

IPA Permafrost Engineering Working Group Report – August 2009

International Permafrost Association

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Co-Chairs:

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1. Short reminder of the Working Group mission and history.

The PEWG mission is to facilitate the communication and exchange of information in the engineering and scientific professional communities to advance the practice of permafrost engineering. Arne Instanes and Ted Vinson stepped down as the PEWG Co-Chairs last year during the Ninth International Conference on Permafrost. Richard Fortier, Fujun Niu and Lukas Arenson are now acting as PEWG Co-Chairs and PYRN Co-Chair respectively.

2. Short reminder of the Working Group objectives as listed on the IPA website (<http://ipa.arcticportal.org/index.php/Working-parties/>).

- a) Organize a technical session on engineering geophysics for the detection and characterization of thaw sensitive zones in a permafrost environment during the Canadian Conference on Permafrost (2010).
- b) Identify and advertise an inventory of engineering test sections in a permafrost environment.
- c) Compile guidelines for best engineering practices in a permafrost environment.
- d) Recruit engineers as members of the Permafrost Young Researchers Network (PYRN) engineers.

3. Summary of activities/initiatives to date. You should emphasize the relevance of these activities to global research issues, as well as their connections to existing or upcoming global research organisations/initiatives.

The PEWG Co-Chairs have contacted the organizing committee of the Canadian Conference on Permafrost (CCOP) for the organization of a technical session on engineering geophysics during this conference. The CCOP will be held in mid-September 2010 at Calgary, Alberta, Canada, during the Canadian Geotechnical Conference. Richard Fortier, Niels Foged and Joey Yang will be in charge of this technical session and solicit papers from scientists and engineers involved in engineering geophysics.

Richard Fortier has been invited by the organizing committee of the 8th International Symposium on Permafrost Engineering to be held next October 2009 at Xi'an, China, to give a keynote speech on Permafrost degradation and related geological hazards in Northern Quebec, Canada. Fujun Niu is acting as one of the two general secretaries of this symposium.

Richard Fortier will also give at CAREERI a lecture on the impacts of permafrost degradation on a road embankment at Umiujaq in Nunavik (Quebec), Canada. Both PEWG Co-Chairs will use this opportunity to discuss about the working group activities.

Guy Doré has submitted a proposal for the 15th International Conference on Cold Regions Engineering to be held at Québec, Québec, Canada, on August 2011. Richard Fortier is a member of the organizing committee.

4. Work plan for the three years to come and description of the means to achieve the objectives listed above. A special focus on the interaction with the Standing Committee on Data, Information and Communication is requested, in particular in relation to the products that the WG is anticipated to release at the end of the 2008-2012 period and/or for the IPY snapshot.

Richard Fortier is preparing a workshop on risk assessment and geohazard evaluation of permafrost degradation: the case study of the municipal development of the Inuit community of Salluit, Northern Quebec, Canada, for the students of the Institute of Northern Engineering (INE) / Alaska University Transportation Center (AUTC), University of Alaska Fairbanks (UAF), and the engineers of the Alaska Department of Transportation (ADOT). This workshop will be held at the UAF in winter 2010. It is an initiative to reach one the objectives of the PEWG subgroup on Engineering Geology for Development in Permafrost Regions.

5. List of upcoming meetings and/or timely milestones for your working group.

- 14th International Conference on Cold Regions Engineering (30/08/2009 – 02/09/2009, Duluth).
- Eighth International Symposium on Permafrost Engineering (14/10/2009 – 17/10/2009).
- International Workshop on Glacier and Permafrost Hazards (10/11/2009 – 13/11/2009).
- Third European Conference on Permafrost (13/06/2010 – 17/06/2010, Longyearbyen).
- Canadian Conference on Permafrost (10/2010, Calgary, Alberta, Canada).

6. New developments and directions.

The Working Groups established for the 2008-2012 period are closing in to their first year of existence. The ambitious objectives decided on in Fairbanks will form the basis of their work plan until 2012 and should already be put into motion by the Working Group Chairs. We will be happy to report on the first initiatives and actions taken by the IPA Working Parties in the next issue of Frozen Ground. To do so, we ask you to send by August 1st a short report of the activities of your Working Group. To ensure consistency among WG reports we ask you to provide no more than 500 words report. Please make sure your report does not exceed this limit. We also ask you to provide us with an unformatted version of your text. Pictures might be included in the reports, depending on printing constraints. You can therefore provide up to one high resolution picture for the report. Your report should roughly be outlined as follows:

1. Short reminder of the Working Group mission and history (if needed).
2. Short reminder of the Working Group objectives as listed on the IPA website (<http://ipa.arcticportal.org/index.php/Working-parties/>).

3. Summary of activities/initiatives to date. You should emphasize the relevance of these activities to global research issues, as well as their connections to existing or upcoming global research organisations/initiatives.

4. Work plan for the three years to come and description of the means to achieve the objectives listed above. A special focus on the interaction with the Standing Committee on Data, Information and Communication is requested, in particular in relation to the products that the WG is anticipated to release at the end of the 2008-2012 period and/or for the IPY snapshot.

5. List of upcoming meetings and/or timely milestones for your working group.

6. New developments and directions.

We have listed the objectives of the Working Parties as formulated in Fairbanks on the new IPA website (<http://ipa-permafrost.org>). You can use it as a reference to track down your and the other WGs objectives and achievements.

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