



Council

Distr.: General
19 December 2019

Original: English

Twenty-sixth session

Council session, part I

Kingston, 17–21 February 2020

Item 7 of the provisional agenda*

Election to fill a vacancy on the Legal and Technical Commission in accordance with article 163, paragraph 7, of the United Nations Convention on the Law of the Sea, if any

Election to fill a vacancy on the Legal and Technical Commission in accordance with article 163, paragraph 7, of the United Nations Convention on the Law of the Sea

Note by the Secretary-General

1. The Council of the International Seabed Authority is invited to note that Christian Jürgen Reichert (Germany), member of the Legal and Technical Commission, tendered his resignation in a letter dated 12 December 2019. He had been elected a member of the Commission on 26 May 2008, for the remainder of the term of office of Michael Wiedicke-Hombach (Germany), who had resigned from the Commission. On 21 July 2011, Mr. Reichert had been elected a member of the Commission for a five-year term beginning on 1 January 2012 ([ISBA/17/C/21](#), para. 18) and re-elected a member of the Commission on 22 July 2016 for a term of five years beginning on 1 January 2017 (see [ISBA/22/C/29](#)).
2. In accordance with article 163, paragraph 7, of the United Nations Convention on the Law of the Sea and rule 80, paragraph 3, of the rules of procedure of the Council, in the event of the death, incapacity or resignation of a member of the Commission prior to the expiration of the term of office, the Council shall elect for the remainder of the term a member from the same geographical region or area of interest.
3. Article 163, paragraph 3, of the Convention and rule 81 of the rules of procedure of the Council provide that members of the Commission shall have appropriate qualifications in the area of competence of the Commission and that States parties shall nominate candidates of the highest standards of competence and integrity with qualifications in the relevant fields so as to ensure the effective exercise of the functions of the Commission.
4. By a note verbale dated 19 December 2019, the Permanent Mission of Germany to the International Seabed Authority informed the secretariat of the Authority of the nomination of Carsten Rühlemann, Head of the Marine Geology section at the Federal Institute for Geosciences and Natural Resources in the Department of Marine

* [ISBA/26/C/L.1](#).



Resource Exploration, as a candidate to fill the vacant seat on the Commission resulting from the resignation of Mr. Reichert. The curriculum vitae of Mr. Rühlemann is contained in the annex to the present note.¹

5. The secretariat invites the Council to take a decision on the election of Mr. Rühlemann to fill the current vacancy.

¹ The annex is being circulated in the language of submission only.

Annex

Curriculum vitae*

Carsten Rühlemann

Date of birth 5 May 1962
 Place of birth Hannover, Germany
 Citizenship German
 Work address Federal Institute for Geosciences and Natural Resources (BGR), Department of Marine Resource Exploration, Stilleweg 2, 30655 Hannover, Germany

Academic degrees

1996 PhD in Geology, University of Bremen
 1992 Diploma (MSc equivalent) in Geology, University of Göttingen
 1986 Diploma (MSc equivalent) in Cartography, University of Applied Sciences of Berlin

Academic positions

2016–present Head of Marine Geology section at BGR
 2003–2016 Research Scientist at BGR, Department of Marine Resource Exploration
 2002–2003 Research Fellow in BMBF project “Rapid Climate Changes in Western Tropical Atlantic-Assessment of the biogenous and sedimentary record”, University of Bremen
 Research Fellow in DFG project “Paleohydrography of the Westiberic Continental Slope”, University of Bremen
 1999–2002 Research Fellow in DFG project “Paleohydrography of the Westiberic Continental slope”, University of Bremen
 1996–1999 Research Fellow in DFG project “Paleo Caribbean-Late Quaternary evolution of the Caribbean-Atlantic water mass exchange”, University of Bremen
 1992–1996 Research Assistant, Division of Marine Geology, University of Bremen

Research work

Marine resource exploration strategies with emphasis on manganese nodules and seafloor massive sulphides

Environmental baseline and monitoring aspects of deep-sea resource exploration, with emphasis on oceanography and sedimentology

Late Quaternary paleoceanography and paleoclimatology

* Curricula vitae are issued without formal editing.

Professional activities

Coordination of the work programme in the Germany license area for the exploration of manganese nodules

Member of the German delegation at the International Seabed Authority in Kingston, Jamaica

Participation in 24 cruises with German, French and US American research vessels (chief scientist on 7 cruises)

Selected peer-reviewed publications

Kuhn, T., Uhlenkott, K., Vink, A., Rühlemann, C., Martinez Arbizu, P. (2019). Manganese nodule fields from the NE Pacific as benthic habitats. In: Harris, P.T., Baker, E.K. (Eds): *Seafloor Geomorphology as Benthic Habitat: GeoHab Atlas of seafloor geomorphic features and benthic habitats (Second Edition)*. Elsevier, in press.

Weldeab, S., C. Rühlemann, B. Bookhagen, F.S.R. Pausata, F.M. Perez-Lua (2018): Enhanced Himalayan glacial melting during YD and HI recorded in the northern Bay of Bengal. *Geochemistry, Geophysics, Geosystems*, 20, 2449–2461. <https://doi.org/10.1029/2018GC008065>.

Portilho-Ramos, R.C., A.P.S. Cruz, C.F. Barbosa, A.E. Rathburn, S. Mulitza, I.M. Venancio, T. Schwenk, C. Rühlemann, L. Vidal, C.M. Chiessi, C.S. Silveira (2018). Methane release from the southern Brazilian margin during the last glacial. *Scientific Reports*, 8: 5948.

Knobloch, A., Kuhn, T., Rühlemann, C., Hertweg, T., Zeissler, K.-O., Noack, S. (2017). Predictive mapping of the nodule abundance and mineral resource estimation in the Clarion-Clipperton Zone using artificial neural networks and classical geostatistical methods. In: R. Sharma (Ed.): *Deep-Sea Mining: Resource Potential, Technical and Environmental Considerations*. Springer International, Cham, pp. 189–212.

Kuhn, T., Wegorzewski, A., Rühlemann, C., Vink, A. (2017). Composition, formation, and occurrence of polymetallic nodules. In: Scharma, R. (Ed), *Deep-Sea Mining: Resource Potential, Technical and Environmental Considerations*, Springer, pp. 23–63.

Mewes, K., J.M. Mogollón, A. Picard, C. Rühlemann, A. Eisenhauer, T. Kuhn, W. Ziebis, S. Kasten (2016). Diffusive transfer of oxygen from seamount basaltic crust into overlying sediments: An example from the Clarion-Clipperton Fracture Zone. *Earth and Planetary Science Letters*, 433: 215–225.

Rühlemann, C., S. Knodt (2015): Manganese nodule exploration & exploitation from the deep ocean. *The Journal of Ocean Technology*, 10: 1–9.

Mewes, K., J.M. Mogollón, A. Picard, C. Rühlemann, T. Kuhn, K. Nöthen, S. Kasten (2014). Impact of depositional and biogeochemical processes on small-scale variations in nodule abundance in the Clarion-Clipperton Fracture Zone. *Deep Sea Research Part I*, 91: 125–141.

Rühlemann, C., S. Mulitza, G. Lohmann, A. Paul, M. Prange, G. Wefer (2004): Intermediate-depth warming in the tropical Atlantic related to weakened thermohaline circulation: Combining paleoclimate data and modeling results for the last deglaciation. *Paleoceanography*, 19, PA1025, doi:10.1029/2003PA000948.

Rühlemann, C., S. Mulitza, P.J. Millier, G. Wefer, R. Zahn (1999): Warming of the tropical Atlantic Ocean and slowdown of thermohaline circulation during the last deglaciation. *Nature*, 402: 511–514.