

Approved Minutes  
Board and Executive Meeting of the Canadian Permafrost Association  
Teleconference  
Meeting #34  
Friday 9 April, 2021 1200-1400 Eastern

Present

Peter Morse (PDM)  
Lukas Arenson (LA)  
Chris Burn (CB)  
Xiangbing Kong (XK)  
Jason smith (JS)  
Kumari Karunaratne (KK)

Excused

Pooneh Maghoul  
Jennifer Humphries  
Barb Fortin

Minutes

PDM

Agenda

1. Approval of the Agenda
2. Approval of the Minutes of Meeting #33, 5 March, 2021.
3. Matters arising (not covered later as agenda items)
4. President's report (LA)
  - a. General update
    - i. USPA: post the titles of accepted papers?
    - ii. Business address at Carleton University
    - iii. Awards
    - iv. CPA Permafrost and cold engineering trainings
  - b. Standing International Committee
  - c. PCF Action Group
  - d. CFES
    - i. National Geosciences Research Plan
5. Treasurer's report (BF )
  - a. General update
  - b. Standing Finance Committee
6. Secretary's report (PDM)
  - a. General update
  - b. Standing Membership Committee
    - i. Awards committee

- ii. Nominations committee
- 7. Communications director report (JH)
  - a. General update
    - i. 2015 CPC proceedings
  - b. Standing Dissemination Committee
- 8. Early Career representative report (XB)
  - a. General update
- 9. President-elect report (KK)
  - a. Update Action Groups
    - i. General update
  - b. Charitable arm
  - c. Standing Linkages Committee
- 10. Any other business
  - a. PM: Interest Group

### Minutes

1. Approval of the Agenda (LA)
  - a. Discussion?
  - b. None
  - c. Vote: Unanimously approved
2. Approval of the Minutes of Meeting #33, 5 March, 2021. (LA)
  - a. Discussion?
  - b. None
  - c. Vote: Unanimously approved
3. Matters arising (not covered later as agenda items)
  - a. None
4. President's report (LA)
  - a. General update
    - i. USPA: post the titles of accepted papers?
      1. Haven't had feedback yet after I reached out to them.
    - ii. Business address at Carleton University
      1. Shares link to draft MOU on G-Suite:
      2. We were very much welcomed by the University to host our address for the next 5 years, and it is renewable. Comments or concerns?
      3. CB: My name is misspelled.
      4. PDM: I am very happy to have this MOU.
      5. CB: The office thinks of strategic areas, and one of them is permafrost, so I think they think this is fine.
      6. LA: Sandra mentioned this, that permafrost is strategic.
      7. LA: If everyone agrees, we can make them a partner.
      8. Unanimous agreement.

9. LA: I'll have a detailed read and send it back. We have an official home.
- iii. Awards
1. For the Don Hayley award, we will move forward as planned. We still have to finish the phrasing for the Terms of Reference and Conditions. And we have to figure out how we want to do it. It could be the Board, or an awards nomination committee. I'd like to have all the ducks in a row before we put out a call in the next newsletter. We need to get the call out in the next newsletter for the HF award.
  2. LA: I haven't heard back from Toni on making the trophy.
  3. CB: AL is around, but on sabbatical right now. He has some pressure from family commitments.
  4. LA: I haven't heard from him in a week, and didn't want to bother him.
- iv. CPA Permafrost and cold engineering trainings
1. LA: There hasn't been a lot of progress, but JH has put together a questionnaire, and it will be linked to in the next newsletter. It is about "What courses out there have you taken?". We will collect that info in the next newsletter.
  2. LA: Anique from Quebec is interested in that list. They are very interested in this. Interest in this from industry and government as to what courses are offered in pf engineering and science.
  3. CB: In the Yukon, Professional Engineers of Yukon are approaching Yukon University to give a 2-day course. They asked us, and we said ask Fabrice. He wants an engineer to help. It is a discussion that is evolving. The courses are either 1 day at a conference, a course at university, or a 1 -week course in the field. A 2-day course is not on offer.
  4. LA: Lots of interest from the engineering community. I gave a talk earlier this year, and lots of interest: tailings, mining, geohazards.
  5. JS: I am bringing up a team, and I took the short course in Edmonton. I can't find anything going on. It is not easy information to get.
  6. AL: What we need from your end is permafrost drilling. Getting that done is hard.
  7. JS: It can be crude, but it really depends on what the permafrost interest is. We don't have a lot of ice-rich permafrost [where JS drills]. It is more about what you can infer from the drilling core.
  8. LA: It is important to know what you need to drill, and the equipment, and we need people to know what to ask for and what to expect.
  9. JS: There are advantages to the different approaches, and you need to have experience, and this needs to be passed on to

others. My guys need to know more than just what I can pass on. If there was a 2-day course, I would send them.

10. LA: If you have the option to go to the field, that is key. The most valuable aspect of the courses.

- b. Standing International Committee
  - i. LA: Hasn't been progress there
- c. PCF Action Group
  - i. The dialog series is complete. What we are working on now is preparing a summary of the dialogs. The whole idea is to come up with a roadmap and highlight the direction that we want to go. It will be circulated for comments to strategic people. We want to make sure that we get enough good feedback though, to make sure it is right. Then we will circulate further and see where it goes from there. The Cascade Institute in Victoria, is interested in moving the idea forward, and bringing this understanding together better. What we learned from the discussion is that it is not really an issue, and that the feedback is included in the model, but then others are saying that we don't have a good handle on the actual numbers. What do they mean in terms of net zero? The Institute is interested in moving that forward to initiate some of this work. Not sure if this is the right place to move this forward.
  - ii. CB: I think the PCF action group must be very careful not to put all their eggs in one basket. It is possible that Jonathan Wilkinson will move to another position. Second, I was struck when Merritt put up the diagram where she has an increase in permafrost carbon and the climate. The diagram says that the effect of permafrost carbon is a tiny change. That seemed to me to be a very reassuring result that PFC is not a big deal, and no need to make a fuss at all. You have to evaluate that because people will refer to it if they are saying that Permafrost carbon is not a big deal. That graph needs to be revisited. It suggests that PCF is not a big deal. Maybe it is not, but that graph makes some very major assumptions that need to be looked at.
  - iii. LA: Yes, it needs looking into. PCF wants government organizations to look into that. ECCC needs to have more leadership in that role.
  - iv. PDM: There is a movement inside our institution to explain the issue to our Minister.
  - v. LA: The problem is that there seems to be no time to wait before we have the best understanding of the numbers. Hence the precautionary principle. It is suggested to take action and plan adaptation and mitigation strategies and get the better numbers at the same time. That will be a key conclusion. Look at different directions in parallel.
  - vi. CB: I'm hearing the same things in infrastructure. That we've done enough work and to get on with things. It gives a great opportunity to show off things in 2024 in Whitehorse. Unfortunately, many institutions are reactive, and not proactive, so there is some effort needed there.
  - vii. LA: Switching that mindset is not easy.

- viii. JS: For me, drilling a lot of holes, the hardest thing is getting some perspective on what is released. May be released. What can I do?
- ix. CB: There are lots that you can do.
- x. JS: We drill a lot of holes for pilings. I install thermistors, I install salinity meters. We could easily sample permafrost. I'm interested in, and I can target areas.
- xi. CB: Any information about the Carbon content in the upper 2-3 m of the ground. That is really valuable information. Most people don't sample from carbon -poor areas. Most inventories are from a total of only about 300 profiles for all of Canada.
- xii. JS: We drill a lot of holes, and we have a big footprint. We could link to mapping
- xiii. LA: The data are needed. Climate models look at the upper few metres.
- xiv. PDM: Any carbon data that you can get would be useful.
- xv. PM: Recently University Manitoba has presented a way to get improved information on ice content. One system we are developing is an ultrasonic system to determine the amount of peat in the ground. We collaborated with a Polish team, and it works quite well. Now we are looking to set up a test site in Canada. There is a lot of potential to work with a partner like JS and monitor it. I would love to get a prototype put together.
- xvi. JS: That is something that we could probably work on together. We have holes, and we can drill more in an hour. It makes good, deep holes. I see the benefit to making things happen and being a part of it.
- xvii. LA: That is what we want the CPA to do is make these connections.
- xviii. JS: If I can help with gathering some of this information, then that would be great.
- xix. PM: We need a forward looking approach and practice, but at the same time, we need to know what practice industry needs. We need to be proactive. We are all busy, and wonder how we can have more dialogue. With more informal meetings, we can be more proactive.

d. CFES

- i. National Geosciences Research Plan
  1. LA: There is going to be an AGM April 16-17. I'll introduce the CPA to the other members of the society. There was a call to contribute to the national science research plan. 1 page. They asked us to write on global change, and that we would contribute to this document. Anyone who wants to champion this?
  2. CB: Next week is the AGM, listen to what they say there. The CPA will not be the only one who has questions about this. Then you will have a better idea of what they want. Permafrost will be easy to write about, but wait until next week. Then you can ask a question if you need.
  3. LA: I'll attend, and report back to the board.
  4. Questions?
  5. None.

5. Treasurer's report (BF; submitted by email to PDM and LA, presented by PDM )
  - a. General update
    - i. Membership. Total paid members: 136 (out of 176, so 77%). Distribution: 48 Early-career, 61 Regular, 16 Lifetime, 6 Corporate Gold, 2 Institutional Gold, 2 Institutional Silver, 1 Community. Renewal in the last month: 1. New members: 2 (1 Corporate Gold – Stantec, 1 Reg)
    - ii. Bookkeeping:
      1. Assets: Cash \$55,602.35, GIC \$2,030.10. No liabilities.
      2. Revenues for 2021 (as of today) \$23,943, 107% of budgeted revenues.
      3. Expenses for 2021 (as of today) \$2,109, 9% of budgeted expenses. During this past month, expenses included Membee (\$165) and Vimeo PRO (\$288)
  - b. Standing Finance Committee
    - i. From BF email: "I had a great meeting with Emmanuel L'Herault a few weeks ago (all en Francais!) and he seemed very interested in becoming a member of the finance committee, which is great news; however, he wasn't so sure about being the Chair of the committee. I am planning on organizing a meeting with the four finance committee members this month and perhaps see if they can get things started. I am really hoping that someone will step up to be the Chair!"
  - c. Questions?
  - d. LA: None, great to see another sponsor, and great to see the financial situation. Great that Emanuel is interested in volunteering.
6. Secretary's report (PDM)
  - a. General update
    - i. PDM: Reached out to the SMC to set up a Awards committee, a Nominations Committee, and to think about how to involve FN in advising the CPA. CPA needs concrete items that need advice about. If we have a clear idea of what we want to do, then we can get feedback on it. We need clear ideas.
    - ii. PDM: Wrote to CB and let him know what we need in terms of support for a mailbox at Carleton University.
    - iii. PDM: Passed on mail/cheques to BF.
    - iv. PDM: Waiting for Industry Canada account key and Carleton University Mail box before updating our profile and reporting to Industry Canada.
  - b. Standing Membership Committee
    - i. PDM: Meeting monthly. These are now works in progress so they should know more soon. From there they have been working on identifying different groups of members within CPA and identifying how CPA membership aids them in the permafrost world. They are expecting to meet again this month and should be able to make more progress as they shift towards the summer.
    - ii. Awards committee

1. PDM: They discussed the two suggestions PDM made and agreed that SMC will fill the role for the Hugh French award and ask Toni to serve as chair.
  - iii. Nominations committee
    1. PDM: They will provide the committee members for the board member selection.
  - iv. Questions?
    1. None.
  - v. LA: Great to see the committee at work.
7. Communications director report (JH; submitted to PDM and LA by email, presented by LA)
  - a. General update
    - i. 2015 CPC proceedings
      1. No update.
    - ii. New “resources” and “data resources” pages on CPA website
      1. “jobs” and “documents” pages now sub-pages of “resources”.
    - iii. Newsletters and minutes added, updated the contacts page.
    - iv. AGM videos added to the members only page.
    - v. Updated or added French pages that were missing on website.
    - vi. Continued activity on social media.
    - vii. LA: We have permission from CGS to post the permafrost papers on our website. The 2010 papers are available from University of Calgary. We don’t need to duplicate. We just need to make the link available.
  - b. Standing Dissemination Committee
    - i. The committee has divided up tasks. Main focuses right now are on: short course development, public lecture/webinar series establishment, course database development, and K-12 education material development.
    - ii. Short course development:
      1. PYRN Executive Committee have already started developing a short course on permafrost science and engineering to be delivered virtually in Fall 2021. The culmination of the course will be an interdisciplinary panel at the 2021 Regional Conference on Permafrost in October 2021.
      2. PYRN is looking to partner with different groups for assistance with securing speakers, webinar platform support, and advertising.
      3. Adam Kirkwood (on the PYRN council and the CPA dissemination committee) is drafting a short proposal for the CPA, USPA, and IPA to review.
      4. The CPA partnering with PYRN on this short course would help us learn what works and what doesn’t for our own course.
      5. It would be nice to confirm that the CPA board is happy with the dissemination committee participating in the initiative.
        - a. LA: Absolutely good to see them working with partners on developing courses.

- iii. Public lecture/webinar series establishment
    - 1. XK has already taken the lead on a webinar series.
    - 2. Cassandra Koenig, Shannon Hibbard, and Yifeng Wang are providing support by reaching out and organizing speakers.
      - a. XK: Not quite yet, but I will talk with them soon about this, and how they can help. I've had a tough time confirming speakers, and what month is better with them. For the USPA, I have contacted the editor of Cold Regions Engineering, and some other professors in mind. We have Daniel Fortier in May. Do we want one in June and July?
      - b. LA: I think that we want one each month.
      - c. XK: Some people are not that interested this summer, but can in the Fall.
      - d. LA: We can reach out to younger members and combine them.
  - iv. Course database development
    - 1. Jen Humphries and Yifeng Wang made a Google form to send out in a newsflash to collect data on permafrost courses in the last 5 years. Ready to send to members.
  - v. K-12 education material
    - 1. To produce effective materials that will be meaningfully adopted in classrooms, it would be best to partner with educators and educational boards in the development of these kinds of materials.
    - 2. Shawn Kenney and Cassandra Koenig have begun brainstorming the different educational boards and groups that we could partner with on this initiative.
  - vi. Questions?
  - vii. None.
8. Early Career representative report (XB)
- a. General update
    - i. XK: Discussed above. Anything else?
    - ii. XK: Dates? In May, when do we want it?
    - iii. PDM: Do we want a common time that people can rely on?
    - iv. LA: I think that the date can be flexible to accommodate the speaker, but the timing needs to be good for a Canadian audience, and I would like to record them for people to listen to later.
    - v. XK: OK
    - vi. No other questions?
    - vii. None.
9. President-elect report (KK)
- a. Update Action Groups
    - i. General update
      - 1. Just getting up to speed after taking some time off
  - b. Charitable arm

- i. No update
    - c. Standing Linkages Committee
      - i. Still tracking down Sarah Brown to get going on the linkages committee
10. Any other business
- a. PM: Interest Group
    - i. PM: I'll wait until the end of the term, but will set something up
  - b. CB: Spoke with Adrian Hill, NND, and sent her a request about hosting the 2022 CPA AGM conference. She will take this to a meeting with the other FN. I meant to send a copy of the letter to LA and KK, sorry. There is movement on that side. A part of the request I made was that at that meeting there should be a workshop led by FN on developing research partnerships (in permafrost). The idea is that we can learn from FN first. That is ongoing, and we will know in early May about this.
  - c. CB: Second, I had a long conversation with Paul Murchison, Executive Director Transportation at Yukon. I asked him to have a talk with LA later on next week. It is getting to be that the people getting ready to organize the conference should meet soon so that this is in the front of people's minds. As president of the IPA, I am not panicking, but there should be some communication before the beginning of summer. Different issue, I haven't got a good sense for the scale of the Chinese ICOP.
  - d. CB: The other thing that you should know from the IPA, is that we have a problem with where the IPA bank account sits. Many countries have concerns with international bank accounts. We are trying to set up a bank account in Norway, but what we are doing now is trying to make an organization within Norway that will have a bank account, and it will be the bank account. If that doesn't work out, the IPA may approach the CPA to see if it is possible to hold with the CPA. The problem is exchanging from Euros to CAD. The chances of a request is 5%. At the moment the IPA account is held by a person, which is inappropriate.
  - e. LA: It might work, we might have to find a way. What concerns me about 2024, is that many are reluctant to go to 2022 in China, then we may be overwhelmed.
  - f. CB: You can see this as a challenge, or see this as an opportunity. I think that there are a couple of things that we need to be proactive about. If you survey the global community, you will find most are on the science side, but the Canadian conference is balance with science and engineering. We need to put things in place early so that there is a strong engineering representation. The second thing is that we have only a limited capacity. So we have to figure out what we could do if there were more people who want to come. If there is a demand from 1000 people, it is a management issue, and we need to start thinking about what we can do. We might be able to accommodate more people, but when the demand outpaces the supply, then the market comes into play. This could be extremely beneficial to the CPA in the long run. The earlier the policies are in place, and all of the committees are on the same page, we will have good decision making. If we have this discussed soon, that is the best position to take.

- g. LA: On the agenda to have the ICOP planning committee soon. We need to get the website going, etc.
  - h. LA: Any other questions?
  - i. CB: It could well be that you can access resources from people like Paul Murchison with things like the website.
  - j. LA: A good point.
  - k. XK: The LOC in Quebec [2019] organized a company to organize the website.
  - l. PM: In 2022, we are organizing a geohazards conference in Quebec, and it would be great to submit the advertisement internally to CPA members.
  - m. LA: Sure thing, just let JH know. It is one of our goals to get these areas of interest better linked.
  - n. LA: Any other questions or discussion?
  - o. None.
11. Adjournment
- a. 13:40
  - b. Next meeting 7 May, 12:00-14:00 Eastern.