PROUD TO PRESENT:

JET GROUTING:
TECHNOLOGY, DESIGN AND CONTROL

SPEAKER: PROFESSOR GIUSEPPE MODONI

WORKSHOP DESCRIPTION:
Jet grouting is one of the most popular ground improvement technologies. Different systems have been developed worldwide, covering a variety of applications and becoming fundamental to solve complex geotechnical problems.

This one-day workshop will cover the technical aspects of jet grouting and address the issues of relevance to all professionals involved in a project. After a brief introduction of the working principles, the first session will be devoted to technical issues, describing in detail the possible injection systems and the effects different equipment and materials have on the properties of the columns.

The mechanisms involved in the injection process will be subsequently analysed, to quantify the geometrical and mechanical characteristics of jet grouted columns, in relation to soil properties and treatment parameters.

The most up-to-date methodologies for the control of treatments will be shown, pointing out advantages and drawbacks. The morning session will close with an overview of the design principles and the methodologies developed for the most common jet grouted structures.

In the afternoon, a variety of examples representative of the most common jet grouted structures will be presented, combining the observation of real projects with design analyses of increasing complexity. The course will finish with a discussion among the participants.

WHO SHOULD ATTEND?
The workshop aims to comprehensively cover aspects related to design, execution and control of jet grouting. It should prove useful to various professionals (geotechnical professionals, civil designers, dam and tunnel designers, contractors etc.) from those who want to understand the scientific bases for designing adequate solutions, to those who search for a better knowledge of the technology itself, and the academics, more interested in scientific issues.

April 2018

WELLINGTON
MONDAY 9TH APRIL
9.00 – 16.30
Level 6, Aorangi House, 85 Molesworth Street, Beca, Wellington.

CHRISTCHURCH
THURSDAY 12TH APRIL
9.00 – 16.30
D Block Lecture Theatre, Ara Institute of Canterbury, 130 Madras Street, Christchurch.

AUCKLAND
MONDAY 16TH APRIL
9.00 – 16.30
The Auditorium, Ground Floor, Beca House, 21 Pitt Street, Auckland.

COST PER PERSON
$350 FOR NZGS MEMBERS, $650 FOR NON NZGS (EX.GST)

PLEASE RSVP TO:
SECRETARY@NZGS.ORG COPY TO ELENI.GKELI@OPUS.CO.NZ STATING WHICH EVENT (CITY) YOU WISH TO ATTEND BY MONDAY 2ND APRIL 2018
Giuseppe MODONI – Associate Professor of Geotechnical Engineering – University of Cassino and Southern Lazio (Italy)

Giuseppe is Associate Professor of Geotechnical Engineering at the University of Cassino and Southern Lazio, Italy. He has earned his Civil Engineering degree and PhD at the University of Napoli (Italy). He has been awarded with JSPS Research (2004), Marie Curie (2006) and Erskine (2018) fellowships. His research interests include experimental and theoretical stress-strain response of granular soils, static and dynamic response of dams, tunnels, foundations, large scale geotechnical problems and jet grouting. He has authored over 150 scientific publications, including peer-reviewed journal and conference papers. He is Associate Editor for Soils & Foundations Journal, member of the scientific board of the ASCE conference Grouting (2017) and has delivered lectures/seminars/courses in several countries.

TIMETABLE

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9.00 – 9.50</td>
<td>Introduction, technology, equipment, materials, injection procedures</td>
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<tr>
<td>10.00 – 10.50</td>
<td>Geometrical and mechanical properties of jet grouting columns</td>
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<td>10.50 – 11.10</td>
<td>Coffee break</td>
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<td>11.10 – 12.00</td>
<td>Control of the treatment</td>
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<tr>
<td>12.10 – 13.00</td>
<td>Design principles and methodologies</td>
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<td>13.00 – 14.00</td>
<td>Lunch break</td>
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<tr>
<td>14.00 – 16.00</td>
<td>Design and application examples: foundations, impermeable barriers, earth retaining structures, bottom plugs, tunnels</td>
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<td>16.00 – 16.30</td>
<td>Discussion</td>
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FULL NAME (Underline Surname Name): ..............................................................................................................................

ORGANISATION ........................................................................................................................................................................

POSTAL ADDRESS ........................................................................................................................................................................

PHONE ( ) ............................... E-MAIL ........................................................................................................................................

Please tick which city applies:

☐ AUCKLAND  ☐ WELLINGTON  ☐ CHRISTCHURCH

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<tr>
<th>ONE-DAY COURSE</th>
<th>NZGS Member</th>
<th>Non Member</th>
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<tr>
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<td>$402.50</td>
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Please send registration form and payment to:

Teresa Roetman, NZGS Secretary, 248 Shaw Road, Oratia or email to secretary@nzgs.org copy to eleni.gkeli@opus.co.nz

REGISTER
BY MONDAY
2ND APRIL
2018