street  
King City (Toronto)  
Ontario, Canada  
L7B 1A3

Tel: +1 905 833 3086  
Fax: +1 905 833 3075  
[www.kingbridgecentre.com](http://www.kingbridgecentre.com)

**Room rates, which include breakfast and dinner, are estimated to be \$230 CDN. Participants should indicate accommodation requires nights 19/20/21/22 to OPG (see contact persons below)**

### *Transportation*

The Kingbridge Centre is located a 30-40 minute taxi ride from the Lester B. Pearson (Toronto) International Airport. The standard taxi fare is \$50 CDN. Transportation by bus will be provided for the Sir Adam Beck (Niagara Falls) technical tour on 23 September. On return to Toronto (18:00) arrangements will be made for drop-off at the Delta Chelsea Hotel in downtown Toronto.

## 9. REGISTRATION AND PARTICIPATION

The participation fee covers the cost for accommodations and the expenses of the two invited speakers for the topical presentations. **This fee is 350 Euros** and is to be paid **no later than the middle of September 2005**. Payment by credit card is not possible.

For payments in Euro:

Bank:	<b>JP Morgan, AG, Frankfurt, Germany</b>
Beneficiary:	OECD
Account:	6161603441
BLZ:	50110800
SWIFT/BIC:	CHASDEFX
IBAN:	DE95501108006161603441
Address:	Gruenburgverg, 2 D-60322 Frankfurt, Germany
Reference:	<b>AMIGO-2 Workshop- DY-3399</b> (please inform your bank to affix this reference)

For Payment in USD:

Bank:	<b>JP Morgan Chase Bank, New York, NY</b>
Beneficiary:	OECD
Account:	9492413100
ABA:	021000021
SWIFT/BIC:	CHASUS33
FEIN #:	521510681
Address:	1166 Avenue of the Americas, 14 <sup>th</sup> Floor New York, NY 10036, USA
Reference	<b>AMIGO-2 Workshop- DY-3399</b> <i>(please inform your bank to affix this reference)</i>

Alternatively, a cheque made payable to “**OECD**” can be sent to the attention of:

Sylvie Voinis  
OECD/NEA  
Waste Management Division  
12, Boulevard des Îles  
F-92130 Issy-les-Moulineaux

## 10. SECRETARIAT AND CONTACTS

The NEA is responsible for the scientific secretariat of the workshop. All technical questions in relation to the workshop should be addressed to the NEA Secretariat:

Sylvie Voinis	Tel: +33 (0)1 45 24 10 49
OECD/Nuclear Energy Agency	Fax: +33 (0)1 45 24 11 45
12, Boulevards des Îles	Eml: sylvie.voinis@oecd.org
F-92130 Issy-les-Moulineaux	

The representative from the host organisation is:

Mark Jensen	Tel: +1 416 592 8672
Ontario Power Generation	Fax: +1 416 592 7336
700 University Ave, H16-E22	Eml: mark.jensen@opg.com
Toronto, Ontario, M5G 1X6	
Canada	

## **AGENDA**





13:00

**PLENARY SESSION II**

**KEY TOPICS PRESENTATIONS**

*Chairperson: Klaus Röhlig*

*Co Chairperson: Shizong Lei*

**Speakers are invited to address the questions of Section 2**

Presentations will include 5 to 10 minutes for discussion.

- 13:00 - 13:50 **Potentials and Limitations of the Use of Geohistory for the Understanding of Current Features and Conditions and Possible Future Evolutions**  
*M. Laaksoharju (Geopoint, Sweden), M. Mantynen (Posiva Oy, Finland), and P. Pitkanen (VTT, Finland)*
- 13:50 - 14:40 **Transferability of Features and Processes from Underground Rock Laboratories and Natural Analogues - Use for Supporting the Swiss and French Safety Cases in Argillaceous Formations**  
*M. Mazurek (University of Bern, Switzerland), A. Gautschi, P. Marschall, and W.R. Alexander (Nagra, Switzerland), and G. Vigneron, P. Lebon, and J. Delay (Andra, France)*
- 14:40 - 15:10 **Break**
- 15.10 - 16:00 **Geoscientific Data Collection and Integration for the Waste Isolation Pilot Plant**  
*R. Beauheim and S. McKenna (SNL, USA), D. Powers (Consulting Geologist, USA), and R. Holt (University of Mississippi, USA)*
- 16:00 - 16:50 **Review of a Site Developer's Geoscientific Data and Site-Characterization Information to Support Repository Certification**  
*R.T. Peake, C. Byrum, and S. Ghose (EPA, USA)*
- 16:50 - 17:30 **Plenary discussion**
- 19:00 - 22:00 **Workshop Dinner**

**End of Day 1**

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**DAY 2 - 21 September 2005**


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**WORKING GROUP SESSIONS**

Workshop participants will be divided into four Working Groups. To this end, participants should come to the workshop with a clear view of what their organisation would like to attain through the workshop.

A chairperson will be designated for each Working Group. The chairperson's task will consist of motivating the discussion in the Working Group and taking care of the tasks to be addressed by the Working Group. A rapporteur will summarise the Working Group discussions in the final plenary session of the Workshop. The chairperson and rapporteur of each Working Group will jointly prepare a written synthesis of the main conclusions to be included in the Workshop proceedings. At least one member of the Scientific Programme Committee will participate in each Working Group.

- 09:00 - 09:15     **Introduction to the Working Groups** (*Format, agenda, topics, objectives, room locations, introduce chairpersons, etc.*)
- 09:15 - 10:30     **Parallel Working Group Sessions**
- 10:30 - 11:00                                     *Break*
- 11:00 - 11:45     **Geological Storage of CO<sub>2</sub> at the Weyburn Oil Field, Saskatchewan:  
Summary of Results of the IEA GHG Weyburn CO<sub>2</sub> Monitoring and  
Storage Project**  
*S. Whittaker (Saskatchewan Industry and Resources, Petroleum Geology  
Branch, Canada)*
- 11:45 - 13:00                                     *Lunch*
- 13:00 - 15:00     **Parallel Working Group Sessions**
- 15:00 - 15:30                                     *Break*
- 15:30 - 16:15     **Current Status of the OECD/NEA Project on “Natural Tracer Profiles  
Across Argillaceous Formations” (CLAYTRAC)**  
*M. Mazurek (University of Bern, Switzerland)*
- 16:15 - 17:30     **Parallel Working Group Sessions** (continued)

**End of Day 2**

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**DAY 3 - 22 September 2005**

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08:30 - 10:30 **Parallel Working Group Sessions**

10:30 - 11:00 *Break*

11:00 - 11:25 **Geosynthesis questionnaire and compendium: presentation and status**  
*K. Röhlig (GRS-K, Germany)*

11:25 - 11:45 **Field Trip Presentation** - an optional field trip to Niagara Falls is planed on Friday

11:45 - 13:30 *Lunch*

13:30 **PLENARY SESSION III**

**WORKING GROUP AND WORKSHOP SUMMARIES**

*Chairperson: Mark Jensen*

*Co-Chairperson: Georges Vigneron*

13:30 - 15:00 **Conclusions and related issues of each working group (20 minutes each + discussion)**  
*by rapporteur of each working group*

15:00 - 16:00 **Synthesis of the workshop, recommendations for further actions, and Final Discussion**  
*Chairperson and co-chairperson*

16:00 **Closing of the Workshop**

**End of the WORKSHOP**



*Annex A***WORKING GROUP SESSIONS****Topics and Questions****Working Group A: Geoscientific Indicators for Safety***Introductory Presentations:*

1. **Use of Geoscientific Arguments in the Nirex Phased Geological Repository Concept: Illustrative Desk Study** by *S. Norris, B. Breen, and L. Knight (UK Nirex Ltd)*
2. **Past Geologic, Climatic and Geomorphologic Forcing Influence on Present-day Hydrodynamics, a Key to Understanding Future Evolution: Example of the Paris Basin, France** by *S. Violette, A. Jost, and J. Gonçalvès (UMR.7619-Sisyphé, UMPC, France), and the “Paris basin modelling” team*

Working group A is a continuation of working group B of AMIGO 1, but participants should explore more deeply the issues surrounding geoscientific indicators for safety. The sessions will start with presentations (10 to 15 minutes) from volunteer members. The following outcomes are expected.

- List different geoscientific arguments or indicators for safety (with motivation) for various host rocks and sites. Consider dividing the arguments into those that support isolation or retention and discuss their applicability for different time frames.
- What actual measurable field evidence supports these arguments/indicators?
- What kind of field evidence would go counter to these safety arguments?
- What key messages are the most promising in terms of scientific credibility to contribute to the safety case. Possibly examine the same message but in terms of potential ease of communication.

**Working Group B: Communication of Geoscientific Safety Arguments**

Working Group B should address the communication of geoscientific safety arguments. What mode (method, type of information, specific arguments) works and does not work for audiences such as colleagues and peers, authorities and regulators, political decision makers, the academic community, and members of the general public (adult and youth). The following outcomes are expected.

- What are the actual experiences with respect to the stage of each programme?
- What is the place (for various audiences) of geoscientific arguments in relation to various other quantitative and qualitative topics like scenario and FEP assessment, simulated repository evolution for various scenarios, calculated dose or risk impacts, engineering

tests of materials, etc., when presenting a safety case to different audiences and with respect to various stages of the repository programme?

- Would we be better off focusing messages to the public on time scales of a few hundred years or a few generations?
- How do you handle the fact that geoscience interpretations seldom are unique and often are open to various interpretations?
- How do you handle expert controversy on a specific topic?

### **Working Group C: Realities of Site Investigation**

#### *Introductory Presentations:*

1. **Spatial Extension and Parameter Integration into the Safety Case – Examples from the Hungarian LLW/ILW and HLW Disposal Projects** by *F. Fedor and I. Szűcs, (MECSEKEREC Ltd., Hungary)*.
2. **Complex Branching Structure in Crystalline Rock- Treatment of Uncertainty in Safety Assessment** by *J. Geier (Clearwater Hardrock Consulting, USA)*.

Working Group C should provide first-hand *practical experience* related to limits imposed by the practicalities of site characterisation. Consider various host rocks and stages of the repository programme. The sessions will start with short presentations (10 to 15 minutes) from volunteer members. The following outcomes are expected.

- List concrete examples of limitations and their reason, e.g. impossibly long time frames, high degree of heterogeneity, potential for impairing safety features of the host rock, etc. In addressing these issues, consider the relation between what you can measure and what you would like to describe. For example, you can measure current groundwater composition at a few selected points and you wish to predict redox stability at depth over time frames relevant to repository safety. Another example is using the results from a small number of hydraulic tests to generate a heterogeneous 3-dimensional distribution of permeability.
- Can these limitations be handled by defensible uncertainty descriptions?
- What has been your experience in predicting properties/responses and then making comparisons with subsequent measurements? How much “after-fitting” was necessary? Did the exercise contribute to validation? What did it teach you about your abilities to characterise?
- What are the realities of transferability of data between sites? What can actually be transferred (data, conceptual models, evaluation procedures) and what could not?
- How have the experiences on possibilities and limitations influenced your investigation programme?
- How are the limits in what can be achieved factored into safety assessment and engineering?

**Working Group D: Assembly and Integration of Geoscientific Knowledge and Arguments**
*Introductory Presentation:*

1. **Assessment of Uncertainty and Confidence in Site Descriptive Models – Experience from the On-going Site Investigation Programme in Sweden** by *J. Andersson (JA Streamflow AB, Sweden), K. Skagius (Kemakta Consultants AB, Sweden), A. Winberg (Conterra AB, Sweden), and A. Ström (SKB, Sweden).*

Working Group D should address assembly and integration of geoscientific knowledge and arguments based on actual experiences from the working group. The session will start with a short presentation (10 to 15 minutes) from a volunteer member. The following outcomes are expected.

- How do you manage integration between various geoscientific disciplines? How do you communicate this integration? (This issue is a continuation of the discussion from Working Group C in AMIGO-1 but should examine more recent practical experiences).
- In developing the site characterisation and evaluation programme, what experiences exist with feedback (e.g. conclusions drawn from sensitivity analyses, FEP-screening, ...) from safety assessment and engineering? How is the exchange of information managed?
- How is geoscientific knowledge, including uncertainty, in “descriptive models” actually assembled and presented?
- How are geoscientific data and arguments actually used in safety assessment? What should be the balance in a safety case between geoscientific arguments and safety assessment calculations?
- How are the geoscientific data and arguments actually used in repository engineering (repository layout, design of underground excavations, etc.)?

*Annex B*

**INSTRUCTION FOR AUTHORS**

**IMPORTANT REMARKS**

Please be sure to use the WORD 97 or XP in A4 format and using TIMES NEW ROMAN as the font, even for equations.

Please check the clarity of figures/pictures/equations once inserted in the text and printed in Black and white.

For figures, drawings, maps... encapsulated post-script files (.eps) or high-resolution (300 dpi) .tif files inserted as a PICTURE and (not as a FILE) in the text document are preferred.

If there is no electronic version of your figures/photos, leave the appropriate space in the text and provide a full-page, high-quality, original (with figure/photo number on the reverse side and indicating top and bottom). Do not tape or glue them to the paper.

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Sylvie Voinis  
OECD/Nuclear Energy Agency  
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F-92130 Issy-les-Moulineaux  
Tel: +33 (0)1 45 24 10 49  
Fax: +33 (0)1 45 24 11 45  
E-mail: [sylvie.voinis@oecd.org](mailto:sylvie.voinis@oecd.org)

*[5 blank line font 11 or 60 pt]*

**Title [Bold, Centred, Times New Roman 11. First Letter in Each Word Should Be in Upper Case, except Prepositions and Articles]**

*[2 blank lines, font 11 or 36 pt]*

**Author [centred, Times New Roman 11, bold]**

Affiliation, Country [Centred, Times New Roman 11]

*[1 blank line, font 11 or 12 pt]*

**Second author [centred, Times New Roman 11, bold]**

Affiliation, Country [Centred, Times New Roman 11]

*[2 blank lines, font 11 or 24 pt]*

Body text [Times New Roman 11 with any numbers and units joined by a forced blank. Margins: Top - 3.45 cm, Bottom - 3.45 cm, Left - 2.8 cm and Right - 2.2 cm, Header 1.0 cm, Footer for pagination 2.5 cm. A4 paper size for the page set-up even if you are printing on another size paper. Alignment: Justified, Line spacing: Single]

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to be numbered as **1, 1.1, 1.1.1, .....**  
Body text [see above]

**Caption Table 1. [centered, Arial 9, bold, and placed above the table]**

*[1 blank line, font 11 or 12 pt]*


**Caption Figure 1. [centered, Arial 9, bold, and placed above the figure]**

Figures: encapsulated post-script files (.eps) or high-resolution (300 dpi) .tif files inserted as a PICTURE and (not as a FILE) in the WORD document.

*[1 blank line, font 11 or 12 pt]*

## **References**

[A consistent referencing system should be used throughout the paper, e.g. consecutive numbers, authors' names and date. All references should be collected together in a section headed "References" at the end of the paper. Please avoid using acronyms for designating publications.]

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### 2<sup>nd</sup> AMIGO WORKSHOP on LINKAGE OF GEOSCIENTIFIC ARGUMENTS AND EVIDENCE IN SUPPORTING THE SAFETY CASE

Title of the paper: .....

.....

.....

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