

PETROLEUM GEOLOGISCHE KRING

KONINKLIJK NEDERLANDS GEOLOGISCH EN MIJNBOUWKUNDIG GENOOTSCHAP



PGK

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Venue: PGK's monthly lectures are held at the KIVI building, Prinsessegracht 23, Den Haag. Drinks are served from 5 PM; the lecture starts at 6 PM.	Labels: Last update November, 1999
Membership: Please apply for membership by contacting the secretariat. Membership dues: Fl 30,-	
Accounts: VSB Bank: 88 65 82 733 (PGK, Den Haag)	Postbank: 4074482 (PGK, Den Haag)

JANUARY NEWSLETTER

JANUARY 19TH PGK MEETING

Henk Visscher (Utrecht University) will give the first PGK lecture of the year 2000. Time and place will be as usual: the KIVI building, Prinsessegracht 23, Den Haag. Drinks will be served from 5PM; the lecture starts at 5.45 PM.

Topic of this talk will be:

Fossil leaves as biosensors of paleoatmospheric CO₂ levels

Physiological responses of land plants to changes in the supply of basic resources (solar radiation, CO₂, water, nutrients) require morphological, anatomical and/or biochemical adjustments. If physiologically determined signals can still be discriminated in fossil plant remains, their temporal analysis may provide a profitable methodology for detecting and quantifying past environmental change. In this respect, the analysis of stomata on leaf remains has become an innovative aspect of paleobotanical research.

Stomata consist of an opening and a pair of cells, the guard cells, located in the epidermis tissue of leaves of higher plants. The purpose of the stomata is the regulation of the gas exchange between the ambient air and the intercellular air space within the leaf during photosynthesis and transpiration. A decreasing number of stomata on tree leaves provides the only morphological evidence that the historical CO₂ increase has already affected the biosphere. For an ever-increasing number of species, there are now convincing observational and experimental data that demonstrate an inverse relation between mean stomatal frequency and atmospheric CO₂ concentration.

An important paleoecological corollary of stomatal responses to CO₂ changes is that stomatal frequency analysis of fossil leaves can provide time-series data that enable the identification of past changes in atmospheric CO₂ regime. In contrast to ice-core measurements, leaves buried in peat and lake deposits have the potential to accurately detect and quantify decade-to-century-scale CO₂ fluctuations during the Holocene. Evidence from Cenozoic and Mesozoic leaf records indicates that the method can be also applied for estimating CO₂ concentrations on prolonged geological time-scales.

LERAAR NIEUWS

In het onderwijs in de regio Rotterdam is een nijpend tekort aan aardrijkskunde leraren. De Hogeschool Rotterdam biedt een tweejarige opleiding in het tweedegraads gebied (je geeft

dan les aan leerlingen van 12 - 16 jaar) in deeltijd aan voor geologen, fysisch- en sociaal geografen. De vakken, die aan geologen gegeven worden zijn: Sociale Geografie, vakdidactiek en onderwijskunde. Salarisindicatie vanaf f 4250,- t/m f 6600,- per maand, bij een volledige baan(maar er kan onderhandeld worden met scholen over een hoger salaris uitgaande van een eerder verdiend salaris).

Inlichtingen: Carel Kooter: e-mail: C.M.Kooter@HRO.NL

Hogeschool Rotterdam, Wijnhaven 61, 3011WJ Rotterdam.

Tel prive 071- 5893812.

Start cursus: september, maar na overleg kan men eventueel eerder beginnen.

MEMBERSHIP DUES 2000

All PGK members have received an acceptgiro for payment of their 2000 membership dues together with this January 2000 Newsletter. Those members that are still one or two years behind are requested to pay these outstanding dues themselves on either VSB Bank account 88 65 82 733 or Postbank account 4074482 (PGK Den Haag; Dfl. 30,- for each year).

ANNUAL MEETING AND DINNER

The PGK annual meeting will be held Wednesday February 16th at 17.30, before the presentation by Professor S.M. Luthi, TUDelft: "At a turning point in Petroleum Geology". As usual there will be an annual dinner concluding the evening, starting around 20.15PM. The costs will be around 50 guilders each person. Those who wish to attend please complete the form at the end of the newsletter and return it before February 13th to the secretary. Information on the exact location and restaurant will follow in the February Newsletter.

ANNUAL DINNER REGISTRATION FORM

Name:

Address:

Tel:

Return to Secretary before February 13th or e-mail M.Kosters@siep.shell.com

MEMBER NEWS

We have received applications for membership from **Mr. H. J. Duyverman** (Terra Incognita Energy Consultancy), **Mr. D. Post** and **Mr. B. Lyon** (Schlumberger), **Mr. P. Fokker** (NITG-TNO), **Mrs. S.V.J. Veltkamp**, **Mr. K.Elewaut** and **Mr. V.L.N. de Groen** (students Utrecht University).

If no objections are received by the end of the next meeting they will be automatically elected members of the society.

The following companies are warmly thanked for sponsoring the PGK in 1999:
Amoco Netherlands B.V.- Argo Geological Consultants -
Chevron USA Inc., The Netherlands Branch – Clyde Petroleum Exploratie B.V. –
Core Laboratories Aberdeen – DSM Energie – Energie Beheer Nederland B.V -
Elf Petroland B.V. - Enres International – Fina Nederland B.V. – Fugro Inpark B.V. -
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