



Transportation Learning Network

A partnership with MDT • NDDOT • SDDOT • WYDOT
and the Mountain-Plains Consortium Universities

Presentation Series: 2022 - 2023

TLN Helpdesk: 701-552-0672

www.translearning.org

CELLULOSE NANOFIBER AS AN ASPHALT MIX ADDITIVE

DATE: Thursday, September 22, 2022

TIME: 1:30 PM – 2:30 PM CST (12:30 PM – 1:30 PM MT)

Register in advance for this meeting (Delivery via Zoom):

<https://ndsu.zoom.us/meeting/register/tJ0qcemurzlvGNAVlYGdUDQ-D6lc1cLZ8a71>

DESCRIPTION: Asphalt binder used for pavement construction is obtained mainly by the distillation of crude oil in refineries. The scarcity of natural resources, environmental concerns, and emerging needs for sustainable materials have spurred the development and use of materials and processes that are renewable and environmentally friendly. In response to this need, initiatives have been taken to develop a new generation of bio-based construction materials as a result of continuous innovation in the use of agricultural products, byproducts, and biomass as a material feedstock. Therefore, the development and evaluation of innovative plant-based asphalt binders and additives, such as cellulose, will help to increase the use of bio-materials to maximize the sustainability of the ground transportation system.

PRESENTER:



Dr. Rouzbeh Ghabchi is an assistant professor in the Department of Civil and Environmental Engineering at South Dakota State University (SDSU). His research interests include pavement engineering, innovative transportation infrastructure materials, environmentally-friendly pavement technologies, pavement performance, and asphalt materials.

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