

# Workshop: Liquefact (EU) – QuakeCoRE (NZ) International Workshop on “Assessment and Mitigation of Liquefaction Risk”

**Aim:** This is a joint workshop between LIQUEFACT (<http://www.liquefact.eu/>) and QuakeCoRE, and occurs in conjunction with the 2019 QuakeCoRE Annual Meeting (2-5 September 2019). The main goal of the workshop is to provide a forum to present on-going research activities on soil liquefaction in Europe and New Zealand, and to explore future research needs and translation of research into practice.

**Moderators:** Misko Cubrinovski (QuakeCoRE) and Alessandro Flora (Liquefact)

**Date:** 8:30am-4:30pm Monday 2nd September 2019

**Location:** Wairau Room, Rutherford Hotel, Nelson

## Agenda

### 8:30am - 10:00am Session 1: *From Historical Evidence and Hazard Zoning to Resilience* (Moderator: Misko Cubrinovski)

		Welcome and Introduction	5 min
Keith Jones	Univ Anglia Ruskin (LF)	Improving resilience to earthquake induced liquefaction events: a resilience assessment and improvement framework	25 + 5 min
Carlo Lai	Univ Pavia (LF)	Multi-scale zoning of earthquake-induced liquefaction hazard	25 + 5 min
Sjoerd Van Ballegooy	T+T (QC)	Historical Evidence of Liquefaction in NZ	25 + 5 min

**Coffee break (10:00 am – 10:30 am)**

### 10:30 am – 12:00 pm Session 2: *Learning from Case-Histories* (Moderator: Alessandro Flora)

Giuseppe Modoni	Univ Cassino (LF)	Validity of indicators for liquefaction hazard and damage assessed with real case studies	25+5 min
Aimee Rhodes	WSP Opus (QC)	CentrePort: A case study of liquefaction in gravelly reclamation fill	15 min
Nikos Ntritsos	UCanterbury (QC)	Recent developments in the system response of liquefiable deposits	15 min
-	-	Open Floor Discussion	30 min

**Lunch break: 12: 00 pm – 1:00 pm**

### 1:00 pm – 3:00 pm Session 3: *Soil Characterization and Liquefaction Mitigation* (Moderator: Gabriele Chiaro)

Alessandro Flora	Univ Napoli FII (LF)	Innovative Ground Improvement for Liquefaction Mitigation: From Experimental Evidences to Design Approaches	25+5 min
Mark Stringer/ Rolando Orense	UCanterbury/ UAuckland (QC)	Dynamic Characterisation of Natural Pumiceous Deposit	25+5 min
Claudio Cappellaro	UCanterbury (QC)	Undrained Direct Simple Shear Behaviour of Fines-containing Sandy Soils from Christchurch	15 min
Maxim Millen	UCanterbury (LF)	Assessment of building performance on liquefiable deposits	15 min
-	-	Open Floor Discussion	30 min

**Coffee break (3:00 pm – 3:30 pm)**

### 3:30 pm – 4:30 pm Session 4: *Numerical Modelling* (Moderator: Misko Cubrinovski)

<i>Anna Chiaradonna</i>	<i>Univ Napoli FII (LF)</i>	<i>Characterization and modelling of the LIQUEFACT field trial</i>	<i>15 min</i>
<i>Connor Hayden/ Chris McGann</i>	<i>UAuckland/ UCanterbury (QC)</i>	<i>Stress Density Model Validation</i>	<i>15 min</i>
<i>-</i>	<i>-</i>	<i>Invited Discussion &amp; Open Floor Discussion</i>	<i>30 min</i>

**Contacts:** Misko Cubrinovski ([misko\[dot\]cubrinovski\[at\]canterbury\[dot\]ac\[dot\]nz](mailto:misko[dot]cubrinovski[at]canterbury[dot]ac[dot]nz)), Maxim Millen ([maxim\[dot\]millen\[at\]canterbury\[dot\]ac\[dot\]nz](mailto:maxim[dot]millen[at]canterbury[dot]ac[dot]nz))