



## ALERT - Geomaterials Member Data

<b>Team:</b>	<i>University of Strathclyde Department of Civil Engineering, Infrastructure Research Group (Geotechnics and Structures)</i>
<b>Responsible ALERT member:</b>	<i>Dr Minna Karstunen minna.karstunen@strath.ac.uk</i>
<b>Link to the website:</b>	<i><a href="http://www.ce.strath.ac.uk/ALERT">http://www.ce.strath.ac.uk/ALERT</a></i>
<b>Size of the research group:</b>	<i>9 academics, 2 post-docs, 12 Doctoral Students, 2 Technicians</i>

<b>Academics</b>	<b>Topic(s) of interest</b>
<i>Professor Mark Dyer</i>	<i>Topic 1.1 Geotechnical stability of flood defences Topic 1.2 Bioremediation of land and contaminated sediments</i>
<i>Dr Minna Karstunen</i>	<i>Topic 2.1 Constitutive modelling of soft soils Topic 2.2 Constitutive modelling of unsaturated soils Topic 2.3 Numerical modelling of geotechnical problems on soft soils</i>
<i>Dr Becky Lunn</i>	<i>Topic 3.1 Coupled hydro-mechanical finite element modelling of rocks Topic 3.2 Modelling the spatial and temporal evolution of permeability in the damage zones surrounding geological faults</i>
<i>Dr Marcelo Sanchez</i>	<i>Topic 4.1 Thermo-Hydro-Mechanical and chemical analysis in geological media Topic 4.2 Engineering barriers Topic 4.3 Expansive soils</i>
<i>Dr Philippe Sentenac</i>	<i>Topic 5.1 Optical fibre sensors for pore pressure measurements of soil stability Topic 5.2 Chemical detection sensors Topic 5.3 Subsurface geo-electrical mapping of buried objects and fissures</i>
<i>Dr Mike Kenny</i>	<i>Topic 6.1 Soil reinforcement Topic 6.2 Recycling and reuse of materials</i>
<i>Dr Helen Keenan</i>	<i>Topic 7.1 Environmental monitoring and modelling Topic 7.2 Contaminated sediments Topic 7.3 Soil and water chemistry</i>
<i>Dr Mahmoud Hassanen</i>	<i>Topic 8.1 Structures strengthening and retrofitting</i>



	<i>Topic 8.2 Soil-structure interaction</i> <i>Topic 8.3 Composite structures</i>
<i>Dr James Lim</i>	<i>Topic 9.1 Finite element analysis</i> <i>Topic 9.2 Thermal modelling</i>

<b>Post-docs</b>	<b>Topic(s) of interest</b>
<i>Dr Stefano Utili</i>	<i>Topic 1.2 Integration of geotechnical process into flood embankment management</i>
<i>Dr Zhenyu Yin</i>	<i>Topic 2.1 Constitutive and numerical modelling of creep</i>

<b>Present PhD students</b>	<b>Title of the thesis</b>
<i>Nicholas Glew</i>	<i>Delivery of carbon substrates for in-situ bioremediation of chlorinated solvents.</i>
<i>Grainne McCloskey</i>	<i>Geotechnical Stability of Flood Embankments in Indonesia and the UK</i>
<i>Panagiotis Nerantzis</i>	<i>Fate and transport of BTEX vapours in the vadose zone</i>
<i>Marco Redaelli</i>	<i>Use of uncertainty theory to characterise the geotechnical stability of flood defence embankments</i>
<i>Marcin Zielinski</i>	<i>Characterisation of fracture patterns on flood protection embankments</i>
<i>Harald Krenn</i>	<i>Numerical modelling of embankments on soft soil</i>
<i>Urs Vogler</i>	<i>Application of volume averaging method for modelling ground improvement</i>
<i>To be appointed</i>	<i>Numerical modelling of ground improvement</i>
<i>Marti Lloret</i>	<i>Numerical modelling of unsaturated soils</i>
<i>Heather Moir</i>	<i>Permeability evolution in geological faults</i>
<i>To be appointed</i>	<i>Modes of failure in reinforced concrete elements</i>
<i>To be appointed</i>	<i>Development of a cold-formed steel portal framing system</i>