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2019

NOON TALK @ DIATI

**Mercoledì 9 Gennaio 2019  
ore 13.30**

Politecnico di Torino  
Sala Riunioni, primo piano,  
DIATI ingresso 3

**Lucia Tsantilis**  
RTDa at DIATI



**POLITECNICO  
DI TORINO**

Dipartimento di Ingegneria  
dell'Ambiente, del Territorio  
e delle Infrastrutture



## **Towards self-healing pavement infrastructures**

Prof. Ezio Santagata moderates the discussion

### **ABSTRACT**

Self-healing is the natural antidote to crack based distresses which occur in flexible pavements. While traffic causes a progressive degradation of bound-layers materials, the time which elapses between successive loadings allows a recovery of mechanical properties that can be partially attributed to self-healing mechanisms. Hence, a clear understanding and rationalization of such phenomena can strongly impact on the durability of pavement infrastructures. This talk will provide an overview of the experimental investigations carried out on self-healing in the Road Materials Laboratory at DIATI. Research challenges, actual applications and future perspectives will also be discussed during the presentation.

### **BIOGRAPHY**

Lucia Tsantilis currently works as an Assistant Professor at the Department of Environment, Land and Infrastructure Engineering of the Politecnico di Torino. She received the PhD degree in "Structures and Infrastructures" from Università Politecnica delle Marche in 2012 with a thesis on "Damage and healing phenomena in bituminous binders". After her PhD, she worked as a research fellow at Politecnico di Torino on a FIRB project focused on "Innovative nano structured and polymer modified bituminous materials". Her research interests primarily lie in developing high- performance and eco-friendly binders containing additives derived from wastes and recycling processes, in rheology of both bituminous and non-petroleum-based binders, in multiscale characterization and modelling of paving materials. She is an active member of several international technical committees dealing with aspects related to crack healing, phase and interphase behaviour, and chemo-mechanical characterization of bituminous materials.

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Please bring  
your own mug.  
Coffee and tea  
will be  
provided  
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Save the date for our next speaker-event, on February 6 2019, at 13:00.