

**Program of the 14th Symposium on Antarctic Geosciences
held at the National Institute of Polar Research, Tokyo,
October 27–28, 1994**

I. Geology and Petrology (I)

1. Deformation of metamorphic and intrusive rocks of the Sør Rondane Mountains, East Antarctica. Tsuyoshi TOYOSHIMA and Masaaki OWADA.
2. Basic igneous rocks from the central and eastern part of Sør Rondane Mountains. Masaaki OWADA, Tsuyoshi TOYOSHIMA, Kazuyuki SHIRAIKI, Masao ASAMI, Hiroo KAGAMI and Hiroshi MAKIMOTO.
3. Geochemical characteristics of mafic dike rocks from the Sør Rondane Mountains, East Antarctica. Yasuo IKEDA, Kazuyuki SHIRAIKI and Hiroo KAGAMI.
4. Mineral paragenesis of the sapphirine-bearing rock from the Austcampane area of the Sør Rondane Mountains, East Antarctica. Hideo ISHIZUKA, Satoko SUZUKI and Hideyasu KOJIMA.
5. On calc-silicate rock from the West Ongul Island. Noriyoshi TSUCHIYA, Toshiaki SHIMURA and G.L. FRASER.
6. Petrology of “Intrusive” charnockite in the Skarvsnes area, East Antarctica. Morihisa SUZUKI (not presented).
7. Geochronological constraints on the metamorphic evolution at Rundvågshetta, East Antarctica. G.L. FRASER, I.S. WILLIAMS, Masahiro ISHIKAWA, Yoichi MOTYOYOSHI, Toshiaki SHIMURA, Noriyoshi TSUCHIYA and D.J. ELLIS.
8. K/Ar and $^{40}\text{Ar}/^{39}\text{Ar}$ mineral ages across the Lützow-Holm Complex, East Antarctica. G.L. FRASER and I. McDougall.

II. Geology and Petrology (II)

9. Rheological behavior of the Lützow-Holm Complex during uplifting. Masahiro ISHIKAWA and Yoichi MOTYOYOSHI.
10. National remanent magnetizations and magnetic anisotropies in a shear zone at Rundvågshetta, East Antarctica. Mutsumi NAKAI and Masahiro ISHIKAWA.
11. National remanent magnetizations and magnetic anisotropies of metamorphic rocks from Breidvågnipa, East Antarctica. Mutsumi NAKAI and Toshiaki SHIMURA.
12. Sapphirine- and corundum-bearing silica-undersaturated granulites from Forefinger Point, Enderby Land, East Antarctica: Evidence for a clockwise *P-T* path? Yoichi MOTYOYOSHI, Masahiro ISHIKAWA and G.L. FRASER.
13. Lützow-Holm, Rayner and Napier Complexes: geochronological overview. Kazuyuki SHIRAIKI.

III. Solid Earth Geophysics (I)

14. Observations of earth tides and earth's free oscillations with a superconducting gravimeter at Syowa Station, Antarctica. Tadahiro SATO, Kazuo SHIBUYA, Katsutada KAMINUMA, Masatsugu OOE, Yoshiaki TAMURA, Yoichi FUKUDA and Masaki KANAO.
15. Tidal displacements of sea ice observed at Nisi-no-ura of the East Ongul Island, Antarctica. Tadahiro SATO, Kenta OKANO, Takanobu SAWAGAKI and Hiroyuki ENOMOTO.
16. Performance tests of STS-Seismograph in low temperature. Masaki KANAO and Katsutada KAMINUMA.

IV. Geomorphology

17. Ground temperature regimes and frost heave activity in the coastal area of the Enderby Land, East Antarctica. Takanobu SAWAGAKI.
18. Some problems on the raised beach along the Lützow-Holm Bay, East Antarctica. Kazuomi HIRAKAWA and Takanobu SAWAGAKI.

19. Some problem on the glacial landforms and "P-form" along the Lützow-Holm Bay. Kazuomi HIRAKAWA and Takanobu SAWAGAKI.
20. Glacial- and periglacial geomorphological problems on the north slope of the Mt. Riieser-Larsen. Kazuomi HIRAKAWA and Takanobu SAWAGAKI.
21. Significance of fossil shells (30,000 yr BP) in the raised beach deposits along the coast of Lützow-Holm Bay, East Antarctica. Atsuo IGARASHI and Kiichi MORIWAKI.

V. Solid Earth Geophysics (II)

22. Magnetic anomaly lineation and fracture zone in Enderby Basin deduced from geomagnetic anomaly field vector. Yoshifumi Nogi, Nobukazu SEAMA, Nobuhiro ISEZAKI and Yoichi FUKUDA.
23. Seismicity around the Antarctic Peninsula. Katsutada KAMINUMA.
24. Broad band seismic analysis of SKS splitting in Antarctica. Atsuki KUBO, Yoshihiro HIRAMATSU, Tsutomu TERASHIMA, Masataka ANDO and Masaki KANAO.
25. Q_s structure of lithosphere in the Lützow-Holm Bay region, East Antarctica and Kinki district, Japan. Masaki KANAO and Junpei AKAMATSU.
26. Characteristics of seismic attenuation in southeast Tibetan Plateau—Comparison with those in the Lützow-Holm Bay region—. Junpei AKAMATSU, Hiroyuki KAKU and Masaki KANAO.
27. Seismic observation network in the Lützow-Holm Bay region, East Antarctica for the study of lithospheric structure. Masaki KANAO, Katsutada KAMINUMA, Kazuo SHIBUYA, Junpei AKAMATSU and Kiyoshi ITO.

VI. Poster Session

- P 1. Detection capability of earthquakes at Syowa Station, East Antarctica. Masaki KANAO and Katsutada KAMINUMA.
- P 2. Geomorphological studies of Antarctic areas using satellite data. Haruo SAKURAI, Yasushi KANAZAWA and Kazuo SHIBUYA.
- P 3. ESR and TL dating of Quaternary sediments in Antarctica. Masashi TAKADA, Masahisa HAYASHI, Takanobu SAWAGAKI, Kazuomi HIRAKAWA and Kiichi MORIWAKI.
- P 4. Submarine topography of the south-west part of Ongul Islands, East Antarctica. Takanobu SAWAGAKI.
- P 5. Observation of periglacial processes at Ny-Ålesund, Spitsbergen Island. Shigeru SAIGUSA and Shin-ichi SAWAGUCHI.
- P 6. Distribution of silicates in pond water in Wright Valley, Victoria Land, Antarctica. Kohei KAWANO, Tamio KAWANO and Tetsuya TORII.
- P 7. The displacement direction of the Arena Gneiss in central Sri Lanka. Yasutaka TANI and Masaru YOSHIDA.
- P 8. Calc-silicate assemblages and reaction textures as indicators of the pressure-temperature-fluid history of East Gondwana crustal fragments. M. SATISH-KUMAR, M. SANTOSH and Masaru YOSHIDA.
- P 9. ^{40}Ar - ^{39}Ar ages and paleomagnetic studies for rock samples from Mahanadi and Godavari gravels, East India. Yutaka TAKIGAMI, Hideo SAKAI, K. Venkata RAO, Harutaka SAKAI, Minoru FUNAKI and Kimio HIROOKA.
- P10. Rockmagnetic study for the analysis of sedimental environment—glacial-interglacial stages—. Masaë HORII, Hideo SAKAI, Mutsumi NAKAI and Kiichi MORIWAKI.
- P11. Paleomagnetic intensity measurements on metamorphic rocks from Antarctica. Naoko UENO.
- P12. The emplacement pressure of syenite estimated by the stability field of amphibole from the Sør Rondane Mountains, East Antarctica. Takanobu OBA and Kazuyuki SHIRAISHI.

VII. Geochemistry and Geochronology of Victoria Land

28. Salt origin of lake and pond waters in the McMurdo Dry Valleys, Antarctica, inferred from

- alkali metals. Nobuki TAKAMATSU, Naoyuki KATO, Genki I. MATSUMOTO and Tetsuya TORII.
- 29. A consideration of salt origin in waters in Wright Valley, southern Victoria Land, Antarctica. Tamio KAWANO, Kohei KAWANO and Tetsuya TORII.
 - 30. Geochemical characteristics of organic compounds in a permafrost sediment core sample from Northeast Siberia. Genki I. MATSUMOTO, E. Imre FRIEDMANN and David A. GILICHINSKY.
 - 31. ^{40}Ar - ^{39}Ar geochronological studies for granitic rocks of Wilson Terrane, Victoria Land. Yutaka TAKIGAMI and Teruo WATANABE.

VIII. Marine Geology

- 32. Peridotites from the seamounts off Wilkes Land. Kiyoaki NIIDA and Makoto YUASA.
- 33. Topographic character of the East Antarctic continental margin. Hideo KAGAMI.

IX. Petrology of Napier Complex

- 34. Evidence for partial melting of high-grade metamorphic rocks around Syowa Station, East Antarctica. Yoshikuni HIROI, Kazuyuki SHIRAISHI, Yoichi MOTOYOSHI and D.J. ELLIS.
- 35. Structural evolution of Forefinger Point granulites, Enderby Land, East Antarctica. Masahiro ISHIKAWA, Yoichi MOTOYOSHI and G.L. FRASER.
- 36. Petrochemical study of the gneiss from Mount Pardoe and Tonagh Island in the Napier Complex, East Antarctica. Yoshiaki TAINOSHIO, Hiroo KAGAMI, Hirokazu MAEKAWA, Koshi YAMAMOTO, Shigeru IIZUMI, Yuhei TAKAHASHI, Yasuhito OSANAI and Noriyoshi TSUCHIYA.

X. Antarctica and Gondwana

- 37. Was the Lützow-Holm Bay-Sri Lanka area Pan-African suture? A critique to recent work based on zircon SHRIMP studies. Masaru YOSHIDA.
- 38. Pan-African processes in Southern India and their bearing on the East Gondwana assembly. M. SANTOSH and Masaru YOSHIDA.
- 39. Sm-Nd and Rb-Sr mineral isochrons from charnockites, khondalites and gneisses of Southern India: implications for widespread crustal rejuvenation in the Pan-African. C. UNNIKRISHNAN-WARRIOR, M. SANTOSH and Masaru YOSHIDA.