

Oil Water with Floating Porous Ceramic and Immobilized Microorganisms

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Fig.1 after wetting the surface of granules with water their oil sorption capacity dropped sharply.

Fig.2 Placing oily porous ceramic granules in oil-polluted water the sorption of water and oil occurs at the same time.

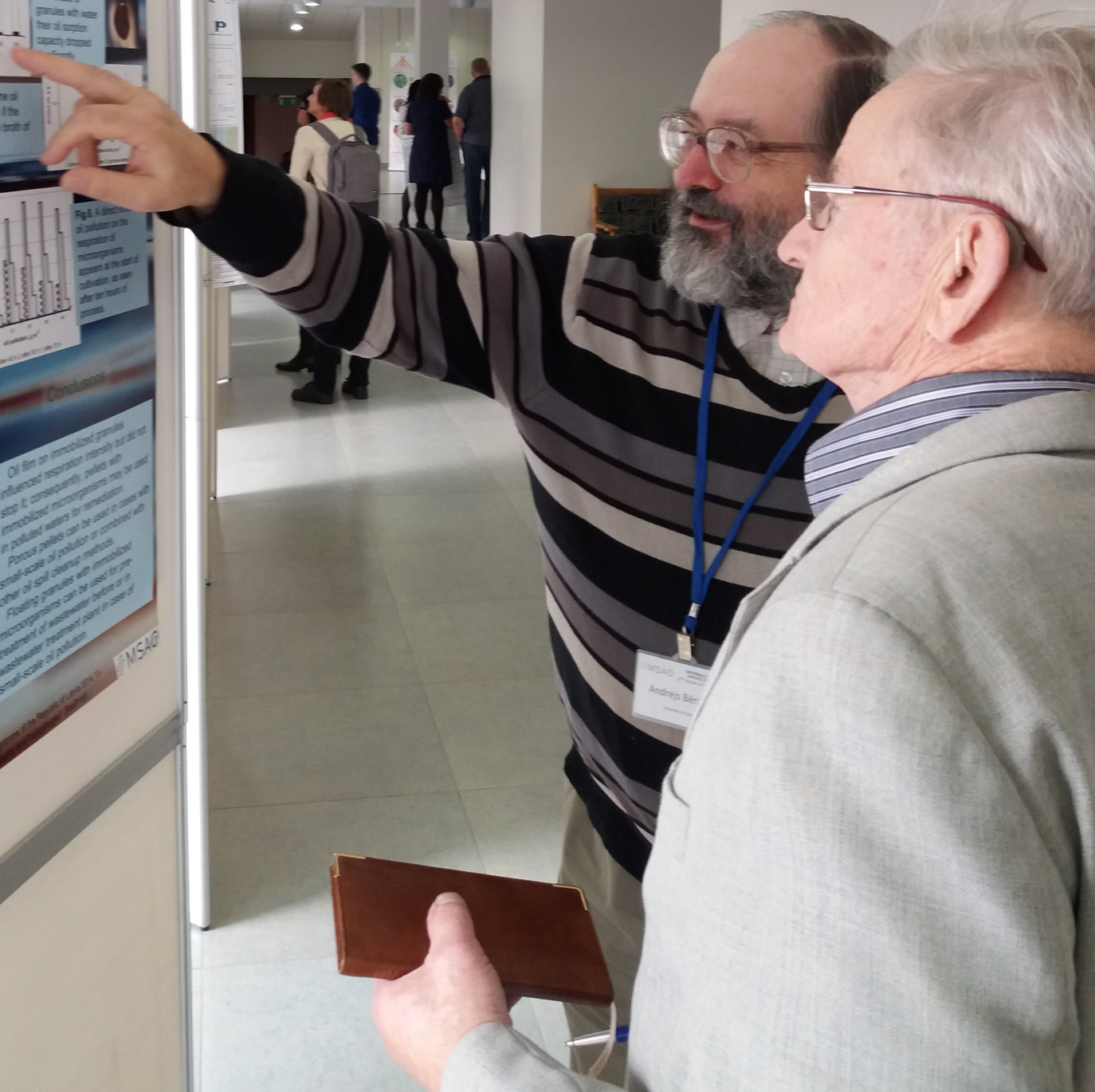
Fig.3 Practically the same oil sorption capacity occurs if the granules are wetted with broth of microorganisms.

Fig.4 Agitation influenced the respiration of microorganisms immobilized on ceramic.

Fig.5 A decrease of oil pollution on the respiration of microorganisms occurs at the start of cultivation, as well as after ten hours of process.

Conclusions
 Oil film on immobilized granules influenced respiration intensely but did not stop it; consequently, pellets with immobilized microorganisms may be used in polluted waters for remediation. Porous pellets can be used in cases with small-scale oil pollution or combined with other oil spill cleanup methods. Floating granules with immobilized microorganisms can be used for pre-treatment of wastewater before or in wastewater treatment plant in case of small-scale of pollution.

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