

Promotion and Encouragement of Marine Scientific Research in the Area

ISA Training Programme

By Yongsheng CAI
Legal Officer
International Seabed Authority



Training Programme

- Part I: Contractor Training programme
 - (i) Training Programme under Registered Pioneer Investor Regime
 - (ii) Contractor Training Programme
- Part II: Endowment Fund Training Programme
- Part III: Internship



Part I

- I. Training programme under the Registered Pioneer Investor Regime
- I. Contractors Training Programme



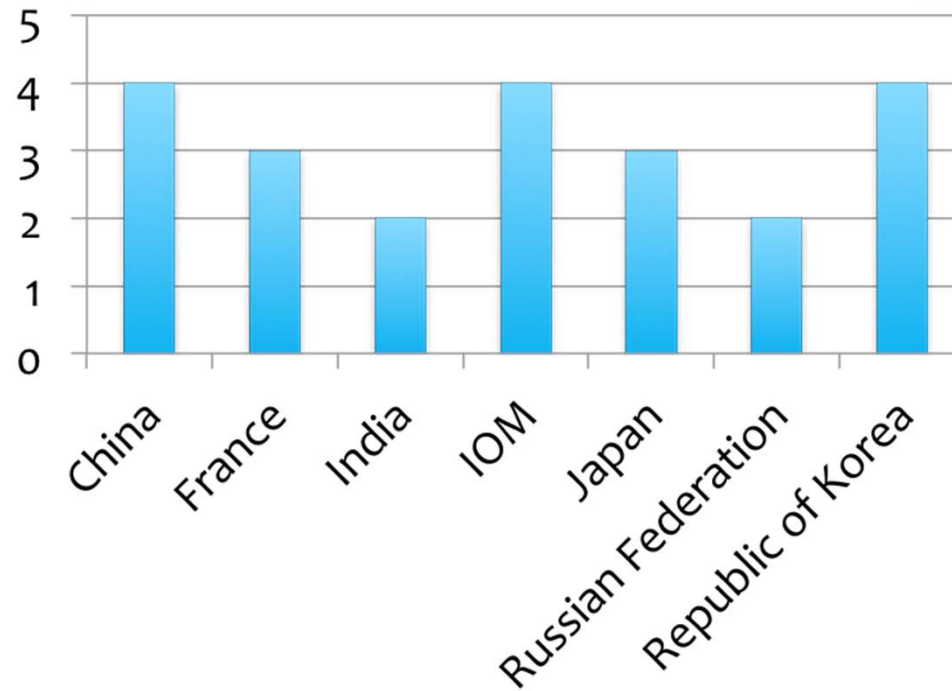
Training Programme under RPI Regime

- ❖ Resolution II of the Third United Nations Conference on the Law of the Sea
- ✓ Paragraph 12 (a)(ii): “Every registered pioneer investor shall---provide training at all levels for personnel designed by the Commission”
- The first group of trainees by France, India, Japan and the then Soviet Union “would consist of no fewer than 12 individuals”.
- The numbers of individuals to be trained by China, IOM and the Republic of Korea “shall consist of no less than four individuals”.
- 22 individuals from 17 countries got trained under the RPI regime between 1993-1999 .
- It may be noted that, because all the registered pioneer investors had completed their training obligations prior to the adoption of the regulations on prospecting and exploration for polymetallic nodules in 2000, they were considered to be exempt from further training requirements.



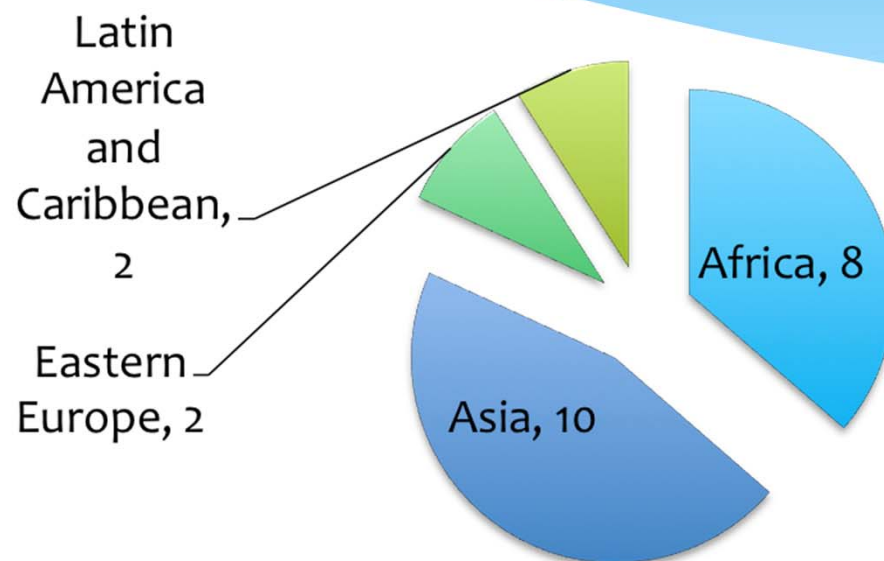
Training Programme under RPI Regime

No. of trainees by each PI or Sponsoring State



Training Programme under RPI Regime

Regional Distribution



Training Programme under RPI Regime

Trainees from Africa

Country	Trainee's name	PI or Sponsoring State	Discipline
Algeria	Mourad Kelkal	China	Geology
Cameroon	Charles Foryoung	Republic of Korea	Electronic Engineering
Ghana	Kwame Odame boamah	India	Geophysics
Kenya	Francis Okoth Wawiye	Republic of Korea	Geophysics
Senegal	Mamadou Ndiaye	France	Geophysics
Sudan	Ali Ibrahim Ahmed	IOM	Geophysics
Sudan	Ibrahim Sarour Balla	China	Geophysics
Tunisia	Ahmed Braham	France	Geophysics



Contractor Training Programme

Status of Contracts

Contractor	Date of Signature	Sponsoring State	Exploration Mineral
IOM	29 March 2001	Bulgaria, Cuba, Czech Republic, Poland, Russia, Slovakia	Metallic Nodules
Yuzhmorgeologiya	29 March 2001	Russian Federation	Polymetallic Nodules
Gov. of the Republic of Korea	27 April 2001		Polymetallic Nodules
COMRA	22 May 2001	China	Polymetallic Nodules
DORD	20 June 2001	Japan	Polymetallic Nodules
IFREMER	20 June 2001	France	Polymetallic Nodules
Government of India	25 March 2002		Polymetallic Nodules
BGR	19 July 2006	Germany	Polymetallic Nodules
NORI	22 July 2011	Nauru	Polymetallic Nodules
COMRA	18 November 2011	China	Polymetallic Sulphides
TOML	11 January 2012	Tonga	Polymetallic Nodules
Gov. of the Russian Federation	29 October 2012		Polymetallic Sulphides
GSR	14 January 2013	Belgium	Polymetallic Nodules
UKSRL-I	8 February 2013	UK	Polymetallic Nodules
JOGMEC	27 January 2014	Japan	Cobalt-rich Crusts
COMRA	29 April 2014	China	Cobalt-rich Crusts
Gov. of the Republic of Korea	24 June 2014		Polymetallic Sulphides
IFREMER	18 November 2014	France	Polymetallic Sulphides
Marawa	19 January 2015	Kiribati	Polymetallic Nodules
OMS	22 January 2015	Singapore	Polymetallic Nodules
Gov. of the Russian Federation	10 March 2015		Cobalt-rich Crusts

Contractor Training Programme

Contracts to be signed

Contractor (Applicant)	Sponsoring State	Exploration Mineral	Status
UKSRL-II	UK	Polymetallic Nodules	To be signed
CIIC	Cook Islands	Polymetallic Nodules	To be signed
Government of India		Polymetallic Sulphides	To be signed
BGR	Germany	Polymetallic Sulphides	To be signed
CPRM	Brazil	Cobalt-rich Crusts	To be signed



Contractor Training Programme

➤ Legal Obligation

- * regulation 27 of the Nodules Regulations
 - * regulation 29 of the Sulphides Regulations
 - * regulation 29 of the Crusts Regulations
-
- ✓ “Pursuant to article 15 of annex III to the Convention, each contract shall include as a schedule a practical programme for the training of **personnel of the Authority and developing States** and drawn up by the contractor in cooperation with the Authority and the sponsoring State or States. Training programmes shall focus on training in **the conduct of exploration**, and shall provide for **full participation by such personnel in all activities covered by the contract**. Such training programmes may be revised and developed from time to time as necessary by mutual agreement.”



Contractor Training Programme

➤ Section 8 of Standard clauses for exploration Contract

- ✓ “8.1 In accordance with the Regulations, the Contractor shall, prior to the commencement of exploration under this contract, submit to the Authority for approval **proposed training programmes** for the training of personnel of the Authority and developing States, including the participation of such personnel in all of the Contractor’s activities under this contract.
- ✓ “8.2 The **scope and financing** of the training programme shall be subject to negotiation between **the Contractor, the Authority and the sponsoring State or States.**
- ✓ “8.3 The Contractor shall conduct training programmes in accordance with the specific programme for the training of personnel referred to in section 8.1 hereof approved by the Authority in accordance with the Regulations, which programme, as revised and developed from time to time, shall become a part of this contract as **schedule 3.**”



Contractor Training Programme

Recommendations for the guidance of contractors and sponsoring States relating to training programmes under plans of work for exploration (ISBA/19/LTC/14)

- **Contractors should, among others:**
- ✓ Consider the training and capacity-building needs of developing countries and the secretariat when developing their training programmes, so as to ensure **as wide a range of skill development** as possible;
- ✓ **As a minimum, provide for the training equivalent of at least 10 trainees during each five-year period of the contract;**
- ✓ Identify **additional training opportunities** that may arise during the contract period, along with any proposed changes to the approved training schedules, if so required;
- ✓ Provide **as much information** to the secretariat as possible about its plan of work and the related available opportunities for training, including the number of trainee places, dates and other specific requirements necessary for carrying out the training activities;
- ✓ Encouraging potential applicants and nominating States to **apply to the Authority** using the appropriate forms.





Contractor Training Programme

Contractor	Year	Name of trainee	Nationality	Type	Complete
BGR	2008	Yaya M. Djire	Mali	At-sea	
BGR	2008	Ms. Suzan Mohamed El Gharapawy	Egypt	At-sea	
BGR	2008	Mr. Heliarivonjy Rakotondramano	Madagascar	At-sea	
BGR	2008	Nesha Nurse	Barbados	At-sea	
TOML	2013	Mr. Dody Darmawan	Indonesia	At-sea	
TOML	2013	Mr. Paul Poloka	PNG	At-sea	
COMRA	2014	Mr. Dieudonne Tchokona Seuui	Cameroon	At-sea	
COMRA	2014	Mr. Gerald Mwila/ Mr. Apichai	Zambia/ Thailand	At-sea	
COMRA	2014	Ms. Anlia Serra	Argentina	At-sea	
BGR	2014	Mr. Khaled Sinoussy Mohamed	Egypt	At-sea	ongoing
BGR	2014	Mr. Daniel Armando	Mexico	At-sea	ongoing
Russian Federation	2015	Mr. Kledy Koloa	PNG	At-sea	ongoing
Russian Federation	2015	Mr. Jose Bedmar	Argentina	At-sea	ongoing
JOGMEC	2015	Mr. Reinhold Hamayulu/ Mr. Alieu Jawo	Namibia/ Gambia	At-sea	
JOGMEC	2015	Md Shamsuzzaman	Bangladesh	At-Sea	
JOMGMEC	2015	Mr. Kevin Jankoo	Jamaica/Guyana	At-sea	
COMRA	2015	Mr. Reinier Giralt Ortega	Cuba	Fellowship	
COMRA	2015	Ms. Taufan Wiguna/ Ms. Natalia Torres	Indonesia/ Mexico	Fellowship	
COMRA	2015	Ms Natia Chomakhidze	Georgia	Engineering	
COMRA	2015	Mr. Prithivi Dass Bissessur	Mauritius	Engineering	

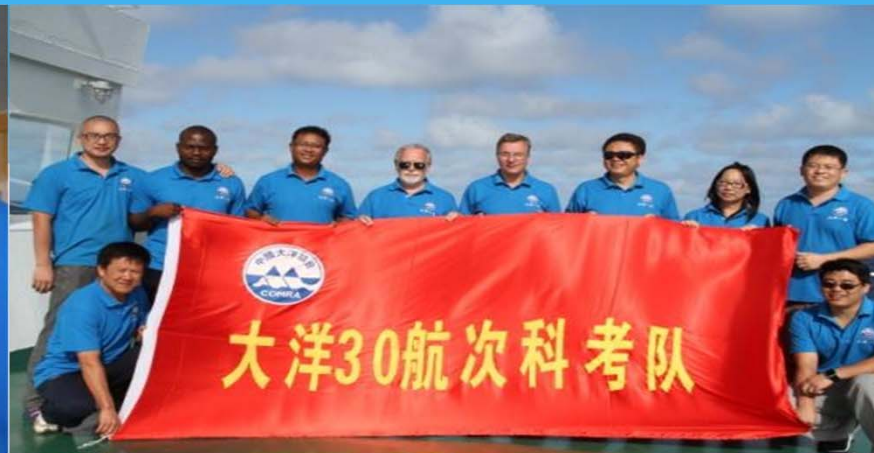
Contractor Training Programme

TOML 2013



Contractor Training Programme

COMRA 2014



Contractor Training Programme

Russian Training Programme 2015

GOVERNMENT OF THE RUSSIAN FEDERATION

FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER
PROFESSIONAL EDUCATION
«SAINT-PETERSBURG STATE UNIVERSITY»
(SPBSU)
7-9 Universitetskay nab., Saint-Petersburg 190034 Russia
phone/fax 328-97-88
http://www.spbu.ru

CERTIFICATE ON TRAINING OR TRAINING PERIOD

28.01.2015 № 04/10-140

This is to certify that Mr. **BEDMAR JOSE MANUEL**, d.o.b. 21.08.1983, a citizen of Argentina, was a student of the additional educational programme "Study and Exploitation of Mineral Resources in the Ocean" within the period from 13.01.2015 to 24.01.2015.

The student completed the following courses within "Study and Exploitation of Mineral Resources in the Ocean" educational programme:

	Course Title	Amount of lecture hours
1	Basics of oceanography and marine ecology	18
1.1	Basic categories, history and development	6
1.2	Basics of physical oceanography	6
1.3	Basics of marine ecology	6
2	Basics of marine geology and geophysics	18
2.1	History of marine geological and geophysical investigations	4
2.2	Seafloor topography, tectonics and structures	6
2.3	Magmatic rocks and bottom sediments	4
2.4	Geophysical methods in marine geology	4
3	Exploration of marine minerals	44
3.1	Types of marine minerals and history of their study	4
3.2	Shallow sea marine minerals	4
3.3	Deep-sea mineral deposits: classification and the need of their study and exploration	6
3.4	Ferromanganese nodules	4
3.5	Cobaltmanganese crusts	2
3.6	Seafloor massive sulfides	6
3.7	Phosphorites	4
3.8	Gas hydrates	4
3.9	New potential marine minerals	4
3.10	Marine minerals exploration methods	6
4	Technology of exploration and mining of marine mineral deposits	6
4.1	Mining technologies	3
4.2	Environmental, legal and economic issues of marine mining	3
4.3	Advisory support	6
5	Consultations	6
	TOTAL AMOUNT	92

Deputy Head of Academic Affairs Office for
Geography, Geology, Geoecology and Soil Science



Galina P. Dizhe

Prepared by: Alexandra A. Khruškina, Advisor on International Relations, Phone: (+7-812) 3636221 a.khruškina@spbu.ru

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phone/fax 328-97-88
http://www.spbu.ru

CERTIFICATE ON TRAINING OR TRAINING PERIOD

28.01.2015 № 04/10-140

This is to certify that Mr. **KOLOA KLEDY**, d.o.b. 30.10.1983, a citizen of Papua New Guinea, was a student of the additional educational programme "Study and Exploitation of Mineral Resources in the Ocean" within the period from 13.01.2015 to 24.01.2015.

The student completed the following courses within "Study and Exploitation of Mineral Resources in the Ocean" educational programme:

	Course Title	Amount of lecture hours
1	Basics of oceanography and marine ecology	18
1.1	Basic categories, history and development	6
1.2	Basics of physical oceanography	6
1.3	Basics of marine ecology	6
2	Basics of marine geology and geophysics	18
2.1	History of marine geological and geophysical investigations	4
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Forthcoming Training Opportunities

➤ UKSLR-I PhD training programme

➤ 4-Year PhD course at the world-renowned Plymouth University Marine Institute

➤ 2 Students who are citizens of developing States

- ✓ One trainee from a developing state will receive on-land training in a 4-year Ph.D. programme in the analysis of polymetallic nodules using advanced imaging and analysis techniques
- ✓ Another trainee from a developing state will receive training in a 4-year Ph.D. programme in deep sea marine biology.

➤ Both Ph.D. training programmes are planned to start on October 1st, 2015.

➤ UKSR will bear the costs of the two training programmes through a grant to Plymouth University. Funds from the Grant will be used to discharge all fees and expenses incurred by the trainees in connection with their participation in the relevant training programme (including the costs of training, accommodation, meals and other incidentals, passport and visa, transport, travel, insurance, materials, fieldwork, incidental study expenses and each student's union or guild fees). UKSR will additionally provide a berth for each student on a research cruise to the Clarion-Clipperton Zone.

➤ General qualifications of candidates

- ✓ Candidates for the Ph.D. training programme in polymetallic nodules should hold a degree and masters qualification in a relevant subject such as geochemistry, chemistry, mineralogy or environmental science, or equivalent education acceptable to Plymouth University.
- ✓ Candidates for the Ph.D. training programme in deep sea marine biology should hold a degree and masters qualification in a relevant subject, preferably marine biology, or equivalent education acceptable to Plymouth University. It is desirable that the candidate have work experience in a relevant field; such as experience of undertaking benthic surveys, use of GIS, statistical modelling, and/or skills in species identification. The ability to be able to go to sea for up to 2 months is highly recommended.
- ✓ In general, candidates for both Ph.D. training programmes should meet the entry requirements for Plymouth University, including demonstrating the ability to read and write English to a level of at least IELTS 6.5, be in good health, and be able to provide two satisfactory written reports from academic referees.

Contractor Training Programme

Forthcoming Training Opportunities

❖ GSR training Programme

I. 2-year master program for one student from developing States

➤ Conditions to access a Master School in Belgium:

- ✓1) Candidates must successfully pass initial screening and requirements. A strong selection criteria is requested regarding language (English) and grades (minimal 2nd Class honors, Upper division)
- ✓2) Candidates must hold at least a bachelor's degree in a relevant scientific or engineering domain.
- ✓3) Depending upon the selected study program and upon the University, a good knowledge of Dutch or French may be required additionally.
- ✓4) Candidates outside EU must apply for a visa (time required to have the document can vary depending on the country)
- ✓5) Candidates may require a master degree or equivalent in some cases (e.g. Master in Maritime Science).

➤ To cover the travel costs, the accommodation and the tuition fees

II. 6 months Internship in 2015-2016

➤ Objectives:

- ✓(1) the participation in the preparation of the upcoming campaign;
 - ✓(2) presence on board of the vessel during the next GSR expedition cruise; and
 - ✓(3) participation to the data processing and interpretation.
- GSR will cover the travel costs and provide accommodation, office working space and IT as required by the tasks. The contractor will also finance the attendance to internationally recognized offshore safety training.

Contractor Training Programme

Estimated Training Opportunities before 2020

- 18 Contracts has been signed or to be signed between 2011-2015
- Each contractor is expected to provide no less than 10 training opportunities
- It could be estimated that 180 training places would be provided between 2013 to 2020
- If the expiring contracts are to be renewed in 2016 and 2017, further more training opportunities could be expected.
- The schedule of all training opportunities will be reported to the Commission in July 2015 and be publicized on ISA website



Contractor Training Programme

Regular procedures for implementation of the Contractor Training programme

- 1. The contractor submits the training proposal to the Secretary-General, including, but not limited to, the objectives and contents of training programme, qualifications of candidates and cost-bearing ;
- 2. The Secretariat circulates notes verbale to member States as well as letters to LTC members inviting nomination of candidates, and post the advertisement online;
- 3. The candidates submit their application (Duly completed Application Form, mostly with Nomination Form by Government);
- 4. The Commission makes selection of candidates and issue an official document, based on the requirements by the contractor;
- 5. The Secretariat notifies the result of selection to the contractor and candidates;
- 6. The contractor provides training to the selected candidates.
- 7. The contractor and the trainees submit training reports to the Authority. The contractor may include the training report as a part of its annual report.



Contractor Training Programme

Criteria for selection of Candidates

---for COMRA 2015

➤ The selection of candidates by the subgroup was based on the qualifications of the candidates proposed by COMRA, particularly language proficiency, education, scientific research background or marine management work experience, potential career development of candidates, reasons for seeking training, expected benefit to the candidates' national countries and other merits embodied in the application and nomination forms. Subject to those considerations, due regard was also paid to equitable geographical distribution and gender balance, in particular the interests and needs of the landlocked and geographically disadvantaged developing States, as requested by the Council of the International Seabed Authority in its decision adopted at the twentieth session ([ISBA/20/C/31](#), para. 6).



Contractor Training Programme

How to Apply

- **One completed Application Form**
- **One completed Nomination Form**
- **Send the forms to training@isa.org.jm**



Part II

Training Opportunities under the ISA Endowment Fund



Introduction to ISA Endowment Fund

- * The International Seabed Authority Endowment Fund for Marine Scientific Research in the Area
 - Established by the Assembly at its 104th meeting on 16 August 2006
 - Its purpose shall be to promote and encourage the conduct of collaborative marine scientific research in the international seabed area for the benefit of mankind as a whole, particularly through two main activities:
 - ✓ By supporting the participation of qualified scientists and technical personnel from developing countries in marine scientific research programmes and activities.
 - ✓ By providing opportunities to these scientists to participate in international technical and scientific cooperation, including through training, technical assistance and scientific cooperation programmes.



Membership of the Advisory Panel

(November 2014-October 2017)



H.E. Ariel Fernandez (Argentina)



H.E. Tommo Monthe (Cameroon)



H.E. Dong Xiaojun (China)



H.E. Jean-Michel Despax (France)



Dr. Georgy Cherkashov
(Russian Federation)



Dr Gordon Paterson (UK)



Dr. Natsumi Kamiya



Dr. Kim Juniper (Canada)



Advisory Panel

- On the basis of the applications received, a shortlist of eligible candidates and proposals will be established by the secretariat of the Authority and will be submitted to the Advisory Panel for evaluation.
- The Advisory Panel will be provided with a summary of each application and, where relevant, the qualifications of each candidate for assistance; the sponsorship, if any, by any Government or governmental agency or other institution or entity; where relevant, information concerning the means or absence thereof for the advancement of the candidate's career or vocation or for acquiring specialized training or experience; a summary of the nature and objectives of the marine scientific research programme, scientific cooperation or technical assistance; and a statement of the expected benefits to the individual or developing country concerned.



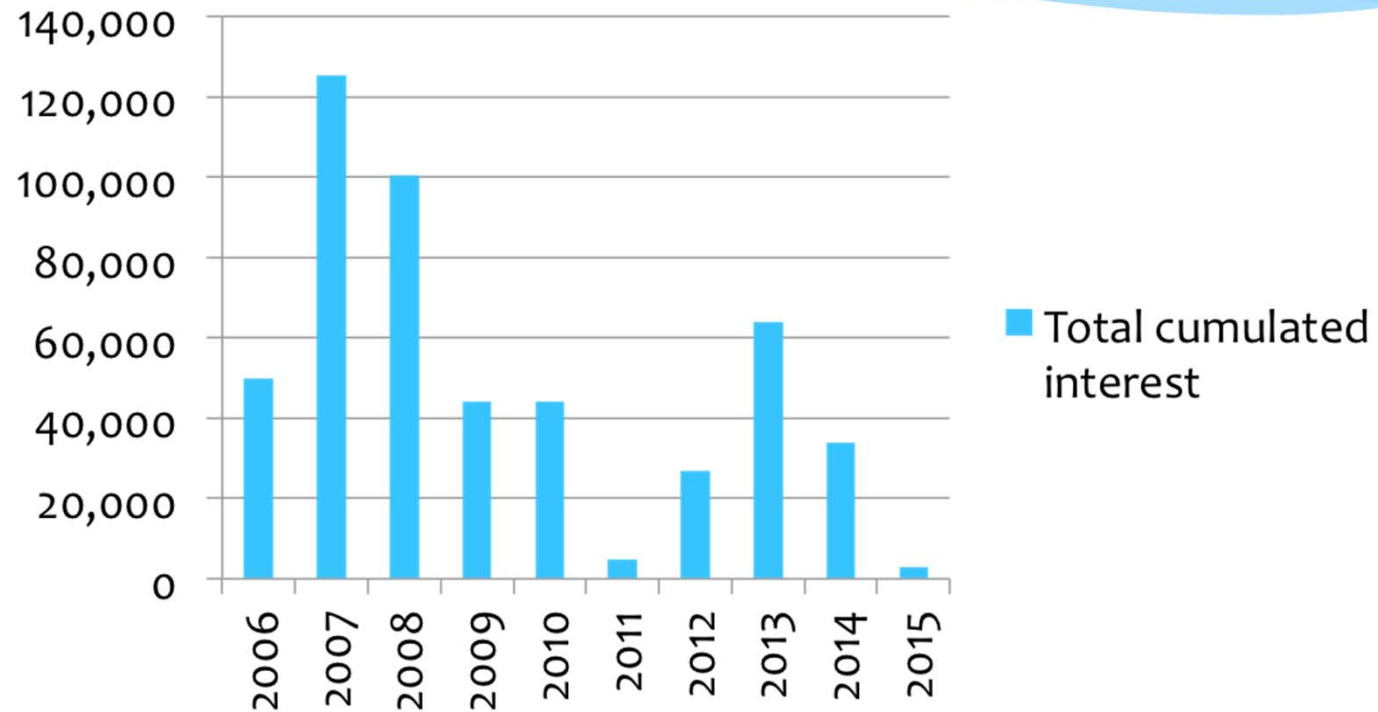
Capital of the Endowment Fund

Year	Contributor	Contribution (US\$)
Initial Capital as of 18 August 2006		2,631,803
16 May 2008	UK	29,800
06 Oct 2008	Mexico	2,500
05 Nov 2008	Spain	25,514
25 Aug 2009	Norway	250,000
25 Sep 2009	Germany	276,719
22 Mar 2010	UK	15,253
31 Dec 2009	Interest not spent	16,535
31 Dec 2010	Interest not spent	6,414
22 Jun 2011	Nigeria	10,000
07 Sep 2011	Mexico	2,500
15 Sep 2011	Japan	100,000
17 Jan 2012	UK	20,000
8 Nov 2012	Mexico	5,000
18 July 2013	UK	10,000
10 Sep 2013	Mexico	5,000
24 Apr 2014	UK	10,000
3 Jul 2014	Republic of Korea	30,000
4 Sep 2014	Mexico	7,500
18 Dec 2014	Tonga	1,000
	TOTAL	3,455,538



Interest Earned

Total cumulated interest



Expenditures of the Fund

as of February 20 2015

Project or item	Year	Expenditure (US \$)
InterRidge	2009-2011	30,000
	2012-2014	45,000
Transfer to Voluntary Trust Fund	2009	20,000
	2011	40,000
Rhodes Academy	2009-2014	18,4419
TAP-MAR I	2010	19,199
TAP-MAR II	2011	30451
SMS	2010	41,456
INDEEP	2012	18,000
SWIR	2014-2015	35,420
EMEPC	2014	1257
Banking fee	--	447
Total		465,649



Summary of Projects

Project	Number of Beneficiaries	Countries of Beneficiaries
InterRidge I	1	India
Rhodes I	9	Bangladesh, China, Egypt, Guyana, Indonesia, Mauritania, Philippines, Thailand, Vietnam
TAP-MAR I	3	Argentina, Nigeria, Sri Lanka
SMS	1	Papua New Guinea
TAP-MAR II	4	Costa Rica, Egypt, Papua New Guinea, South Africa
Rhodes II	6	Brazil, Columbia, Egypt, Jamaica, Madagascar, Palau
InterRidge II	2	Cameroon, India
Rhodes III	8	China, Indonesia, Malta, Philippines, Sierra Leone Suriname, Trinidad
InterRidge III	3	Mauritius, India



Summary of the Projects

Project	Number of Beneficiaries	Countries of Beneficiaries
Rhodes IV	6	China, Fiji, Namibia, Peru, Philippines, Tunisia
INDEEP	6	Brazil, Columbia, India, Mauritius, Namibia, Russia
InterRidge IV	3	China, India, Papua New Guinea
Rhodes V	4	Bolivia, Cook Island, Indonesia, Vietnam
InterRidge V	2	China, India
Portugal	1	Thailand
Rhodes VI 2014	4	Tonga, Micronesia, Malaysia, Vietnam
SWIR	2	Jamaica, Nigeria (Dec. 2014 – Apr. 2015)
InterRidge VI	1	China
TOTAL	66	36



Endowment Fund

Trainees from Africa

Country	Name of trainee	Project
Cameroon	Akumbom Vishiti	InterRidge 2010
Egypt	Lamaiaa Mohamedieu	Rhodes Academy 2009
Egypt	Nehal Shams El Din	Rhodes Academy 2010
Egypt	Suzan El-Gharapawy	TAP-MSR 2010
Madagascar	Leonide Y. Randrianarisoa	Rhodes Academy 2010
Mauritania	Latir Setra Fassa	Rhodes Academy 2009
Mauritius	Girish Beedessee	InterRidge 2011
Mauritius	Girish Beedessee	INDEEP 2012
Namibia	Stanley Ndara	Rhodes Academy 2012
Namibia	Bronwen Currie	INDEEP 2012
Nigeria	Olubunmi Nubi	TAP-MAR 2009
Nigeria	Rabiu Abdul	SWIR 2014-2015
Sierra Leone	Sheku Sei	Rhodes Academy 2011
South Africa	Wahiebah Hoosain	Tap-Mar 2010
Tunisia	Yosra Khammeri	Rhodes Academy 2012



Endowment Fund

InterRidge 2010



Vishiti anticipates that the InterRidge fellowship will have a very positive impact on her career development: “Considering that female scientists are few in Cameroon, my vision is to become a senior academic in the Cameroon [UNIVERSITY](#) system and the skills and networks I will set up during this fellowship will be very useful in this career path”.



Endowment Fund

InterRidge 2011



*“I am fascinated by the abundance and diversity of organisms found at hydrothermal vents, with the possibility of finding novel genes, proteins and molecules which can contribute to interesting biological properties. This fellowship will provide me an opportunity to look at the biological properties of invertebrates and microbial symbionts sampled at vent systems of the Central Indian Ridge (CIR). There is an ongoing effort to search for new molecules in terms of marine natural products, and hydrothermal vents have proven to be a rational environment to explore. The data generated will also provide insights on the vents’ host-symbionts relationship”.

Beedessee was then working at the Mauritius Oceanography Institute (MOI) under the supervision of Dr Daniel Marie. The title of his project is “Biological activities and properties of extracts derived from invertebrates and microbial communities of hydrothermal vent faunas at the Central Indian Ridge”.





SWIR

International Cooperative Study on the Hydrothermal System at Ultraslow Spreading Southwest Indian Ridge (SWIR)

- By Second Institute of Oceanography, State Oceanic Administration, China
- Two candidates was selected at the 11th meeting of the Panel.
- ✓ Rabiul Abdul from **NIGERIAN INSTITUTE FOR OCEANOGRAPHY AND MARINE RESEARCH (NIOMR)** completed at-sea training between Dec. 2014 to Feb. 2015.
- ✓ Renee McDonald will attend the at-sea training commencing March 2015.





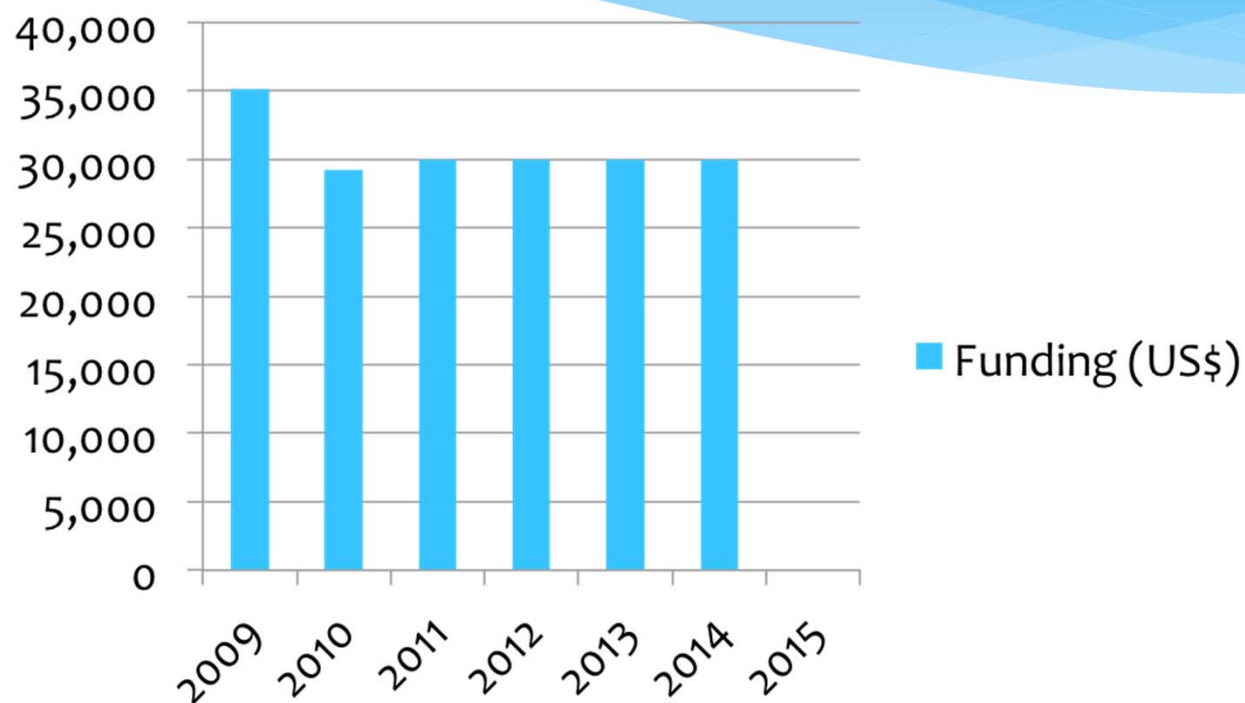
EMEPC at-sea Training in 2014

- By the Portuguese Task Group for the Extension of the Continental Shelf
- 27th May - 22nd June 2014
- Ms. Apitida Wasuwatcharapong
from Department of Mineral Resources, Thailand





Funding to Rhodes Academy





2014 Session



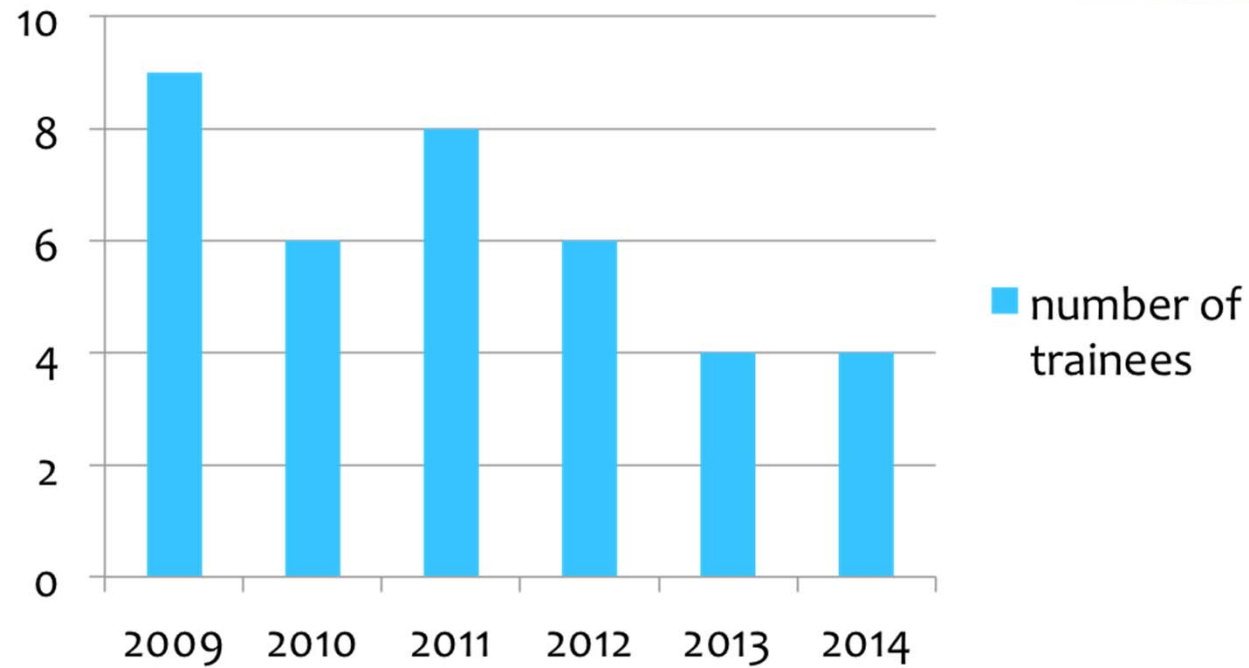
Webpage: www.virginia.edu/colp/rhodes-academy.html





Trainees (2009-2014)

Total: 37



Rhodes Academy 2015

RHODES ACADEMY OF OCEANS LAW AND POLICY

PROMOTING THE RULE OF LAW IN THE WORLD'S OCEANS

TWENTIETH SESSION • RHODES, GREECE
5 JULY - 24 JULY 2015

Week 1

LOS INTRODUCTIONS, NAVIGATION, MARINE SCIENCE AND DEEP SEABED

Territorial sea, UNCLOS, navigation and passage regimes, exclusive economic zone, living and non-living resources, marine science, deep seabed minerals, islands, submarine cables, sea floor mapping, and global climate change.

Week 2

MARITIME DELIMITATION, CONTINENTAL SHELF, FISHERIES, AND BIODIVERSITY

Maritime delimitation overview, baselines, dispute settlement cases and state practice, outer limits of continental shelf, common heritage of mankind, piracy, exclusive economic zone and high seas fisheries, IUU fishing, biodiversity, and whaling.

Week 3

MARINE ENVIRONMENT, MERCHANT SHIPPING, AND DISPUTE SETTLEMENT

Marine environment, deep seabed mining, ISA regulations, ship-source pollution, maritime safety, arbitration, ethics and fraud before tribunals, ITLOS cases and decisions, coastal state EEZ laws, sovereign state litigation, and warship immunity.

APPLICATIONS & FURTHER INFORMATION AVAILABLE AT
www.virginia.edu/colp/rhodes-academy.html

*Formal applications are to be made through
the Center for Oceans Law and Policy by 1 May 2015*

The Rhodes Academy is a cooperative undertaking sponsored by the Center for Oceans Law and Policy, University of Virginia School of Law (Charlottesville, USA); the Aegean Institute of the Law of the Sea and Maritime Law (Rhodes, Greece); the Law of the Sea Institute of Iceland (Reykjavik, Iceland); the Max Planck Institute for Comparative Public Law and International Law (Heidelberg, Germany); The Netherlands Institute for the Law of the Sea, Utrecht University (Utrecht, The Netherlands); and the Centre for International Law, National University of Singapore (Singapore). The Korea Maritime Institute (Seoul, Republic of Korea) and the Research Center of the Sea and Maritime Law and Policy, Ankara University (Turkey), are associate sponsors. For many years the International Seabed Authority has provided science scholarships for developing country students.

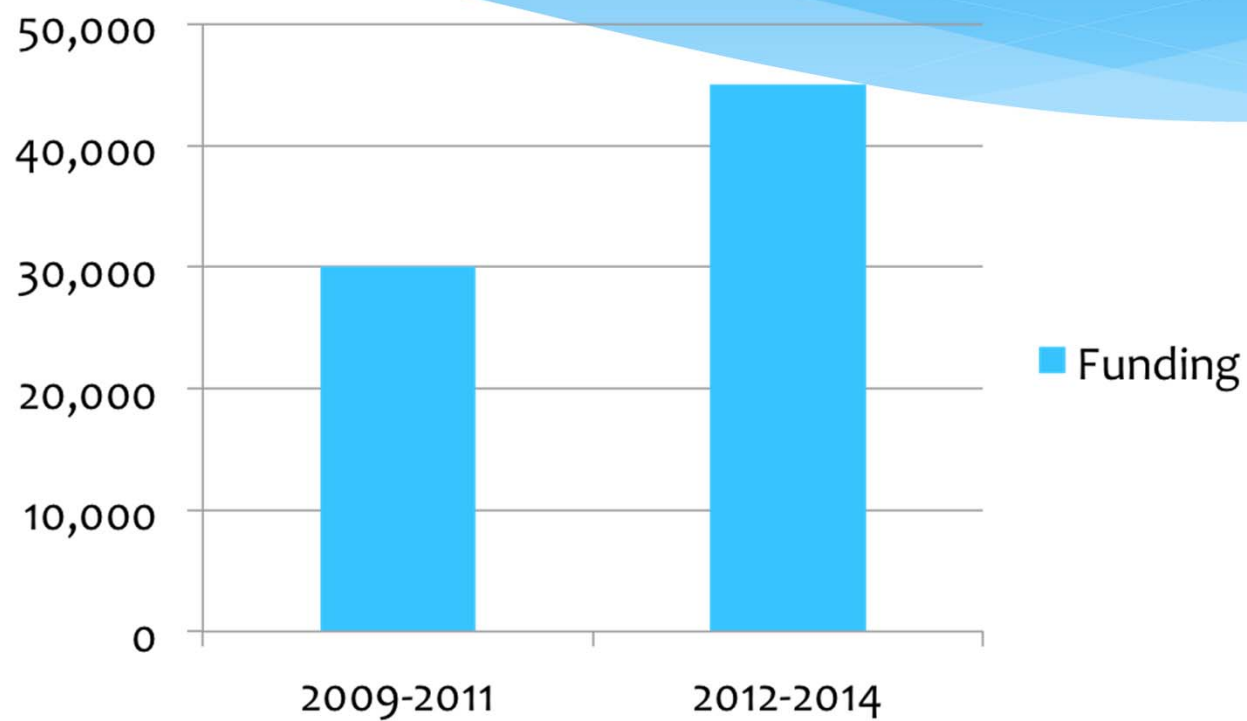
CENTER FOR OCEANS LAW AND POLICY
University of Virginia School of Law
580 Massie Road, Charlottesville, VA, 22903, USA
E-mail: jacobs@virginia.edu • Attn. Mr. Judy Ellis

AEGEAN INSTITUTE OF THE LAW OF THE SEA AND MARITIME LAW
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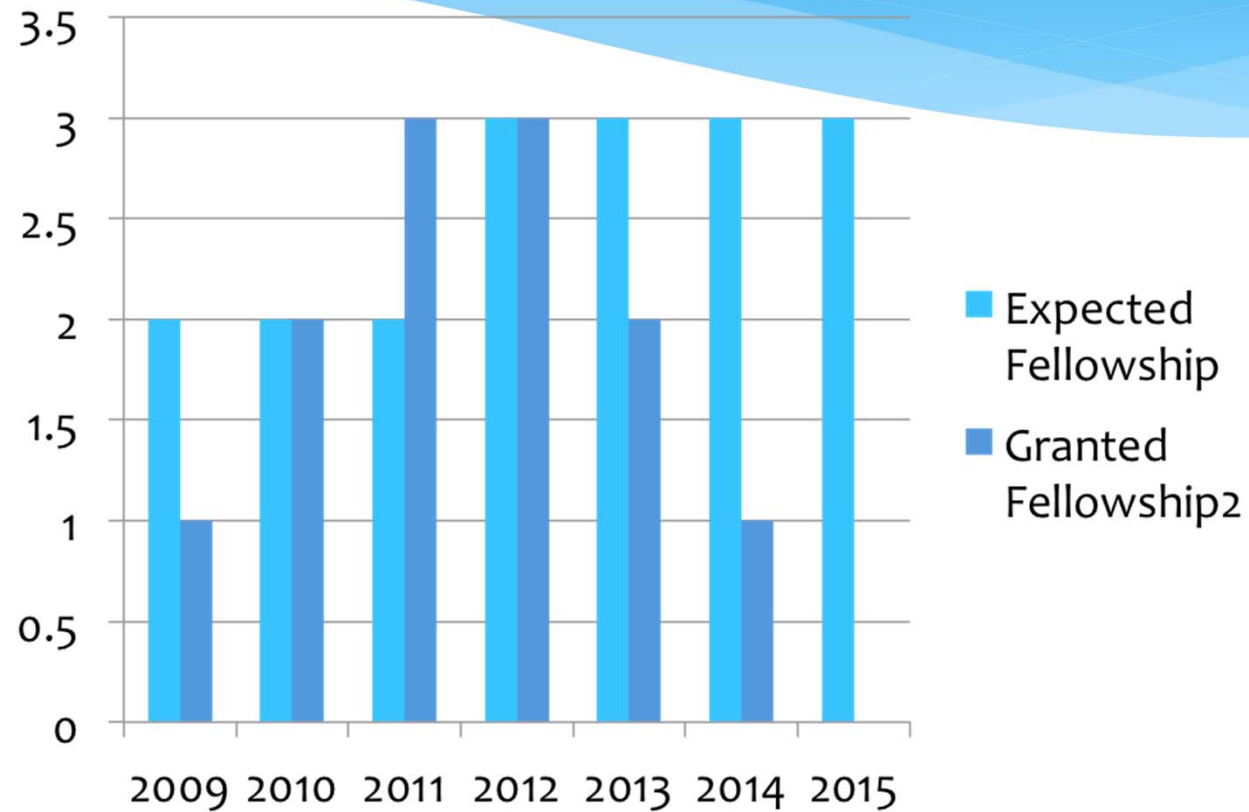


Funding to InterRidge





Fellowships (2009-2014)





InterRidge Student and Postdoctoral Fellowships - Call for proposals 2015

- <http://www.interridge.org/fellowship>
- All application materials are to be submitted electronically to the InterRidge Coordinator
- ✓ interridge@gmail.com;
- ✓ coordinator@interridge.org)
- * by **31 March 2015**

These Fellowships are designed to encourage international collaboration on any aspect of ridge-crest science by graduate students or postdoctoral researchers, fostering long-standing partnerships for their future careers. The Fellowships can be used for any field of ridge-crest science. In particular these awards are encouraged to be used for international cruise participation, international laboratory use, and adding an international dimension to the Fellow's research.





*13th Deep-Sea Biology Symposium
Travel Bursary (3-7 December 2012)*

Funding: \$ 18,000

No.	Name	Country	Institution
1	Bronwen Currie	Namibia	Ministry of Fisheries & Marine Resources
2	Angelo Bernardino	Brazil	Univ. Federal do Espirito Santo
3	Antonina Rogacheva	Russian Federation	Shirshov Institute of Oceanology
4	Ravail Singh	India	DZMB, Germany
5	Girish Beedessee	Mauritius	Mauritius Oceanography Institute
6	Nestor Ardila	Columbia	Univ. de los Andes





6 Bursaries

- * **REGISTRATION is now open!** (09/01/2015)
- * To register in the 14th DSBS please fill in the form in the following link: [registration form](#). You will receive a notification email after the submission of your form.
- * The [REGISTRATION](#) fee includes a welcome package (including symposium documentation), all social events (except symposium dinner), coffee breaks and lunches.
- * [REGISTRATIONS](#) can be transferred to another delegate at any time.
- * Note that standard [REGISTRATION](#) is possible up to two weeks after decision on abstract acceptance.
- **WHEN:** 31st August - 4th September 2015
- **Where:** Aveiro, Portugal
- * **Host Institution:** [UNIVERSITY of Aveiro](#)
- * **Conveners:** [Marina Cunha](#)
[Ricardo Serrão Santos](#)
[Ana Hilário](#)
- Budget:

Item	Expenditures per person (US\$)	Total
Airfares average	1800	10,800
Accommodation	500	3,000
Daily per diem	180	1,080
TOTAL	3080	14,880



Marco Polo-Zheng He Academy

2015 Session

Sponsors



The 2015 Summer Program of Marco Polo-ZHENG He Academy of International Oceans Law and Policy is divided into two sessions. The Xiamen Session is sponsored by the South China Sea Institute of Xiamen University. Participants of this summer program will enjoy two weeks of study on the most beautiful campus of China. For detailed information of Xiamen Session, please visit: <http://makeboluo.xmu.edu.cn/>

The Shanghai Session is sponsored by the Centre for Polar and Deep Ocean Development of Shanghai Jiao Tong University (SJTU-PADOD Centre) and will be held in the Xuhui Campus of the University, which is located in the commercial center of Xuhui District of Shanghai. Detailed information for Shanghai Session, please visit: <http://padod.sjtu.edu.cn/en/>

You are welcome to apply for both Xiamen and Shanghai Sessions or either of them.



Curriculum

The 2015 Summer Program of Marco Polo-ZHENG He Academy of International Oceans Law and Policy offers a unique and in-depth series of lectures and workshops on oceans law and policy, in an intensive four-week long course in Xiamen and Shanghai.



Professor Kuen-chen FU
Director of Marco Polo-ZHENG He Academy

"Welcome to Xiamen where Marco Polo started his journey back home to Venice; and welcome to Shanghai where the world's largest harbour is located."

Xiamen Session

Week 1

6 July (Monday) - 10 July (Friday)

Mr. Christopher A. Whomersley, PCA

Topic: "International trend in deep seabed mining and practice of the United Kingdom"

Week 2

13 July (Monday) - 17 July (Friday)

Topic: Professor FU Kuenchen, South China Sea Institute of XMU

Topic: "Legal Issues of the South China Sea and the Arctic Ocean"

Shanghai Session

Week 3

20 July (Monday) - 24 July (Friday)

Judge José Luis Jesus, ITLOS

Topic: "Dispute settlement in the law of the sea: 19 years of the ITLOS and beyond"

Week 4

27 July (Monday) - 3 July (Friday)

Deputy Secretary-General Michael W. Lodge, ISA

Topic: "ISA, deep sea mining and international fisheries"

Extra-Curricular Activities

The classes of the 2015 Summer Program will be arranged during the weekdays in morning leaving the afternoons and weekends free for field trips, sightseeing, and other activities. In addition to class lectures and discussions, Marco Polo-ZHENG He Academy tries to arrange for our fellows' visits to a number of ocean related government agencies and legal institutions in Xiamen and Shanghai.

The program of Xiamen will include:

- Welcome Reception; and Visits to:
- The Basic People's Courts in Xiamen
- Law firms
- Ocean-related government agencies

The program at Shanghai will include:

- Welcome Reception; and Visits to:
- Polar Research Institute of China
- China Maritime Museum
- China Art Palace
- Dong Haoyun Shipping Museum
- Qian Xuesen Library & Museum



Class of 2013 at China Museum for Fujian-Taiwan Kinship

Please note that the arrangement of courses and field trips is subject to adjustment.

Introduction of the Faculty



Mr. Christopher A. Whomersley Chris Whomersley has recently retired as Deputy Legal Adviser in the United Kingdom's Foreign & Commonwealth Office after a career spanning thirty-six years and covering many areas of international law. Recently, he was responsible for the arrangements relating to the declaration of an Exclusive Economic Zone around the United Kingdom, as well as for the law updating UK legislation on deep sea mining. In June Chris was honoured by HM The Queen for his services to international law.



Professor FU Kuenchen Prof. Kuen-chen Fu (a.k.a. Lawrence K.C. Fu) (1951) obtains his B. L. from National Taiwan University in 1974 and so does his M. L. in 1980; He gets his LL.M. (with specialization in oceans law and policy) in Univ. of Virginia School of Law, 1983, and his S.J.D. in Univ. of Virginia School of Law, 1986. He also attended the Hague Academy of International Law in the Hague (Summer 1982). In 2013, he was awarded the honorary PhD of Law degree by the Far East Federal University (FEFU).



Judge José Luis Jesus Member of the Tribunal since 1 October 1999; re-elected as from 1 October 2008; President of the Tribunal 2008-2011; President of the Seabed Disputes Chamber since October 2014. Law Degree, School of Law, Classical University of Lisbon (1978); International Law Certificate, Saint John's University, New York (1985); M.A., Government and Politics, Saint John's University, New York (1985).



Deputy Secretary-General Michael W. Lodge Michael W. Lodge is Deputy to the Secretary-General and Legal Counsel for the International Seabed Authority (ISA). He received his LLB from the University of East Anglia, and has an MSc in marine policy from the London School of Economics and Political Science. He is a barrister of Gray's Inn, London, and has served as legal counsel to numerous agencies including the ISA, the OECD Round Table on Sustainable Development and the South Pacific Forum Fisheries Agency.

Certificate

All courses will be conducted in English. Certificate of Attendance for each session will be granted at the closing of session. There will be no tests, unless requested for by any student, in such an event, in addition to the Certificate of Attendance, a Certificate of Grade will be awarded at the end of the session.



Certificates are awarded at the Graduation Ceremony in 2012



Professor Erik Franks, Professor Kuen-chen FU
—Faculties for 2011 Marco Polo-ZHENG He Academy



Class of 2013 in Shanghai Session



Award Ceremony of 2011

ISA Endowment Fund

Summary of Training opportunities in 2015

- Rhodes Academy
 - ✓ Possibly 3 – 6 Fellowships for 2015 Session

- INDEEP
 - ✓ 6 Bursaries to attend the 14th Symposium

- InterRidge
 - ✓ 3 Fellowships

- Marco Polo- Zhenghe Academy
 - ✓ 6 Fellowships for 2015 Summer Training Programme

- Applications to be submitted to the respective institute
- Candidates to be selected by the respective institute



Part III

Internship



Internship



THE INTERNATIONAL JOURNAL OF
MARINE AND COASTAL LAW 30 (2015) 1–27



brill.com/estu

An Environmental Management Strategy for the International Seabed Authority? The Legal Basis

*Aline Jaeckel**

Faculty of Law, University of New South Wales, Sydney, Australia

Abstract

The number of contracts granted by the International Seabed Authority (ISA) to explore minerals on the seabed beyond national jurisdiction has increased greatly in recent years and commercial exploitation is scheduled to start in the near future. A core challenge is to establish adequate environmental protection measures, procedural safeguards, and institutional arrangements to balance commercial mining with environmental protection. This is especially important given the urgent need to utilize existing legal and institutional frameworks, such as the ISA, to protect marine biodiversity in areas beyond national jurisdiction. This article analyses the ISA's mandate to adopt a comprehensive environmental management strategy. It outlines the legal basis of eight potential components of such a strategy. Although several of these have been endorsed by the ISA on a temporary or *ad hoc* basis, substantial gaps remain. An environmental management strategy could provide for systematic environmental safeguards during both exploration and exploitation for minerals.

Keywords

International Seabed Authority – deep seabed mining – marine environment – Exploration Regulations – marine biodiversity – environmental impact

* This article draws on research for a briefing note prepared by the author during an internship at the ISA. The author would like to thank Michael Lodge, Rosemary Rayfuse and Sarah Williams for their comments. The content and any remaining errors are the responsibility of the author.



Internship



Members of Tonga Delegation at the ISA Annual Session, July 2013: T. Suka Mangisi (Left) and Taaniela Kula (Right) with Rose Kautoke (Middle) Tonga Attorney General's Office Lawyer sponsored by the DSM Project to undertake an internship with the ISA in July 2013



Timaina Vakadewabuka: Fiji Attorney General's Office lawyer, sponsored by the DSM Project to undertake an internship with the ISA in July 2013






SPC-EU EDF10 Deep Sea Minerals (DSM) Project





**Information Brochure 15
The International Seabed Authority**

The International Seabed Authority (ISA) is an autonomous international organisation created by the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and the 1994 Agreement relating to the implementation of Part XI of UNCLOS. The ISA is the mechanism through which State parties manage the seabed mineral resources of "the Area", which is the term for all seabed beyond the limits of national jurisdiction¹. UNCLOS designates the Area and its resources as "the common heritage of mankind" and so the ISA is tasked to manage applications to explore or mine those mineral resources, and to distribute any proceeds derived from them, in a manner which is equitable and beneficial to all.



The Area is all of the white parts of the seabed shown on this map.

¹ Article 1, paragraph 1 of UNCLOS. The full extent of the Area will not be finally determined until all countries have finalised the limits of their maritime boundaries – as the Area is all of the seabed outside those limits.

SPC-EU EDF10 Deep Sea Minerals Project www.scpac.org/dsm



Internship

Structure of the programme

- ISA accepts interns on a limited basis depending on the specific needs of respective offices and their capacity to effectively support, accommodate and supervise the interns.
- The programme does not consist of clearly defined internship positions; rather, ISA will define the number and nature of internships on a continuous basis, according to the needs of the various offices. The selection and recruitment procedure will, consequently, be on an ongoing basis and each intern will carry out his or her assignments under the supervision of a designated ISA staff member.



Internship

Status

- Interns are considered gratis personnel. They are not staff members and are therefore not entitled to privileges and immunities extended by the host country to ISA staff members.
- Interns shall not be sought or accepted as substitutes for staff to be recruited against posts authorized for the implementation of mandated programmes and activities. Interns shall not represent ISA in any official capacity, do not perform supervisory functions and must not exercise certifying or approving authority.
- Interns may not apply for or be appointed to any position in the Professional or above categories during the period of their internship and for the six months immediately following the expiration date thereof.



Internship

Conditions of Internship

- Interns are responsible, where appropriate, for obtaining the necessary visas and arranging their travel to and from Kingston as well as accommodation and travel in Kingston.
- Interns are not financially remunerated by ISA. Costs and arrangements for travel, visas, accommodation and living expenses are the responsibility of interns or their sponsoring institutions.
- ISA accepts no responsibility for the medical insurance of the intern. Applicants for internship must show proof of valid medical insurance coverage to cover the full period of the internship at the duty station and provide a medical certificate of good health prior to the commencement of the internship.
- ISA accepts no responsibility for loss or damage to personal effects that may occur during the internship.



Internship



INTERNATIONAL SEABED AUTHORITY

5 March 2015

Certificate of internship

To whom it may concern

This is to certify that Laura Lallier, PhD student affiliated with the faculty of Law of Ghent University (Belgium), department of European, Public and International Law, completed eight weeks (12th January to 6th March 2015) as an intern at the International Seabed Authority based in Kingston, Jamaica. During her stay, she successfully completed a variety of tasks she was assigned in relation to her research interest which is the environmental legal aspects of deep sea mining in the Area. These tasks included:

- Reviewing the results of a stakeholder survey that was conducted in 2014 and identifying elements relevant to the drafting of exploitation regulations.
- Designing comparative flow charts on the review processes for EIA of mining activities, in the context of drafting exploitation regulations. This was the result of comparative studies between several national regimes and relevant stakeholder inputs.
- Writing a briefing paper on exploration activities requiring a prior EIA.
- Selecting research material and the legal basis for environmental management plans.
- Study on the recent Chatham Rise case in New Zealand (11th February 2015) and the lessons learnt that could be useful to the ISA with regards to EIA, review process and evaluation criteria.
- Study on internationally recognised standards (such as the International Finance Corporation Performance Standards, and the Equator Principles).

In addition, Laura had the opportunity to sit in the Legal and Technical Commission's meeting in February, of which the agenda was mainly connected to the drafting and development of exploitation regulations.

We trust that Laura's achievements during her stay was not only of great help in assisting the Authority in such a critical phase in the development of a mining code, but equally of great inspiration and support to her research.

We wish Laura the best of luck for her PhD and her future career.



Yongsheng Cai
Yongsheng Cai
Legal Officer

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OFFICE OF THE PERMANENT OBSERVER FOR THE INTERNATIONAL SEABED AUTHORITY TO THE UNITED NATIONS
One United Nations Plaza, Room 1140, New York, N.Y. 10017, United States of America
Phone: (212) 963-6470, 963-6411 • Fax: (212) 963-0908



Internship

Application and Selection

- An Application Form + an Nomination Form
- Applications should be submitted at least one month before the intended period of internship.
- Selection of interns should be conducted by an ad hoc committee for that purpose, which is composed of three professional staff members of ISA.
- Send to training@isa.org.jm



Thank You

yshcai@isa.org.jm

or training@isa.org.jm

