

og Dansk Geologisk Forening en mindeaften på 300-årsdagen for NIELS STEENSEN's immatrikulation ved universitetet. Mødet afholdtes i universitetets festsal. Universitetets rektor, prof. dr. med. ERIK WARBURG indledte, hvorefter der holdtes tre korte foredrag:

Prof. dr. med. EDVARD GOTFREDSEN: Træk af NIELS STEENSEN's liv og anatomiske arbejde.

Prof. dr. phil. A. NOE-NYGAARD: NIELS STEENSEN som krystallograf og geolog.

Prof. dr. phil. R. SPÄRCK: NIELS STEENSEN og samtidens naturforskning.

### Palæontologisk Klubs møder

i året 1956

12. marts:

A. ROSENKRANTZ: Embryonalskallen hos nogle paleocæne Tectibranchiater fra Danmark. Demonstration af embryonalskallen hos *Gilbertina* (*G. ultima* (v. KOENEN)) fra Vestre Gasværk og *G. groenlandica* n. sp. fra paleocænet på Nûgssuaq, Vestgrønland) samt hos *Cylichna*, illustreret ved materiale fra Vestgrønlands paleocæn.

EIGIL NIELSEN: Nyt om *Latimeria*. Demonstration af nyt fotografisk materiale.

ESKE KOCH: Forelæggelse af et stort kogleafttryk fra Herningegnen. Grundlaget for beretningen er et næsten fuldstændigt aftryk af en kogle i en istransporteret blok af kvartsrig, stærkt konsolideret sandsten, fundet på Herningegnen og lånt af Herning Museum. Det 19 cm lange aftryk danner en dyb hulning i stenen med åbning på aftrykkets side nær basis. En afstøbning under eet er først blevet mulig, efter at polyvinylchlorid-metoden blev kendt herhjemme. Koglen står i alle bygningstræk nær den gruppe af slægten *Pinus*, som SHAW (SHAW: The Genus *Pinus*, 1914) benævner *Haploxyylon*; denne dækkes af begrebet »Soft Pines». Det terminate umbo henviser koglen til SHAW's subsection *Cembra*. Nogen helt identisk recent art er ikke fundet, men koglerne hos *Pinus armandii* står den nær. Også koglerne hos *Pinus flexilis* kommer den fossile kogle nær. Fossiliet tænkes beskrevet som *Pinus herningensis* n. sp.

CHR. POULSEN: Nogle bemærkninger om trilobitsslægten *Megistaspis*. Referat af V. JAANUSSON: Untersuchungen über baltoskandische Asaphiden 3: Über die Gattungen *Megistaspis* n. nom. und *Homalopyge* n. gen.: Bull. Geol. Inst. Uppsala, vol. 36, 1956, pp. 59—77.

CHR. POULSEN: Nogle metoder til forbedret fossilfotografering. Det har længe været kendt, at man ved at overtrække fossiler med en tynd hinde af ammoniumklorid kan fremhæve detaljer i skalskulptur m. m., hvorved man lettere opnår vellykkede fotografiske gengivelser. Metodens anvendelighed er imidlertid i høj grad afhængig af atmosfærens fugtighedsgrad, og den er uegnet ved mere end 6 ganges forstørrelse, idet sublimatet let får en temmelig grovkornet overflade. Disse ulemper kan undgås ved hjælp af følgende, af foredragsholderen udarbejdede metode: Rent antimon ophedes til smeltning i et kvartsrør, hvorfra sublimatet (antimontetraoxyd) blæses over på objektet, hvor det danner et meget fint beslag, hvis overflade kan udsættes for så stærk forstørrelse som 200 gange uden at vise mindste ændring af kornet struktur.

5. november:

EIGIL NIELSEN: Er hvirveldyrene opstået i saltvand eller ferskvand? Referat af meninger fremsat i følgende afhandlinger: A. S. ROMER & B. H. GROVE: Environment of the Early Vertebrates: *Amer. Midland Naturalist*, 16, 1935, no. 6; W. GROSS: Paläontologische und stratigraphische Bedeutung der Wirbeltierfauna des Old Reds und der marinen altpaläozoischen Schichten:

- Abh. d. Deut. Akad. d. Wissenschaften zu Berlin, Math.-Nat. Klasse, Jahrg. 1949, no. 1 (1950); A. S. ROMER: Fish Origins — fresh or salt water? Pap. Mar. Biol. and Oceanogr., Deep Sea Research, Suppl. to vol. 3 (1955) p. 261; R. H. DENISON: A Review of the Habitat of the earliest Vertebrates: Fieldiana: Geology, vol. 11 (1956) no. 8.
- J. C. TROELSEN: Danienets planktoniske foraminiferer og deres stratigrafiske betydning. Foredraget forventes trykt i »Smithsonian Institution, United States National Museum, Bulletins« i 1957.
- CHR. POULSEN: En ny trilobit fra Bornholms Exsulanskalk. Foredraget findes trykt i dette bind p. 223 under titlen »A New Middle Cambrian Trilobite from Bornholm«.

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### Mineralogisk-petrografisk Klubs møder

i året 1956

10. april:

POUL GRAFF-PETERSEN: Mineralers ionadsorption og overfladeaktivitet.

24. april:

ASGER BERTHELSEN: Nogle danske flinttyper under petrografisk mikroskop.

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### Dansk Geofysisk Forenings møder

i året 1956

23. februar:

Afdelingsgeodæt, cand. mag. AXEL JESSEN: Vandstand og jordbevægelser.

15. marts:

Amanuensis, cand. mag. BØRGE FRISTRUP: Gletcherundersøgelser i Grønland.

26. april:

Professor, dr. phil. EINAR ANDERSEN, statsgeodæt, dr. phil. O. SIMONSEN og afdelingsgeodæt, cand. mag. AXEL JESSEN: Beretning om det nordiske geodæt-møde i Helsingfors i april 1956.

24. maj:

Geodætassistent, cand. mag. SVEND SAXOV: Gravimetriske undersøgelser i Vendsyssel.

11. oktober:

Statsmeteorolog, cand. mag. J. EGEDAL: Geofysikens stilling i Danmark.

22. november:

Professor J. RYBNER: Grønland og radiobølgenes udbredelse.

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## List of Danish Geodetical and Geophysical Publications 1955

(Compiled by Dansk Geofysisk Forening)

Published in Copenhagen 1955 unless otherwise stated

EINAR ANDERSEN: C.C.G. Andræ. — Geodætisk Instituts Skrifter, 3. Række, Bd. XXI.

This volume contains a biography in general and the geodetic career especially of C. C. G. Andræ (1812–93). An extract of Andræ's theoretical works is reproduced and some critical remarks are given by the author.

EINAR ANDERSEN: Adjustment of observations by the method of least squares. — Geodætisk Instituts Skrifter, 3. Række, Bd. XXII.

This paper presents a standardization both in respect of methods and notations of the theory of adjustment by means of the matrix calculus. Including the theory of free functions the author has rounded off the theory of adjustment in a form and in an extension corresponding to the requirements of the normal courses of geodesy.

Annuaire Magnétique, 1ère partie: Le Danemark (excepté le Groenland), 1954.

Annuaire Météorologique, 1ère partie: Le Danemark (excepté le Groenland), 1953.

J. BONDAM and R. BØGVAD: The geothermal gradient at Ivigtut, South Greenland. — Bulletin of the Geological Society of Denmark, Vol. 13, Part 1, pp. 42–45.

On basis of the accomplished measurements, the geothermal gradient at Ivigtut, South Greenland, might be given on the order of magnitude of 1°C. for 60 to 75 metres.

ANTON FR. BRUUN and A. KILLERICH: Characteristics of the water-masses of the Philippine, Kermadec and Tonga Trenches. — Pap. Mar. Biol. and Oceanogr., Deep-Sea Research, suppl. to Vol. 3, pp. 418–25. — London & New York, 1955.

The observations of temperature, salinity and oxygen content carried out by the "Galathea" Expedition 1950–52 in the Philippine and the Tonga-Kermadec Trenches are published and discussed.

ANTON FR. BRUUN, EBBE LANGER and HANS PAULY: Magnetic particles found by raking the deep sea bottom. — Deep-Sea Research, Vol. 2, pp. 230–46. — London & New York, 1955.

On the "Galathea" Expedition 1950–52 a collection of strongly magnetic material from the ocean floor was undertaken. The paper describes the instrument used and the material collected, and it reports on laboratory work by which particles of the same nature were produced experimentally.

J. EGEDAL: On the variations of the normal height of the sea-level round the Danish coasts 1889–1954. App. to the Nautical-Meteorological Annual 1955.

By means of tidal observations from ten Danish recording gauge stations the secular variation of the normal height of the sea-level and the tilting of Denmark have been determined. The different forces affecting the mean sea-level have been mentioned, and considerations concerning the eustatic change of the sea-level have been made.

J. EGEDAL and N. AMBOLT: The effect on geomagnetism of the solar eclipse of 30 June 1954. — J. Atmos. Terr. Phys., Vol. 7, pp. 40–48. — London, 1955.

After a short review of results of earlier investigations of the effect of solar eclipses on geomagnetism, results of observations of the magnetic declination compiled from eleven observatories near the path of totality of the solar eclipse of 30 June 1954 have been mentioned. It is shown that the maximal magnetic effect takes place in close connection with the passage of the eclipse. On the assumption that the effect is a diminution of the departure of the daily variation, the said effect, derived according to a new method, has been examined, and it is shown that a diminution of the order found by Chapman from an investigation based on theoretical considerations takes place in the present case.

AXEL JESSEN: Nivellement hydrographique entre six stations danoises. — *Tellus*, Vol. VII, pp. 381-384. — Stockholm, 1955.

The annual means of sea-level are considered as consisting of two independent quantities: the height of the zero point in question and the height of the water-surface. An attempt is made to separate these two quantities. The result is a set of diagrams showing the relative secular motion of the zero points and the sea-level.

I. LEHMANN: The times of P and S in Northeastern America. — *Annali di Geofisica*, Vol. VIII, No. 4, pp. 351-370. — Rome, 1955.

A study of the transmission times of P and S waves of Northeastern American earthquakes revealed a significant departure of the times of S from those of current tables. It is an indication of differences of structure existing below the Mohorovičić discontinuity. — Depth greater than normal has been assigned to some Northeastern American earthquakes. Reasons are given why this may not be correct.

WM. H. LITTLEWOOD and FREDERIK HERMANN: The Danish oceanographic and fisheries research vessel *Dana*, and her post-war program. — *Transactions, American Geophys. Union*, Vol. 36, No. 5, pp. 902-906. — Washington, 1955.

A short description of the Danish R/V "Dana" and a review of her post-war oceanographic investigations.

ASGER LUNDBAK: The North Sea Storm Surge of February 1, 1953. Its Origin and Development. — *Geografisk Tidsskrift*, Bd. 54, pp. 8-23.

The gradual development of the surge, which caused so great human and material losses in Holland, England and Belgium in the beginning of 1953, is described on the basis of available reports. The astronomical tide and the effect of the wind are dealt with separately, and it is concluded, that the extreme duration of the storm was a decisive factor.

ASGER LUNDBAK: Flod og Ebbe ved Grønland og i Polhavet. — *Grønland*, nov. 1955, pp. 423-436.

A review of the astronomical tide in the seas surrounding Greenland and the North Pole is given, and the progressing of the tide within the various areas is described. It is stated, that the tide in these areas is almost exclusively coming from the Atlantic, and that the development of the tide must be explained in terms of free progressing waves and amphidromies.

J. M. LYSHEDE: Hydrologic studies of Danish watercourses. — *Folia Geographica Danica*, Bd. VI.

An analysis of runoff conditions in Denmark, mainly based upon the material of Det danske Hedeselskab.

Nautisk-Meteorologisk Årbog/Nautical-Meteorological Annual 1954.

SVEND SAXOV: Lidt om den magnetiske sydpol. — *Geografisk Tidsskrift*, Bd. 54, pp. 1-7.

The displacement of the South magnetic pole. The observed and adjusted values originating in observations during the period of 1820 to 1952 are listed.

SVEND SAXOV: Eftersøgning af vand. — *Naturens Verden*, 39. årgang, pp. 159-168.

Exploration of water. Developments from the diving rod to geoelectricity are described. Examples from geoelectric methods are given.

SVEND SAXOV: Temperaturen variation i jorden. — *Naturens Verden*, 39. Årgang, pp. 235-243.

Recent measurements of the temperature gradient in the Earth's crust are discussed. Likewise temperature distribution within the Earth's core and heat flow are mentioned.

SVEND SAXOV: Some gravity measurements on Fyn. — Geodætisk Instituts Skrifter, 3. Række, Bd. XXIII.

A gravity survey including 1700 stations are given; the area covered being Fyn, Taasinge, Langeland, and Ærø. Comparisons between pendulum and gravimeter observations on Fyn, Taasinge, Langeland, Ærø, Bornholm, and Sjælland are given; pendulum observations were carried out 1895–1921 by "Den Danske Gradmåling" and the gravimetric survey was made by means of partly a Nørgaard torsion gravimeter partly a Worden gravimeter in 1945–1947, and 1953–1954 respectively.

An account of the accuracy of the Nørgaard gravimeter observations is given. Interpretation of the Bouguer anomaly map. Different methods of obtaining residual and second derivative anomalies are examined. Data afforded by geology, precise levelling, seismic refraction shooting, nearby earthquakes, and magnetism are presented.

E. SINDING: Astronomical determinations in Greenland 1927–1952. — Geodætisk Instituts Skrifter, 3. Række, Bd. XIX.

The measurements and results of the astronomical observations in Greenland are presented.

JENS SMED: Synoptic Hydrographic Charts, September 1954–July 1955.

Monthly charts showing surface water temperature and salinity, wind and current for the North Sea and adjacent waters. For details see the 1953 list.

TH. SORGENFREI: Geo-electric Surveys in Denmark and Scania 1953. — Geological Survey of Denmark, III. Series, No. 32.

The reported surveys have shown that resistivity methods may be applied to the solution of various geologic problems even in a geologically rather complex area such as the drift area of Denmark. A combined method including both trenching and electrical drilling appears to be most profitable, since the quantitative interpretation of electrical drillings may be very difficult due to the great potential variability of the glacial deposits.

A table gives an outline of the approximative resistivities of various Danish formations and deposits experienced during the first year of resistivity measurements in Denmark.

HELGE THOMSEN and M. V. L. LORCK: The state of the ice in the arctic seas 1952. — Appendix to the Nautical-Meteorological Annual 1952.