

International Heat Flow Commission of IASPEI

Minutes of the IHFC business meeting

Cape Town, January 14, 2009

The meeting was held on Wednesday, 14 January 2009 from 12:30-14:00

The meeting attended by:

- Čermák, Vladimír (Czech Republic, cermak@ig.cas.cz),
- Chandrasekhar, Varun (India, varun@geosyndicate.com),
- Clauser, Christoph (IHFC Chairman, Germany, c.clauser@eonerc.rwth-aachen.de)
- Demezhko, Dmitri (Russia, ddem54@inbox.ru),
- Farouk, Hamzat Ahmed (Nigeria, phamzat@yahoo.com),
- Goetzl, Gregor (Austria, gregor.goetzl@geologie.ac.at),
- Hamza, Valiya, M. (IHFC Member, Brazil, hamza@on.br),
- Tumwikirize, Isaiah (Uganda, isaiah.tumwikirize@gmail.com),
- Jones, Michael (South Africa, Michael.jones@wits.ac.za),
- Kedaid, Fatima Zohra (Algeria, kedaid@hotmail.com),
- Kim, Hyoung Chan (Korea, khc@kigam.re.kr),
- Rybach, Lads (Switzerland, rybach@geowatt.ch),
- Ramontja, Thibedi (South Africa, ramontja@geoscience.org.za),
- Shim, Byoung Ohan (Korea, boshim@kigam.re.kr).

The following Agenda was Proposed and accepted:

1. Chairman's welcome
2. Attendance
3. Additions to and approval of agenda
4. Chairman's Report
5. IHFC web pages
6. Proposals for IHFC symposia and workshops for IUGG 2011 Assembly
7. Heat flow paradox: Two maps to confuse colleagues in other geo-disciplines?
8. AOB
9. Fund raising by placing advertisements on the web site, commercial suppliers
10. Adjourn

1. IHFC business meeting was opened by Cristoph Clauser (IHFC Chairman), who greeted all present. From the current IHFC members, only Clauser and Hamza were present. Additionally, 12 guests attended the meeting (see above).
2. See above for the list of attendees and their e-mail addresses.
3. The proposed agenda was accepted
4. The chairman provided a brief introduction of the aims and duties of the IHFC, its position in IASPEI, and reported on the IHFC activities since the last meeting at Perugia. A more detailed explanation focused on the individual IHFC working groups and their programmes. The chairman called for closer cooperation and personal contacts among the IHFC members and specialists from other disciplines. He also invited all present to contribute by their input to the IHFC future activities.

5. The chairman introduced new IHFC web page on <http://www.geophysik.rwth-aachen.de/IHFC/> and demonstrated its present version. He thanks all contributors, in particular past chairman David Chapman and his group for developing the general layout and templates. He also thanks the long-time custodian of the previous IHFC home page Shaopeng Huang for the Univ. of Michigan for the service he provided over all these years! As the new home page is online in its first version, Shaopeng is asked to supply information from the old home page which is lacking on the new one to the chairman for inclusion. Following the completion of this adjustment, the old home page should be shut down from the web.
6. Special attention was paid to propose suitable titles of symposia and workshops for the next IUGG General assembly which will take place at Melbourne, Australia in 2011. It was agreed to propose and organize (if accepted by IASPEI) the following sessions:
 - a) a symposium on heat flow, tectonics and geothermal energy (with focus on engineered geothermal systems). This symposium will focus on research on the local stress regime and its transient variations in the brittle crust; rock properties, seismic methods, and fracture mechanics in view of engineered geothermal systems (convened by the IHFC in cooperation with seismological commission/working group)
 - b) session on the interpretation of the borehole temperature inversions in terms of the paleoclimate reconstructions (with particular focus on the southern hemisphere), jointly with someone from IAMAP. The names of the respective chairmen and co-chairmen are to be nominated later, with participation of representatives from IASPEI and other IUGG associations. Australian co-convenors are welcome and will need to be motivated.

Note from the IASPEI Executive Meeting on Thursday, 15 January:

The following symposia and workshops with IHFC participation were approved:

- *Heat Flow, Tectonics, and Geothermal Energy (with focus on engineered geothermal systems); convenors: Clauser+ NN (Australian), + NN (Industry)*
- *Physics of the seismic process from lab studies to field observations; convenors: Zaryalov + Main + IHFC representative*
In this symposium, we can collaborate with seismologists on research on suitable seismic methods for deriving the local stress regime in the brittle crust or its transient variations; this is of great importance for the design of engineered geothermal (hot dry rock) systems
- *Climate Change and seismicity; convenors: Papadopoulos + Zschau + Beltrami*

I invite IHFC members for (self-)nominations for the “NN” placeholders and the IHFC representative above.

7. At present, two global heat flow patterns exist, namely the Pollack & Chapman (1975, 1993) spherical harmonic representation (which is also presented on the IHFC web page) and new proposal prepared by Hamza (see IJES, April 2008 special issue). The discussion identified these two competing global heat flow maps as problematic with respect to the way IHFC and the heat flow community communicate their results to the other disciplines. It was felt that we cannot leave it up to the end-user of such a map to make up his mind, which one to use. This is not a trivial topic, as the two maps differ by as much as 30 % in the number for the thermal power spent by the Earth. It was proposed to create a new IHFC working group to discuss this problem with representatives of both groups of authors and specialists in terrestrial and marine heat flow. **The chairman invites (self-)nominations of individuals for this new working group on global heat flow mapping. The chairman also invites comments of all IHFC members to this topic.**
8. It was agreed to submit suitable material to the IHFC chairman, which would further illustrate the past IHFC activities, such as list of recent publications, IHFC history, any news connected with heat flow studies (specially focussed on African colleagues).

Also the updated list of all future conferences, symposia somehow connected to geothermics and geothermal energy will be announced on the IHFC web pages. The promise of the help of Professor Ladsí Rybach (President of the International Geothermal Association) in this respect was greatly acknowledged.

Jones will look for more contacts with institutions in Africa which may be interested in cooperation and provide this information to their working group on outreach, headed by Massimo Verdoya (verdoya@dipteris.unige.it).

9. Unfortunately, only a limited number of heat flow researchers did make it to Cape Town. This limited the number of presentations: one third of the presentations in symposium H1 and more than half of those in workshop H2 were cancelled and both convenors were absent. This may be often due to the lack of travel money. For future participation, every body is called upon trying to raise additional travel funds from institutions and industry.

Cape Town, January 14, 2009

Prepared by Vladimír Čermák
(in proxy of the absent IHFC secretary and IHFC vice secretary)

Approved and amended by the Chairman. Aachen, 6 February 2009