

distributed to teachers across the country.

### Social Program

The social program is most important because it heightens communication. On the evening of arrival, all faculty and participants gather in the lounge at the University residence. Light liquid refreshments and snacks break down barriers and encourage conversation. Name badges are distributed indiscriminately and each individual must then find the person whose badge he holds and subsequently introduce him to the whole group. One fellow made a most complete and exceptional introduction except that he could not remember the name of the individual he was introducing!!

Other events include a picnic, an evening at the Stratford festival and a final banquet without speeches but with appropriate presentations designed to emphasize contributions by the recipient.

### Conclusions

The workshop at Western is designed to assist secondary school teachers in the area of methodology of earth science teaching. The success of the program hinges in large part upon the direction provided by two experienced secondary school teachers. Members of the faculty at Western provide coordination, and conduct the field trips. The teachers who have attended agree that the workshop is of particular benefit toward the development of their own course with comments indicating that the program provides an experience varying from a refresher session to a completely new approach to the teaching of earth science.

However, it is evident that this program does not provide the long range requirements for the proficient teaching of earth science in the secondary schools. As expressed by one participant in 1974 – "a full credit course should be taught by a person with several courses in geology". The long range solution will be provided by the universities which will foster a university curriculum designed for earth science teaching in the secondary schools. Such a program should be advertised in calendars. Up until now, many teachers of earth science in high schools have come from industry and government but as the number of courses increase – and this seems definitely the trend – the need will only be filled by graduates from university who have completed a satisfactory course.

The Science Council study of 1970 pointed out that the present graduate of a secondary school in Canada probably lacks the ability to appreciate fully their physical environment and to enjoy, through knowledge, the spectacular variety of Canadian terrain. Stated another way the student who graduates from high school at present knows something about the birds and bees, and about the flowers and trees. But in a country like Canada he should know something about the rocks and the minerals, too!

MS received, October 3, 1974.



## Archean Petrography Seminar/ Workshop

---

T. H. Pearce

*Department of Geological Sciences  
Queen's University  
Kingston, Ontario*

A conference on the petrography of Archean rocks was held at the Donald Gordon Centre for Continuing Education, Queen's University, on October 4th and 5th, 1974. The conference was organized by the writer under the auspices of the Department of Geological Sciences, Queen's University, and was well attended by 40 geologists from both universities and industry. The format of the meeting stressed informality and actual work by the participants on thin sections provided by each speaker. The participants were allotted 10 minutes to give background information on their rocks and a further 20 minutes (sometimes more) were spent by all participants examining the thin sections which had been provided.

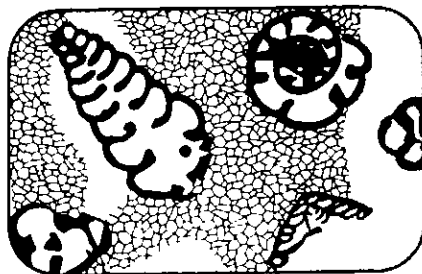
After opening words of welcome by R. A. Price, the conference got down to business with a presentation by W. B. Bryan of the Woods Hole Oceanographic Institute, on "Textures of Modern Abyssal Basalts". Textures similar to these have been showing up in well preserved Archean rocks and this work was well received. Gaston Gélinais and his group from Ecole Polytechnique presented several seminars highlighted by samples of remarkably well preserved quench texture rocks from their traverse area

north of Noranda. W. R. A. Baragar presented a talk on onion-skin texture in palagonized tuffs also from the Noranda area. Various samples of pumpellyite (including some in various shades of brown) were shown by Wayne Jolly in a selection of thin sections from the Abitibi belt. The ultramafic cumulates from Kakagi Lake were described by Rolly Ridler, and Nick Arndt's presentation on ultramafic rocks from Munro Township was interesting – as usual. As a cautionary note to would-be spinifex hunters, Tony Naldrett had a small slab containing metamorphic olivine which greatly resembles the igneous variety. Richard Herd illustrated some radiating metamorphic textures with examples from his sapphirine-bearing rocks, and R. J. Shegelski gave a presentation on the Savant Lake Greenstone Belt. The writer presented a seminar on the textural identification of volcanic rocks using a silicified quartz latite from north of Noranda as an example.

On Friday evening, a successful smoker was held, courtesy of the Queen's Geology Department. Some participants took the opportunity to compare Archean and modern abyssal rocks using microscopes set up in the lounge. Some textures are identical, but few petrologists were willing to venture an opinion of the significance of this.

The consensus seemed to be that this was a valuable type of meeting. There is certainly no substitute for direct comparison of rocks in thin section. Individuals interested in further meetings of this type might contact the writer at Queen's University.

MS received, November 7, 1974.



## Symposium International sur les Micro- paléontologiques Belges

Bernard Mamet  
*Département de Géologie  
Université de Montréal  
Montréal, Québec*

### Summary

An international conference was held in Belgium, 2-10 September 1974, to discuss a complete revision of the biostratigraphy of the Devonian and Lower Carboniferous. The symposium was held in the field to permit participants to collect from the classic sections of the Dinant synclinorium and the Namur "synclinal". An example of the detailed biostratigraphic work that has been done is provided by one section in the Famennian, which has been subdivided into 73 micropaleontological zones – a degree of subdivision even greater than the subdivision of the Cenozoic on the basis of microplankton. Although many of these zones may be of local significance, it is clear that the region visited constitutes a remarkable stratigraphic succession, where subsidence continued for a long time and where practically all miogeosynclinal facies interfinger. Knowledge of the biostratigraphy of this area is well-advanced and it may be expected to serve as a valuable standard of reference. (*Summary prepared by the editor.*)

Sous ce titre un peu trompeur, se cache non pas un symposium local sur des limites belges, mais une révision complète de la bio-

stratigraphie du Dévonien et du Carbonifère Inférieur. Le Synclinorium de Dinant et le "Synclinal" de Namur, en Belgique et dans le Nord de la France, recèlent en effet une succession remarquablement bien exposée de terrains paléozoïques dont une grande partie sert de standard de référence mondial pour les étages et séries du Dévonien et du Carbonifère.

Rompant avec la tradition des congrès calfeutrés, le symposium s'est déroulé presque entièrement sur le terrain, permettant aux participants de récolter directement leurs échantillons, pour Conodontes, Foraminifères, Ostracodes et Spores. A en juger par les sacs des participants, les récoltes furent fructueuses.

La plupart des contacts entre les unités stratigraphiques majeures ont été l'objet d'une attention particulière. Ainsi les limites Emsien–"Couvinién", "Couvinién"–Givétien, Givétien–Frasnien et Frasnien–Famennien ont été clairement exposées, la plupart toutefois par des coupes parastratotypiques. Le passage du Dévonien au Carbonifère, qui fut l'objet de discussions passionnées depuis plus d'un siècle, n'a rien perdu de son attrait et plusieurs solutions furent exposées, tant à Etroeungt, qu'Anseremme ou aux Avesnelles. Enfin, plusieurs solutions possibles pour le passage Tournaisien–Viséen furent envisagées, tant à Dinant, qu'à Salet.

En dehors de ces problèmes stratigraphiques majeurs, susceptibles d'intéresser autant un stratigraphe soviétique que son homologue australien, plus d'une centaine de coupes ont illustré des subdivisions mineures typiques (les anciennes assises du "Code secret" de la géologie belge du XIX<sup>ème</sup> siècle). Ainsi l'excursion du Famennien près de Comblain–Souverain Pré-Evieux–Esneux fut particulièrement instructive. Au total, 73 zones micropaléontologiques ont été proposées. Si leur réalité se vérifiait, la stratigraphie du Paléozoïque Supérieur serait constituée de zones plus précises que celles du Cénozoïque basées sur micro-