UNIVERSITY OF TORONTO
Identity, Privacy & Security Institute

# The IPSI Lecture Series Presents:

## Towards an Enhanced Security for the Smart Grid


### Professor Mourad Debbabi
**Concordia University**


**The successful deployment of smart grids is predicated on the ability to guarantee their security. Such a requirement is of paramount importance since electrical grids are essential to several components of the critical infrastructure. Recent cyber security incidents and security research studies demonstrate that electrical grids could be subjected to disrupting attacks that might lead to severe security and economic consequences, and even to the endangerment and loss of human lives. In this talk, we will first present the ongoing activities of our research program on smart grid security. We will then, present some of our recent research contributions in terms of the detection and the mitigation of delay attacks on time synchronization. In addition, we will discuss our recent ongoing research on security metrics for the smart grid.**

**Thursday, April 06, 2017**

**12:00 PM – 1:15 PM**

**Rosebrugh Building, RM 211**

**164 College Street Toronto, ON, M5S 3G9**

**Mourad Debbabi is a Professor at the Concordia Institute for Information Systems Engineering and Associate Dean Research and Graduate Studies at the Faculty of Engineering and Computer Science. He holds the NSERC/Hydro-Québec Thales Senior Industrial Research Chair in Smart Grid Security and the Concordia Research Chair Tier I in Information Systems Security. He is also the President of the National Cyber Forensics and Training Alliance (NCFTA) Canada. He is also a member of CATAAlliance's Cybercrime Advisory Council. He is the founder and one of the leaders of the Security Research Centre at Concordia University. In the past, he was the Specification Lead of four Standard JAIN (Java Intelligent Networks) Java Specification Requests dedicated to the elaboration of standard specifications for presence and instant messaging. Dr. Debbabi holds Ph.D. and M.Sc. degrees in computer science from Paris-XI Orsay, University, France. He published 3 books and more than 260 peer-reviewed research articles in international journals and conferences on cyber security, cyber forensics, privacy, cryptographic protocols, threat intelligence generation, malware analysis, reverse engineering, specification and verification of safety-critical systems, smart grid security, programming languages and type theory. He supervised to successful completion 25 Ph.D. students and more than 65 Master students. He served as a Senior Scientist at the Panasonic Information and Network Technologies Laboratory, Princeton, New Jersey, USA; Associate Professor at the Computer Science Department of Laval University, Canada; Senior Scientist at General Electric Research Center, New York, USA; Research Associate at the Computer Science Department of Stanford University, California, USA; and Permanent Researcher at the Bull Corporate Research Center, Paris, France.**

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