



## Head of Department of Marine Microbiology and Biogeochemistry

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# Royal Netherlands Institute for Sea Research (NIOZ)



NIOZ, the Royal Netherlands Institute for Sea Research is a world-leading marine science institute. NIOZ is the Dutch national oceanographic institute, part of the Dutch Research Council NWO, and has been conducting seagoing research for over 140 years.

NIOZ performs independent, fundamental and frontierapplied (inter-) disciplinary research, addressing important scientific as well as societal issues towards a better understanding of the functioning of oceans and seas. Through its research, NIOZ links researchers from various marine disciplines and from across the entire knowledge chain and connects them to societal partners. In addition, NIOZ maintains seagoing vessels and equipment for the Dutch scientific community, acting as the country's national marine research facilitator. Furthermore, the NIOZ stimulates and supports fundamental and frontier-applied marine research, as well as education and marine policy development in a national and international context.

NIOZ operates from two strategic locations in the Netherlands, on Texel and in Yerseke, and facilitates a Dutch research station in the Caribbean, at Saint Eustatius (The Caribbean Netherlands Science Institute, CNSI). Royal NIOZ employs a permanent staff of ca. 50 senior scientists, supported by ~140 specialists and other permanent staff, and ~40 postdocs. Furthemore, ca. 80 PhD students are pursuing their degree. About 20 NIOZ PIs have honorary or part-time chairs at various national and international universities and universities of applied science.

### Strategic vision

The NIOZ aims to generate the multidisciplinary expertise and fundamental knowledge needed to underpin and improve long-term sustainable and responsible marine management; from a fundamental understanding of key-processes to promoting innovative solutions to (future) challenges of sustainable and responsible use of seas and oceans: their **Mission Blue Planet**.

The Institute's strategic plan identifies two broad research themes: the changing ocean system, past, present, future and adaptability of marine ecosystems in a changing world. These themes are inspired by the three major notions of oceans as unknowns, oceans in trouble, and oceans as an opportunity.

## Royal Netherlands Institute for Sea Research (NIOZ)

### Organisation

NIOZ is managed by its Director, Professor Henk Brinkhuis, together with the Management Team (MT), comprising the Heads of the Scientific Departments. The Director and MT are supervised by the Board of NWO and advised by the Institute Advisory Committee and the Scientific Advisory Committee.

Research at NIOZ is conducted in four Scientific Departments. Three are thematically, marine systemoriented (estuaries and delta areas, coastal seas and open oceans), while the Department of Marine Microbiology and Biogeochemistry (MMB) conducts science in all these domains.

**Estuarine & Delta Systems –** The EDS Department focuses on understanding the complex interactions between organisms and their physical and chemical environment in estuaries and deltas. The Department is based in Yerseke, on the Eastern Scheldt, but also focuses on other estuarine systems worldwide. EDS' aim is towards an integrated understanding of the functioning of estuary and delta systems, in the context of natural and human-induced environmental changes. **Coastal Systems –** The COS Department works at exceptionally large spatiotemporal scales, spanning almost the complete trophic pyramid: from primary producers to secondary producers, and predators at subsequent trophic levels. This ecological expertise is complemented by the in-depth knowledge of the local and global physical properties and processes of coastal systems.

**Ocean Systems –** The OCS Department studies open-ocean processes from a variety of disciplines, ranging from physical and chemical oceanography, marine geology, paleoceanography to deep-sea ecology. Investigating the oceans in the past and present, OCS assesses their future role.

Marine Microbiology & Biogeochemistry – The MMB Department studies microbial communities in all types of marine environments, from estuaries to the deep ocean, from the deep past to the present. Using field and experimental approaches and a variety of analytical, (bio)chemical and genomic techniques, they study the diversity, evolution, physiology and activity of eukaryotes, prokaryotes and viruses in diverse marine environmental settings.



# The Marine Microbiology and Biogeochemistry Department



The Department of Marine Microbiology and Biogeochemistry (MMB) studies microbial communities and their functioning in all types of marine environments, from estuaries to the deep ocean, from tropical coral reefs to polar regions, and from the present to the past.

The Department has well-equipped molecular, chemical and microbiological laboratories, and state-of-the-art facilities for bioinformatics, flow cytometry, single-cell analysis as well as isotope and high-resolution mass spectrometry. The Department is international and dynamic and has approximately 80 members, including PhD students, postdocs and Master students from >15 different countries. A group of sixteen staff scientists and fifteen research assistants (junior and senior) form the core of the Department. Nearly half of the core staff was recruited in the last three years leading to a young, vibrant, diverse and multidisciplinary department.

## The Marine Microbiology and Biogeochemistry Department

### Expertise

The expertise of the Department of MMB is broadly divided into the three following domains: biogeochemistry, microbiology, molecular ecology & evolution.

#### Biogeochemistry

Within this domain, environmental and climate parameters in the geological past, such as marine productivity and sea surface temperature, are reconstructed based on lipids produced by microorganisms. This provides information necessary to improve predictions on future oceans and climate. Furthermore, tools based on molecular isotopic signatures are developed for characterizing food webs, the impact of microbes on major biogeochemical cycles as well as the fate of plastics.

#### Microbiology

In the domain of Microbiology, field and experimental approaches are used to study the diversity, physiology, evolution and activity of eukaryotes, prokaryotes (archaea and bacteria), and viruses from diverse marine systems. A variety of analytical (bio)chemical, microscopy, cultivation and genomic techniques are used to study the metabolism, physiology and speciesspecies interactions of microorganisms and determine their impact on the biogeochemistry of important element cycles (e.g. carbon and nitrogen) as well as on the degradation of plastics.

### **Molecular Ecology & Evolution**

Within this domain, MMB uses state-of-the-art molecular and computational approaches to study microbial diversity and evolution as well as communities and networks in the ocean. Major research aims are to reconstruct the evolutionary history of marine microorganisms to provide a window into the early evolution of life on Earth and its diversification, to characterize the role of symbiosis in the functioning of microbial food webs, and to constrain the role of marine microbes in the consumption and production of greenhouse gases.



### Appointment of Head of Department of Marine Microbiology and Biogeochemistry



NIOZ is looking for a new Head for the Department of MMB.

### Job description

The Head of Department is responsible for the general management of the MMB Department, supported by, and in close collaboration with, the Heads of the three domains within MMB. S/he bears final responsibility for research quality and scientific production pertaining to the Department's mission, which includes fundamental and frontier-applied multi and transdisciplinary research projects. The Head takes an active lead in optimally aligning these activities to Institute-wide developments and collaborations on marine research.

S/he is also an active member of the NIOZ's Management Team and actively contributes to the development and implementation of the Institute's overall strategy. S/he should, therefore, ensure the Department's contribution to the advancement of NIOZ's overall strategy. S/he lays the groundwork for the Department's outreach and communication and ensures a good representation of the Department and NIOZ. S/he is an ambassador of the department, and of the Royal NIOZ, and is considered to have an external oriented vision and concomitant action(s).

The Head of Department spends approximately 40% of the time on general management and scientific supervision, 40% on scientific research and related activities, and 20% on representative tasks.

### Appointment of Head of Department of Marine Microbiology and Biogeochemistry

### Profile

The new Head of Department:

- is a widely acknowledged and highly respected researcher/scientist, with demonstrated research excellence in a field relevant to the MMB Department;
- has management experience and success, possesses an inclusive, open, strong and dynamic academic leadership style and good interpersonal skills;
- generates involvement and develops collaborations within the institute as well as on a national and international level, sees possibilities for creating synergies;
- will formulate a clear vision on future developments in marine sciences on a national and international level;
- is an excellent and proven mentor for young and mid-career scientists;
- will promote the Institute nationally and internationally;
- has good oral and written communication skills in English and a willingness to learn Dutch within two years.

The new Head of Department has an enthusiastic leadership style focused on connecting individuals and collegiality. S/he is forward-thinking, goal setting and a good communicator.

### **Conditions of employment**

The Head of Department will be appointed at the Royal Netherlands Institute for Sea Research by the Netherlands Foundation of Scientific Research Institutes (NWO-I). A contract for two years will be offered, leading to a permanent contract subject to satisfactory performance.

The NIOZ recognizes the needs of dual career spouses and partners and offers assistance in seeking both academic and non-academic employment.

Salary is competitive, and depending on qualifications and experience. The salary package contains an 8% holiday allowance and an 8.3% end-of-year allowance, 42 days of leave, pension provisions and flexible working hours. Non-Dutch applicants may be eligible for favourable tax treatment.

The terms of employment of NIOZ are set out in the Collective Labour Agreement of the Employers' Association of Research Institutes (CAO WVOI, https://www.wvoi.nl/cao-oi-en/).

For more information on the conditions of employment, please visit: www.workingatnioz.com.



# Appointment process and how to apply



An executive search exercise is being undertaken by Perrett Laver to assist the Appointment Advisory Committee. Applications should consist of a cover letter addressing suitability for the offered position and a full curriculum vitae.

Perrett Laver may be contacted for informal enquiries and questions about the post on +31 20 2409 341 or Manar.Ellethy@perrettlaver.com.

Applications can be uploaded at https://candidates. perrettlaver.com/vacancies, quoting reference number 4615. The closing date for applications is 9am CET on Friday 8<sup>th</sup> May 2020.

Applications will be considered by the Appointment Advisory Committee in May, and selected candidates will be invited for formal interviews in June. An assessment is part of the application process.

Given the current composition of the Management Team, applications from female candidates are actively encouraged. Protecting your personal data is of the upmost importance to Perrett Laver and we take this responsibility very seriously. Any information obtained by our trading divisions is held and processed in accordance with the relevant data protection legislation. The data you provide us with is securely stored on our computerised database and transferred to our clients for the purposes of presenting you as a candidate and/or considering your suitability for a role you have registered interest in.

As defined under the General Data Protection Regulation (GDPR) Perrett Laver is a Data Controller and a Data Processor, and our legal basis for processing your personal data is 'Legitimate Interest'. For more information about this, your rights, and our approach to Data Protection and Privacy, please visit our website http://www.perrettlaver.com/information/privacypolicy/

### Living and working in the Netherlands



The Netherlands, with a population of over 17 million, is a constitutional monarchy with a parliamentary system. This small nation boasts a wealth of cultural heritage and is famous for its painters, windmills, tulips, clogs and notoriously flatlands. Today, international trade is still the main driver of economic growth. The Netherlands is the 16<sup>th</sup> largest economy in the world and one of the ten leading exporting nations. As a founding member of the EU and NATO and host to the International Court of Justice in The Hague, the Netherlands is at the heart of international cooperation. Its small size, welcoming attitude to travellers and many sights make it a unique and fairly easy to discover destination.

### **Dutch society**

Dutch society is multicultural and focused on international relations, thanks to the merchant and exploring spirit of the Dutch and the influx of immigrants. The country is the birthplace of Nobel Prize winners and daring philosophers, as well as groundbreaking artists and scientists. The United Nations has ranked the Netherlands as the 4<sup>th</sup> happiest nation on earth, with the happiest children (as ranked by UNICEF). Benefits of living and working in the Netherlands include a satisfying work-life balance, high standards of living, an excellent education and health system, and a strong sense of community.

### About Texel

In 2007, National Geographic honoured the island of Texel as one of the seven least spoiled island treasures in the world. Lined with endless dune capped North Sea beaches and breath-taking nature reserves, Texel is a favoured wellness resort to about 925.000 tourists a year. The Wadden Sea forms the eastern boundary of Texel and is a UNESCO natural world heritage site as well as a European Natura 2000 area where millions of breeding and migrating birds feed and rest. Texel is known for its mentality of 'slow living' and local products. Residents are hospitable; the atmosphere in villages is laid back but far from boring due to the numerous sports and music events that are organized. It is what the islanders call 'celebrating the good things in life'. With an average of about 1.550 sunny hours per year, climate on the island of Texel is quite pleasant.

### Taxation

Certain categories of international staff can receive a tax exemption of approximately 30% on their gross salary for up to eight years. This is to compensate for the extra costs they incur in living abroad, such as having to rent temporary accommodation, etc. In principle, the 30% rule applies to staff who have been expressly recruited from another country and who have a formal contract of employment in the Netherlands.





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