

## Clare McMullan

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**From:** [REDACTED]@ch2m.com  
**Sent:** 10 October 2014 13:56  
**To:** Paul Younger  
**Subject:** RE: Scottish Hydrological Group evening talk - 19th November  
**Attachments:** 19Nov14-SHG-fracking.docx

Dear Paul

Thank you for your email. It does sounds really interesting what you will be presenting. We are very much looking forward to it.

Please find enclosed draft of the marketing flyer. (SEPA may be pulling out from the presentation - am still to confirm)

Thank you, [REDACTED]

-----Original Message-----

**From:** Paul Younger [mailto:Paul.Younger@glasgow.ac.uk]  
**Sent:** 06 October 2014 15:19  
**To:** [REDACTED] UKE  
**Subject:** RE: Scottish Hydrological Group evening talk - 19th November

Dear [REDACTED]

No problem - still in the diary.

I could send a photo of a drilling rig, but they are rather over-used to illustrate this topic (usually surrounded by lurid, eery colours introduced using Photoshop!), so instead maybe the attached figure from a recent paper of mine, which is hydrological in nature, would be better: it shows the vertical offset between induced fractures (monitored seismically) and the nearest overlying freshwater body. I will be talking about this (and many other hydrological matters) on 19th Nov.

Best wishes

Paul Y

**From:** [REDACTED]@ch2m.com [mailto:[REDACTED]@ch2m.com]  
**Sent:** 06 October 2014 12:32  
**To:** Paul Younger  
**Subject:** RE: Scottish Hydrological Group evening talk - 19th November

Dear Paul

Hope you had a nice summer.

I must apologise that ICE has accidentally left your talk out from the ICE Scotland event yearbook. I hope SHG is still pencilled in your diary for 19th November (fingers crossed).

Would you by any chance have any photos/figures in relation to fracking that we could include in our marketing material?

Many thanks,

On behalf of ICE Scottish Hydrological Group [REDACTED]

[REDACTED]  
Water - Europe

CH2M HILL  
16 Abercromby Place  
Edinburgh EH3 6LB United Kingdom  
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From: Paul Younger [mailto:Paul.Younger@glasgow.ac.uk]  
Sent: 02 July 2014 16:53  
To: [REDACTED]/UKE  
Subject: RE: Scottish Hydrological Group evening talk - 19th November

Dear [REDACTED]

That is fine - [REDACTED] so it will be a delight to catch up with him.

Shale gas, water and the water/energy nexus

Shale gas has been a controversial topic in the UK for the last three years, and recent reports suggest its exploitation may soon become a reality in Scotland. Most of the controversy has related to possible impacts on the water environment, either in terms of temporary, high demands for water during fracking operations, or in relation to possible pollution risks. This lecture will assess these issues as dispassionately as possible, and place the shale gas debate in the wider context of the water / energy nexus - one of the world's truly huge future challenges. About the speaker: Prof Paul L Younger FEng FICE holds the Rankine Chair of Engineering at the University of Glasgow. [REDACTED]

[REDACTED]

Hope this is all you need - if not, let me know

Paul Y

From: [REDACTED]@ch2m.com [mailto:[REDACTED]@ch2m.com]  
Sent: 01 July 2014 13:05  
To: Paul Younger  
Subject: RE: Scottish Hydrological Group evening talk - 19th November

Hello Paul  
Hope you are well and enjoying the sunshine. Apologies for not being in touch sooner.

Could you give me the title of your talk and a paragraph for us to advertise the event through ICE?

SEPA would like to be involve in this talk too, so you will be sharing the evening with [REDACTED] (SEPA). However, we would like you to be the main speaker while [REDACTED] will have a shorter time slot to touch a little on the consenting/CAR side of things.

I hope it is ok that we have the meeting at Strathclyde University following some of our Edinburgh members' request to meet closer to the train station. I will let you know which lecture hall we are booked to.

If there is any queries, please do not hesitate to get in touch.

Many thanks, [REDACTED]

[REDACTED]  
[REDACTED]  
Water - Europe

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From: Paul Younger [mailto:Paul.Younger@glasgow.ac.uk]  
Sent: 14 May 2014 14:51  
To: [REDACTED]/UKE  
Subject: RE: Scottish Hydrological Group evening talk

Great - in my diary now

From: [REDACTED]@ch2m.com [mailto:[REDACTED]@ch2m.com]  
Sent: 13 May 2014 13:42  
To: Paul Younger  
Subject: RE: Scottish Hydrological Group evening talk

No worries. Let's do 19th Nov.  
Thanks, [REDACTED]

From: Paul Younger [mailto:Paul.Younger@glasgow.ac.uk]  
Sent: 13 May 2014 12:20  
To: [REDACTED]/UKE  
Subject: RE: Scottish Hydrological Group evening talk

Would 19th work? As it happens I have a long-standing commitment with EPSRC the 12th.

Paul Y

From: [REDACTED]@ch2m.com [mailto:[REDACTED]@ch2m.com]  
Sent: 13 May 2014 09:41  
To: Paul Younger  
Subject: RE: Scottish Hydrological Group evening talk

Dear Paul

Nice to hear from you. Thank for getting back to me. SHG is honoured to have you as our speaker.

How about 12th November 2014? The Wolfson Medical School lecture room is one of our usual venue for Glasgow meetings which could be ideal. We will liaise with the venue and will be able to confirm in early June.

Many thanks, [REDACTED]

From: Paul Younger [mailto:Paul.Younger@glasgow.ac.uk]  
Sent: 12 May 2014 18:42  
To: [REDACTED]/UKE  
Subject: RE: Scottish Hydrological Group evening talk

Dear [REDACTED]

I would be more than happy to do this. The best evening for me, usually is Wednesday, but I can usually manage other nights too with enough notice - and indeed it would be easier for me if we could meet in Glasgow. Do you want to propose some concrete dates in November?

Best wishes

Paul Younger

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From: [REDACTED]@ch2m.com [mailto:[REDACTED]@ch2m.com]  
Sent: 12 May 2014 11:59  
To: Paul Younger  
Subject: Scottish Hydrological Group evening talk

Good morning Prof Younger

I am getting in touch on behalf of Scottish Hydrological Group. We wonder if you would be able to spare us an evening to speak to us about the science of shale gas exploration through fracking possibly in November (or when it suits your diary). Our evening meeting attendees consists of professionals working in the water industry in both public and private sector, in roles such as hydrologists, hydraulic modellers, hydrogeologists and environmental consultants.

We would arrange for the evening meeting to be in Glasgow if suits.

I look forward to hearing from you at your earliest convenience.

Thank you.

Best wishes, [REDACTED]

On behalf of ICE Scottish Hydrological Group



Water - Europe

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