

BioTurf: Joining forces for the large playable demonstrator

Dr. Claudia Post from the TFI Aachen talks about the focus of the last months in the project as well as when and how you can see, feel, and even test the BioTurf!

Q: The project BioTurf is running until end of November 2023. What is your focus for the last months of the project?

C. Post: The newly developed 3D-tufted structure working without any polymer infill is already achieved. In the current stage of the BioTurf project we are putting together what we have learned in the project so far to realise the large playable demonstrator at the University Sports Centre in Aachen. The installation and use of the biobased artificial turf system is planned for autumn 2023 at a small soccer pitch at University Sports Centre in Aachen. Here, it can **be used and visited by the public.** Feedback is appreciated!

Q: Are there any last challenges you are facing in the project?

In the last laboratory tests, we focus on optimisation the material composition on target of finding a 100% mono-material based textile structure. Our major challenge at this stage is to reduce step-

by-step the polypropylene content in the primary backing by substitution with polyethylene regarding stability aspects.

Q: Are there any insights beyond the world of artificial turfs that have resulted from the project?

It was shown that biobased polyethylene can be used as a feedstock for the fibre and yarn production. These biobased fibres/yarns have the same wear behaviour as virgin-based material yarns. If we manage to use biobased fibres as sole resource for mono-material production and circuit them for next generation applications, that would be a great step towards circular economy refined by bioeconomy.



Dr. Claudia Post is the new project lead of BioTurf as of 01.03.2023 As a geoscientist at the RWTH Aachen University her main focus has been on Environmental Geotechnic, Remediation of Contaminated Sites, and therefore, also on the protection of resources, partly realised by geotextiles.

Acknowledgement

The BioTurf project partners would like to thank the Federal Ministry for Education and Research (BMBF) for funding the research project as part of the BIOTEXFUTURE innovation space.

Contact

Dr. Claudia Post c.post@tfi-aachen.de +49 241 9679 162