

Public Lecture Evaluation

Masaryk University	Faculty of Science
Faculty	Microbiology
Procedure field	Doc. RNDr. Ivo Sedláček, CSc.
Applicant	May 30, 2018
Lecture date	Antarctica – a flourishing microbial continent
Lecture topic	37 (see attached list of attendees)
Persons present (number)	Prof. RNDr. Jiří Doškař, CSc. Prof. RNDr. Zdeněk Hubálek, DrSc. Prof. MVDr. Alois Čížek, CSc.
Designated evaluators (board members)	

In the introductory part of the lecture, the applicant presented the geographic and climatic conditions in Antarctica and the history of microorganism research on this continent, emphasizing his own research and research carried out by MU staff. Subsequently, it focused on the occurrence of microorganisms in specific ecosystems (soil, permafrost, lakes, ice, cryoconites, coastal waters) and characterized individual taxonomic groups of bacteria, archaea, bacteriophages and fungi creating specific communities reflecting their viability requirements in local conditions. He explained a list of structural or functional psychrophilic adaptations to cold in a clear and comprehensible way. He pointed out their exceptional metabolic activity and the production of secondary metabolites with potential biotechnological use. He also mentioned the possibilities of using some of the studied species as models in astrobiology to elucidate the factors responsible for viability under extreme conditions. In the second part of the lecture, he presented the areas of his own research conducted by himself or his colleagues in Antarctica and subsequently at Czech Collection of Microorganisms in Brno. The lecture, which lasted 60 minutes, was very well designed, carefully prepared and documented, and was presented at an adequate scientific level, in a form comprehensible and interesting for audience.

The lecture was followed by a discussion in which Ivo Sedláček convincingly demonstrated very good orientation in the area and competently answered questions from committee members and the plenary.

Conclusion

The lecture delivered by Ivo Sedláček, entitled “Antarctica – a flourishing microbial continent” and delivered as part of the professor appointment procedure, *demonstrated* sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a professor appointment procedure in the field of Microbiology.



In Brno on May 31, 2018

Jiří Doškař,

Zdeněk Hubálek

Alois Čížek