

Séminaire

Le lundi 21 octobre 2024, 13h ARC 233, <u>MS Teams</u> *Le séminaire se déroulera en anglais.* Seminar

Monday, October 21, 2024, 1 p.m. ARC 233, <u>MS Teams</u>

GreenSolar: Benefits and considerations for combining photovoltaics with vegetated roofs systems Jennifer Drake, Carleton University

Abstract: The integration of photovoltaics (PV) with vegetated roof systems, termed "GreenSolar," presents a promising approach to urban sustainability. This talk explores the multifaceted benefits and considerations of combining these technologies. Vegetated roofs offer stormwater management, and urban biodiversity enhancement, while PV systems provide renewable energy generation. When combined, these systems can improve PV efficiency through cooling effects and extend the lifespan of roofing materials. However, challenges such as structural load, maintenance, and potential shading effects must be addressed. This presentation will discuss green roof policies in Canada, design strategies, and recent research findings, highlighting the potential of GreenSolar systems to contribute to resilient and sustainable urban environments.

Bio: Dr. Jennifer Drake is an Associate Professor in the Department of Civil and Environmental Engineering at Carleton University and holds the prestigious position of Canada Research Chair in Stormwater and Low Impact Development (Tier II). Prof. Drake is recognized as one of Canada's leading experts in stormwater management, low impact development (LID), and green infrastructure. Her research focuses on sustainable urban water management, integrating principles of sustainability and best management practices to address the unique challenges posed by urbanization and



climate change. In addition to her academic achievements, Prof. Drake has made substantial contributions to public policy and engineering design. Her research has influenced flood management practices and green infrastructure design standards in Ontario. She has also served as a Board Member for the Toronto and Region Conservation Authority.

TOP-SET est un programme de formation FONCER du CRSNG en puissance optoélectronique ayant pour but de façonner une cohorte de personnel hautement qualifié détenant des connaissances approfondies en systèmes optoélectroniques pour joindre les rangs d'équipes de recherche et développement.

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