14th Meeting of the
ECORD Science Support & Advisory Committee
ESSAC

May 26-28, 2010

Sommarøy Hotel
Tromsø, Norway

Agenda of the 14th ESSAC Meeting

May 26-28, 2010, Tromsø, Norway

Tuesday May 25, 15:00 - 18:00h

Arrival of participants
Transport to Sommarøy

Wednesday May 26, 9:00 – 18:00h

1. Introduction

1.1 Call to order, introductions (Stein) (5')
1.2 Welcome and meeting logistics (Koc) (5')
1.3 Discussion and approval of the Agenda (Stein) (5')
1.4 Items since the 12th ESSAC Meeting and ESSAC Office news (Stein/Lezius) (20')

2. IODP News

2.1 Lead Agencies and Implementing Organizations (Mével) (20')
2.2 SAS Executive Committee - SASEC (Mével) (20')
2.3 Science Steering Evaluation Panel – SSEP (Stein) (15')
2.4 Science Planning Committee - SPC and Operation Task Force – OTF (Stein) (40')
2.5 Science Plan Writing Committee – SPWC (Camoin) (15')

3. ECORD News

3.1 EMA - ECORD Council (Mével) (20')
3.2 ESO (Stevenson) (20')
3.3 ESO-EMA-ESSAC Outreach (Maruéjol) (20')
3.4 ESSAC representatives and National Office reports (ESSAC Delegates) (30')

4. Election of new vice-chair (10')

Lunch

5. Nominations and Staffing

5.1 Staffing (Stein) (45')
- 5.1.1 Ranking procedures, quotas and statistics
- 5.1.2 Updates on expedition staffing and applications:

  327 Juan de Fuca, 328 Cascadia ACORK, 329 South Pacific Gyre, 330 Louisville, NanTroSEIZE 3, CRISP, Superfast, Mid-Atlantic Microbiology
- 5.1.2 Nominations of co-chiefs

5.2 Updates on SAS panel nominations (Stein) (10')
- 5.2.1 SASEC
- 5.2.2 SPC
- 5.2.3 SSEP
- 5.2.4 STP
- 5.2.4 SSP

5.2.5 EPSP
5.2.6 EDP
5.2.7 SSEP

6. ESSAC highlights: Wilkesland Expedition (Escutia, proposed) (45')

7. Breakout sessions

Introductions (Stein) (05')

Breakout sessions ESSAC Nomination and staffing / Education and Outreach / Workshops, Communication and Vision subcommittees (90')

Optional after dinner: 30 min hike up to Hillesøy mountain to enjoy the Midnight sun

Thursday May 27, 2010, 9:00 – 16:30h

8. Education and outreach

8.1 Summer Schools 2010 update
- 8.1.1 USSP: The Urbino Summer School in Paleoclimatology, July 2010, update (Lourens) (10')
- 8.1.2 IODP Canada Summer School: Ocean and climate changes in polar and subpolar environments, update (Banerjee) (10')
- 8.1.3 ECORD Summer School on Geodynamics of Past Climate Changes, Bremen, September 2010, update (Lezius) (10')

8.2 ECORD Grants and Scholarships 2010 (Lezius) (10')
8.3 ECORD Summer Schools 2011 (Lezius) (05')
8.4 School of Rock 2010 (Lezius) (10')
8.5 ECORD Teachers Workshop (Lezius) (15')
8.6 Distinguished Lecturer Programme (10')
- 8.6.1 2009/2010 (Lezius)
- 8.6.2 2010/2011 (Lezius)

8.7 E&O Subcommittee report, discussion and future actions (Monteys) (45')

5.3 N&S Subcommittee report, discussion and future actions (Lourens) (45')

Lunch

9. Workshops, communication and vision

9.1 Ocean School 010 Oostende (Stein) (10')
9.2 IODP Drilling of the 'Shackleton sites' on the Iberian Margin (Abrantes) (10')
9.3 ESF Magellan Conference: Large Igneous Provinces and Mass Extinctions (Piller) (10')
9.4 EuroFORUM 2010 (Stein) (10')
9.5 ESF Magellan Programme: Present and Future (Erbacher) (20')
9.6 WC&V Subcommittee report, discussion and future actions (TBN) (45')

10. Review of consensus, motions and actions (Stein) (15')

11. Next meetings

ESSAC #15, October 26-27, 2010, Zurich (Jaccard) (5')

12. Any Other Business (Stein)

Thursday 16:30 Transport to Tromsø
Thursday evening: Conference dinner, Tromsø

<u>Friday May 28, 2010</u>

Field trip

09:00 – 11:00	Visit to the Arctic-Alpine Botanical Garden
11:00 – 13:00	Visit to the Polar Museum and/or Polaria
14:00 – 23:30	Fjord Excursion

List of Participants

ESSAC Office

Ruediger Stein (Chair)	ESSAC Delegate Germany
Jeannette Lezius	ESSAC Science Coordinator

ESSAC Representatives

Fatima Abrantes	ESSAC Delegate Portugal
Neil Banerjee	ESSAC Alternate Canada
Bryndís Brandsdóttir	ESSAC Delegate Iceland
Gilbert Camoin (Vice-Chair)	ESSAC Delegate France
Carlota Escutia	ESSAC representative Spain
Anneleen Foubert	ESSAC Alternate Belgium
Samuel Jaccard	representative Switzerland
Rachael James	ESSAC Delegate UK
Nalan Koç (meeting host)	ESSAC Delegate Norway
Lucas Lourens	ESSAC Delegate Netherlands
Xavier Monteys	ESSAC Delegate Ireland
Werner Piller	ESSAC Delegate Austria
Marit Solveig Seidenkrantz	ESSAC Delegate Denmark
Ian Snowball	ESSAC Delegate Sweden
Kari Strand	ESSAC Delegate Finland
Paola Tartarotti	ESSAC representative Italy

Observers/Guests

Jochen Erbacher	ESF Magellan Workshops
Patricia Maruéjol	EMA
Catherine Mével	EMA
Alan Stevenson	ESO
Antje Voelker	ESSAC representative Portugal

Apologies

Menchu Comas	ESSAC Delegate Spain
Elisabetta Erba	ESSAC Delegate Italy
Judith McKenzie	ESSAC Delegate Switzerland
Rudy Swennen	ESSAC Delegate Belgium

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c Bremen Summer School, preliminary program

6. Final program Ocean School 010 Oostende

7. Program EuroFORUM 2010

8. Program: The Future of Magellan, Steering Committee Meeting; Flyer Magellan Workshop Programme

ESSAC Terms of References

ACEX	**A**rctic **C**oring **Ex**pedition (Expedition 302)
APLACON	**A**lternative **Pla**tform **Con**ference (Lisbon, May 2001)
AF	**A**cademy of **F**inland
BCR	**B**remen **C**ore **R**epository
BGS	**B**ritish **G**eological **S**urvey (UK)
BoG	IODP-MI **B**oard **of G**overnors
CDC	**C**onceptual **D**esign **C**ommittee (new riser vessel)
CDEX	**C**enter for **D**eep Earth **EX**ploration (Japan)
CoNISMa	**Co**nsorzio **N**azionale **I**nteruniversitario per le **S**cienze del **Ma**re (Italy)
CDP	**C**omplex **D**rilling **P**roject
CNR	**C**onsiglio **N**azionale delle **R**icerche (Italy)
CNRS	**C**entre **N**ational de la **R**echerche **S**cientifique (France)
DASTI	**D**anish **A**gency for **S**cience, **T**echnology and **I**nnovation
DFG	**D**eutsche **F**orschungs**G**emeinschaft (German Research Foundation)
EC	**E**uropean **C**ommission
ECORD	**E**uropean **C**onsortium for **O**cean **R**esearch **D**rilling
EDP	**E**ngineering **D**evelopment **P**anel
EPC	**E**uropean **P**etrophysics **C**onsortium
EMA	**E**CORD **M**anaging **A**gency
ERA-Net	**E**uropean **R**esearch **A**rea **Net**work
ESF	**E**uropean **S**cience **F**oundation
EPSP	**E**nvironmental **P**rotection & **S**afety **P**anel
ESO	**E**CORD **S**cience **O**perator
ESSAC	**E**CORD **S**cience **S**upport and **A**dvisory **C**ommittee
FWO-Vlaanderen	Fund for Scientific Research-Flanders (Belgium)
FWF	Austrian Science Fund
GRICES	**G**abineta de **R**elacoes **I**nternacionais da **C**iencias e do **E**nsino **S**uperior (Portugal)
GSI	The **G**eological **S**urvey of **I**reland
ICDP	**I**nternational **C**ontinental Scientific **D**rilling **P**roject
IIS-PPG	**I**ndustry **I**ODP **S**cience **P**rogram **P**lanning **G**roup
INGV	**I**stituto **N**azionale di **G**eofisica e **V**ulcanologia (Italy)
INSU	**I**nstitut **N**ational des **S**ciences de l'**U**nivers (France)
IOs	**I**mplementing **O**rganisation**s**
IODP	**I**ntegrated **O**cean **D**rilling **P**rogram
IODP-MI	**IODP M**anagement **I**nternational, Inc.
ISP	**I**nitial **S**cience **P**lan for the IODP
JAMSTEC	**JA**pan **M**arine **S**cience & **TE**chnology **C**enter
J-DESC	**J**apanese **E**arth **D**rilling **S**cience **C**onsortium
JEODI	**J**oint **E**uropean **O**cean **D**rilling **I**nitiative
JOI	**J**oint **O**ceanographic **I**nstitutions
JR	**J**OIDES **R**esolution
LDEO	**L**amont **D**oherty **E**arth **O**bservatory
MEC	**M**inisterio de **E**ducacion y **C**iencia **Y** (Spain)
MEXT	**M**inistry of **E**ducation, Culture, Sports, Science & **T**echnology (Japan)
MoU	**M**emorandum **o**f **U**nderstanding
MOST	People's Republic of China **M**inistry **O**f **S**cience and **T**echnology

MSP	**M**ission-**s**pecific **p**latform
NanTroSEIZE	**Nan**kai **Tro**ugh **SEI**smogenic **Z**one **E**xperiment
NCMR	**N**ational **C**enter for **M**arine **R**esearch (Greece)
NERC	**N**atural **E**nvironment **R**esearch **C**ouncil (UK)
NSF	**N**ational **S**cience **F**oundation (USA)
NWO	Netherlands Organisation for Scientific Research
OD21	**O**cean **D**rilling in the **21**st Century (Japan)
ODP	**O**cean **D**rilling **P**rogram
OEAW	Austrian Academy of Sciences
OGS	Istituto Nazionale di **O**ceanograpfiae di **G**eofisica **S**perimentale (Italy)
RANNIS	The Icelandic Centre for Research
SAS	**S**cience **A**dvisory **S**tructure
SASEC	**S**cience **A**dvisory **S**tructure **E**xecutive **C**ommittee
SciMP	**Sci**entific **M**easurements **P**anel
SNF	**S**wiss **N**ational Science **F**oundation
SODV	**S**cientific **O**cean **D**rilling **V**essel
SPC	**S**cience **P**lanning **C**ommittee
SSEP	**S**cience **S**teering & **E**valuation **P**anel
SSP	**S**ite **S**urvey **P**anel
STP	**S**ite **T**echnology **P**anel
TAMU	**T**exas **A** & **M** **U**niversity
ToR	**T**erms **o**f **R**eference
USSAC	**U**nited **S**tates **S**cience **A**dvisory **C**ommittee
USSSP	**U**nited **S**tates **S**cience **S**upport **P**rogram
UVic	**U**niversity of **Vic**toria (Canada)
VR	Swedish Research Council

ESSAC subcommittee procedures

ESSAC has been structured in three subcommittees (Staffing and Nominations, Education and Outreach, and Workshops, Communication and Vision) to increase the efficiency of ESSAC and the involvement of the ESSAC Delegates in ESSAC life. Subcommittee general tasks and composition are summarized below.

The subcommittees meet electronically to prepare the meetings on general issues and to work on specific issues at the request of the ESSAC Chair. Each subcommittee is coordinated by an ESSAC Delegate, nominated by the ESSAC Chair. The coordinator is in charge of writing a report for the Agenda book and of presenting the activities of the subcommittee at the meetings. A general discussion follows that presentation.

Staffing and Nominations subcommittee

Members: Lucas Lourens (Coord.), Ruediger STEIN (ESSAC Chair), Jeannette LEZIUS (ESSAC Science Coordinator), Fatima ABRANTES, Neil BANERJEE, Gilbert CAMOIN, Rachael H. JAMES, Judith McKENZIE.

General tasks:

- Suggesting nominations of ECORD representatives (delegates and alternates) on SAS panels, PPGs and DPGs.
- Co-ordinating applications, reviewing all the applications and suggesting nominations of shipboard participants.
- Reviewing the quota of shipboard scientists between participating countries.
- Suggesting co-chief nominations for IODP Expeditions.

Immediate actions:

- Summarize the current ECORD composition of SAS panels, identify future replacements (expertise), and suggest permanent alternates.
- Summarize the current ESSAC composition, identify future replacements (Delegates and alternates), and make recommendations.
- Summarize the quota balance for ECORD participation to IODP Expeditions.

Education and Outreach subcommittee

Members: Xavier MONTEYS (Coord.), Ruediger STEIN (ESSAC Chair), Jeannette LEZIUS (ESSAC Science Coordinator), Werner PILLER, Marit-Solveig SEIDENKRANTZ, Ian SNOWBALL, Rudy SWENNEN

General tasks:

- Developing educational opportunities/programs: Teacher's workshops, Summer Schools etc., especially in non-traditional audiences.
- Reviewing Summer School proposals.

· Reviewing applications and suggesting nominations for ECORD scholarships.

· Initiating applications of speakers for the Distinguished Lecturer Series and suggesting nominations.

· Providing new ideas regarding new ways to raise funds for E&O activities.

· Advising on the public outreach (societal relevance of the IODP science).

Immediate actions:

· Make recommendations for deadlines for submission of Summer School proposals and for applications for ECORD scholarships.

· Make suggestions of new ideas regarding E&O activities (societal relevance of the IODP science), especially in non-traditional audiences.

· Make suggestions regarding new ways to raise funds for E&O activities.

· Monitoring ECORD database (e.g. ECORD publications).

Workshops, Communication and Vision subcommittee

Members: Elisabetta ERBA (Coord.), Ruediger STEIN (ESSAC Chair), Jeannette LEZIUS (ESSAC Science Coordinator), Bryndís BRANDSDOTTIR, Menchu COMAS, Nalan KOÇ, Kari STRAND

General tasks:

· Initiating and monitoring workshops.

· Reviewing applications for participation to IODP workshops and suggesting nominations.

· Providing stimulation and guidance for the writing of drilling proposals in accordance with the IODP ISP and encouragement of IODP-related activities among participating countries.

· Assisting and advising on extending the scientific base of the consortium to non-member countries.

· Looking for gaps in the science spanned by the active proposals relative to the themes and initiatives specified in the Initial Science Plan (ISP),

Immediate actions:

· Review the ECORD database and make recommendations.

· Summarize ECORD active proposals by ISP themes.

· Make recommendations regarding stimulation and guidance for the writing of drilling proposals.

· Make recommendations regarding the extension of the scientific base of the consortium to non-member countries.

1. Introduction

1.1 Letter from the Chair

1.1 Letter from the Chair

Dear ESSAC Delegates, ESSAC alternates, and attendees of the 14th ESSAC Meeting,

since I took over the ESSAC chairmanship October 1st 2009, the ESSAC Office is located at Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, Germany, and I think we can say that the relocation of the ESSAC Office from Aix-en-Provence in France to Bremerhaven had no negative impact on ESSAC activities. The new ESSAC Science Coordinator, Jenny Lezius, started her work immediately in preparing the 13th ESSAC meeting, which was held in Oulu, Finland, on November 03-04, 2009. What happened since this 13th ESSAC Meeting?

Over the last month we issued calls for four expeditions: Juan de Fuca Flank Hydrogeology II Expedition (327), South Pacific Gyre Microbiology Expedition (329) and Louisville Seamount Chain Expedition (330) with JOIDES Resolution and NanTroSEIZE Plate Boundary Deep Riser 1 Expedition (326) with Chikyu. ESSAC has recently completed the selection of the ECORD scientists for these expeditions. Upcoming calls will be for CRISP, Superfast and Mid-Atlantic Microbiology Expeditions (all with JOIDES Resolution) with a May 15 deadline for applications. More information about the scientific objectives, precise dates, and official notification of these expeditions can be found on the IODP website at: http://www.iodp.org/expeditions/.

As a full complement of scientists is not required to achieve the science objectives of the Juan de Fuca Hydrogeology II Expedition, ESSAC (as well as the other PMOs) had the unique opportunity to utilize berths for other priority initiatives such as education/ outreach, engineering, and/or training. Thus, ESSAC issued a special call for engineers, educators and/or science communicators to join this expedition. We received a great demand and many applications by engineers and teachers for this special call. One ECORD engineer and two ECORD teachers will participate in this expedition.

Several calls for the Science Advisory Structure (SAS) have been issued to replace ECORD members in SSEP, SSP, SPC, EDP and STP. ESSAC has recently evaluated the applications, and the ECORD Council has to approve our nominations.

The second phase of the ECORD Distinguished Lecturer Programme is still running very successfully with the ECORD Distinguished Lecturers Peter Clift (Aberdeen University, UK), Achim Kopf (Bremen University, Germany) and John Parkes (Cardiff University, UK). This phase will be active until June 2010. ESSAC already issued a call for lecturers for the next phase of the DLP. Applicants will be evaluated by ESSAC during this 14th Meeting.

After a call for applications for ECORD Scholarships, the ESSAC Office received 47 applications – including applications from the non-ECORD countries Poland and New Zealand - to attend one of the three ECORD-sponsored summer schools. This year ECORD-sponsored summer schools will be focused on 1) the Dynamics of Past Climate Changes in Bremen (September 2010), 2) Past Global Change Reconstruction & Modelling Techniques in Urbino (July 2010) and 3) Ocean and climate changes in polar and subpolar environments in Canada (June/July 2010). All applications will be evaluated by ESSAC during this 14th Meeting, and up to 15 young scientists may be selected and

sponsored by ECORD to attend one of these summer schools. Furthermore, the ESSAC Office has issued a new call for ECORD-sponsored 2011 summer schools. Applications from Bremen and Urbino have been submitted, which will also be discussed during the 14th ESSAC Meeting.

For the first time, we issued a call for applications for ECORD Research Grants, merit-based awards for outstanding graduate students to conduct research related to the IODP/ODP/DSDP. 8 young students applied to this call. All applications will be discussed during the 14th ESSAC Meeting.

During the EGU 2010 in Vienna, we – together with ICDP - have organized the joint IODP/ICDP EuroFORUM 2010, an Interdivision Session dealing with major achievements and perspectives in ocean and continental drilling. Oral presentations were scheduled for Tuesday May 04, 15.30-17.00h, followed by a poster session. The EuroFORUM had 32 contributions in total, and >200 people visited the oral session.

In conclusion, while preparing the next ESSAC meeting that will be held on May 25th and 26th, 2010 in Tromsø, we – Jenny as Science Coordinator and myself as Chair - would like to mention that we are very satisfied with the smooth transition of the ESSAC Office from Aix-en-Provence to Bremerhaven, and we thank ESSAC delegates and other IODP/ECORD bodies for active cooperation during the last months. As ESSAC Chair, I hope that this constructive and efficient cooperation between all of us will continue and strengthend during the coming months which are so important for the planning of the new post-2013 scientific drilling program.

I warmly thank Nalan Koc for hosting the 14th ESSAC Meeting in Tromsø and for her efforts for the outstanding arrangements made for that meeting.

I wish you a successful and pleasant meeting.

Ruediger (Rudy) Stein

Bremerhaven, May 14, 2010

1.2 Welcome and meeting logistics of the 14th ESSAC Meeting in Tromsø, Norway May 26-28, 2010

Practical Information

The meeting will be held at Sommarøy Arctic Hotel & Conference Centre Hotel. The participants are requested to register directly via Email info@sommaroy.no, mention reference "ESSAC Meeting" (25 and 26 May). Information about the hotel can be found at the website http://www.sommaroy.no/?a_id=148. The price of this Hotel per person is 3670NOK (~470€) / individual room including meals.

Transport from the airport to Sommarøy by organized bus in the afternoon of 25th, transport from Sommarøy to Tromsø will be at 16:30 on Thursday 27th.

Participants are also requested to register directly at Thon Hotel Tromsø, via Email Tromso@thonhotels.no, with reference "ESSAC Meeting" (27 May). Singel rooms are 1145 NOK (~145€).

A conference dinner is being arranged for Thursday 27th in Tromsø.

On Friday morning there is the possibility to visit the Arctic-Alpine Botanical Garden http://www2.uit.no/ikbViewer/page/tmu/artikkel?p_document_id=71426 and/or the Polar museum and/or Polaria. The Fjord excursion starts at 14:00 (Price 550 NOK (~70€)) http://www.nor-way.no/tromsoe-skjervoey/category568.html.

For further assistance regarding administrative and logistical matters, please contact the meeting host:

Meeting Host

Nalân Koç
Norwegian Polar Institute, Tromsø
Polar Environmental Centre, NO-9296 Tromsø
Phone: +47 77 75 06 54
Email: nalan.koc@npolar.no

1.3 Discussion and approval of the Agenda

At the meeting in Tromsø, Norway, R. Stein will present the current agenda and highlight potential challenges of the meeting and/or changes of the agenda.

1.4 Approval of the Minutes of the 13th ESSAC Meeting

R. Stein will present the minutes of the 13th ESSAC meeting in Oulu, Finland.

1.5 Items since the 13th ESSAC Meeting and ESSAC Office news

R. Stein will present items since the last ESSAC meeting. The list down-below contains the actions items, which arose since the 13th ESSAC meeting in Oulu, Finland (November 03rd -04th, 2009) and that have been accomplished by the ESSAC Office or other persons in charge (ESSAC delegates, subcommittee members or observers) since then (labelled with "**Done**").

Action items not fulfilled yet, have been labelled by "**in progress**".

The full list of action items, consensuses and motions are given in the executive summary (Appendix 1).

> **ESSAC Action Item 0911-01:** ESSAC (R. James) will contact her national office concerning replacement of Science Advisory Structure Executive Committee (SASEC) member Nick Arndt.

done Damon Teagle has been nominated and already been approved by ECORD Council as new ECORD SASEC member.

> **ESSAC Action Item 0911-02:** ESSAC (G. Camoin) will contact Christian Blanpied (Total) for replacing Philippe Lapointe within Environmental Protection and Safety Panel (EPSP).

in progress

> **ESSAC Action Item 0911-03:** ESSAC Office will contact Lothar Wohlgemut and Bill Ussler (as chair) for continuation of membership of L. Wohlgemut within Engineering Development Panel (EDP).

done L. Wohlgemut continues his membership in EDP until January 2011.

> **ESSAC Action Item 0911-04:** ESSAC Office will send out a Call for Nominations for the Science Planning Committe (SPC) of the SAS in IODP with deadline March 15, 2010.

done Approval of elected UK and F member by ECORD Council in June 2010.

> **ESSAC Action Item 0911-05:** ESSAC Office will send out a Call for Nominations for the Site Survey Panel (SSP) of the SAS in IODP with deadline March 15, 2010.

done Approval of elected UK member by ECORD Council in June 2010.

> **ESSAC Action Item 0911-06:** ESSAC Office will send out a Call for Nominations for the Scientific Technology Panel (STP) of the SAS in IODP with deadline March 15, 2010.

done

> **ESSAC Action Item 0911-07:** ESSAC Office will send out a Call for Nominations for the Engineering Development Panel (EDP) of the SAS in IODP with deadline March 15, 2010.

done Approval of elected UK member by ECORD Council in June 2010.

> **ESSAC Action Item 0911-08:** ESSAC Office will send out Calls for Applications to Sail on the three upcoming cruises: Juan de Fuca Flank Hydrogeology, South Pacific Gyre Microbiology, Louisville Seamount Chain with deadline January 15, 2010.

done

> **ESSAC Action Item 0911-09:** ESSAC Office will send out a Call for engineers/teachers for the Juan de Fuca Expedition with deadline January 15, 2010.

done

> **ESSAC Action Item 0911-10:** ESSAC Office will contact the national offices/delegates to ask them to send statistics regarding the scientists involved in each expedition (in addition to the Science Party members) and statistics including the published IODP-related papers of all their scientists.

in progress

> **ESSAC Action Item 0911-11:** ESSAC Office will send out draft versions of a letter of support for ECORD Scholarships and ECORD Grants to delegates/alternates.

done

> **ESSAC Action Item 0911-12:** ESSAC Office will send out a Call for Scholarships/Grants with deadline March 29, 2010.

done

> **ESSAC Action Item 0911-13:** ESSAC Office will send out a Call to host a Summer School 2011 with deadline May 10, 2010.

done

> **ESSAC Action Item 0911-14:** ESSAC Office will contact current lecturers within DLP (2008/2010) to remind them that this program runs until May/June 2010. The ESSAC Office will also send them (once again) a list of all interested institutes.

done

> **ESSAC Action Item 0911-15:** ESSAC Office will create a form to request feedback from institutes that have hosted DLPs.

done

> **ESSAC Action Item 0911-16:** ESSAC Office will create a Call for DLP (2010/2012) related to the three main ISP themes, with a list of possible topics. The call will be sent out with deadline March 15, 2010.

done

> **ESSAC Action Item 0911-17:** ESSAC Office will contact the subcommittee "Workshops, Communication and Vision" to revise the draft version of the Letter of Support for Continuation of IODP with deadline end of February 2010.

done Final version of the Letter of Support been completed by ESSAC Chair and ESSAC delegates mid of April, 2010 (see Appendix 2).

New ESSAC Action Items

> **new ESSAC Action Item**: ESSAC Office issued a Call for Nomination in the Environmental Protection and Safety Panel (EPSP) of the SAS in IODP with deadline June 08, 2010.

done

> **new ESSAC Action Item:** ESSAC Office issued a Call for Applications for the School of Rocks 2010 with Deadline May 20, 2010.

done

> **new ESSAC Action Item:** ESSAC Office issued a a Call for Nominations for the Science Steering and Evaluation Panel (SSEP) of the SAS in IODP with deadline June 08, 2010.

done

2. IODP News

2.1 Lead Agencies and Implementing Organizations

C. Mével will give a summary about the latest news regarding lead agencies and implementing organizations activities.

2.2 SAS Executive Committee (SASEC), IODP Council and IWG+

C. Mével will give a summary about the latest news regarding SASEC activities, IODP Council and IWG+.

2.3 Science Steering Evaluation Panel – SSEP

R. Stein will present a summary of the 13th SSEP meeting that took place at Alan Gilbert Building, University of Melbourne, Melbourne, Australia, from November 16th to 18th, 2009. The draft minutes (v1) are given in Appendix 3.

2.4 Science Planning Committee - SPC and Operation Task Force

R. Stein will present a summary of the 15th SPC meeting that took place at the University of Sydney from March 23rd to 26th, 2010. The executive summary is presented in Appendix 4.

Presentation and discussion of proposals

During the March SPC Meeting, SPC reviewed the twenty-four full proposals shown in the table below, organized by agendum according to the three main themes of the Integrated Ocean Drilling Program (IODP) Initial Science Plan (ISP).

Proposal	Short Title	Watchdogs	Conflicts
Deep Biosphere and Subseafloor Ocean (6 proposals)			
547-Full4	Oceanic Subsurface Biosphere	Murray/Peterson/Camoin	None
553-Full2	Cascadia Margin Hydrates	Kakegawa/Blackman/Jenkyns	None
555-Full3	Cretan Margin	van der Pluijm/Kakegawa/Feary	None
557-Full2	Storegga Slide Gas Hydrates	Hollis/Feary/Kasahara	None
589-Full3	Gulf of Mexico Overpressure	Kasahara/van der Pluijm/Blackman	None
633-Full2	Cost Rica Mud Mounds	Kakegawa/Kasahara/Umino	None
Environmental Change, Processes, and Effects (10 proposals)			
548-Full2	Chixculub K-T Impact Crater	Stein/Yamazaki/Jenkyns	Neal
556-Full4	Malvinas Confluence	Li/Stein/Camoin	None
567-Full4	South Pacific Paleogene	Murray/Stein/Hollis	None
581-Full2	Late Pleistocene Coralgal Banks	Camoin/Feary/Hollis	None
595-Full3	Indus Fan and Murray Ridge	Cheong/Murray/Peterson	None
661-Full2	Newfoundland Sediment Drifts	Jenkyns/Cheong/Yamazaki	None

667-Full	NW Australian Shelf Eustasy	Feary/Jenkyns/Cheong	Exon
672-Full3	Baltic Sea Basin Paleoenvironment	Hollis/Murray/Li	None
686-Full	Southern Alaska Margin I	Peterson/Cheong/Murray	None
732-Full2	Antarctic Peninsula Sediment Drifts	Stein/Yamazaki/Peterson	None

Solid Earth Cycles and Geodynamics (8 proposals)

551-Full	Hess Deep Plutonic Crust	Früh-Green/Anma/Takada	None
659-Full	Newfoundland Rifted Margin	Takada/Anma/John	None
669-Full3	Walvis Ridge Hotspot	John/ Früh-Green/Umino	None
681-Full2	Lesser Antilles Volcanic Landslides	Kasahara/ Früh-Green/Yamazaki	None
695-Full2	Izu-Bonin-Mariana Pre-Arc Crust	Umino/Takada/Feary	None
697-Full3	Izu-Bonin-Mariana Rearc Crust	Anma/van der Pluijm/John	None
698-Full2	Izu-Bonin-Mariana Arc Middle Crust	John/Umino/Takada	None
703-Full	Costa Rica SEISCORK	Kasahara/van der Pluijm/Peterson	None

Proposed FY10 *JR* operations schedule:

Expedition 324	Shatsky Rise	4 September – 4 November 2009
Expedition 317	Canterbury Basin	4 November 2009 – 4 January 2010
Expedition 318	Wilkes Land	4 January – 8 March 2010
Transit		8 March – 13 April 2010
Maintenance Period		13 April – 5 July 2010
Expedition 327	Juan de Fuca	5 July – 4 September 2010
Expedition 328	Cascadia CORK	4 September – 18 September 2010
Transit		18 September – 8 October 2010

Proposed FY11 *JR* operations schedule:

South Pacific Gyre	8 October – 12 December 2010
Louisville Seamount Trail	12 December 2010 – 11 February 2011
Transit	11 February – 15 March 2011
CRISP A	15 March – 16 April 2011
Superfast Spreading Rate 4	16 April – 19 May 2011
Maintenance	19 May – Mid-September 2011
Mid-Atlantic Microbiology	Mid-September – Mid-November 2011

ICDP and U.S. National Academy of Sciences combined discussion on Climate-Hominid Evolution

SPC Consensus 1003-07: SPC recognizes the high scientific value and widespread societal interest in understanding how—or whether—climate influenced the early stages of human evolution on the African continent. Addressing this issue requires a much more detailed understanding of the regional and local climates in which hominids and hominins evolved, and this understanding will require a coherent and integrated approach to recovering detailed climate records from terrestrial (former lake) sequences, from present day lakes in Africa, and from the ocean basins surrounding Africa. SPC invites the ICDP community to join with the IODP community to establish a Joint Program Planning Group charged to plan an integrated onshore, lake, and ocean drilling program that would dramatically enhance scientific understanding of how past climates may have influenced the early stages of our evolution.

Available for future consideration by the Operations Task Force

Proposal	Short Title
477-Full4	Okhotsk/Bering Plio-Pleistocene (Okhotsk)
505-Full5	Mariana Convergent Margin
537B-Full4	Costa Rica Seismogenesis Phase B
549-Full6	Northern Arabian Sea Monsoon
552-Full3	Bengal Fan

601-Full3	Okinawa Trough Deep Biosphere
605-Full2	Asian Monsoon
644-Full2	Mediterranean Outflow
693-APL	S. Chamorro Seamount CORK
716-Full2	Hawaiian Drowned Coral Reefs
724-Full	Gulf of Aden Faunal Evolution
738-APL	Nankai Trough Submarine Landslides

Holding bin

Proposal	Short Title
618-Full3	East Asia Monsoon
637-Full2	New England Shelf Hydrogeology
705-Full2	Santa Barbara Basin Climate Change

Thematic summaries

To assist with determining how well each of the three major ISP themes had been addressed to-date within IODP, thematic summaries were presented for each. Gilbert Camoin covered Deep Biosphere and Subsurface Ocean, Naohiko Ohkouchi covered Environmental Change, Processes, and Effects, and Donna Blackman covered Solid Earth Cycles and Geodynamics. Each noted how the main objectives within each theme had been addressed by prior drilling, and how current proposals (both those at OTF and at SPC) would address the ISP.

Global ranking of proposals

Rank	Proposal #	Short Title	
1	732-Full2	Antarctic Peninsula Sediment Drifts	OTF
2	695-Full2	Izu-Bonin-Mariana Pre-Arc Crust	OTF
3	686-Full	Southern Alaska Margin 1	OTF
4	548-Full3	Chicxulub K-T Impact Crater	OTF
5	553-Full2	Cascadia Margin Hydrates	OTF
6	681-Full2	Lesser Antilles Volcanic Landslides	*
7	661-Full2	Newfoundland Sediment Drifts	OTF
8	551-Full	Hess Deep Plutonic Crust	OTF
9	633-Full2	Costa Rica Mud Mounds	OTF
10	581-Full2	Late Pleistocene Coralgal Banks	OTF
11	659-Full	Newfoundland Rifted Margin	OTF
12	672-Full3	Baltic Sea Basin Paleoenvironment	NF
13	697-Full3	Izu-Bonin-Mariana Rearc Crust	NF
14	567-Full4	South Pacific Paleogene	NF
15	555-Full3	Cretan Margin	NF
16	589-Full3	Gulf of Mexico Overpressures	NF
17	669-Full3	Walvis Ridge Hotspot	NF
18	556-Full4	Malvinas Confluence	†

OTF = forwarded to OTF
NF = not forwarded to OTF
* = placed in "holding bin" due to site survey deficiencies (see SPC Consensus 1003-15)
† = deactivated

Scheduled/maybe Scheduled Proposals

Them	Numbers	Tytle	Schedule	Ocean	P-type/IO	SSP	EPSP	Drilling	CORK	3rd-Party	Other
1	545-Full3	Juan de Fuca Flank Hydrogeology	FY10 Exp.327	Pac	RL	1A, 1B	approved		CORK		
3+1	734-APL	Cascadia Accretionary	FY10 Exp.328	Pac	RL	3A	No review		replace CORK		ED sea test
1	662-Full3	South Pacific Gyre Microbiology	FY11 Exp.329	Pac	RL	1Aa	all site approved				
3	636-Full3	Louisville Seamounts	FY11 Exp.330	Pac	RL	1Aa	all site approved			Goettinge nMM tool	
3	537A-Full5	Costa Rica Seismogen	FY11 (partial)	Pac	RL	1Bb	all sites approved		No CORK		
3	522-Full5	Superfast Spreading Crust	FY11	Pac	RL	1Aa	approved	Deep >2,000m			
1	677-Full	Mid-Atlantic Ridge Microbiology	FY11/12	Atl	RL	3A	No review		multilevel CORK		
1	601-Full3 Add2	Okinawa Trough Deep Biosphere	FY10	Pac	RL	No review	No review	special casing			
3	603C+D (partial)	NanTroSEIZE Stage 3	FY10+11 Exp.326	Pac	RL	2A,2B	approved				
3	738-APL	Nankai Trough Submarine	FY11	Pac	RL	1Aa	approved				* as APL by SPC
Not Scheduled Proposals											
2	477-Full4	Okhotsk Plio-Pleistocene		Pac	RL	1Ca	approved				Per. Russian
1	505-Full5	Mariana Convergent Margin		Pac	RL	1Bc, 2Cc	no concerns	8 holes casing	3 CORKS		
3	537B-Full4	Costa Rica Seismogen		Pac	R	No review	No review	Riser 6,000m	CORK		
2	548-Full3	Chicxulub K-T Impact Crater		Atl	MSP	1Aa	Pre viewed				Permit?
2	549-Full6	Northern Arabian Sea Monsoon		Ind	RL	1A	approved				
3	551-Full	Hess Deep Plutonic Crust		Pac	RL	1Aa	No review No issue	Hardrock			
2	552-Full3	Bengal Fan		Ind	RL	1Aa	approved				
1	553-Full2	Cascadia Margin Hydrates		Pac	RL	1B, 1A	approved		ACORK		LD-DP for Log
2	581-Full2	Late Pleistocene Coralgal Banks		Atl	MSP	1A	No review	MDCB			Per.-MMS
2	605-Full2	Asian Monsoon		Pac	RL	1Aa	approved				Clearance
1	633-Full2	Costa Rica Mud Mounds		Pac	RL	1Aa, 1Bb	approved ROV		4 CORKs		
2	644-Full2	Mediterranean Outflow		Atl	RL	1Ba	No review				
3	659-Full	Newfoundland Rifted Margin		Atl	RL	1Aa	No review	Deep 2,120m			
2	661-Full2	Newfoundland Sediment Drifts		Atl	RL	1Bb, 2Ab	No review				
2	686-Full	Southern Alaska Margin 1		Pac	RL	1Ba,1Ca,	No review				
3	695-Full2	Izu-Bonin-Mariana Pre-Arc Crust		Pac	RL	1Ba	No review				
2	716-Full2	Hawaiian Drowned Reefs		Pac	MSP	1Aa	approved				Permit
2	724-Full	Gulf of Aden Faunal Evolution		Pac	RL	2Cc, 2Cb,	No review				Security
2	732-Full2	Antarctic Peninsula Sediment Drifts		South	RL	1Ba	No review	Non-mag			
1	693-APL	S. Chamorro Seamount		Pac	RL	3A	No review		CORK		

Them	Numbers	Tytle	Ocean	P-type	SSP	EPSP	Drilling	CORK	3rd-Party	Other	SPC
1	555-Full3	Cretan Margin	Med	RL	3A	No review		CORK			
2	567-Full4	South Pacific Paleogene	Pac	RL	2Ad, 3A	No review				Long transit	
1	589-Full3	Gulf of Mexico Overpressures	Atl	RL	1A	tentative approved	Blue Unit	CORK		Shell loc. Mud	
2	618-Full3	East Asian Margin	Pac	RL+R	1Aa	Previewed				No Chikyu	Holding bin
1	637-Full2	New England Shelf Hydrogeology	Atl	MSP	2Cd, 3Bd	Previewed					Holding bin
3	669-Full3	Walvis Ridge Hotspot	Atl	RL	N/A	No review				GHMT	
2	672-Full3	Baltic Sea Basin Paleoenvironment	Atl	MSP	1Ba	No review					
3	681-Full2	Lesser Antilles Volcanic	Atl	RL	2Ab, 2Ac,	No review					Holding bin
3	697-Full3	Izu-Bonin-Mariana Rearc Crust	Pac	RL	1Bb	No review	Deep? 1,900m				
3	703-Full	Costa Rica SeisCORK	Pac	RL	N/A	No review		Seis-CORK			
2	705-Full2	Santa Barbara Basin C-Change	Pac	RL+R	1Ab, 1Ac	Previewed					Holding bin

Nominations of ECORD co-chiefs

Number	Short title	Nominee	Country	country
548	Chicxulub K-T Impact Crater	Morgan, Joanna	ECORD	UK
548	Chicxulub K-T Impact Crater	Schulte, Peter	ECORD	D
548	Chicxulub K-T Impact Crater	Claeys, Philippe	ECORD	Belgium
551	Hess Deep Plutonic Crust	Gillis, Kathy	ECORD	CND
551	Hess Deep Plutonic Crust	Pedersen, Rolf	ECORD	N
551	Hess Deep Plutonic Crust	MacLeod, Chris	ECORD	UK
551	Hess Deep Plutonic Crust	Ceuleneer, Georges	ECORD	F
553	Cascadia Margin Hydrates	Riedel, Michael	ECORD	CND
553	Cascadia Margin Hydrates	Boetius, Antje	ECORD	D
553	Cascadia Margin Hydrates	Behrmann, Jan	ECORD	D
553	Cascadia Margin Hydrates	Hinrichs, Kai Uwe	ECORD	D
581	Late Pleistocene Coralgal Banks	Tudhope, Sandy	ECORD	UK
581	Late Pleistocene Coralgal Banks	Gischler, Eberhard	ECORD	D
581	Late Pleistocene Coralgal Banks	Betzler, Christian	ECORD	D
633	Costa Rica Mud Mounds	Brueckmann, Warner	ECORD	D
633	Costa Rica Mud Mounds	Ranero, Cesar	ECORD	E
659	Newfoundland Rifted Margin	Manatschal, Gianreto	ECORD	F
659	Newfoundland Rifted Margin	Minshull, Timothy	ECORD	UK
661	Newfoundland Sediment Drifts	Kroon, Dick	ECORD	UK
661	Newfoundland Sediment Drifts	Erbacker, jochen	ECORD	D
661	Newfoundland Sediment Drifts	Ursula Roehl	ECORD	D
661	Newfoundland Sediment Drifts	Wilson, Paul	ECORD	UK
661	Newfoundland Sediment Drifts	Pearson, Paul	ECORD	UK
686	Southern Alaska Margin 1: Climate-Tectonics	Clift, Peter	ECORD	UK
695	Izu-Bonin-Mariana Pre-Arc Crust	Chauvel, Catharine	ECORD	F
695	Izu-Bonin-Mariana Pre-Arc Crust	Pearce, Julian	ECORD	UK
732	Antarctic Peninsula Sediment Drifts	Hodell, David	ECORD	UK
732	Antarctic Peninsula Sediment Drifts	Crosta, Xavier	ECORD	F
732	Antarctic Peninsula Sediment Drifts	Hilldenbrand, Claus-Dieter	ECORD	UK
732	Antarctic Peninsula Sediment Drifts	Gersonde, Rainer	ECORD	D

2.5 Science Plan Writing Committee – SPWC

G. Camoin will give a report about latest news of SPWC activities.

3. ECORD News

3.1 EMA - ECORD Council

C. Mével will give a summary about the latest news regarding EMA and ECORD Council activities.

3.2 ESO

A. Stevenson will give a summary about the latest news regarding ESO activities.

Great Barrier Reef Environmental Changes Expedition

After transit to Townsville, Australia (29 January-4 February), the *Greatship Maya* left Townsville on 11 February and conducted coring operations on the Great Barrier Reef off NE Australia. The offshore part of the expedition ended on 6 April after 55 days. A preliminary expedition summary is given below.

Although the recovery was less than expected (c.f. 57.5% for Expedition 310 Tahiti, which had slightly different lithologies, i.e. higher portion of microbialites), some impressive cores were recovered, including continuous massive coral frameworks characteristic of very high energy and shallow (probably <5 m paleodepth) environments, ideal for sea level reconstruction. The GBREC Onshore Science Party will begin on 2 July at the IODP Bremen Core Repository (BCR), when minimum and standard measurements will be made on the split cores.

IODP Expedition 325 - GBREC	
Number of sites	29
Number of holes	34
Number of cores	420
Drilled length	746 m
Recovered length	218 m
Core recovery	29 %
Duration	55 days
Deepest penetration	43 mbsf
Number of holes logged	4

First reports from the Co-chief scientists indicate that:

- Recovered sediment cores from -42 m to -167 m below present sea level recovered well developed, in situ coral reef frameworks from -42 m to -139 m below present sea level. The expedition cored the distinct -120 m reef feature at HYD-02A and recovered coral frameworks from -129 m to -139 m below sea level – likely representing the LGM or penultimate LGM.

- Good coverage/recovery from key water depths -90 m to -120 m that span the pre-LGM, LGM and subsequent postglacial reef sections.
- Recovered extensive sequences of older Pleistocene reefs deposits from beneath the post glacial reef sections.
- Recovered +40 m of sediments from the upper-slope (-167 m) that likely encapsulates sediment flux from the shelf edge reefs during sea level fluctuations.

New Jersey Shallow Shelf - Expedition #313

The Expedition 313 New Jersey began at the Bremen Core Repository on 6th November and continued until the 4th December. The OSP was attended by 25 participating scientists from 11 countries and 40 ESO staff. All necessary analyses and reporting were completed at the OSP, and reporting will be finalised at the 1st post-cruise meeting to take place at College Station from 3rd to 7th June 2010. Outreach activities were conducted during the OSP. The expedition is currently 4 months into the moratorium period with the Science Party conducting their post-Expedition research. The Expedition Report editorial meeting will be held at TAMU, College Station, Texas 3-7 June. ESO presented the Expedition QA/QC report at the recent STP meeting held in Sydney, Australia.

Peer-reviewed papers from Expedition 313 are not expected for several months, but the expedition has been reported though oral presentations and posters at various conferences, including:

- **American Geophysical Union Fall Meeting, 14–18 December 2009**
  - Gregory S. Mountain *et al.,* Links Between Eustatic History, Sequence Architecture, and Lithofacies Associations Put to the Test: IODP Exp313 Drilling on the NJ Margin.
  - Michael J Mottl *et al.,* Fresh and Salty: Chemistry of Sediment Pore Water from the New Jersey Shallow Shelf: IODP Exp313.
  - Jenny Inwood *et al.,* Downhole Logging Measurements from IODP Expedition 313: an Overview and Future Directions.
- **German joint IODP/ICDP meeting in Frankfurt, 9-11 March 2010**
  - Ulrich Kotthoff *et al.,* Palynological results from the New Jersey shallow shelf: site-shoreline distance, sea-level reconstruction, and vegetation development on the Atlantic Coastal Plain.
  - Michael J Mottl *et al.,* Sediment Pore Water Chemistry from the New Jersey Shallow Shelf: IODP Expedition 313.
- **US Northeast Section meeting of the Geological Society of America, 13-16 March 2010**
  - Gregory S. Mountain *et al.,* Eustatic History, Sequence Architecture, and Lithofacies Associations in the NJ Transect: preliminary results of IODP Exp313.
  - Francine McCarthy *et al.,* IODP Exp. 313 sea-level reconstructions from palynology (distance-to-shoreline estimates) and benthic foraminifera (water-depth estimates): insights into controls on the architecture of the NJ margin.

- Ulrich Kotthoff *et al.,* Comparison of palynologically-derived estimates of sea-level and paleo-depth reconstructions using benthic foraminifers: insights into controls on the architecture of the New Jersey margin.

- **Japan Geoscience Union Meeting 2010, May 23-28 2010**
  - Hisao Ando *et al.,* Passive margin shelf drilling and its significance: preliminary results of IODP Expedition 313 New Jersey Shallow Shelf.
  - Hironori Otsuka *et al.,* Compaction processes of the New Jersey shallow shelf based on petrophysical data from IODP Expedition 313.
- **European Geosciences Union General Assembly, 2-7 May 2010**
  - Jean-Noel Proust *et al.*, Architecture of passive margin sediments and sea level changes: New Jersey IODP Expedition 313 preliminary results *(invited talk at the EuroFORUM 2010: Achievements and perspectives in scientific ocean and continental drilling).*
  - Jenny Inwood *et al.,* Unravelling the characteristics of siliciclastic margin successions using multivariate statistical analysis of petrophysical data: IODP Expedition 313.
  - Johanna Lofi *et al.,* Interpretation and significance of petrophysical boundaries in siliciclastic shelf margin successions: IODP Expedition 313.
  - Sally Morgan *et al,* Adjustment of core petrophysical measurements to account for core quality issues: A case study from the New Jersey Shallow Shelf (IODP Expedition 313).

Change in ESO Management at the British Geological Survey

Following Dr Dan Evans retirement at the end of April, the British Geological Survey (BGS) has implemented a new management structure for ESO. This is part of a reorganisation of the BGS structure within Marine Geoscience, which is led by Robert Gatliff (Head of Marine Geoscience). The ESO project will be managed within the Marine Geology Team, led by Alan Stevenson. David McInroy has been appointed Project Manager/Science Manager of ESO, and is the first point of contact for ESO.

Robert Gatliff will take a new position as Chair of ESO to oversee co-ordination between the ESO partners and will represent ESO at ECORD Council, at SPC (Science Planning Committee) and OTF (Operations Task Force) and IWG+ (International Working Group Plus). Alan Stevenson will be Vice-Chair of ESO. Dr Dan Evans has agreed to be available on a consultancy basis.

Robert Gatliff was appointed Head of Marine Geoscience (formerly the Marine, Coastal and Hydrocarbons Programme) in 2003. He has been Chief Scientist on three coring and drilling research cruises on the UK Atlantic Margin. He has extensive petroleum geology and basin analysis experience, primarily in the UK, but also in Tonga, Azerbaijan, East and West Africa and the Falkland Islands.

Alan Stevenson was appointed Team Leader in 2008, and previously led the Marine Geological Mapping Project in BGS. He has extensive marine geology operations experience, and has recently completed the editing of a major new atlas of the geology of the Southern Permian Basin. He currently co-ordinates the EC's EMODNET (European Marine Observation and Data Network) Geology Project consisting of partners from 14 countries. He continues in his role as Outreach Manager for ESO.

David McInroy has worked in BGS Marine Geoscience since 2001. For the last 6 years he has held the role of ESO Staff Scientist and has been active in the organisation and implementation of scientific operations for ECORD, including the expeditions to the central Arctic, Tahiti and the New Jersey continental shelf. In addition to working for ESO, David works on various BGS projects concentrating on the NW European Margin, in particular the regional seismic interpretation, mapping, and analysis of the Hatton-Rockall and Faroe-Shetland Basin areas.

The management at the IODP Bremen Core Repository (led by Dr Ursula Röhl, ESO Curation & Laboratory Manager) and the European Petrophysics Consortium (led by Dr Sarah Davies, EPC Manager) remains unchanged.

3.3 EMA-ESO-ESSAC Outreach

P. Maruéjol will report on the recently fulfilled ECORD outreach activities, which have been outlined at the last EMA-ESO-ESSAC meeting convened by EMA and held in Edinburgh at the BGS office, from February 25 to 26, 2010. The meeting was attended by A. Stevenson (host/ESO), A. Gerdes (ESO), C. Mével and P. Maruéjol (EMA), Jenny Lezius and R. Stein (ESSAC).

1) New ECORD Publications

- **ECORD Newsletter #14 - May 2010**, a 20-page issue released at EGU 2010, available on-line at: http://www.ecord.org/pub/nl.html.

  This issue is made up of ECORD information from late November 2009 to April 2010 with regular messages, news and updates from the ECORD Council, EMA, ESO, ESSAC and ECORD Outreach, reports on two Magellan Series Workshops and on a 2008-2009 Dsitinguished Lecturer by P. Clift , 'A Letter from Spain' (M. Comas and J-R. Sanchez Quintana), a review of the EPC during the last MSP expeditions (Sarah Davies) and a short presentation of the new IODP-MI office in Tokyo by K. Suyehiro.

  The next issue - ECORD Newsletter #15 - will be prepared during the next EMA-ESO-ESSAC meeting in Bremerhaven and assembled according to the following deadlines:

  - Call for contributions - to be issued on September 1, 2010,
  - Author's deadline - October 8, 2010,
  - Date of release - late October-early November 2010.

- **ECORD Pocket folder** includes 8 leaflets presenting ECORD/IODP, ESSAC, ESO, EPC and BCR as well as three MSP expeditions operated by ESO (ACEX, Tahiti and New Jersey). This informative folder replaces the previous ECORD, ESSAC and ESO brochures and was successfully presented at EGU 2010.

2) ECORD on-line with the updates of the ECORD, ESO and ESSAC web sites and the new pages (RSS, twitter, facebook...).

3) IODP-ICDP joint activities at EGU 2010

For the first time, ECORD presented IODP along with ICDP at EGU 2010 to get together the scientific drilling community. ECORD issued a EGU 2010 communication plan covering all activities supported by ECORD, IODP-MI, ICDP, CDEX-JAMSTEC and IODP-USIO at the conference - http://www.ecord.org/pi/egu10.html:

- Joint IODP-ICDP booth rented by IODP-MI - L-shaped and 18 sqm area - to present recent information about IODP and ICDP programs, Corelyser-CoreWall demonstrations and a model of the *Kayd*,
- Joint IODP-ICDP Townhall meeting - a very well attended event (> 200 people),
- Three IODP media conferences were held on Wed May 5 - see the webcasts on http://www.egu-media.net/content/view/212/81/

The next EMA-ESO-ESSAC meeting will take place in Bremerhaven from August 24 to 25, 2010.

3.4 ESSAC representatives and National Office reports

Each ESSAC delegates will give a short summary about the latest national activities regarding IODP and ECORD issues. The current ESSAC delegates and alternates are given in the table down below:

ESSAC Delegates and Alternates

Austria	Werner E. Piller werner.piller@uni-graz.at	Michael Wagreich michael.wagreich@univie.ac.at
Belgium	Rudy Swennen rudy.swennen@geo.kuleuven.ac.be	Anneleen Foubert Anneleen.Foubert@ees.kuleuven.be
Canada	Neil Banerjee neil.banerjee@uwo.ca	Ulrich G. Wortmann uli.wortmann@utoronto.ca
Denmark	Marit-Solveig Seidenkrantz mss@geo.au.dk	Paul Cornils Knutz pkn@geus.dk
Finland	Kari Strand kari.strand@oulu.fi	Annakaisa Korja annakaisa.korja@helsinki.fi
France (Vice-Chair)	Gilbert Camoin camoin@cerege.fr	Serge Berné serge.berne@univ-perp.fr
Germany (Chair)	Ruediger Stein Ruediger.Stein@awi.de	Jochen Erbacher j.erbacher@bgr.de
Iceland	Bryndís Brandsdóttir bryndis@raunvis.hi.is	Gudrún Helgadóttir gudrun@hafro.is
Ireland	Xavier Monteys Xavier.Monteys@gsi.ie	David Hardy david.hardy@gsi.ie
Italy	Elisabetta Erba elisabetta.erba@unimi.it	Leonardo Sagnotti leonardo.sagnotti@ingv.it

The Netherlands	Lucas Lourens llourens@geo.uu.nl	Stefan Schouten schouten@nioz.nl
Norway	Nalan Koç Nalan.Koc@npolar.no	Helga F. Kleiven kikki@uib.no
Portugal	Fatima Abrantes fabrantes@pro.softhome.net fatima.abrantes@ineti.pt	Luiz F. Menezes Pinheiro lmp@geo.ua.pt
Spain	Menchu Comas/ Carlota Escutia Dotti mcomas@ugr.es/ cescutia@ugr.es	Victor Diaz del Rio diazdelrio@ma.ieo.es
Sweden	Ian Snowball Ian.Snowball@geol.lu.se	Eve Arnold eve.arnold@geo.su.se
Switzerland	Judith McKenzie judy.mckenzie@erdw.ethz.ch	Helmut Weissert helmut.weissert@erdw.ethz.ch
U.K.	Rachael H. James R.H.James@noc.soton.ac.uk	Ros Rickaby Rosalind.Rickaby@earth.ox.ac.uk

5. Nominations and Staffing

5.1 Staffing

R. Stein will summarize on expedition staffing.

Juan de Fuca 327

Juan de Fuca II						IODP PMO Balance						
Berth #	Science Party #	Responsibility	Name	Status	Affiliation (ranking)	J-DESC (8)	ESSAC (8)	USSAC (8)	IODP-China (1)	ANZIC (0)	K-IODP (0)	INDIA (0)
1	1	Co-chief Scientist	Fisher, Andy	accepted	USSAC			1				
2	2	Co-chief Scientist	Tsuji, Takeshi	accepted	J-DESC	1						
3		USIO Expedition Project Manager	Petronotis, Katerina	accepted	USIO							
4		USIO Logging Staff Scientist	Mrozewski, Stefan	accepted	USIO							
5	3	Core Description- Petrologist	Harris, Michelle	accepted	ESSAC(UK,***;s)		1					
6	4	Core Description- Petrologist/inorganic geochemist	Rutter, Jennifer	accepted	ESSAC(UK,**;s)		1					
7	5	Core Description- Structural Geologist/Logging Scientist	Miyamoto, Hiroki	accepted	J-DESC (2;s)	1						
8	6	Inorganic Geochemist	Ji, Fuwu	accepted	IODP-CHINA				1			
9	7	Physical Properties	Inderbitzen, Katie	accepted	USSAC (3;s)			1				
10	8	Hydrogeologist/Physical Properties	Winslow, Dustin	accepted	USSAC (1;s)			1				
11	9	Geophysicist/Physical Properties	Masui, Reona	accepted	J-DESC (1;s)	1						
12	10	Microbiologist/Organic Geochemist	Cowen, James	accepted	USSAC (1)			1				
13	11	Microbiologist/Organic Geochemist	Orcutt, Beth	accepted	ESSAC(DK,***)		1					
14	12	Microbiologist/CORK Specialist	Turner, Amanda	accepted	USSAC (1;s)			1				
15	13	Hydrogeologist/CORK Specialist	Becker, Keir	accepted	USSAC (1)			1				
16	14	Inorganic Geochemist/CORK Specialist	Wheat, Geoff	accepted	USSAC (1)			1				
17	15	Inorganic Geochemist/CORK Specialist	Hulme, Samuel	accepted	USSAC (1;s)			1				
18		CORK Engineer	Morvan, Sylvain	accepted	ESSAC(F,**)		1					
19												
20												
21												
22												
23		Education and Outreach	Gautier, Jean-Marie	accepted	ESSAC (alternate)		1					
24		Education and Outreach	Thierberge, Brigitte	accepted	ESSAC (1)		1					
25		Education and Outreach	Kane, Jacqueline	accepted	DEA							
26		Education and Outreach	Keske, Stephanie	accepted	DEA							
27		Education and Outreach	Bowman, Dinah	accepted	DEA							
28		Education and Outreach	Richardson, Bejonty	*accepting - paperwork?*	HBCU							
29		Education and Outreach	Peart, Leslie	accepted	USIO							

Louisville 330

ESSAC nominations

Louisville Ranking results	Candidate		C	Expertise	
Priority list					
3,0	Fitton	Godfrey	UK	Petrologist	PhD, Professor
3,0	Thordarson	Thorvaldur	UK	Petrologist Sedimentologist Stratigraphic Correlator	PhD, Reader in Volcanolog
3,0	Weis	Dominique	CDN	Geochemist	PhD, Professor
2,9	Beier	Christoph	D	Inorganic Geochemist Petrologist	PhD
2,7	O'Connor	John	D	Petrologist	PhD
2,7	Pressling	Nicola	UK	Palaeomagnetist	PhD
2,3	Hamelin	Cedric	F	Inorganic Geochemist Petrologist	PhD
2,2	Drouin	Marion	F	Inorganic Geochemist Petrologist Metamorphic Petrologist	PhD
reserve list					
2,1	Granot	Roi	F	Paleomagnetist	PhD
2,0	Kalnins	Lara	UK	Geophysicist Physical Properties Specialist	graduate student
1,9	Rausch	Svenja	D	Inorganic Geochemist Petrologist	Dipl. Geow., graduate stu
1,9	Williams	Rebecca	UK	Petrologist	Graduate Student
1,8	Maicher	Doris	D	Logging Scientist Petrologist	PhD, Cruise coordination a
1,6	Janin	Myriam	F	Inorganic Geochemist Petrologist	PhD student
1,6	Rutter	Jennifer	UK	Inorganic Geochemist Petrologist	Graduate Student
1,5	Ramalho	Ricardo	UK	origin and evolution of Ocean Island Volcanoes	PhD (thesis submitted; vi
1,2	Pandey	Sanjay Kumar	D	Inorganic Geochemist	PhD
1,0	Koch	Michael	D	Inorganic Geochemist Petrologist Metamorphic Petrologist	Graduate Student
	declined	invited			

South Pacific Gyre 329

ESSAC nominations

South Pacific Gyre Ranking results	Candidate		C	Expertise	
Priority List					
3	Ferdelman	Timothy	D	Inorganic Geochemist	PhD
3	Kallmeyer	Jens	D	Biologist Microbiologist Inorganic Geochemist Organic Geochemist	Phd, Research Group Leader
2,9	Alain	Karine	F	Microbiologist	PhD, research scientist CNRS
2,9	Gribsholt	Britta	DK	Microbiologist Inorganic Geochemist Organic Geochemist	PhD, Associate Professor
2,8	Steinsbu	Bjørn Olav	N	Microbiologist	PhD student
2,8	Wade	Bridget	UK	Sedimentologist Paleontologist (Foraminifer-Benthic)	PhD, NERC Advanced Research
2,7	Bach	Wolfgang	D	Inorganic Geochemist Petrologist Metamorphic Petrologist	PhD
2,7	Toffin	Laurent	F	Microbiologist	PhD
Reserve list					
2,5	Engelhardt	Tim	D	Microbiologist	PhD student
2,4	Smith-Duque	Christopher	UK	Petrologist Metamorphic Petrologist	PhD
2,2	Szpak	Michal	IRL	Inorganic Geochemist Organic Geochemist	PhD Candidate
1,9	Harris	Michelle	UK	Petrologist Metamorphic Petrologist	Graduate Student
1,5	Adhikari	Rishi Ram	D	Microbiologist Inorganic Geochemist Organic Geochemist	PhD Student
1,5	Pasini	Valerio	F	Microbiologist Geophysicist Structural Geologist	PhD student
1,2	Pandey	Sanjay Kumar	D	Inorganic Geochemist	PhD
declined	invited				
	invited for Juan de Fuca				

NanTroSEIZE

ESSAC Nominations

STARS/Ranking	Candidate		C	Expertise	
Priority list NanTroSEIZE					
3,0	Doan	Mai-Linh	F		Assistant Professor
3,0	Kopf	Achim	D		Professor of Marine Geotechnics
2,9	Fabbri	Olivier	F		Professor
2,3	Dempsey	Edward	UK	Petrologist Metamorphic Petrologist Structural Geol	Graduate student
2,3	Tudge	Joanne	UK	Logging Scientist Downhole Measurements	PhD Student
2,2	Pinero	Elena	D	Inorganic Geochemist Sedimentologist	PostDoc Researcher
1,6	Reusch	Anna	D	Physical Properties Specialist Sedimentologist	student, BSc (MSc will be submitted autumn 2010)
1,6	Silva	Sónia	P	Structural Geologist	PhD student
Reserve list					
1,3	Idowu	Oluwaseyi	CDN	Geophysicist Physical Properties Specialist	
1,2	Pandey	Sanjay Kumar	D	Inorganic Geochemist	PhD

5.2 Updates on SAS panel nominations

R. Stein will summarize updates on SAS panel nominations.

5.2.1 SASEC

Nicolas Arndt attended his last meeting in January 2010. As his replacement, Damon Teagle was proposed by IODP-UK. This change has already been approved by the ECORD Council.

5.2.2 SPC

Two rotations were considered in SPC. Hugh Jenkyns and Gilbert Camoin will rotate off after August 2010. The ESSAC Office issued a Call for Nominations in STP in December, with deadline March 15, 2010. Three valid applications have been received. The applications have been sent to the ESSAC delegates on March 15, 2010. Six votes have been received by the ESSAC Office.

Nominations are Heiko Paelike and Javier Escartin. These results need to be approved from the ECORD Council during the next meeting in June 2010.

5.2.3 SSEP

Juergen Kopeke started his membership at the May meeting 2010. Tim Ferdelman will replace Kai Uwe Hinrichs starting at November meeting 2010.

5.2.4 STP

Following changes were considered in STP: Douglas Schmitt will be new incoming (vice) chair of STP. Georges Gorin will be replaced by Nathalie Vigier starting with the January meeting 2011.

5.2.4 SSP

Neil Mitchell will rotate off after the July meeting 2010. The ESSAC Office issued a Call for Nominations in SSP in December, with deadline March 15, 2010. Three valid applications have been received. The applications have been sent to the ESSAC delegates on March 15, 2010. The ESSAC Office received six votes.

Nominated is Peter Clift. This results needs to be approved from the ECORD Council during the next meeting in June 2010.

5.2.5 EPSP

The ESSAC Office issued a Call for Nominations in EPSP in April, with deadline June 08, 2010.

5.2.6 EDP

Johnn Thorogood rotated off in January 2010. The ESSAC Office issued a Call for Nominations in SSP in December, with deadline March 15, 2010. No valid application has been received. After an extension of deadline, the ESSAC Office received one valid application. IODP-UK supported this applicant. This information has been sent to the ESSAC delegates on April 14, 2010.

Nominated is Neal Whatson. This application still needs to be approved from the ECORD Council during the next meeting in June 2010.

5.2.7 SSEP

Daniele Brunelli declined his membership in SSEP with immediate effect in April 2010. The ESSAC Office issued a Call for Nominations in SSEP in April, with deadline June 08, 2010.

6. ESSAC Highlights

Carlota Escutia will present a report about Wilkesland Expedition 318.

IODP drilling of the Wilkes Land margin during Expedition 318 (January-March 2010) aimed to obtain the record of the development and evolution of the East Antarctic Ice Sheet (EAIS) and its relationships with global climatic, oceanographic and sea level changes. The recovered sediment cores tell the story of Antarctica's transition from an ice-free, warm, greenhouse world to an ice-covered, cold, dry "icehouse" world. Sediments and microfossils preserved within the cores document the onset of cooling and the development of the first Antarctic glaciers and the growth and recession of Antarctica's ice sheets. Cores from one site resemble tree rings - unprecedented alternating bands of light and dark sediment preserve seasonal variability of the last deglaciation that began some 10,000 years ago.

7. Breakout Sessions

ESSAC Subcommittees:

Nominations and staffing

Education and outreach

Workshops, communication and vision

8. Education and outreach

8.1 ECORD Summer Schools 2010 updates

8.1.1 The Urbino Summer School in Paleoclimatology 2010

L. Lourens will give a short report about the Urbino Summer School in Paleoclimatology. PDF course flyer and provisional program are given in the Appendix 5a. Details are to be found on the webpage: http://www.urbinossp.it/

8.1.2 IODP Canada Summer School

N. Banerjee will give a short report about the IODP Canada Summer School. PDF course flyer and preliminary program are given in the Appendix 5b.

Details are to be found on the webpage: http://www.iodpcanada.ca/news_items/an-iodp-canada-summer-school-in-2010

8.1.3 ECORD Summer School on Geodynamics of Past Climate Changes

J. Lezius will give a short report about the ECORD Summer School on Geodynamics of Past Climate Changes. Details are to be found on the webpage: http://www.glomar.uni-bremen.de/ECORD_Summer_School_2010.html.

8.2 ECORD Grants and Scholarships

J. Lezius will give a short overview of duly received applications for ECORD Scholarships and ECORD Research Grants (cf. 7. Breakout session Education and Outreach).

8.3 ECORD Summer Schools 2011

J. Lezius will present the applications to host an ECORD Summer School 2011 (cf. 7. Breakout session Education and Outreach).

8.4 School of Rock 2010

J. Lezius will present information about the School of Rock 2010 and give an overview of received applications for the Call issued in May 2010 with deadline May 20.

8.5 ECORD Teachers Workshop

J. Lezius will present some information about the possibility of an ECORD Teachers Workshop based on a proposal by Jean-Luc Berenguer.

Draft Proposal for an ECORD School of Rock- like Teachers Workshop

Proponent: Jean-Luc Bérenguer, science teacher at Lycée International de Valbonne, (Sophia-Antipolis, Nice, France), coordinator of the programme 'Sismos à l'Ecole', member of the GIFT committee and 2009 School of Rock teacher.

What is "School of Rock"?

Since 2005, Deep-Earth Academy (Consortium from Ocean Leadership) and the IODP-USIO organise "School of Rock (SOR)" as a multi-day workshop onboard the JOIDES Resolution or in the IODP Gulf Coast Core Repository. Educators from across the USA and the world work with real core material and lab technology to learn how the science reveals clues about Earth's history. During "School of Rock" research experiences, primary to undergraduate educators have daily opportunities to conduct hands-on analyses of sediment and hard-rock cores with scientists and technicians who specialise in IODP research.

This workshop became so popular among the teachers from ECORD member countries that two of them participated in the School of Rock 2009 - Exp 321T.

Objectives

An ECORD version of the School of Rock (ECORD School of Rock) could be organised on a similar basis with the following objectives:

· to bring the scientific outcomes of IODP-ICDP at school for teachers of the ECORD member countries,

· to transfer the knowledge and implied societal relevance to a wider audience (educators and students),

· to establish a network of ECORD supportive teachers through European countries.

Tasks

· to provide training courses that cover the main research areas of IODP and ICDP to a group of teachers with both academic courses and hands-on practices led by IODP-ICDP experts,

· to carry out classroom activities relevant to each grade and curriculum,

· to support teachers (at a national level?) when implementing the educational resources in the classroom.

Recommendations to allow a successful workshop

· good on-site organisation,

· further involvement of the teachers within the classroom and the educational community.

Description of the workshop

· Call for teachers issued by ESSAC and distributed through educational networks to select 30 participants as a maximum,

· Possible relevant scientific themes: sea level/climate change, carbonates, microbiology/micropaleontology, KT crisis, passive margin/Ligurian ocean, tools for seismicity/tsunamis, rift/hydrothermalism , ocean acidification, etc, according to the scientific experts who will be part in and to the tools available for the workshop.

· Duration: Seven days (a week) with one theme per day with hands-on activities, short courses, develop classroom activities, fieldworks.

· Location: Centre International de Valbonne, Sophia-Antipolis, France)

- accommodation, meeting, transport and laboratory facilities,
- 20km to Nice international airport,
- previous experiences in teachers workshops - Edusismo 2009 with 50 French teachers and European Educational Observatory for Environment (03E) 2010 with 60 Italian, Swiss and French teachers.
- Linked with research laboratories: GeoAzur (Villefranche sur mer and Sophia-Antipolis), CEREGE (Aix en Provence).

Links

· School of Rock: http://www.oceanleadership.org/education/deep-earth-academy/educators/school-of-rock/

· JOIDES Resolution: http://joidesresolution.org/

· Sismos à l'Ecol: http://www.edusismo.org/en/index.asp?

· Geosciences Information for Teachers (GIFT): http://www.egu.eu/media-outreach/gift/home.html

· European Educational Observatory for Environment (03E): http://o3e.geoazur.eu/

· Centre International de Valbonne: http://www.civfrance.com/

8.6 Distinguished Lecturer Programme

8.6.1 2009-2010

J. Lezius will present an update of the DLP, with done, upcoming and planned/postponed dates. The Program runs until June 2010 and will be replaced by new DLP (cf. 7. Breakout session Education and Outreach). J. Lezius will also present a first draft of the request feedback from for institutes that host DLPs (cf. 7. Breakout session Education and Outreach).

8.6.2 2010-2011

J. Lezius will give an overview of received applications for the DLP 2011 (cf. 7. Breakout session Education and Outreach).

8.7 Subcommittee report, discussion and future actions

X. Monteys reports about the meeting of the « Education and Outreach » ESSAC subcommittee at the 14th ESSAC meeting in Tromsø (Norway).

5.3 Subcommittee report, discussion and future actions

L. Lourens reports about the meeting of the « Nominations & staffing» ESSAC subcommittee at the 14th ESSAC meeting in Tromsø (Norway).

9. Workshops, communication and vision

9.1 Ocean School 010 Oostende

R. Stein will report about the Ocean School 010. The final program is given in Appendix 6.

9.2. IODP Drilling of the "Shackleton sites" on the Iberian Margin

F. Abrantes reports about IODP Drilling of the "Shackleton sites" on the Iberian Margin: In Search of a Plio-Pleistocene Marine Reference Section

The Workshop IODP Drilling of the "Shackleton sites" on the Iberian Margin: In Search of a Plio-Pleistocene Marine Reference Section, funded by the ESF programme Workshops on Marine Research Drilling - MAGELLAN WORKSHOP SERIES, took place in Lisbon on 9 and 10th of November 2009.

The main objective of the workshop was to assemble researchers who have worked on the Portuguese Margin, and especially the Shackleton sites, to discuss the development of an IODP proposal to extend these remarkable records into the Plio-Pleistocene by drilling using the JOIDES Resolution. The workshop provided a forum for invitees to summarize past work and present new data, identify key unanswered questions, and discuss the best drilling strategy for reaching the overall goals.

We originally envisioned that the workshop would be solely focused on paleoceanography, but during the organization of the workshop we were approached by Portuguese and Italian colleagues from the tectonics community. This group's interest is to establish a borehole observatory (i.e., "CORK" and instrumented hole) in the region of the fault believed to have caused the devastating Lisbon earthquake and tsunami in 1755. Given the societal relevance and importance of this geohazard objective, we invited 7 scientists with tectonic interests to join the workshop.

Following oral presentations and discussion of the possible strategies, the consensus was to submit separate but parallel proposals because of the different "drilling readiness" of the two objectives. All necessary site survey data is available to propose the Shackleton sites, whereas there are a host of issues with the borehole observatory site that will require additional time to resolve.

9.3 ESF Magellan Conference: Large Igneous Provinces and Mass Extinctions

W. Piller will present a report on that workshop.

The focus of the topics within „Large Igneous Provinces and Mass Extinctions" was rather broad during the EGU Meeting covering not only the P/T-boundary but also including Cambrian and

Carboniferous problems. The Saturday workshop focussed on the Siberian traps. The presentations covered highly different topics ranging from petrology and mineralogy, over a major focus on geochronology to biotic signals at the P/T-boundary. The inclusion of experts covering highly different scientific fields and the close cooperation of a broad Russian science party seems to be very promising for future activities.

9.4 EuroFORUM

R. Stein will present a report on the EuroFORUM at EGU 2010 in Vienna. The program is given in Appendix 7.

9.5 ESF Magellan Programme: Present and Future

J. Erbacher will give an ESF Magellan Summary. The Invitation of the Steering Committee Meeting, including the programme and flyer is given in Appendix 8.

9.6 Subcommittee report, discussion and future actions

TBN reports about the meeting of the «Workshops, communication and vision» ESSAC subcommittee at the 14th ESSAC meeting in Tromsø (Norway).

10. Review of consensus, motions and actions

11. Next meetings

S. Jaccard will present fact about the next ESSAC meeting which will be held in Zurich, October 26-27, 2010 (field trip October 25).

12. Any other Business

LIST OF CONSENSI, MOTIONS AND ACTIONS
13TH ESSAC MEETING
Oulu, November 03-04, 2009

1. INTRODUCTION

1.3 Discussion and approval of the Agenda

ESSAC Consensus 0911-01: ESSAC approves the Agenda of its 13th meeting on November 03-04, 09 at the Hotel Radisson Blu in Oulu, Finland.

1.4 Approval of the Minutes of the 12th ESSAC Meeting

ESSAC Consensus 0911-02: ESSAC approves the Minutes of its 12th meeting on May 26–27, 09 at the Hotel do Mar in Sesimbra, Portugal.

4. NOMINATIONS AND STAFFING

4.1.1 Updates in expedition staffing

ESSAC Consensus 0911-03: ESSAC approves the "late replacement" of two scientists for the Great Barrier Reef Expedition on the basis of expertise and nationality. Raphael Bourillot will replace Gilbert Camoin, and Didier Loggia will replace Philippe Gouze.

4.2 Updates on SAS panel nominations

ESSAC Consensus 0911-04: ESSAC approves SAS Panel replacement within the Science Steering and Evaluation Panel (SSEP): Tim Ferdelman will replace Kai-Uwe Hinrichs (after May-2010-Meeting) and Juergen Koepke will replace Achim Kopf (after May-2010-Meeting).

ESSAC Consensus 0911-05: ESSAC approves that future Calls for SAS Panel nominations will specify the nationality that is looked for ("UK", "F", "D", "ECORD countries outside UK, F and D")

ESSAC Consensus 0911-06: ESSAC approves an additional phrase for Calls for SAS Panel nominations to encourage all "other" nationalities to apply: applicants who will not serve as a member may become an alternate within the respective SAS Panel.

> **ESSAC Action Item 0911-01:** ESSAC (R. James) will contact her national office concerning replacement of Science Advisory Structure Executive Committee (SASEC) member Nick Arndt.

> **ESSAC Action Item 0911-02:** ESSAC (G. Camoin) will contact Christian Blanpied (Total) for replacing Philippe Lapointe within Environmental Protection and Safety Panel (EPSP).

> **ESSAC Action Item 0911-03:** ESSAC Office will contact Lothar Wohlgemut and Bill Ussler (as chair) for continuation of membership of L. Wohlgemut within Engineering Development Panel (EDP).

> **ESSAC Action Item 0911-04:** ESSAC Office will send out a Call for Nominations for the Science Planning Committe (SPC) of the SAS in IODP with deadline March 15, 2010.

> **ESSAC Action Item 0911-05:** ESSAC Office will send out a Call for Nominations for the Scientific Technology Panel (SSP) of the SAS in IODP with deadline March 15, 2010.

> **ESSAC Action Item 0911-06:** ESSAC Office will send out a Call for Nominations for the Scientific Technology Panel (STP) of the SAS in IODP with deadline March 15, 2010.

> **ESSAC Action Item 0911-07:** ESSAC Office will send out a Call for Nominations for the Engineering Development Panel (EDP) of the SAS in IODP with deadline March 15, 2010.

> **ESSAC Action Item 0911-08:** ESSAC Office will send out a Call for Nomination in the Site Survey Panel (SSP) of the SAS in IODP with deadline March 15, 2010.

> **ESSAC Action Item 0911-09:** ESSAC Office will send out Calls for Applications to Sail on the three upcoming cruises: Juan de Fuca Flank Hydrogeology, South Pacific Gyre Microbiology, Louisville Seamount Chain with deadline January 15, 2010.

> **ESSAC Action Item 0911-10:** ESSAC Office will send out a Call for engineers/teachers for the Juan de Fuca Expedition with deadline January 15, 2010.

> **ESSAC Action Item 0911-11:** ESSAC Office will contact the national offices/delegates to ask them to send statistics regarding the scientists involved in each expedition (in addition to the Science Party members) and statistics including the published IODP-related papers of all their scientists.

7. EDUCATION AND OUTREACH

> **ESSAC Action Item 0911-12:** ESSAC Office will send out draft versions of a letter of support for ECORD Scholarships and ECORD Grants to delegates/alternates.

> **ESSAC Action Item 0911-13:** ESSAC Office will send out a Call for Scholarships/Grants with deadline March 29, 2010.

> **ESSAC Action Item 0911-14:** ESSAC Office will send out a Call to host a Summer School 2011 with deadline May 5, 2010.

> **ESSAC Action Item 0911-15:** ESSAC Office will contact current lecturers within DLP (2008/2010) to remind them that this program runs until May/June 2010. The ESSAC Office will also send them (once again) a list of all interested institutes.

> **ESSAC Action Item 0911-16:** ESSAC Office will create a form to request feedback from institutes that have hosted DLPs.

> **ESSAC Action Item 0911-17:** ESSAC Office will create a Call for DLP (2010/2012) related to the three main ISP themes, with a list of possible topics. The call will be sent out with deadline March 15, 2010.

8. WORKSHOPS, COMMUNICATION AND VISION

> **ESSAC Action Item 0911-18:** ESSAC Office will contact the subcommittee "Workshops, Communication and Vision" to revise the draft version of the Letter of Support for Continuation of IODP with deadline end of February 2010. Final version of the Letter of Support has to be completed end of March, 2010.

10. NEXT MEETINGS

ESSAC Consensus 0911-07: Location of ESSAC Meeting #14 will be Tromsø, Norway; location of ESSAC Meeting #15 will be Zurich, Switzerland; location of ESSAC Meeting #16 will be Leuven, Belgium.

ESSAC Office
Alfred Wegener Institute
Am Alten Hafen 26
27568 Bremerhaven
Germany
Essac.office@awi.de
www.essac.ecord.org

April 2010

Letter of Support for IODP post-2013 from the ECORD Community

In this letter, the ECORD community presents its case for support for the continuation of the scientific ocean drilling program beyond 2013.

Since 1968, the Deep Sea Drilling Project (DSDP), Ocean Drilling Program (ODP) and Integrated Ocean Drilling Program (IODP) have continuously invested in technology and innovation to make drilling and material recovery possible in many difficult settings and even in extreme environments. Ocean drilling has provided crucial records of past and present processes and interactions within and between the biosphere, cryosphere, atmosphere, hydrosphere and geosphere. The early exploratory phase resulted in the confirmation of the unifying theory of Plate Tectonics, shortly followed by the development of new fields such as paleoceanography, astronomical geochronology, structure and geodynamics of the ocean crust, georesources in oceanic hydrothermal systems, marine gas-hydrate reservoirs, geomicrobiology, and others.

The IODP is facing challenges. Research in IODP encompasses a wide range of fundamental and applied issues that affect society, such as global change, biodiversity, the origin of life, natural hazards involving the study of earthquakes processes, mineral and energy resources along continental margins as well as the internal structure and dynamics of our planet. With a multiple-platform approach including the riser-drill ship *Chikyu*, the non-riser drill ship *Joides Resolution* and mission-specific platforms, IODP focuses on three broad scientific themes documented in the Initial Science Plan, (1) Deep Biosphere and the Subseafloor Ocean, (2) Environmental Change, Processes and Effects, and (3) Solid Earth Cycles and Geodynamics.

ECORD scientists have been deeply involved in DSDP, ODP and IODP, writing proposals, conducting site surveys, participating as co-chiefs, shipboard and shorebased scientists, serving in the science advisory structure, (co)organizing conferences, workshops and summer schools. The IODP approach is multidisciplinary, and it incorporates chemists, oceanographers, microbiologists, mathematicians, and engineers into the geoscience community. It is committed to training the next generation of young researchers, by providing high-quality training and by exposing school teachers to modern geoscientific problems and other educational activities.

The international structure of the program has been successfully increased, resulting in scientific cooperation beyond any political conflicts. Mobility and team-work of scientists and students have greatly benefited the marine geology community, and Earth Sciences in general, making IODP one of the largest and most successful international scientific programs of the last half-century.

ECORD has made a significant contribution to the success of IODP by providing Mission Specific Platforms (MSP). The scientific impact of MSP expeditions has been tremendous. ACEX (IODP Expedition 302) retrieved the first scientific drill cores from the central Arctic Ocean seafloor and revealed the climatic evolution of the Arctic during its transition from Greenhouse to Icehouse conditions over the last 56 Myr. The Tahiti Sea-Level Expedition (IODP Expedition 310) allowed refinement of the global sea-level curve for the last 16,000 years and provided essential information on climate change during that time window. The joint IODP and International Continental Drilling Programme (ICDP) New Jersey Shallow Shelf Expedition (IODP Expedition 313) enable us to study and understand the amplitude and rate of natural sea-level fluctuations that took place during a key period of dramatic climate change 12 to 35 million years ago. Detailed knowledge of past variability of ice-sheets and sea level has a direct impact on future climate change predictions and thus is of strong societal relevance.

The ECORD community believes that oceanic drilling is essential for understanding the operation of the Earth System. A spectrum of science and technology is required to quantify *in situ* short- and long-term processes operating since 180 million years ago, and this can only be achieved via an international and multidisciplinary approach. Ocean drilling is the only way to directly investigate the structure of the oceanic lithosphere and to eventually sample the mantle (astenosphere), the seismogenetic zones, submarine slope instability, magmatic processes, organic-carbon-rich reservoirs including gas hydrates, complete high-resolution records of climate change, ocean acidification, evolution of life and the atmosphere, and sub-seafloor microbial communities.

The post-2013 phase of ocean drilling will build on the huge experience accumulated and it will address scientific questions related to both basic and applied research. Crucially, it will also address a number of themes that are relevant to society. Our Vision is to deliver the Earth and Life Sciences discoveries needed to meet the challenges society faces as stewards of our changing planet. Our Mission is: 1) to employ ocean drilling and monitoring technology required to obtain unique insight to understand and predict Earth's dynamic system and its impacts; 2) to inspire and train the next generation of geoscientists; 3) to communicate our scientific discoveries to the public and to decision makers.

Our major challenges will include:

- **Climatic change**

The variability of global climate on all timescales and the causes of this variability are among the foremost current scientific challenges with urgent societal implications. Palaeoclimate records reveal the variability of natural climate against which we must evaluate anthropogenic forcings and, most importantly, provide the only data against which models of future climate change can be evaluated. Key responses including climate sensitivity and polar amplification, ice sheet stability and sea level change, ocean acidification and its ecological impacts, and changes in ocean circulation and bio-geochemistry can all be investigated. The infrastructure provided by an Integrated Ocean Drilling Program is essential to recover spatially distributed and high-resolution records from the oceans and to access difficult or restricted records such as those in coral reefs and under ice-covered polar oceans.

- **Deep Life**

Exploration of deeply seated microbial populations has revealed active, extant populations of microbes down to 1.6 km depth. Despite the vast size of these deep sedimentary and crustal habitats, we do not know the identity, extent, function, physical and chemical diversity, and activity of their microbial communities. These deep ecosystems may impact on major Earth processes including energy, global carbon and redox budgets and climate change, as well as on the nature of evolution of life on Earth. New drilling is required to obtain the fresh and uncontaminated samples that are critical for microbiological and biogeochemical study.

- **Renewing the Lithosphere**

Our dynamic planet continually evolves through the creation and destruction of Earth's great tectonic plates driven by convection of heat and matter in the deep Earth. The consequent chemical exchange with the oceans and atmosphere controls seawater composition, and moderates the Earth's surficial environment and habitats. Quantifying the fluxes between these reservoirs during the life cycles of tectonic plates is fundamental to understanding the origin, state, and evolution of planet Earth. Ocean drilling is key to sampling, observing, and testing models of the Earth's composition, structure and dynamics.

- **Earth in Motion: Deforming plate boundaries, fluid flow, and active experimentation**

The Earth is dynamic, with plates, plate boundaries, magma, and fluids moving on timescales from milli-seconds to millions of years. These motions impact us directly by causing the major geologic hazards (earthquakes, submarine landslides, tsunamis, volcanoes) that threaten the majority of the global population that live adjacent to subduction zones or active tectonics regions and moderating the chemical exchange between the Earth's crust and the oceans and atmosphere that maintains life.

Ocean drilling is needed to install the downhole observatories that will make long-term observations on the seismic, tectonic, slope and hydrate processes central to many geohazards, monitor fluid movements that may lubricate faults, transport chemical fluxes and interact with living communities, and carry out real time hydrological and biological experiments. Drilling will recover the most complete records of tectonic and volcanic hazards.

The ECORD community firmly reiterates its commitment to continued participation on ocean drilling beyond 2013, and we believe that ECORD will maintain a crucial and distinctive role in future scientific ocean drilling.

Ruediger Stein (ESSAC Chair and ESSAC Delegate of Germany)

on behalf of

Fatima Abrantes (ESSAC Delegate of Portugal)
Neil Banerjee (ESSAC Delegate of Canada)
Bryndís Brandsdóttir (ESSAC Delegate of Iceland)
Gilbert Camoin (ESSAC Delegate of France)
Menchu Comas (ESSAC Delegate of Spain)
Elisabetta Erba (ESSAC Delegate of Italy)
Rachael H. James (ESSAC Delegate of United Kingdom)
Nalan Koç (ESSAC Delegate of Norway)
Lucas Lourens (ESSAC Delegate of The Netherlands)
Judith McKenzie ((ESSAC Delegate of Switzerland)
Xavier Monteys (ESSAC Delegate of Ireland)
Werner E. Piller (ESSAC Delegate of Austria)
Marit-Solveig Seidenkrantz (ESSAC Delegate of Denmark)
Ian Snowball (ESSAC Delegate of Sweden)
Kari Strand (ESSAC Delegate of Finland)
Rudy Swennen (ESSAC Delegate of Belgium)

and the ECORD community.

13th Meeting of the
Science Steering and Evaluation Panel
Nov 16-18, 2009
Alan Gilbert Building, The University of Melbourne,
Melbourne, Australia

Draft Minutes Version 1.1

1. Joint Session, Introduction

1.1. Call to Order (SSEP co-chair Marta Torres)

SSEP co-chair Torres welcomed participants, thanked local host Gallagher, and briefly reviewed the meeting agenda and described how the meeting would be organized. Furthermore, Torres announced that the meeting would take three days, with required reviews for 17 drilling proposals (2 with external reviews). Torres reminded participants to speak slowly & clearly, to be sensitive to cultural and style differences, and that only one person would speak at a time (through the co-chairs), and that cross talk should be avoided.

1.2. Self-introduction of panel members, liaisons, and guests

Panel members:
Ivano Aiello (alt. for Marsaglia), Serge Berné, Hendrik Brinkhuis (co-chair), Julie Carlut, Beth Christensen (alt. for McHugh), Tim Ferdelman (alt. for Maclennan), Stephen Gallagher (local host), Robert Harris, Kai-Uwe Hinrichs, Matthew Hornbach, Ken Ikehara, Fumio Inagaki, Iryu Yasufumi, Akira Ishiwatari (co-chair), Achim Kopf, Junichiro Kuroda, Kyung Eun Lee, Tiegang Li, Katsuyuki Michibayashi, Katharina Pahnke, Heiko Pälike, Marcel Regelous (alt. for Brunelli), Yair Rosenthal, Tokiyuki Sato, Mitch Schulte, Aleksey Smirnov, Yohey Suzuki, Eiichi Takazawa, Marta Torres (co-chair), Peter Vrolijk, Kosei Yamaguchi

Panel members not able to attend:
Daniele Brunelli, John Maclennan, Kathleen Marsaglia, Cecilia McHugh, Xuelin Qiu (no alternate)

Liaisons and observers:
Carlos Alvarez-Zarikian (USIO), Louise Anderson (ESO), Charna Meth (Ocean Leadership), Helen Evans (USIO), Neville Exon (ANZIC), Joerg Geldmacher (USIO), Stuart Henrys (SSP), Junzo Kasahara (SPC), Hiroshi Kawamura (IODP-MI), Yusuke Kubo (CDEX), Takashi Nakagawa (MEXT), Ian MacGregor (IODP-MI 2nd Triennium Review Committee), Simon Nielsen (CDEX), John Tauxe (EDP), Barry Zelt (IODP-MI)

1.3. Welcome and meeting logistics (host Stephen Gallagher)

Local host ANZIC SSEP member Gallagher welcomed delegates, explained logistics, and provided apologies for missing nametags. The SSEP thanked him for organizing the meeting and for guiding a much appreciated field trip "*The Geology of the Surf Coast south of Melbourne*" prior to the SSEP meeting on Nov 15th, introducing participants to aspects of the Eocene to Miocene geology in the region.

1.4. Approval of present 13th SSEP meeting agenda (Torres)

SSEP Consensus 0911-1: The SSEP approves the revised agenda of their 13th meeting, Nov 16-18, 2009 in Melbourne, Australia.

The agenda for the 13th meeting of SSEP is provided as **Attachment 1.**

1.5. Approval of last (12th) SSEP meeting minutes (Torres)

Torres asks for approval of the most recent 12th SSEP meeting in Utrecht, The Netherlands (May 2009). Torres asked for a consensus to approve the minutes 'as is', and all members agreed.

SSEP Consensus 0911-2: The SSEP approves the minutes of their 12th SSEP meeting on May 25-28th 2009, Utrecht, The Netherlands.

1.6 IODP-MI Report (Kawamura)

Hiroshi Kawamura (Science Support, IODP-MI, Sapporo Office) reported on activities at IODP-MI. He provided information about the IODP organizational structure, and gave an overview of the current Science Advisory Structure (SAS) meeting schedule. He then provided proposal submission statistics. For this SSEP meeting, IODP-MI received 15 proposals (5 environment, 2 solid earth, 8 microbiology and sub-seafloor). As of 4 November 2009, 106 proposals were active in the system (37 solid earth, 44 environment, 25 deep biosphere). For the current SSEP meeting there would be 5 full proposals, 7 pre-proposals, 3 ancillary proposal letters (APL), as well as 2 proposals with external reviews. Following an extensive review of all proposal statistics, Kawamura explained the potential outcomes and recommendations for each proposal type for the current meeting. He mentioned that Engineering Manager Greg Myers was leaving IODP-MI, mentioned current IODP-MI vacancies, and then concluded with a reminder of the current SSEP member rotation schedule.

1.7. SAS Panel Reports

1.7.1. SPC Report (Kasahara)

SPC chair Kasahara gave an update on the most recent August 2009 SPC meeting in Kiel, Germany. Important elements included that the SPC received the IWG+ guidance for INVEST and endorses all elements of the guiding principles. The SPC recommends that discussions of post-2013 scientific ocean drilling should incorporate: (1) more seamless integration with other major geoscience programs (e.g., ocean observatories, ICDP, ANDRILL), as appropriate; (2) further recognition of the importance of onshore to offshore transects for some types of scientific studies; and (3) substantial flexibility in program and expedition planning and formulation. Further, the SPC commends the efforts of the "Flexible Expedition Implementation" Working Group (Filippelli, Ohkouchi, Peterson) to explore schemes at the proposal level and SPC level that would ensure achievement of top science objectives while allowing maximum implementation flexibility. In addition, The SPC approved the following *JOIDES Resolution* schedule for late FY2010 and FY2011: (1) Juan de Fuca Flank Hydrogeology

(Proposal 545-Full3) and Cascadia Accretionary Prism CORK (Proposal 734-APL); (2) South Pacific Gyre Microbiology (Proposal 662-Full3); (3) Louisville Seamounts (Proposal 636-Full3); (4) Superfast Spreading Crust (Proposal 552-Full5) + Costa Rica Seismogenesis Project (CRISP) Phase A (Proposal 537A-Full5); and (5) Mid-Atlantic Ridge Microbiology (Proposal 677-Full). Further, the SPC approved a five-month operational plan and contingencies for *Chikyu*, with starting date in FY2011 to be determined. Last but not least, the SPC appoints Hendrik (Henk) Brinkhuis as co-chair of the Science Steering and Evaluation Panel (SSEP), effective immediately

1.7.2. SSP Report (Site Survey Panel; Henrys)
Stuart Henrys (SSP liaison) explained the role of the SSP, and reported on the outcomes of most recent July 2009 SSP meeting in Austin, Texas, USA. Henrys listed two new SSP members, and provided updates on those proposals that the SSEP will evaluate during the meeting. Henrys announced that the next SSP meeting will be held in Wellington, New Zealand, in late January 2010.

1.7.3. EDP Report (Engineering Development Panel; Tauxe)
John Tauxe (EDP liaison) reviewed the role of EDP and updated the SSEP on EDP activities. He summarized current technological issues, including continuous core recovery high latitude coring activities. He then reviewed engineering and technical issues for upcoming proposals, which include SCIMPI and non-magnetic core barrels. The next EDP meeting will be held in Sendai, Japan in January 2010.

1.7.4. ESO Report (European Implementing Organization; Anderson)
Louise Anderson (Leicester) reported on current and future activities by the ECORD Science Operator. She reviewed the accomplishments of Expedition 313 (New Jersey) and discussed preparations for Expedition 325 (Great Barrier Reef Environmental Changes), scheduled for November-December 2009, with Jody Webster and Yusuke Yokoyama as co-chief scientists. She pointed to the high number of high ranked publications resulting from ESO/ECORD Expeditions.

1.7.5. USIO Report (United States Implementing Organization; Zarikian)
Carlos Zarikian (TAMU) reported on the *JOIDES Resolution* Expeditions and likely new schedule. He briefly reviewed the accomplishments of PEAT I and II, the Juan de Fuca CORK remedial cementing job, the Bering Sea, and the Shatsky Rise expeditions; all were very successful, and many problems apparent during the shakedown cruise (and PEAT I) were now under control. The Canterbury Basin Expedition 317 is just underway, and will be followed by the Wilkes Land Antarctica Expedition 318 early January. Sampling parties organized for PEAT, were equally successful. While the schedule following 318 is not formally set yet, Zarikian eluded to signals that industry work in collaboration with KIGAM and the Korean National Oil Company will now likely *not* follow the Wilkes Land Expedition. New expeditions (Juan de Fuca, Cascadia, South Pacific Gyre Microbiology, Louisville Seamounts, Superfast/CRISP, Mid-Atlantic

Microbiology) will be scheduled starting in June 2010, after a 'non IODP phase'. Further, Zarikian provided an update on LDEO' status through the recent expeditions, and outreach activities, including video reports of a 'School of Rock' session, with live interaction to and from the ship and scientists. He finished by announcing that Brad Clement is the new director of IODP-USIO-TAMU, as of August 3, 2009.

1.7.6. CDEX Report (Japan Implementing Organization; Nielsen)

Simon Nielsen (CDEX) provided an update on the current CDEX and *Chikyu* status. He not only confirmed that *Chikyu* azimuth thruster repairs are now working properly, he hailed the successful completion of the first riser drilling in IODP history. Activities of CDEX in 2009 included two IODP Expeditions in Stage 2 of the NanTroSEIZE Complex Drilling Project: Exp. 319 (May 10 – August 22) included the first riser operation in scientific ocean drilling. Expedition 322 (September 1 – October 10) targeted subduction input sites in the Shikoku Basin. These messages were followed by an overview of the tentative 2009-2010 schedule and outreach activities. Training cruises will be held in November and December 2009, training core techs on advanced piston-coring methods. Stage 3 will begin during the second half of 2010, with the initiation of the NanTroSEIZE deep riser drilling as well as installation of observatories at several NanTroSEIZE sites.

2. Reviewing process

2.1 Introduction

SSEP co-chair Marta Torres reviewed the SSEP terms of reference, and explained again the conflict of interest (COI) rules that had been circulated prior to the meeting. Torres reviewed the star grouping system, and reminded the panel that if an EDP and/or STP review was requested, a detailed justification will be added in the review.

2.1 Breakout Sessions

A total of 17 proposals were reviewed during the meeting, including new external reviews available for 2 proposals. Panel members were divided into two breakout sessions for detailed discussions of the proposals: Breakout Group 1: *Deep Biosphere/Microbiology* (chaired by M. Torres), Breakout Group 2: *Solid Earth/Paleoenvironments* (chaired by H. Brinkhuis and A. Ishiwatari);

Kopf asked the co-chairs about the reasoning behind the watchdog assignments for this meeting; he felt the assignments disregarded both expertise of individual panel members and continuity (i.e., lead watchdogs of a given proposal during the previous SSEP meeting were not assigned to the same proposal this time, not even as a non-lead watchdog). The co-chairs disagreed with Kopf's statement that the assignments were done without regard to expertise. They recognized, however, that in some cases there was not a perfect match, and explained some of the difficulties in making assignments for the current meeting; in particular the large cadre of new members and last minute replacements. Nonetheless, in the future,

even more effort will be done to secure the best possible evaluation of proposals as SSEP member Kopf suggested.

The conflict of interest rules and confidentiality requirements were respected during the entire review procedure (breakout sessions, general sessions, and grouping). The table below lists the conflicted SSEP members, liaisons and guests who left the room during the review of the relevant proposals.

Breakout Group 1: Microbiology • Chair: Torres • *Alan Gilbert-G21, Theatre 1*

Proposal	Conflict	Lead WD	WD #2	WD #3	WD #4	WD #5
673-Full2		**Inagaki**	Iryu	Schulte	Vrolijk	Christensen
743-Full		**Vrolijk**	Kopf	Harris	Suzuki	Hornbach
755-Pre		**Suzuki**	Pahnke	Yamaguchi	Schulte	Rosenthal
758-Full		**Kopf**	Hinrichs	Felderman	Regelous	Yamaguchi
759-Pre		**Yamaguchi**	Hinrichs	Carlut	Inagaki	Takazawa
761-Pre	**Hinrichs**	**Harris**	Felderman	Hornbach	Suzuki	Vrolijk
762-APL		**Schulte**	Kopf	Hornbach	Hinrichs	Lee
764-Pre		**Ikehara**	Michibayashi	Inagaki	Regelous	Harris

Breakout Group 2: Solid Earth and Paleoenvironment • Co-chairs: Ishiwatari and Brinkhuis • *Alan Gilbert-109, Theatre 2*

Proposal	Conflict	Lead WD	WD #2	WD #3	WD #4	WD #5
672-Full3*	**Ferdel-man**	**Pälike**	Ikehara	Berne	Rosenthal	Kuroda
708-Pre2	**Brink-huis**	**Aiello**	Kuroda	Sato	Lee	Berne
735-Full		**Takazawa**	Michibayashi	Hornbach	Regelous	Carlut
754-Full		**Ferdelman**	Li	Takazawa	Smirnov	Michibayashi
748-Full*	**Kopf**	**Carlut**	Ikehara	Regelous	Aiello	Li
756-Pre		**Berne**	Sato	Christensen	Iryu	Smirnov
757-APL		**Rosenthal**	Lee	Pahnke	Palike	Sato
760-Pre		**Li**	Christensen	Palike	Smirnov	Pahnke
763-APL		**Kuroda**	Smirnov	Iryu	Gallagher	Aiello

* Proposals with new external reviews

3. Joint Session, Proposal Dispositions

The course of action regarding each of the 17 SSEP proposals reviewed during the Melbourne meeting was achieved by consensus of the full panel. The specific dispositions for each proposal were as follows:

Number	Short Title	Contact Proponent	Disposition

673-Full2	Morocco Margin Mud Mound	Van Rooij	Deactivate
708-Pre2	Central Arctic Paleoceanography	Stein	Develop Full
735-Full	South China Sea Tectonic Evolution	Li	Revise Full
743-Full	Gulf of Mexico Hydrate Dynamics	Knapp	Revise Full / Review by EDP/ Preview by EPSP
754-Full	Norwegian Sea Silica Diagenesis	Davies	Revise Full
755-Pre	Arctic Slope Stability	Winkelmann	Deactivate
756-Pre	Arctic Ocean Exit Gateway	Jakobsson	Develop Full
757-APL	South Pacific Eocene-Oligocene	Lyle	Forward to SPC
758-Full	Atlantis Massif Seafloor Processes	Frueh-Green	Revise Full Review by EDP
759-Pre	EPR Fast-Spread Crust	Haymon	Revise Pre
760-Pre	SW Australia Margin Cretaceous Climate	Grocke	Revise Pre
761-Pre	South Atlantic Bight Hydrogeology	Wilson	Develop Full
762-APL	Grizzly Bare Outcrop Microbiology	Wheat	Forward to SPC
763-APL	Iberian Margin Paleoclimate	Hodell	Forward to SPC
764-Pre	TAG II Hydrothermal System	Rona	Revise Pre
672-Full3*	Baltic Sea Basin Paleoenvironment	Andren	Forward to SPC w/3*
748-Full*	Nice Airport Landslide	Stegmann	Revise Full

* Proposals with new external reviews.

The summary dispositions were as follows:

Pre-Proposal: revise preliminary proposal	=	3
Pre-Proposal: develop full proposal	=	3
Full Proposal: forward to SPC	=	1 (Grouping: 3*)
Full Proposal: send for external review	=	0
APL: forward to SPC	=	3
Full Proposal: revise full proposal	=	5
Full Proposal: request new submission/deactivate	=	1
Pre Proposal: request new submission/deactivate	=	1
APL: request new submission/deactivate	=	0

The specific dispositions for each proposal were as follows:

A qualitative grouping was assigned to those proposals forwarded to the SPC using the 5-star scale grouping. Grouping was obtained by consensus of the full panel, after evaluation against the individual grouping criteria.

4. Nominations for new SSEP co-chair, to replace Akira Ishiwatari

Inagaki nominated Yasufumi Iryu, Sato seconded.

The nomination of Yasufumi Iryu was approved by vote of the full panel, using paper ballots (27 yes, 3 no, 1 abstain).

SSEP Consensus 0911-3: The SSEP recommends that SPC consider Yasufumi Iryu for appointment as the next Co-Chair of SSEP.

5. Next SSEP meetings

Fumio Inagaki presented the logistics and details for the next planned SSEP meeting in Kochi, Japan, May 18 (Tue) – 21 (Fri), 2010. A possible fieldtrip will occur on Monday, May 17th, 2010. The November 2010 meeting will be in the USA (possibly Portland).

6. Resolutions for outgoing SSEP members

Resolutions were given for outgoing SSEP members, viz: Junichiro Kuroda (by K. Ikehara), Eiichi Takazawa (by K. Michibayashi), Kosei Yamaguchi (by Y. Suzuki) and Heiko Pälike (by H. Brinkhuis).

7. Conclusion

The co-chairs Akira Ishiwatari, Marta Torres and Henk Brinkhuis thanked all of the panel members for their dedication and hard work, and again thanked Stephen Gallagher for hosting the meeting. Watchdogs submitted drafts of proposal reviews to the IODP-MI science coordinators (Hiroshi Kawamura and Barry Zelt) before the meeting ended.

APPENDIX 1:

13th Meeting of the Science Steering and Evaluation Panel

The Alan Gilbert Building, Grattan Street, The University of Melbourne
Melbourne, Australia, 16-18 November 2009

Approved agenda

Sunday, November 15 (Optional)

A trip to the world class outcrops of Eocene to Miocene volcanic and cool water carbonate exposures along the surf coast south of Melbourne. Leave Hotel 10.30am return *ca.* 5.00pm.

Welcoming Reception in Evening - 19:30-21:30 sponsored and hosted by Professor Glyn Davis (Vice Chancellor, the University of Melbourne) **at Graduate House, the University of Melbourne**.

Monday, 08:30-17:00 Nov 16, 2009 *Alan Gilbert-109, Theatre 2*

Joint Session, Reports

- Introduction of all meeting participants
- Opening remarks by host (Gallagher)
- Approval of the agenda (Torres)
- Approval of previous (May 2009 meeting) minutes (Torres)
- Introduction to the meeting (Torres)
- IODP-MI report (Kawamura)
- SPC report (Kasahara)
- SSP report (Stuart)
- USIO report (Zarikian)

----- *Coffee break ---- ca. 10.00am in the 1st floor Executive Lounge (ANZIC sponsored)*

- CDEX report (Kubo)
- ESO report (Anderson)
- EDP report (Tauxe)

----- *Lunch break ---- (not provided, Lygon Street is the place to go)*

Joint Session, Meeting overview

- Reviewing process, breakout sessions, conflict of interest, star system etc. (Torres)

----- *Coffee break ---- ca. 3.00pm in the 1st floor Executive Lounge (ANZIC sponsored)*

Breakout sessions

- Proposal review

Proposals to be reviewed:

Proposal	Short title	Lead proponent	Conflict of Int.
672-Full3*	Baltic Sea Basin Paleoenvironment	Andren	Ferdelman
673-Full2	Morocco Margin Mud Mound	Van Rooij	
708-Pre2	Central Arctic Paleoceanography	Stein	Brinkhuis
735-Full	South China Sea Tectonic Evolution	Li	
743-Full	Gulf of Mexico Hydrate Dynamics	Knapp	
754-Full	Norwegian Sea Silica Diagenesis	Davies	
748-Full*	Nice Airport Landslide	Stegmann	Kopf
755-Pre	Arctic Slope Stability	Winkelmann	
756-Pre	Arctic Ocean Exit Gateway	Jakobsson	
757-APL	South Pacific Eocene-Oligocene	Lyle	
758-Full	Atlantis Massif Seafloor Processes	Frueh-Green	
759-Pre	EPR Fast-Spread Crust	Haymon	
760-Pre	SW Australia Margin Cretaceous Climate	Grocke	
761-Pre	South Atlantic Bight Hydrogeology	Wilson	Hinrichs
762-APL	Grizzly Bare Outcrop Microbiology	Wheat	
763-APL	Iberian Margin Paleoclimate	Hodell	
764-Pre	TAG II Hydrothermal System	Rona	

* Proposals with new external reviews

Watchdog assignments:

Breakout Group 1: Microbiology • Chair: Torres • *Alan Gilbert-G21, Theatre 1*

Proposal	Lead WD	WD #2	WD #3	WD #4	WD #5
673-Full2	**Inagaki**	Iryu	Schulte	Vrolijk	Christensen
743-Full	**Vrolijk**	Kopf	Harris	Suzuki	Hornbach
755-Pre	**Suzuki**	Pahnke	Yamaguchi	Schulte	Rosenthal
758-Full	**Kopf**	Hinrichs	Ferdelman	Yamaguchi	Regelous
759-Pre	**Yamaguchi**	Hinrichs	Carlut	Inagaki	Takazawa
761-Pre	**Harris**	Ferdelman	Hornbach	Suzuki	Vrolijk
762-APL	**Schulte**	Kopf	Hornbach	Hinrichs	Lee
764-Pre	**Ikehara**	Michibayashi	Inagaki	Regelous	Harris

Breakout Group 2: Solid Earth and Paleoenvironment • Co-chairs: Ishiwatari and Brinkhuis • *Alan Gilbert-109, Theatre 2*

Proposal	Lead WD	WD #2	WD #3	WD #4	WD #5
672-Full3	**Palike**	Ikehara	Berne	Rosenthal	Kuroda
708-Pre2	**Aiello**	Kuroda	Sato	Lee	Berne
735-Full	**Takazawa**	Michibayashi	Hornbach	Regelous	Carlut
754-Full	**Ferdelman**	Li	Takazawa	Michibayashi	Smirnov
748-Full	**Carlut**	Ikehara	Regelous	Aiello	Li
756-Pre	**Berne**	Sato	Christensen	Iryu	Smirnov
757-APL	**Rosenthal**	Lee	Pahnke	Palike	Sato
760-Pre	**Li**	Christensen	Palike	Smirnov	Pahnke
763-APL	**Kuroda**	Smirnov	Iryu	Gallagher	Aiello

* Proposals with new external reviews

Tuesday, 08:30-17:00 Nov 17, 2009

Breakout sessions

- Proposal review cont.

----- *Coffee break ---- ca. 10.00am in the 1st floor Executive Lounge (ANZIC sponsored)*

Breakout sessions

- Proposal review cont.

----- *Lunch break ---- 12.00 midday, catered for in the 1st floor Executive Lounge (ANZIC sponsored)*

Joint SSEP session **Alan Gilbert-109, Theatre 2**

- Proposal Review

----- *Coffee break ---- 3.00pm in the 1st floor Executive Lounge (ANZIC sponsored)*

Joint SSEP session **Alan Gilbert-109, Theatre 2**

- Proposal Review

7.00pm - **Meeting Dinner** (part sponsored by Esso Australia Ltd.- includes 3 course meal with beer, wine & soft drinks - cost is now *ca.* 50 AUD per person) – **at University House, the University of Melbourne.**

Wednesday, 08:30-17:00 Nov 18, 2009

Joint SSEP session **Alan Gilbert-109, Theatre 2**

- Proposal Review

----- Coffee break ---- ca. 10.00am, outside Theatre 2 (ANZIC sponsored)

Joint SSEP session **Alan Gilbert-109, Theatre 2**

-Proposal Review

----- Lunch break ---- 12.00 midday, catered for outside Theatre 2 (ANZIC sponsored)

Joint SSEP session **Alan Gilbert-109, Theatre 2**

-Discussions and recommendations to SPC
-Nomination of new co-chair (replacing Ishiwatari)
-Other business
-Announcements on upcoming SSEP Meetings; May 2010 (Japan) & Nov 2010 (USA)
-Resolutions for outgoing SSEP; Junichiro Kuroda (by K. Ikehara), Eiichi Takazawa (by K. Michibayashi), Kosei Yamaguchi (by Y. Suzuki) and Heiko Pälike (by H. Brinkhuis)
-Conclusions

IODP Science Planning Committee

15th Meeting, 23-26 March 2010

University of Sydney, Sydney, Australia

EXECUTIVE SUMMARY (v1.2)

1. Introduction

1.3. Approve Science Planning Committee meeting agenda – highlight action items

SPC Consensus 1003-01: The SPC adds an executive session at the end of Day 3 (Thursday) to the agenda, and then approves the agenda for its fifteenth meeting on 23-26 March 2010 in Sydney, Australia.

1.4. Approve last Science Planning Committee meeting minutes

SPC Consensus 1003-02: The SPC approves the minutes of its fourteenth meeting on 25-27 August 2009 in Kiel, Germany.

1.5. Items approved since August 2009 meeting

SPC Motion 1001-01: The SPC does not forward Proposal 757-APL (South Pacific Eocene-Oligocene) to the Operations Task Force (OTF).

Jenkyns moved; van der Pluijm seconded; 16 in favor (Blackman, Camoin, Feary, Früh-Green, Jenkyns, John, Kakegawa, Kasahara, Murray, Ohkouchi, Peterson, Takada, Tokunaga, Umino, van der Pluijm, Yamazaki); 1 did not vote (Filippelli); 4 non-voting (Cheong, Li, Stein, Webster)

SPC Motion 1001-02: The SPC forwards Proposal 762-APL Grizzly Bare Outcrop Microbiology to the Operations Task Force (OTF) for potential scheduling.

van der Pluijm moved; Peterson seconded; 15 in favor (Blackman, Camoin, Fear, Früh-Green, John, Kakegawa, Murray, Ohkouchi, Peterson, Stein, Takada, Tokunaga, Umino, van der Pluijm, Yamazaki); 2 did not vote (Filippelli, Kasahara); 4 non-voting (Cheong, Jenkyns, Li, Webster)

2. Presentation and discussion of proposals

2.3. Solid Earth Cycles and Geodynamics

SPC Consensus 1003-03: The SPC recognizes an urgent need to develop adequate borehole monitoring capabilities for future ocean drilling activities, the lack of which currently hamper highly meritorious proposals that address key goals of the IODP science plan. Particularly, capabilities for fluid, biosphere, seismic, and displacement monitoring are central to the future of the program. Borehole monitoring will also provide synergistic collaborations with other ocean observatory activities that are being planned or underway.

7. IODP Science Advisory Structure panel reports

7.4 Scientific Technology Panel

SPC Consensus 1003-04: The SPC accepts all consensus items forwarded to it by the Scientific Technology Panel (STP) for this meeting.

7.5 Engineering Development Panel

SPC Motion 1003-05: The SPC accepts all Engineering Development Panel (EDP) consensus items forwarded to it for this meeting.

van der Pluijm moved, Peterson seconded, passed unanimously

8. Approve new Science Steering and Evaluation Panel co-chair

SPC Motion 1003-06: The SPC approves the nomination of Yasufumi Iryu as the new co-chair of the Science Steering and Evaluation Panel (SSEP).

Camoin moved; Peterson seconded; passed by consensus

10. International Continental Scientific Drilling Program report
10.2. ICDP and US NAS combined discussion on Climate-Hominid Evolution

SPC Consensus 1003-07: SPC recognizes the high scientific value and widespread societal interest in understanding how—or whether—climate influenced the early stages of human evolution on the African continent. Addressing this issue requires a much more detailed understanding of the regional and local climates in which hominids and hominins evolved, and this understanding will require a coherent and integrated approach to recovering detailed climate records from terrestrial (former lake) sequences, from present day lakes in Africa, and from the ocean basins surrounding Africa. SPC invites the ICDP community to join with the IODP community to establish a Joint Program Planning Group charged to plan an integrated onshore, lake, and ocean drilling program that would dramatically enhance scientific understanding of how past climates may have influenced the early stages of our evolution.

15. Global ranking of proposals I
15.1. Select proposal pool to rank

SPC Consensus 1003-08: The SPC deactivates Proposals 547-Full4 Oceanic Subsurface Biosphere and 557-Full2 Storegga Slide Gas Hydrates and will not consider them for ranking.

SPC Consensus 1003-09: The SPC will not consider Proposal 703-Full (Costa Rica SEISCORK) for ranking during this meeting.

SPC Consensus 1003-10: The SPC asks for revision of Proposals 667-Full NW Australian Shelf Eustasy, 595-Full3 Indus Fan and Murray Ridge, and 698-Add2 Izu-Bonin-Mariana Arc Middle Crust and returns them to the proponents.

SPC Consensus 1003-11: The SPC will include in the ranking pool 18 of the proposals reviewed at this meeting.

16. Presentation and discussion of Ancillary Project Letters

SPC Consensus 1003-12: The SPC will keep 738-APL Nankai Trough Submarine Landslides at the Operations Task Force (OTF) to be scheduled.

SPC Consensus 1003-13: The SPC enthusiastically endorses Proposal 763-APL Iberian Margin Paleoclimate to triple APC-core the Pleistocene sequence at the location of the well-known Iberian margin core MD95-2042 and forwards it to the Operations Task Force (OTF). We recognize the high value of this site for providing an important North Atlantic reference

section that allows for direct correlation to polar ice cores through its isotopic signals, and for integrating marine and terrestrial signals by virtue of its relatively near-shore position. This APL has outstanding potential to provide a "virtual Greenland" record that will provide insights into the rates and magnitudes of climate change on multiple timescales and over multiple glacial-interglacial cycles when natural climate forcing (e.g., orbital, CO_2) differed substantially. Recognizing that creation of a proper marine "type section" calls for a multitude of replicated proxy measurements, SPC encourages OTF to consider providing enough time to collect a fourth APC hole to 150 mbsf to ensure recovery of a complete sequence so that sediment does not become limiting in post-collection sampling. The potential value of logging at least one hole should also be considered as part of the operational considerations at this site.

18. Global ranking of proposals II

18.3 Select ranked proposals to forward to Operations Task Force

SPC Motion 1003-14: The SPC moves to have proposals ranked 1-11 forwarded to the Operations Task Force (OTF) with the understanding that Proposal 659-Full includes alternate site emphasis.

Murray moved, Camoin seconded, 12 in favor (Blackman, Camoin, Feary, Filippelli, John, Kakegawa, Kasahara, Murray, Okhouchi, Peterson, Stein, Takada), 1 opposed (Yamazaki), 4 abstained (Anma, Früh-Green, Umino, van der Pluijm), 3 non-voting (Cheong, Hollis, Li)

SPC Consensus 1003-15: The SPC places Proposal 681-Full2 Lesser Antilles Volcanic Landslides in the holding bin until after the site survey data have been released. Once the data are released, the SPC chair will send an email to all SPC members.

SPC Consensus 1003-16: The SPC removes all tier designations for proposals residing at the Operations Task Force (OTF) and does not give any tier designations for proposals being forwarded to OTF this year.

18.5. Select proposals to deactivate

SPC Consensus 1003-17: The SPC deactivates Proposal 556-Full4 Malvinas Confluence because it has ranked low in the last several SPC evaluations and realistically has little chance of being implemented within the current phase of the IODP, which ends in 2013.

20. Other Business

20.1 Liaisons Ocean Observatories Initiative

SPC Consensus 1003-18: The SPC creates a subcommittee consisting of Früh-Green, Blackman, and Kasahara to work with the Science Advisory Structure Executive Committee (SASEC) to enhance communication with ocean observatory efforts to promote collaborative science activities.

21. Review of motions and consensus items

SPC Consensus 1003-19: The SPC thanks Jody Webster for (virtual) hosting the 15th IODP Science Planning Committee Meeting, held at the University of Sydney. We thank Neville Exon for being the on-site host. Inke Falkner and Edwina Tanner from the University of Sydney offered indispensible logistical support. The meeting venue was in a beautiful location that was further amplified by lovely weather and most helpful people. The SPC thanks Tom Hubble for a wonderful fieldtrip to Long Reef that focused on sandstone

depositional environments, and also showed us where to live near Sydney when money is no object. Finally, the SPC thanks the host for a welcoming ice breaker on Monday evening and an enjoyable banquet on Thursday night.

SPC Consensus 1003-20: The SPC thanks Dan Evans for his dedicated and highly effective service as ESO Manager. Between 2003 and 2010, he has played a crucial role in the successful implementation of the first four IODP MSP operations (Arctic Coring, Tahiti Sea Level, New Jersey Shallow Shelf, Great Barrier Reef Environmental Changes), which turned out to be major achievements in scientific drilling. The Program will miss his experience and Welsh wisdom.

SPC Consensus 1003-21: The SPC greatly thanks Tomochika Tokunaga's deep knowledge of the program, especially for hydrological aspects in subduction zone processes that have been critical in SPC decision making. Thank you Tomochika, we will miss your enthusiastic contributions.

SPC Consensus 1003-22: The SPC is very enthusiastic about the upcoming start of work on the Costa Rica Seismogenesis Project. Operations during CRISP-A promise to position the program well for eventual deep riser drilling.

SPC Consensus 1003-23: The SPC will leave Proposal 738-APL Nankai Trough Submarine Landslides at the Operations Task Force (OTF), and asks the NanTroSEIZE Project Management Team (PMT) to recommend appropriate co-Chief scientists suited to the new drilling plan involving non-riser operations.

The Urbino Summer School in Paleoclimatology
in collaboration with the School of Rock presents

Past Global Change Reconstruction and Modelling Techniques

University of Urbino, Italy - July 9-29, 2010

The 7th summer school of the USSP consortium will focus on past climate dynamics with special emphasis on the analysis of the long-term Carbon cycling and its implications in the understanding of Present and Future climates. USSP 2010 will integrate lectures, symposia, fieldtrips, and exercises on the many different areas of paleoclimatology including e.g., biogeochemical cycling, paleoceanography, continental systems, and all aspects of deep time climate modeling. It features interactive discussions of case-studies (e.g. Cretaceous OAEs, P/E hyperthermals, the Greenhouse-Icehouse transition, but also the Neogene and Quaternary climate dynamics, and millennial-scale variability) and will provide participants with an advanced working knowledge on the paleobiological and geochemical proxy data and their use in reconstructing and modeling of past climates.
The USSP consortium is composed of leading senior scientists from around the world of which more than 30 will be involved in active teaching and mentoring in Urbino. USSP 2010 will welcome up to 70 students (end-MSc or early career Graduate and post Graduate) selected on CVs.

Deadline for early-registration
March15th, 2010

Registration Fee (early registration)
Students: 650 Euros - Academic /industrial staff: 1100 Euros

For more information please visit: www.uniurb.it/ussp

USSP pool of instructors

David Beerling University of Sheffield
Jelle Bijma Alfred Wegener Institute
Steve Bohaty University of Southampton
Gabriel Bowen Purdue University
Raymond Bradley University of Massachussets
Ken Caldeira Carnegie Institution
Thomas Cronin USGS National Center
Robert DeConto University of Massachussets
Henk Dijkstra IMAU Utrecht
Gerald Dickens Rice University
Nicolas Gruber ETH Zurich
David Harwood Univ. of Nebraska Lincoln
Gerald Haug ETH Zurch
Jorijntje Henderiks Stockholm University
Chris Hollis GNS Science Lower Hutt
Matthew Huber Purdue University
Paul Koch UC Santa Cruz
Lee Kump Penn State University
Kirk Johnson Denver Museum of Nat. Sc.
Luca Lanci University of Urbino
Mark Leckie University of Massachussets
Lucas Lourens Utrecht University
Jack Middelburg Utrecht University
Tim Naish Victoria Univ. of Wellington
Ulysses Ninnemann University of Bergen
Mark Pagani Yale University
Heiko Pälike University of Southampton
Richard Pancost University of Bristol
Paul Pearson Cardiff University
Isabella Premoli Silva University of Milan
Isabella Raffi University of Chieti
Maureen Raymo Boston University
Gert-Jan Reichart Utrecht University
Eelco Rohling University of Southampton
Yair Rosenthal Rutgers University
Luke Skinner University of Cambridge
Stefan Schouten NIOZ
Caroline Slomp Utrehct University
Appy Sluijs Utrecht University
Jan Smit Vrije Universiteit Amsterdam
Howard Spero UC Davis
Rudy Stein Alfred Wegener Institute
Catherine Stickley Norwegian Polar Institute
Debbie Thomas Texas A&M University
Ellen Thomas Yale University
Paul Valdes University of Bristol
Anna von der Heydt IMAU Utrecht
Johan Weijers Utrecht University
Tim White Penn State University
Scott Wing Smithsonian Institution
James Zachos UC Santa Cruz
Richard Zeebe University of Hawaii at Manoa
Patrizia Ziveri UAB Barcelona

Organization and coordination

Simone Galeotti
simone.galeotti@uniurb.it

Henk Brinkhuis
H.Brinkhuis@uu.nl

Stephen Schellenberg
schellenberg@geology.sdsu.edu

Università di Urbino

ECORD European Consortium for Ocean Research Drilling

IODP INTEGRATED OCEAN DRILLING PROGRAM

Darwin Center for Biogeosciences

ANDRILL

imagES

Pesaro e Urbino

	Fraiday July 9th	Saturday July 10th	Sunday July 11th	Monday July 12th	Tuesday July 13th	Wednesday July 14th	Thursday July 15th
AM-0 (08.30-09.15)	Arrival at Urbino and Check-In at Hotel Tortorina	State of System Earth Dijkstra/vd Heydt	Paleoworld: Mesozoic Leckie	DATA Processing: univariate techniques Dijkstra/vd Heydt	Time and Stratigraphy Schellenberg	Cyclostratigraphy Lourens	Paleoclimate Archives Leckie, Schellenberg
AM-1 (09.20-10.05)		State of System Earth Dijkstra/vd Heydt	Paleoworld: Cenozoic Zachos	DATA Processing: multivariate techniques Dijkstra/vd Heydt	Time and Stratigraphy Leckie	Cyclostratigraphy Lourens	Paleoclimate Archives Leckie, Schellenberg
AM-2 (10.25-11.10)		State of Ecosystems Middelburg	Paleoworld: Quaternary Cronin	DATA Processing: nonlinear time series analysis Dijkstra/vd Heydt	Biomagnetostratigraphy Schellenberg/Leckie	Cyclostratigraphy Lourens	Paleoclimate Archives Leckie, Schellenberg
AM-4 (11.15-12.00)		State of Ecosystems Middelburg	Intro to modelling past climates DeConto	DATA Processing: nonlinear time series analysis Dijkstra/vd Heydt	Biomagnetostratigraphy Schellenberg/Leckie	Age models Schellenberg/Leckie	Paleoclimate Archives Leckie, Schellenberg
		LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK
PM-1 (13.30-14.15)		Modern Carbon Cycle Gruber/Sarmiento	Paleo Carbon Cycle Ridgewell	Sediments & Core Description Leckie, Schellenberg	EXCURSION/SAMPLING	FIELD / LAB WORK	FIELD / LAB WORK
PM-2 (14.20-15.05)		Modern Carbon Cycle Gruber/Sarmiento	Paleo Carbon Cycle Ridgewell	Sediments & Core Description Leckie, Schellenberg			
PM-3 (15.25-16.10)		Modern Ecology: issues Middelburg/Bijma	Palaeo Ocean Acidification Zachos	Sediments & Core Description Leckie, Schellenberg			
PM-4 (16.15-17.00)		Modern Ecology: issues Middelburg/Bijma	Palaeo Ocean Acidification Zachos	Sediments & Core Description Leckie, Schellenberg			
Pre-Meal (18.00-19.00)	USSP 2010 Icebreaker	Social @ Tortorina Pool	Social @ Tortorina Pool	Social @ the Campus (17:30-18:30)		Social @ Tortorina Pool	Social @ Tortorina Pool
End at 20.00				EVENING LECTURE TBD		USSP Dinner	

	Friday July 16th	Saturday July 17th	Sunday July 18th	Monday July 19th	Tuesday July 20th	Wednesday July 21st	Thursday July 22nd
AM-0 (08.30-09.15)	O,C,H Stable Isotopes I Rohling, Bijma, Zachos	Orbital Forcing Pälike/Raymo	FREE DAY	Organic Geochemical Proxies I Pagani	Geochemical Modeling Caldeira	Terrestrial Biota Johnson/Wing	Parallel session 7
AM-1 (09.20-10.05)	O,C,H Stable Isotopes I Rohling, Bijma, Zachos	Orbital Forcing Pälike/Raymo		Organic Geochemical Proxies II Pagani	Geochemical Modeling Caldeira	Terrestrial Biota Johnson/Wing	Parallel session 8
AM-2 (10.25-11.10)	O,C,H Stable Isotopes I Rohling, Bijma, Zachos	Marine Geochemical Proxies Reichart		Organic Geochemical Proxies I Pancost	Geochemical Modeling Dickens, Zeebe	Parallel session 1	Parallel session 9
AM-4 (11.15-12.00)	O,C,H Stable Isotopes I Rohling, Bijma, Zachos	Marine Geochemical Proxies Reichart		Organic Geochemical Proxies II Pancost	Geochemical Modeling Dickens, Zeebe	Parallel session 2	Parallel session 10
	LUNCH BREAK and Cioppino Poster	LUNCH BREAK and Cioppino Poster		LUNCH BREAK and Cioppino Poster	LUNCH BREAK and Cioppino Poster	LUNCH BREAK and Cioppino Poster	LUNCH BREAK and Cioppino Poster
PM-1 (13.30-14.15)	Investigation: Stable Isotopes I Rohling, Bijma, Zachos	Marine Geochemical Proxies Rosenthal		Terrestrial Geochemical Proxies Koch	Marine Biotia Schellenberg/Cronin	Parallel session 3	Parallel session 11
PM-2 (14.20-15.05)	Investigation: Stable Isotopes II Rohling, Bijma, Zachos	Marine Geochemical Proxies Rosenthal		Terrestrial Geochemical Proxies Koch	Marine Biotia Schellenberg/Cronin	Parallel session 4	Parallel session 12
PM-3 (15.25-16.10)	FIELD / LAB WORK	FIELD / LAB WORK		Science Party Assignements	Science Party Meeting	Parallel session 5	Development and calibration of new proxies Schouten
PM-4 (16.15-17.00)				Science Party Meeting	Science Party Meeting	Parallel session 6	Development and calibration of new proxies TBD
Pre-Meal (18.00-19.00)		Social @ Tortorina Pool	Social @ Tortorina Pool	Social @ the Campus (17:30-18:30)	Social @ Tortorina Pool	Social @ Tortorina Pool	Social @ Tortorina Pool
End at 20.00				Oceanic Anoxic Events		USSP Dinner	

	Friday July 23rd	Saturday July 24th	Sunday July 25th	Monday July 26th	Tuesday July 27th	Wednesday July 28th	Thursday July 29th
AM-0 (08.30-09.15)	CIOPPINO 2010	FREE DAY	Cretaceous GCMs Valdes/DeConto/Huber	Miocene-Pliocene GCMs Huber/Von der Heydt	Vegetation Modelling Beerling	Non-linearities Quaternary Skinner	The past as a key to the Future? TBD
AM-1 (09.20-10.05)			Cretaceous GCMs Valdes/DeConto/Huber	Miocene-Pliocene GCMs Huber/Von der Heydt	Vegetation Modelling Beerling	Non-linearities Quaternary Skinner	The past as a key to the Future? TBD
AM-2 (10.25-11.10)			Paleogene GCMs Valdes/DeConto/Huber	Miocene-Pliocene GCMs Valdes/DeConto/Huber	Quaternary GCMs Valdes/Dijkstra	Sea-Level Changes Rohling	Future Scenarios IPCC
AM-4 (11.15-12.00)			Paleogene GCMs Valdes/DeConto/Huber	Miocene-Pliocene GCMs Valdes/DeConto/Huber	Quaternary GCMs Valdes/Dijkstra	Sea-Level Changes Rohling	Future Scenarios IPCC
			LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK	LUNCH BREAK
PM-1 (13.30-14.15)			GCM: exercise Valdes/DeConto/Huber	Modelling ice sheet Dynamics Van de Wal/DeConto	Quaternary GCMs Valdes/Dijkstra	Glacial/interglacial changes Haug/Ninnemann	Student presentations
PM-2 (14.20-15.05)			GCM: exercise Valdes/DeConto/Huber	Modelling ice sheet Dynamics Van de Wal/DeConto	Quaternary GCMs Valdes/Dijkstra	Glacial/interglacial changes Haug/Ninnemann	Student presentations
PM-3 (15.25-16.10)			Science Party Meeting	Science Party Meeting	Science Party Meeting	The past as a key to the Future? TBD	Student presentations
PM-4 (16.15-17.00)			Science Party Meeting	Science Party Meeting	Science Party Meeting	The past as a key to the Future? TBD	USSP 2010 Wrap Up
Pre-Meal (18.00-19.00)	USSP 2010 BANQUET		Social @ the Campus (17:30-18:30)	Social @ Tortorina Pool	Social @ Tortorina Pool	Social @ Tortorina Pool	Social @ Tortorina Pool
End at 20.00			Ocean Acidification Ken Caldeira				

Parallel Session	*Date*	*Parallel 1*	*Parallel 2 (specific to working groups)*	*Parallel 3 (Paleobiology)*
Parallel Session 1	July 21st	Oceanic Anoxic Events	Mid-Pleistocene revolution	Planktic forams : ecology
Parallel Session 2	July 21st	Oceanic Anoxic Events	Mid-Pleistocene revolution	Planktic forams: applications
Parallel Session 3	July 21st	Diagenesis	Pliocene Dynamics	Nannoplankton : ecology
Parallel Session 4	July 21st	Radiogenic Isotopes	Pliocene Dynamics	Calc. Nannofossils: applications
Parallel Session 5	July 21st	Geochemical modelling of OAEs	PETM and Hyperthermals	Siliceous microfossils
Parallel Session 6	July 21st	Geochemical modelling of OAEs	PETM and Hyperthermals	Siliceous microfossils
Parallel Session 7	July 22nd	Internal Climate Variability (NAO, ENSO etc.)	The Eocene-Oligocene transition	Benthic forams: ecology
Parallel Session 8	July 22nd	Internal Climate Variability (NAO, ENSO etc.)	The Eocene-Oligocene transition	Ostracods: ecology
Parallel Session 9	July 22nd	Orbital Forcing case studies	Miocene Climate Dynamics	Benthic mcrofossils applications
Parallel Session 10	July 22nd	Orbital Forcing case studies	Miocene Climate Dynamics	Dinnoflagellates : ecology
Parallel Session 11	July 22nd	Paleo-CO2 records	Holocene?	Dinoflagellate cysts: applications
Parallel Session 12	July 22nd	Paleo-CO2 records	Holocene?	Spores and Pollens : Applications

Frontal lectures
Lab/Exercises
Parallel sessions
Evening Lectures
Specials

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An IODP Canada/ECORD **Summer School** – 27 June to 12 July 2010

Rimouski – Quebec city – Montreal (Canada)

WELCOME TO STUDENTS FROM THE INTERNATIONAL COMMUNITY

Ocean and Climate Changes in Polar and Subpolar environments

• **PhD students and postdoctoral fellows from the international community** are welcome to apply. The summer school will focus on paleoceanography and paleoclimatology at high latitudes and will include lectures, lab work, fieldwork in the St. Lawrence Estuary and field trips in the St. Lawrence lowlands;

• The registration cost is **1, 500 $ CD**. It includes accommodation and most meals, local transport, access to the ship, laboratories, etc. It does not include the air flight ticket to Montreal and extra-personal costs;

• To register: **Fill the form** available on IODP-Canada Web site (www.iodpcanada.ca) accompanied by **a CV**, a **letter of support from your director** and **send it** to the IODP-Canada office by email to Hélène Gaonac'h (coordinator@mail.iodpcanada.ca);

• Ten (**10) IODP-Canada scholarships (Deadline is May 15, 2010), 1000 $ each,** are available to support your participation to this summer school. Send all documents required for your registration plus and additional **letter of motivation**, to Hélène Gaonac'h (coordinator@mail.iodpcanada.ca).

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IODP Canada Web site: http://www.iodpcanada.ca

2010 IODP-Canada Summer School preliminary program

(20April2010) - Subject to small changes. A final program will be send later.

Ocean and climate changes in polar and subpolar environments

http://www.iodpcanada.ca/news_items/an-iodp-canada-summer-school-in-2010

27 June – 12 July, 2010

Rimouski, Quebec, Montreal (Quebec, Canada)

For information: Hélène Gaonac'h (gaonach.helene@uqam.ca)

SATURDAY 26 JUNE: Arrival to Montreal

SUNDAY 27 JUNE (Montreal to UQAR)		
08h00	Departure from Montreal	
11h00-14h00	Stop at Montmorency Falls (Quebec) and **Lunch on the way**	Field trip
17h00	Arrival at Rimouski	
18h00-19h00	Visit of Institut des sciences de la mer de Rimouski (ISMER), UQAR laboratories; **G. St-Onge – UQAR - and A. Rochon - UQAR**	
19h00	**Ice Breaker** + buffet + Welcome from **Serge Demers, Director of ISMER – UQAR.**	

MONDAY 28 JUNE (UQAR)		
8h00-9h00	Announcements + **Breakfast**	
9h00-10h30	Methods and introduction to Quaternary geology and oceanography of the Saguenay Fjord and St Lawrence Estuary Part I; **G. St-Onge - UQAR**	Course
10h30-11h00	**Break**	
11h00-12h30	Methods and introduction to Quaternary geology and oceanography of the Saguenay Fjord and St Lawrence Estuary Part II; **A. de Vernal - UQAM**	Course
12h30-13h30	**Lunch** at UQAR	
PM	Preparation for departure on the Coriolis II (group A) or on the Ferry (group B)	
Night time	**Group A** : seismic survey while steaming to the inner Saguenay fjord **Group B**: night on the north shore of the St. Lawrence estuary **Diner on Coriolis or on shore**	

TUESDAY 29 JUNE - EXPEDITIONS		
Day time	**Group A** : CTD and coring (Box + piston) in the Saguenay fjord **Group B** : site seeing (whale watching) **Breakfast + Lunch on Coriolis or on shore**	
17h00-18h00	Scientific party change on the Coriolis II (group A	

	disembarks while group B embarks)	
Night time	**Group B** : seismic survey in the Saguenay fjord **Group A**: night on the north shore of the St. Lawrence estuary **Diner on Coriolis or on shore**	

WEDNESDAY 30 JUNE - EXPEDITIONS		
Day time	**Group B** : CTD and coring (Box + piston) in the Estuary **Group A** : site seeing (whale watching); return to Rimouski) **Breakfast + Lunch on Coriolis or on shore**	
17h-18h00	**Group B** disembarks at Rimouski	
19h00	**Diner at Rimouski**	

THURSDAY 1ST JULY (RIMOUSKI)		
8h00-9h00	Announcements+ **Breakfast**	
9h00-16h00	Preparation of the cruise report by **groups A & B+ Break+ Lunch**	
16h00-17h00	Presentation of the cruise report by **groups A & B+ Break+ Lunch**	
17h00-18h00	"Physical properties of polar ocean sediments"; **J. Ortiz - Kent State University**.	Lecture
19h00	**Diner at Rimouski**	
FRIDAY JULY 2 (UQAR)		
8h00-9h00	Announcements+ **Breakfast**	
9h00-12h00	Paleomagnetism and high latitude chronology; **G. St-Onge – UQAR+ Break**	Course/lab
12h00-13h30	**Lunch**	
13h30-16h30	Geomorphology at high latitudes: Examples from Eastern and Arctic Canada; **P. Lajeunesse - Laval**	Course
19h00	**Diner at Rimouski**	

SATURDAY 3 JULY (RIMOUSKI)		
06h00-22h00	**Breakfast** Mont Albert – Glacial and proglacial features – Parc national de la Gaspésie **Lunch+ Diner on the way**	Field trip

SUNDAY 4 JULY (QUEBEC)		
8h00-9h00	Announcements+ **Breakfast**	
9h00	Departure from Rimouski	
9h30-11h00	Field trip to the park of the Bic; **P. Lajeunesse – Laval**	Field trip
11h00-14h00	**Lunch** + arrival at Quebec	
14h00-17h00	High-resolution X-ray fluorescence core scanning and CAT-Scan tomography: Applications to high latitude paleoclimates; **P. Francus – INRS-ETE**	Course
17h00- 18h00	"Challenges of geotechnical drilling methods and non-invasive measurements of sediment and rock cores in the polar regions". **F. Rack - ANDRILL Executive Director**	Lecture
19h00	**Diner at Quebec**	

MONDAY 5 JULY (QUEBEC)		
8h00-9h00	Announcements+ **Breakfast**	
9h00-10h30	Marine seismic reflection and multibeam bathymetry I; **M. J. Duchesne – GSC-Québec, Canada**	Course
10h30-11h00	**Break**	
11h00-12h30	Marine seismic reflection and multibeam bathymetry II: Hands-on session; **M. J. Duchesne – GSC-Québec, Canada**	Lab
12h30-13h30	**Lunch**	
13h30-15h00	Marine seismic reflection and multibeam bathymetry II: Hands-on session; **M. J. Duchesne – GSC-Québec, Canada**	Lab
Evening	Tour in Québec-city – Free evening*	

* Dinner not included for that night.

TUESDAY 6 JULY (QUEBEC-MONTREAL)		
8h00-9h00	Announcements+ **Breakfast**	
9h00	Departure for Montreal	
9h30 –12h00	Stop at St-Nicolas : Postglacial Champlain Sea deposits	Field trip
12h00-13h00	**Lunch**	
15h00	Arrival in Montreal	
Evening	Free evening* in Montreal	

* Dinner not included for that night.

WEDNESDAY 7 JULY (MONTREAL; GEOTOP-UQAM)		
8h30-9h30	Welcome at GEOTOP + Announcements+ **Breakfast**	
9h30-12h00	XRF data and image analyses; **P. Francus – INRS-ETE**	Lab
12h00-13h30	**Lunch**	
13h30-15h00	Where it begins: the sediment-water interface; **Bjorn Sundby, UQAR**	Course/Lab
15h00-15h30	**Break**	
15h30-17h00	Biogeochemical fluxes and biomarkers in polar – subpolar basins; **Y.Gélinas – Concordia**	Course/Lab-
17h00-18h00	"Lecture on IP25 biomarker and sea ice cover"; **G. Massé, University of Plymouth, UK.**	Lecture

19h00	**Diner downtown Montreal**	

THURSDAY 8 JULY (MONTREAL; GEOTOP-UQAM)		
8h45-9h00	Announcements+ **Breakfast**	
9h00-9h45	Micropaleontology I : Planktonic foraminifers in the Arctic; **F. Eynaud – Université Bordeaux I**	Course
9h45-10h30	Micropaleontology II: Diatoms in polar-subpolar environments; **X. Crosta - Université Bordeaux I**	Course
10h30-11h00	**Break**	
11h00-11h45	Micropaleontology III: dinocysts as tracers of sea-surface conditions and sea-ice cover; **A. Rochon – UQAR and A. de Vernal - UQAM**	Course
11h45-12h30	Micropaleontology IV: Transfer functions; **J. Guiot – CEREGE/CNRS**	Course
12h30-13h30	**Lunch**	
13h30-17h00	Observation at microscope and transfer function exercises	Lab
19h00	**Diner downtown Montreal**	

FRIDAY 9 JULY (MONTREAL; GEOTOP-UQAM)		
8h45-9h00	Announcements+ **Breakfast**	
9h00-10h30	Isotopic geochemistry I: The stable isotope signal in foraminifers; **C. Hillaire-Marcel - UQAM**	Course
10h30-11h00	**Break**	
11h00-12h30	Isotopic geochemistry II: The proxies of ocean circulation (Nd, Pb, Sr, etc); **M. Frank – IFM GEOMAR**	Course
12h30-13h30	**Lunch**	
13h30-17h00	Isotopic geochemistry: Exercises; visits of the labs	Lab
19h00	**Diner downtown Montreal**	

SATURDAY 10 JULY (MONTREAL)		
09h00-16h00	**Breakfast** **Field trip in the St Lawrence low land+ quarry** **Lunch+ Diner**	Field trip

SUNDAY 11 JULY (MONTREAL): Free
Participants are on their own for meals

MONDAY 12 JULY (UQAM, CONCORDIA)		
8h00-9h00	Announcements+ **Breakfast**	
9h00-9h45	"Late Cenozoic Arctic Paleoceanography"; **M. O'Regan –**	Lecture

	Cardiff University	
9h45-10h30	"Modelling sea ice"; **J.F. Lemieux – Courant Institute of Mathematical Sciences, New York**	Lecture
10h30-11h00	**Break**	
11h00-11h45	" Gas hydrates in the Arctic"; **G. Bellefleur – GSC-Ottawa**	
11h45-12h30	"The Great challenges in the paleoceanography of the Arctic"; **R. Stein - Alfred Wegener Institute**	Closing Lecture
12h30-14h00	**Lunch**	

END OF THE SUMMER SCHOOL

http://www.iodpcanada.ca/

2010 IODP-Canada Summer School preliminary program

A final program will be send later.

Ocean and climate changes in polar and subpolar environments

http://www.iodpcanada.ca/news_items/an-iodp-canada-summer-school-in-2010

27 June – 12 July, 2010

Rimouski, Quebec, Montreal (Quebec, Canada)

For information: Hélène Gaonac'h (gaonach.helene@uqam.ca)/ **SUMMARY BELOW=>>** **See the complete program* on www.iodpcanada.ca**

Saturday 26 June Arrival to Montreal

Sunday 27 June	Montreal-Rimouski+Montmorency Fall (Quebec)+ **Ice Breaker** at ISMER, UQAR
Monday 28 June (Rimouski)	Introduction & Quaternary geology and oceanography of the Saguenay Fjord and St Lawrence Estuary (**G. St-Onge, A. de Vernal**) + Coriolis expedition
Tuesday 29 June (Rimouski)	Coriolis Expedition
Wednesday 30 June (Rimouski)	Coriolis Expedition
Thursday 1st July (Rimouski)	Cruise report + evening lecture by **J. Ortiz**
Friday July 2 (Rimouski)	Paleomagnetism (**G. St-Onge**) + Glacial-periglacial geomorphology (**P. Lajeunesse**)
Saturday 3 July (Rimouski)	Field trip to Mont Albert
Sunday 4 July (Quebec)	Field trip to Bic + High-resolution X-ray fluorescence core scanning and CAT-Scan tomography (**P. Francus**) + evening lecture by **F. Rack**
Monday 5 July (Quebec)	Marine seismic reflection and multibeam bathymetry (**M. Duchesne**)
Tuesday 6 July	Quebec city – Montreal+ field trip of Champlain Sea deposits
Wednesday 7 July (Montreal)	XRF data and image analyses (**P. Francus**) + sediment-water interface geochemistry (**B. Sundby**) + Biogeochemical fluxes (**Y. Gélinas**) + Evening lecture by **G. Massé**
Thursday 8 July (Montreal)	Micropaleontology **(F. Eynaud, X. Crosta, A. Rochon, A. de Vernal, J. Guiot**)
Friday 9 July (Montreal)	Isotopic geochemistry (**C. Hillaire-Marcel, M. Frank**)
Saturday 10 July	Field trip in the St Lawrence lowlands + quarry
Sunday 11 July (Montreal)	Free
Monday 12 july (Montreal)	Lecture series by **M. O'Regan, J.F. Lemieux, G. Bellefleur, R. Stein**

*Affiliations of teachers and lecturers are given in the detailed program.

Bremen ECORD Summer School 2010

Prelim. Program Week 2

Saturday, September 18
Field trip to the Quaternary landscapes in the vicinity of Bremen
Dierk Hebbeln et al.

Sunday, September 19
Free time to explore Bremen

Monday, September 20
Introduction to IODP
09:00 – 10:00 **IODP and ECORD: Structure and objectives and an introduction to "the Virtual Ship"**
Ulla Röhl, Rüdiger Stein
10:00 – 10:30 **Coffee break**
10:30 – 12:00 **IODP Core Curation and tour of the Bremen Core Repository**
Walter Hale
12:00 – 13:00 **Lunch**
13:00 – 14:30 **Student talks**
14:30 – 15:00 **Coffee break**
15:00 – 15:45 **Core descriptions – introduction to practical #1**
Frank Lamy, Mahyar Mohtadi
15:45 – 16:30 **Physical properties – Introduction to practical #2**
Holger Kuhlmann
16:30 – 17:15 **XRF core scanning** – **introduction to practical #3**
Ulla Röhl

Tuesday, September 21
Virtual Ship
Visual core description, physical properties and XRF core scanning
Three groups of 10 students rotate for three practicals
Practical #1: Core description (*Frank Lamy, Mahyar Mohtadi*)
Practical #2: Physical properties (*Holger Kuhlmann*)
Practical #3: XRF core scanning (*Ulla Röhl*)
09:00 – 11:30 **First Lab turn**
11:30 – 12:30 **Lunch break**
12:30 – 15:00 **Second lab turn**
15:00 – 15:30 **Coffee break**
15:30 – 17:00 **Student talks**

Wednesday, September 22
Virtual Ship
Visual core description, physical properties and XRF core scanning – continued
09:00 – 11:30 **Third Lab turn**
11:30 – 12:30 **Lunch break**
12:30 – 13:15 **Core splicing – introduction to practical #4**
Thomas Westerhold
13:15 – 14:00 **Integrated stratigraphy – Introduction to practical #5**
Thomas Fredrichs, Karl-Heinz Baumann
14:00 – 14:45 **Pore water sampling – introduction to practical #6**
Martin Kölling
14:45 – 15:15 **Coffee break**

Core splicing, stratigraphy and pore water sampling
Three groups of 10 students rotate for three practicals
Practical #4: Core splicing (*Thomas Westerhold*)
Practical #5: Integrated stratigraphy (*Thomas Fredrichs, Karl-Heinz Baumann*)
Practical #6: Pore water sampling (*Martin Kölling*)
15:15 – 17:45 **First Lab turn**

Thursday, September 23
Virtual Ship
Core splicing, stratigraphy and pore water sampling – continued
09:00 – 11:30 **Second Lab turn**
11:30 – 12:30 **Lunch break**
12:30 – 15:00 **Third Lab turn**
15:00 – 15:30 **Coffee break**
15:30 – 17:00 **Introduction to Downhole Logging**

17:30 **Barbeque party**

Friday, September 24
9:00 – 10:30 **How to write an IODP proposal**
Ulla Röhl et al.
10:30 – 11:00 **Coffee break**
11:00 – 12:00 **How to write an IODP proposal - continued**
12:00 – 12:30 **Summer School wrap up, award for the best student presentation, and farewell**

RASAB - Committee of Oceanology

KONINKLIJKE VLAAMSE ACADEMIE VAN BELGIE VOOR WETENSCHAPPEN EN KUNSTEN

ACADÉMIE ROYALE DES SCIENCES, DES LETTRES ET DES BEAUX-ARTS DE BELGIQUE

THE ROYAL ACADEMIES FOR SCIENCE AND THE ARTS OF BELGIUM

OCEAN SCHOOL 010

Education at Sea - Education for the Sea

Venue: Flanders Marine Institute - VLIZ
InnovOcean site
Oostende, 16-17 February 2010

Vlaams Instituut voor de Zee
Flanders Marine Institute

"Education at Sea - Education for the Sea"

Final programme

A few years ago, the Committee of Oceanography of the Royal Academies for Sciences and the Arts of Belgium organized a successful meeting, which reviewed the offer of master programmes in ocean sciences at the national level.

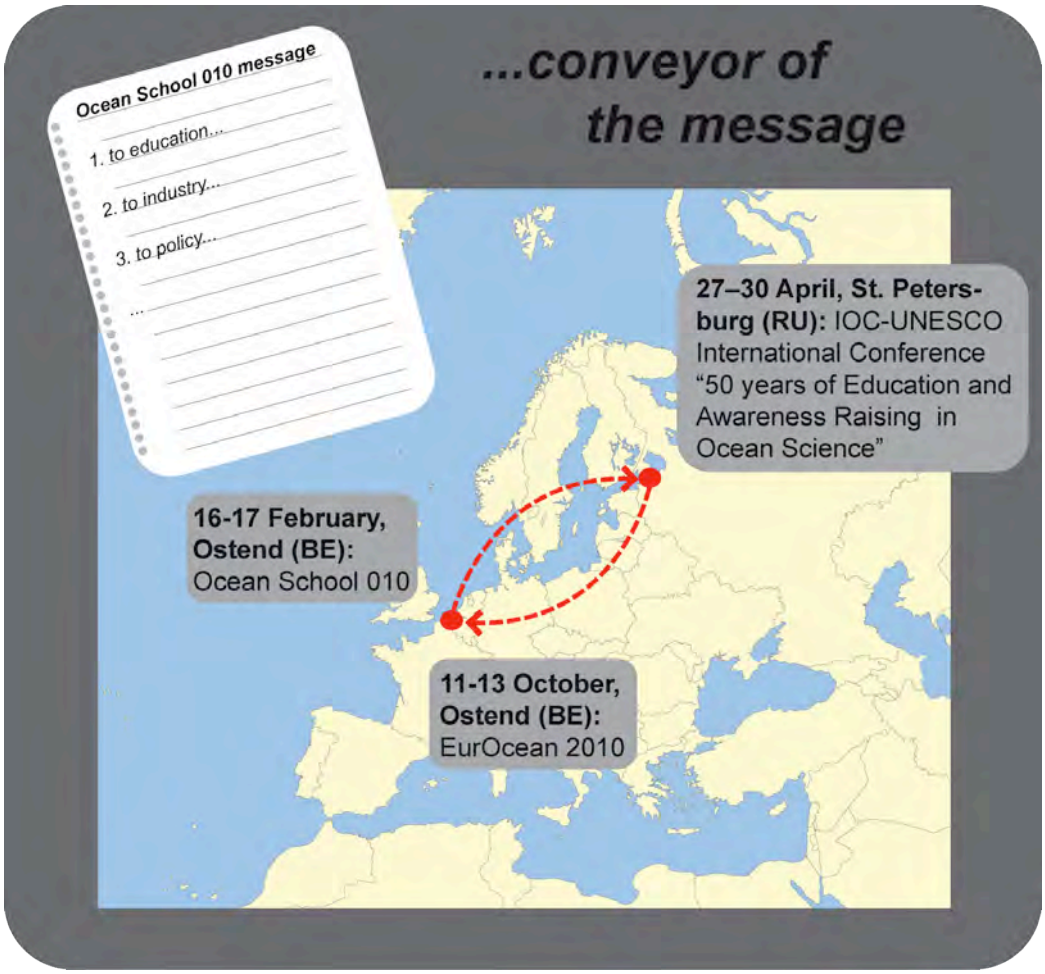
Since then, the scenery in ocean science education underwent deep modifications, worldwide.

In Belgium, some **master programmes** merged, while new programmes came into being. At the **European and global level**, various educational initiatives have been developed in the framework of European Networks of Excellence or Integrated Programmes (MARBEF, HERMES, HERMIONE, etc) and within large international programmes, such as for instance the Integrated Ocean Drilling Program IODP (represented in Europe by ECORD/ESSAC). Successful initiatives within international organizations with an educational vocation, such as IOC-UNESCO (e.g. TTR-Training Through Research), could keep momentum, notwithstanding financial constraints.

But beyond the academic dimension, there is the whole **professional world** – from fisheries and aquaculture to the offshore industry – that urges for the delivery of young manpower, with an adequate scientific and technical profile. Are we providing the right young scientists and engineers, with the right profile, both for Science and Industry? If not (… yet fully), how can we take action? How can we further promote ***"education at sea" and "education for the sea"***, **across borders in Europe and in the world**? These are key questions.

The Committee of Oceanology of RASAB, in cooperation with the Flanders Marine Institute (VLIZ), organizes on February 16th and 17th (am) a **workshop "Ocean School 010"** which will address these questions.

Messages from the "Ocean School 010" workshop will be conveyed to the **IOC-UNESCO International conference "50 Years of Education and Awareness Raising for Shaping the Future of the Oceans and Coasts"** (April 27-30, 2010, St. Petersburg, http://www.ioc50.ru/about/) and to the **EurOcean 2010** Conference (Ostend, http://www.ewi-vlaanderen.be/en/landschap/projects/belgian-eu-presidency-2010/events-belgian-eu-presidency-2010). The messages from the stakeholders and Industry will be conveyed to the master programme co-ordinators, for further attention.



Please find the agenda below. The workshop sessions will take the form of round tables, with short introductory statements and open discussions.

Posters will document various programmes and initiatives.

For further information, please contact Jean-Pierre Henriet (jeanpierre.henriet@ugent.be) and Jan Seys (jan.seys@vliz.be) .

Venue

The venue is the VLIZ (http://www.vliz.be/), Wandelaarkaai 7, Oostende.

Registration is now closed and all registrants have received indications towards hotel and venue.

Final Programme

Day 1 (February 16th) am

08h00 – 09h00 registration

09h00 Welcoming

Willy Baeyens (VUB, Chair RASAB Committee of Oceanology) and Jan Mees (Director VLIZ).

Brief outline of the objectives (Jean-Pierre Henriet, UGent).

09h15 **Session 1: expression of the needs**

Question addressed: what is the vision of Industry and of Academia on the competences expected from young scientists graduating as MSc in Ocean Science programmes?

Chair Jan Mees, VLIZ. Moderator Jean-Pierre Henriet, UGent

09h15 – 10h45

Panel leaders Patrick Sorgeloos (UGent) and Marc Roche (FPS Economy)

- Fisheries and aquaculture, products of the sea
- Offshore energy and geotechnique
- Aggregates, minerals, environmental impact assessment

Coffee break

11h15 – 12h30

Panel leaders Carlo Heip (Royal-NIOZ), Vera Van Lancker (MUMM) and Ruediger Stein (AWI, ESSAC)

- Academic research – Marine Biosciences
- Academic research – Marine Geosciences
- Academic research – The Physical and Chemical Ocean

12h30 -14h00 Lunch

Day 1 (February 16th) pm

Session 2: overview of opportunities

Question addressed: what is the present potential of Academia and of Industry in terms of (1) graduate education and training (master level), (2) relevant undergraduate education and training (bachelor level) and outreach in schools, (3) relevant postgraduate training and PhD research, (4) training at sea

Chair Willy Baeyens, VUB. Moderator Jan Seys, VLIZ

14h00 – 15h30

Panel leaders Nico Koedam (VUB), Salim Djenidi (ULg) and Mieke Eggermont (UGent)

- Graduate programmes in Ocean Science: overview
- Outreach in schools. Appetizers in undergraduate programmes
- Postgraduate training and PhD

Coffee break

16h00 – 17h30

Panel leaders George Pichot (MUMM) and Wouter Rommens (IOC-UNESCO IODE)

- Training at sea (national fleets, Eurofleets, industrial fleets,…)
- Training opportunities through international programmes (EU, UNESCO, IODP,…)
- Academia-Industry partnership: exploratory tracts

17h30 – 19h00 Reception and Poster session: existing masters in ocean science, outreach programmes, networks, etc.

Day 2 (February 17th)am

Session 3: strategy and action plan

09h00 – 10h30 *Chair Rudy Herman, AWI Flanders. Moderators Jan Seys and J.P. Henriet*

- Response to the needs: tuning of existing programmes, radical innovations (qualitative)
- Development of opportunities (quantitative), best value for money: clustering of resources

Coffee break

11h00 – 12h30

- Debate and wrapping up: messages
    - to education
    - to industry
    - to policy (EurOcean Ostend 2010, IOC-UNESCO Conference St. Petersburg 2010)

12h30 – 14h00 Lunch and closure of the workshop.

EuroFORUM

Oral Programme CL4.9/SSP1.7

EuroFORUM 2010: Achievements and perspectives in scientific ocean and continental drilling

Convener: Ruediger Stein

Co-Conveners: Gilbert Camoin , Jochen Erbacher , Henk Brinkhuis , Ulrich Harms , Ursula Röhl

Tuesday, 04 May 2010

Room: 16

Chairperson: R. Stein, U. Harms

15:30–15:45, EGU2010-8021

Isabella Raffi, Mitch Lyle, Heiko Paelike, Hiroshi Nishi, Jan Backman, Alberto Malinverno, Theodore Moore, and IODP Expedition 320/321 Shipboard Science Party

Preliminary data from the Pacific Equatorial Age Transect (PEAT IODP Expedition 320/321): a contribution to the knowledge of Cenozoic ocean and climate history (solicited)

15:45–16:00, EGU2010-12967

Carlota Escutia Dotti

Unveiling climate and ice-sheet history from drilling in high-latitude margins and future perspectives (solicited)

16:00–16:15, EGU2010-6615

Timothy Ferdelman, Laura Wehrmann, Kai Mangelsdorf, Akihiro Kano, Trevor Williams, and Henriet Jean-Pierre

Biogeochemistry and geomicrobiology of cold-water coral carbonate mounds - lessons learned from IODP Expedition 307 (solicited)

16:15–16:30, EGU2010-3334

M. Conin, P. Henry, S. J. Lallemant, S. Bourlange, E. J. Screaton, M. Strasser, L. C. McNeill, E. Araki, T. B. Byrne, D. M. Saffer and the Exp. 319 and 322 Scientists Team

Model of construction of the Nankai margin from drilling results of the Nankai Trough Seismogenic Zone Experiment (NanTroSeiZE - IODP Expeditions 314, 315, 316, 319, and 322) (solicited)

16:30–16:45, EGU2010-9996

Jean-Noel Proust, Gregory Mountain and the IODP Expedition 313 Science Party Team

Architecture of passive margin sediments and sea level changes: New Jersey IODP Expedition 313 preliminary results (solicited)

16:45–17:00, EGU2010-6860

Martin Melles, Julie Brigham-Grette, Pavel Minyuk, Christian Koeberl, and Lake Elgygytgyn Scientific Party

ICDP Deep Drilling 2008/09 at Lake El'gygytgyn, NE Siberia: Operational Success and First Results (solicited)

Poster Programme CL4.9/SSP1.7

EuroFORUM 2010: Achievements and perspectives in scientific ocean and continental drilling

Convener: Ruediger Stein

Co-Conveners: Gilbert Camoin , Jochen Erbacher , Henk Brinkhuis , Ulrich Harms , Ursula Röhl

Display Time: Tuesday, 04 May 08:00–19:30

Attendance Time: Tuesday, 04 May 17:30–19:00

Halls X/Y

Chairperson: R. Stein, U. Harms, H. Brinkhuis, G. Camoin, J. Erbacher, U. Roehl

XY391, EGU2010-2320

Bernd Zolitschka, Flavio Anselmetti, Daniel Ariztegui, Pierre Francus, Catalina Gebhardt, Annette Hahn Pierre Kliem, Andreas Lücke, Christian Ohlendorf, Frank Schäbitz, Stefan Wastegard and the PASADO Science (9) Team

PASADO - ICDP Deep Drilling at Laguna Potrok Aike (Argentina): A 50 ka Record of Increasing Environmental Dynamics

XY392, EGU2010-14783

Thomas Litt, Sebastian Krastel, Flavio Anselmetti, Rolf Kipfer, Sefer Öcen, Namik Cagaty, and Hans-Ulrich Schmincke

Lake Van Drilling Project ‘PaleoVan' to be drilled in summer 2010

XY393, EGU2010-10455

Nadine Hoffmann, Klaus Reicherter, and Christoph Gruetzner

Quaternary evolution of the delta systems and the coast line of Lake Ohrid (FYROM/Albania) revealed by shallow geophysical and drilling data

XY394, EGU2010-3283

Lothar Viereck-Gotte, Jane E. Francis, Alan P.M. Vaughan, Barbara A.R. Mohr, Sergio A. Marenssi, and Stephen F. Pekar

Seymour Island/Marambio Drilling Project: Drilling 40Ma (Campanian to Eocene) of high latitude Southern Hemisphere climate history.

XY395, EGU2010-8440

Hendrik Vogel, Bernd Wagner, Thomas Wilke, Andon Grazhdani, Goce Kostoski, Sebastian Krastel-Gudegast, Klaus Reicherter, Giovanni Zanchetta and the SCOPSCO science Team

SCOPSCO - Scientific Collaboration On Past Speciation Conditions in Lake Ohrid

XY396, EGU2010-7905

Henning Lorenz and Christopher Juhlin

The Swedish Deep Drilling Program - an emerging scientific drilling program and new infrastructure.

XY397, EGU2010-15198

Ronald Conze, Josh Reed, Yu-Chung Chen, and Frank Krysiak

Integrated Drill Core Data Analysis Tools

XY398, EGU2010-11988

Mikhail Kovalevskiy

Results of comparative study of elastic-anisotropic properties of rocks from the Kola and German superdeep wells in the 4-5 km depth range

XY399, EGU2010-12579

Catalina Gebhardt, Volker Wennrich, Jochem Kueck, Frank Niessen, Martin Melles, and the El’gygytgyn Scientific Party

Physical properties, downhole logging and seismic data from deep drilling in Lake El'gygytgyn, Chukotka, NE Siberia - initial results

XY400, EGU2010-15196

Volker Wennrich, Olaf Juschus, Andrei Andreev, Nobert Nowaczyk, Martin Melles, and Julie Brigham-Grette

Climate evolution of the high Arctic during the past 3.6 Million years recorded in the sediments of Lake El'gygytgyn, NE Siberia

XY401, EGU2010-14815

Ruediger Stein, Petra Weller, and Heiko Pälike

Middle Eocene 15â˜C sea-surface water cooling and sea-ice formation in the central Arctic Ocean

XY402, EGU2010-15443

Michael Schreck, Morten Smelror, Ruediger Stein, and Jens Matthiessen

Palynostratigraphy of Arctic and Subarctic Sediments in the Neogene

XY403, EGU2010-12693

Lester Lembke-Jene, Bonnie Wolff-Boenisch, Roberto Azzolini, Joern Thiede, Nicole Biebow, Olav Eldholm, and Paul Egerton

Drilling Polar Oceans with the European Research Icebreaker AURORA BOREALIS: the IODP Context

XY404, EGU2010-325

David Naafs, Jens Hefter, Ruediger Stein, and Gerald Haug

Results from IODP Leg 306: Long-term cooling trend in North Atlantic sea-surface temperatures during the last 5 Ma

XY405, EGU2010-8261

Thomas Westerhold, Ursula Röhl, Barbara Donner, James Zachos, and Heather McCarren

First continuous high-resolution benthic stable isotope Paleocene record from the central Pacific (ODP Site 1209)

XY406, EGU2010-9705

Johanna LOFI, Jennifer INWOOD, Christian BJERRUM, Christophe BASILE, Hironori OTSUKA, Henna VALPPU, Gregory MOUTAIN, Jean Noël PROUST, and EXP313 ScienceParty

Interpretation and significance of petrophysical boundaries in siliciclastic shelf margin successions: IODP Expedition 313

XY407, EGU2010-8919

JENNIFER INWOOD, JOHANNA LOFI, CHRISTIAN BJERRUM, CHRISTOPHE BASILE, HIRONORI OTSUKA, HENNA VALPPU, GREGORY MOUNTAIN, JEAN-NOEL PROUST, and EXPEDITION 313 SCIENCE PARTY

Unravelling the characteristics of siliciclastic margin successions using multivariate statistical analysis of petrophysical data: IODP Expedition 313

XY408, EGU2010-11038

Louise Anderson, Sarah Davies, Annick Fehr, Jennifer Inwood, Johanna Lofi, and Sally Morgan

Core Petrophysical Services for IODP Mission Specific Platform Expeditions

XY409, EGU2010-14970

C. Seard, G.F. Camoin, Y. Yokoyama, H. Matsuzaki, N. Durand, E. Bard, S. Sepulcre, and P. Deschamps

Microbialite development patterns in the last deglacial reefs from Tahiti (French Polynesia; IODP Expedition #310): implications on reef framework architecture

XY410, EGU2010-14988

Gilbert Camoin and the IODP Expedition 310 Tahiti Team

Reef response to sea-level and environmental changes during the last deglaciation. IODP Expedition 310 “Tahiti Sea Level

XY411, EGU2010-12793

Marina Rabineau, Daniel Aslanian, Christian Gorini, Karine Alain, and International Participants

Drilling below the salt in the Western Mediterranean Sea : the GOLD-1 (Gulf of Lion Drilling) Project.

XY412, EGU2010-12938

Wiebke Ziebis, Timothy Ferdelman, James McManus, Jesse Muratli, Aude Picard, Friederike Schmidt-Schierhorn, Sebastian Stephan, Heinrich Villinger, and Katrina J Edwards

North Pond: a natural observatory for sub-seafloor oxidant supply and metabolic reactions

XY413, EGU2010-13007

Shasa Labanieh, Catherine Chauvel, Anaïs Fourny, and Expedition 322 scientists

Chemical composition of the pile subducting in the Nankai Trough, results from IODP expedition 322 (withdrawn)

XY414, EGU2010-13277

Marianne Conin, Aurelien Boiselet, Sylvain Bourlange, Pierre Henry, and Philippe Gaillot

Characterization of compactant and dilatant deformation in the Nankai accretionary margin and implications for stress paths

XY415, EGU2010-8720

Michael Strasser, Gregory F. Moore and the 738-APL co-proponent Team

The IODP “Nankai Trough Submarine Landslide History

Invitation

ESF Magellan Workshop Series Programme
Steering Committee Meeting
The Future of Magellan
August 2010

Tuesday, 17.08.2010 – Friday, 20.08.2010

Dear Magellan Steering Committee Members,
Dear ESF Representatives,
Dear Guests;

The ESF Magellan Steering Committee (www.esf.org/magellan) will hold an extraordinary meeting in August 2010 in Burkheim Germany. The purpose of this meeting is to plan the future of the current ESF networking program for marine drilling research in Europe. The committee aims to submit a proposal for a future ESF Networking Programme to support the European science community in terms of both marine and continental drilling research.

We would kindly request your attendance at this important meeting from 17th August until 20th August 2010.

The programme is given below and the logistical information is found on the second page of this invitation.

Programme:

Tuesday, 17.08.2010
Arrival during the day or evening

Wednesday, 18.08.2010
Day: Excursion:
Geology of the Upper Rheingraben and the Miocene Kaiserstuhl Vulcano (beginning at ca.9:30 am)

Evening:
6 pm, dinner, possibly with a guided tour in the medieval Burkheim

Thursday, 19.08.2010
Day:
Meeting beginning at 9:00 am
Ending at 5:00 pm

Evening:
6 pm: wine degustation and dinner

Friday, 20.03.2010
Meeting beginning at 8:30 am
Ending at 12:30 am
Departure after Lunch (Lunch optional)

Logistics:

Meeting location:

Posthotel „Kreuz-Post“
Landstrasse 1, D-79235 Vogtsburg-Burkheim
Telephone: 0049-7662/90910
Reiner-gehr@kreuz-post.de
http://www.kreuz-post.de/

16 single rooms have been reserved at the Posthotel. Please make your hotel reservation under the term **“Magellan”** at the following e-mail-address:
Sabine.Kunze@bgr.de (Telephone:0049-511-643-3709) until **May 30, 2010** and let the science coordinator know whether or not you will be able to attend the meeting.

Arrival:
Burkhein is located in the Kaiserstuhl, a Miocene volcano situated in the “Rheingraben” between the Black Forest and the Vosges in SW Germany. You may travel by plane to either Basel Switzerland, or Karlsruhe, Germany or Frankfurt/Main, Germany and then by bus or train to Freiburg. Local trains connect Burkheim with Freiburg. We suggest taking a train from Freiburg main station to Breisach or Burkheim/Bischoffingen **and offer to fetch you either in Freiburg main station or Breisach station in case you are not keen on experiencing the adventure of rural trains in Germany.**

http://www.burkheim-touristik.de/main.php?typ=anfahrt
http://www.burkheim-touristik.de/main.php?typ=ortsplan

We are looking forward to seeing you all in Burkheim,

Best regards

Teresa and Jochen

Magellan Workshop Programme Steering Committee Members

Dr. Jochen Erbacher (Chair)
Marine Geology and Deep Sea Mining
Bundesanstalt für Geowissenschaften und Rohstoffe
Stilleweg 2
30655 Hannover, Germany
Tel: +49 511 643 27 95
Email: J.erbacher@bgr.de

Dr. Judith A. McKenzie (Vice Chair)
Geologisches Institut
Department Erdwissenschaften
ETH-Zentrum
Sonneggsstr. 5, NO G 58
8092 Zürich, Switzerland
Tel: +41 1 632 38 28
Fax: +41 1 632 10 75
Email: judy.mckenzie@erdw.ethz.ch

Dr. Kari Strand
Thule Institute
PO Box 7300
90014 University of Oulu,
Oulu, Finland
Tel: +358 8 553 35 56
Fax: +358 8 553 35 64
Email: Kari.Strand@oulu.fi

Dr. Jean-Pierre Henriet
Renard Centre of Marine Geology
Geologie en bodemkunde
Universiteit Gent
Krijgslaan 281
9000 Gent, Belgium
Tel: +32 92 64 45 85
Fax: +32 92 64 49 67
Email: Jeanpierre.henriet@ugent.be

Dr. Nalan Koc
Norwegian Polar Institute N-9296
Tromsoe, Norway
Tel: +47 77 75 06 54
Fax: +47 77 75 05 01
Email: nalan.koc@npolar.no

Dr. Ian Snowball
Geo Biosphere Centre Department of Quaternary Geology
Lund University Sölvegetan 12 S-223 62
Lund, Sweden
Tel: +46 46 222 39 56
Fax: +46 46 222 48 30
Email: Ian.Snowball@lgeol.lu.se

Dr. Werner Piller
Institute of Geology and Palaeontology
Karl Franzens University of Graz
Heinrichstrasse 26
8010 Graz, Austria
Tel: +43 31 63 80 55 82
Fax: +43 31 63 80 98 71
Email: Werner.piller@uni-graz.at

Dr. Marit-Solveig Seidenkrantz
Geological Institute
Oester Voldgade 10
1350 Copenhagen, Denmark
Tel: +45 35 32 24 26
Fax: +45 35 32 24 40
Email: mss@geol.au.dk

Dr. Gilbert Camoin
CEREGE, UMR CNRS 6635
Europôle Méditerranéen de l'Arbois
BP 80
13545 Aix-en-Provence cedex 4, France
Tel : +33 4 42 97 15 14
Fax : +33 4 42 97 15 40
Email : gcamoin@arbois.cerege.fr

Dr. Koenraad Verbruggen
Beggars Bush, Haddington Road
Geological Survey of Ireland
Dublin 4, Ireland
Tel: + 353 1 678 28 64
Fax: +353 1 678 25 79
Email: koen.verbruggen @gsi.ie

Dr. Fatima Abrantes
Departamento de Geológia Marinha
Inst. Nacional de Enjenharia tecnologia e Inovaçao
Estrada da Portela, Zambujal
Apartado 7586
2721-866 Amadora, Portugal
Tel: +351 21 470 55 35
Fax: +351 21 471 90 18
Email: fatima.abrantes@ineti.pt

Dr. Lucas Lorenz
Utrecht University
Department of Earth Sciences
Project Group Stratigraphy and Paleontology
Utrecht, The Netherlands
Tel: +31 30 253 51 73
Fax: +31 30 6253 26 48
Email: llourens@geo.uu.nl

The ESF Magellan Workshop Series Programme

A mechanism to support European leadership in the planning and effective exploitation of marine drilling research opportunities.

EUROPEAN SCIENCE FOUNDATION
SETTING SCIENCE AGENDAS FOR EUROPE

Programme summary and aims

Over the last decennia European researchers played a leading role in the international marine drilling community that has made major contributions to important discoveries and scientific advances such as the operation of plate tectonics and the accretion of the oceanic lithosphere, the existence of microbial communities (deep biosphere) and presence of frozen methane (gas hydrates) below the sea floor, past extreme and rapid climate variations, high resolution climate perturbations, new models for passive margin evolution and alpine geology, the mechanisms of ocean biogeochemical cycles, and the discovery of large igneous provinces associated with continental break-up at volcanic margins.

The ESF Magellan Workshop Series Programme is a mechanism to stimulate and nurture the process of developing new and innovative science proposals to support European leadership in the planning of marine drilling expeditions and execute European proposals for use of drilling platforms and hence ensure the effective exploitation of research opportunities.

Programme activities

- Science meetings and workshops, winter and summer schools
- Short visit grants

Call for proposals

The Magellan Workshop Programme Series invites proposals from potential organisers of workshops to be held in 2010. The next deadline for applications is **15 June 2010.** Priority will be given to workshops which take place in countries that financially support the Programme (Austria, Belgium, Denmark, Finland, France, Germany, Ireland, the Netherlands, Norway, Portugal, Sweden and Switzerland). The Short Visit Grant call will remain open until 30 September 2010 in order to provide support for interested scientists.

Contribution

The contribution of **The Magellan Workshop** will not exceed 20 000 Euro. **The Short Visit Grant** contribution is limited to 500 Euro per person. Apply on-line at: www.esf.org/magellan.

Who should submit an application?

The programme wishes high-quality applications, which broadly follow the general science themes identified as:

Earth's Surface Environmental Change, Processes and Effects
The Deep Biosphere & Sub-Seafloor Ocean
Solid Earth Cycles & Geodynamics.

Junior applicants with little or no experience in writing a proposal are strongly recommended to ask advice from their senior local and/or host supervisor on these matters.

Priority will be given to applicants who come from or intend to visit countries that financially support the programme (Austria, Belgium, Denmark, Finland, France, Germany, Ireland, The Netherlands, Norway, Portugal, Sweden and Switzerland).

Programme management

The Programme is managed by a steering committee of scientists, representing the funding agencies, which contribute to the Programme's budget. This committee is chaired by **Dr. Jochen Erbacher** (Germany).

Contact

Ms. Ellen Degott
Liasion Officier
Life, Earth and Environmental Sciences
European Science Foundation (ESF)
BP 90015
1 quai Lezay-Marnésia
67080 Strasbourg cedex
France
Tel: +33 (0)3 88 76 71 00
Fax: +33 (0)3 88 37 05 32
Email: e.degott@esf.org

Dr. Bernard Avril
Science Officer
European Science Foundation (ESF)
BP 90015
1 quai Lezay-Marnésia
67080 Strasbourg cedex,
France
Tel: +33 (0)3 88 76 71 00
Fax: +33 (0)3 88 37 05 32
Visit the ESF website at:
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