

## Informations pratiques

### Tarif

Cette activité est gratuite mais l'inscription est obligatoire avant le 21 mai 2018:

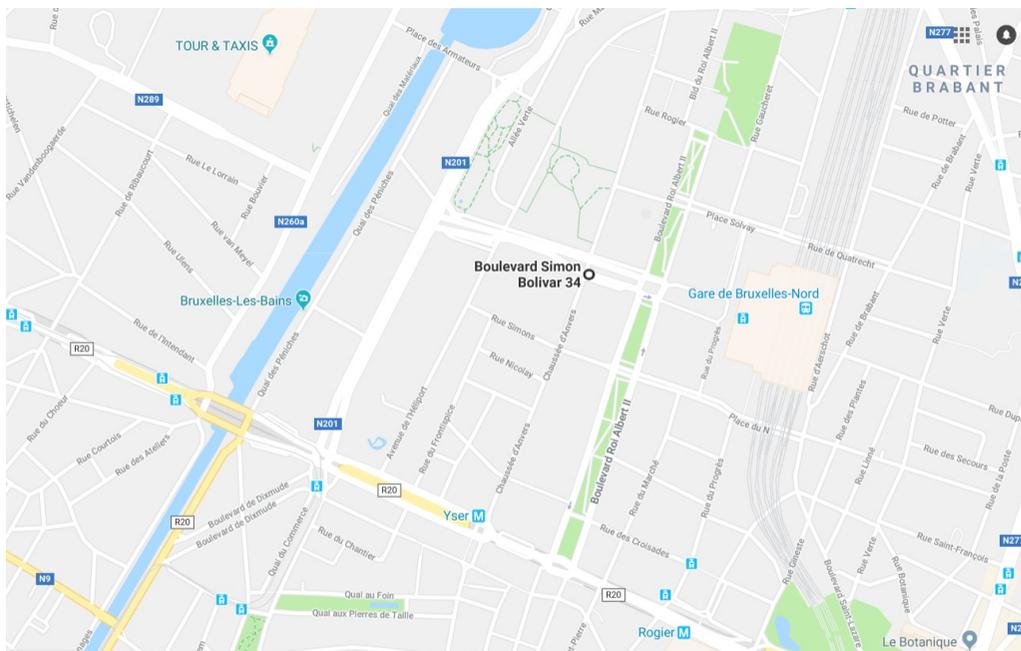
Inscription via le  
formulaire en ligne



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### Accès



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# Assemblée Générale Ordinaire

&

# Conférence



Vendredi 25 mai 2018



Société Belge de  
Géologie de l'Ingénieur et de  
Mécanique des Roches

## Programme



13h45 - 14h15 : Accueil

14h15 - 15h30 : Assemblée Générale Ordinaire 2018

15h45 - 16h45 : Conférence de Lucien HALLEUX

16h45 - 17h30 : Réception

### Lucien HALLEUX (Prof. Dr. Ir.)

Founder of G-Tec SA

Visiting Professor, KU Leuven & ULg (Belgium)

Lucien Halleux is a qualified geo-engineer specialized in Ground Investigation. He holds a PhD in engineering and has over 30 years' experience in engineering geology and geophysics applied to on- and offshore infrastructures (harbours and navigation channels, tunnelling, railway routes, quarries, etc.).

In 1993 he founded G-Tec. The company is active worldwide in geological and geophysical investigation, with activities mainly related to Marine Engineering, to offshore renewable energy and to offshore mineral resources. The subsidiary G-Tec Offshore, founded in 2014, specializes in marine geotechnical investigations.

Lucien also has academic and research activities. He developed several innovative applications of geophysical techniques, some of which are protected by patents. He is (co)author of 30+ papers in international journals and congresses. He teaches geophysical exploration as a visiting professor in the universities of Leuven and Liège (Belgium). In 1991 he was selected as a Belgian Astronaut Candidate for ESA.

He chaired the working group in charge of preparing the "Classification of Soils and Rocks for the Maritime Dredging Process", issued in 2015 by the World Association for Waterborne Transport Infrastructure (PIANC).



## GSR (Deme Group) at the forefront of deep sea mining exploration

« Une histoire belge... »



Deep sea mining used to be a popular topic in the 60's and 70's of last century. It nearly disappeared from the scene afterwards due to low commodity prices. Since a few years, it is back on stage, driven by the depletion of conventional resources and the surging demand linked to new technologies and materials.

The presentation starts with a brief history of the topic, followed by an overview of the main types of deep sea mineral resources. Most deep sea mining prospects are located outside of the national Economic Exclusive Zones and are under jurisdiction of the International Seabed Authority (ISA).

The Belgian company GSR obtained a 72.000 km<sup>2</sup> concession for polymetallic nodules in 2012, with the support of the Belgian government. The concession is located in the Clarion Clipperton Zone of the Pacific Ocean, some 1500 km away from the closest inhabited land.

Several exploration campaigns have already been completed with focus on environmental studies, geological exploration and technological aspects. An ambitious program is defined for the coming years, placing GSR at the forefront of the global effort to diversify the raw material supply chain. Engineering challenges, environmental issues and perspectives will be addressed and are open for discussion after the presentation.



In situ sea trial of Patania, the first Technology Demonstrator



A batch of polymetallic nodules, just after recovery