

**Program of the 11th Symposium on Antarctic Geosciences
held at the National Institute of Polar Research, Tokyo,
November 8-9, 1990**

I. Earth Science in the Antarctic Ocean

1. Status of the surface ship gravity measurements on icebreaker SHIRASE. Yoichi FUKUDA, Hiroaki TOH, Yoshifumi NOGI, Jiro SEGAWA and Katsutada KAMINUMA.
2. Vector anomalies of the geomagnetic field around the Kerguelen Plateau. Yoshifumi NOGI, Nobukazu SEAMA, Nobuhiro ISEZAKI, Tamotsu HAYASHI and Katsutada KAMINUMA.
3. The directions of magnetic anomaly lineations and fracture zones between Antarctica and Africa. Yoshifumi NOGI, Nobukazu SEAMA, Nobuhiro ISEZAKI and Katsutada KAMINUMA.
4. Marine geology of Enderby Basin, East Antarctica. Seizo NAKAO and Masahiro KASAHARA.
5. Submarine canyons offshore Queen Maud Land, Antarctica. Hideo KAGAMI, Hiromi KURAMOCHI and Yoko SHIMA.
6. Magnetic anomaly in Ongul Islands and its adjacent sea. Yoshifumi NOGI, Nobukazu SEAMA, Nobuhiro ISEZAKI and Minoru FUNAKI.

II. Earth Science in the Sør Rondane Mountains (I)

7. Results of a.f. demagnetizations on dolerite dikes, hornblendites, syenites and metamorphosed basic rocks from Sør Rondane Mts., East Antarctica. Katsuyasu TOKIEDA and Minoru FUNAKI.
8. Note on field occurrences of the granitic rocks in the Sør Rondane Mountains. Yuhei TAKAHASHI, Yoshiaki TAINOSHIO, Yasuhito OSANAI and Noriyoshi TSUCHIYA.
9. Granulite-facies metamorphism in the eastern Sør Rondane Mountains. Masao ASAMI and Hiroshi MAKIMOTO.
10. Metadikes in the Austhamaren area of the eastern Sør Rondane Mountains, East Antarctica. Hiroshi MAKIMOTO and Masao ASAMI.
11. Ammonium contents of biotite in granitic and metamorphic rocks in Sør Rondane Mountains, East Antarctica. Yoshiaki TAINOSHIO, Yuhei TAKAHASHI, Yasuhito OSANAI and Noriyoshi TSUCHIYA.

III. Earth Science in West Antarctica

12. Geochemical characteristics of organic components in soils of the McMurdo Dry Valleys, Antarctica. Genki I. MATSUMOTO, Kouitsu HIROTA, Kunihiko WATANUKI and Tetsuya TORII.
13. Seismic Activity of Mount Erebus, Antarctica in 1989. Shinya ASAKAWA, Katsutada KAMINUMA and Hiroshi SHIMIZU.
14. Volcanic Activity of Mount Erebus and Temperature Measurements. Katsutada KAMINUMA, Hiroshi SHIMIZU and R.B. DIBBLE.
15. Cumulate inclusions from Turtle Rocks, Antarctica. Kiyoaki NIIDA, Katsutada KAMINUMA and Kazuo SHIBUYA.
16. Permafrost occurrence at ice free ground in James Ross Island, Antarctic Peninsula area. Masami FUKUDA, Jorge STRELIN, Kazuo SHIMOKAWA, Nobuyuki TAKAHASHI and Toshio SONE.
17. Chemical and isotopic characteristics of ice from an icewedge in Marambio Island, Antarctic Peninsula region (II). Kikuo KATO.

IV. Earth Science in the Syowa Station and the Surrounding Area

18. The re-appraisal of geomorphological data in relation to natural environmental change in Antarctica. Yoshio YOSHIDA.
19. Seismic observation with radio-linked network at Syowa Station (3). Junpei AKAMATSU, Hiroshi MURAKAMI, Nobuo ICHIKAWA and Katsutada KAMINUMA.
20. Intermittent micro-seismic activity around Syowa Station Antarctica. Katsutada KAMINUMA and Junpei AKAMATSU.
21. Broad band seismic observation by STS seismometer at Syowa Station, Antarctica. Hiroshi MURAKAMI and Katsutada KAMINUMA.

22. Extraction of seismic signal by an autoregressive models and screening out noisy microearthquakes. Tetsuo TAKANAMI and Genshiro KITAGAWA.
23. Mean sea-level observation at Syowa Station. Minoru ODAMAKI, Yutaka MICHIDA, Iwao NOGUCHI, Yoshiyuki IWANAGA, Shunichi IKEDA and Kouzi IWAMOTO.
24. Gravity mapping in and around Mizuho Plateau. Toshiyasu NAGAO and Katsutada KAMINUMA.

V. Earth Science in the Sør Rondane Mountains (II)

25. Moraine on the Sør Rondane Mountains, East Queen Maud Land. Kiichi MORIWAKI, Kazuomi HIRAKAWA and Norikazu MATSUOKA.
26. Seismic explosion experiments in the Sør Rondane Mountains region by using Antarctic penetrators. Research Group of the Antarctic Penetrator (Kazuo SHIBUYA).
27. An experimental study of Ca-amphibole from the Yamato and Sør Rondane Mountains syenitic rocks, East Antarctica. Takanobu OHBA and Kazuyuki SHIRAISHI.
28. ^{40}Ar - ^{39}Ar ages of rock samples for paleomagnetic study from Sør Rondane Mountains. Yutaka TAKIGAMI and Minoru FUNAKI.
29. Preliminary note on paleomagnetic intensities obtained from rocks in Antarctica. Naoko UENO and Minoru FUNAKI.
30. Finding of vanadium-bearing garnet from the Sør Rondane Mountains, East Antarctica. Yasuhide OSANAI, Noriyoshi TSUCHIYA, Yuhei TAKAHASHI and Yoshiaki TAINOSHIO.

VI. Earth Science in Gondwana

31. Tectonics of Precambrian East Gondwana. Masaru YOSHIDA.
32. Charnockite "In the breaking and making" evidence from East Gondwanan crustal fragments. Masaru YOSHIDA and M. SANTOSH.
33. Nature and role of fluids in granulite petrogenesis: Evidence from Gondwana deep crustal sections. M. SANTOSH.
34. Element mobility during incipient charnockite formation in southern India: Implications for Gondwanian granulites. M. SANTOSH, Masaru YOSHIDA and Hiroshi SHIRAHATA.