Subject: Postdoc Position, Heriot-Watt University, Edinburgh From: Raffaella Ocone <<u>r.ocone@hw.ac.uk</u>> Date: October 19, 2016

A post-doc position is available within the School of Engineering and

Physical Sciences at Heriot-Watt University, Edinburgh. The successful

candidate will be part of the Particle Technology and Complex Fluids

research group. The group works on addressing key gaps in the

scientific understanding and the engineering application of

particulate materials. We work at the development and formulation of

material (constitutive) laws describing the complex phenomena

occurring at various length and time scales. Our work is devoted to

producing user-inspired research through rigorous mathematical

modelling, simulation and experimental validation

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(rheologícal
measurements).
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The postdoc work will be concerned with the theoretical development of

constitutive equations for the bulk properties of the particulate

phase. The specific work will involve developing appropriate

mathematical scaling procedures (i.e. averaging and homogenisation)

which will permit the development of laws describing the behaviour of

particulate flow. The work will require a sound mathematical expertise

and a background in physics to deal with particleparticle and

particle-fluid interactions. The work will be part of a major

programme linked to Professor Ocone

(r.ocone@hw.ac.uk) EPSRC

Established Career Fellowship. Further details can be found at:

https://www.hw.ac.uk/about/careers/jobs/

job_SVJDNjcOOA.htm