2. Organization and activities of the Institute (Geological Sciences) for the Academic Year 2004

During the year from April, 2004 to March, 2005, several promotions and appointments were made in the Geological Science section of the Institute so that our research and teaching activities were enforced. All faculty and administrative staffs were:

Professors:

Arakawa, Yoji, D.Sc., petrology, geochemistry and geochronology

Hayashi, Ken-ichiro, D.Sc., migration of heavy metals, geochemistry of hydrothermal system

Kimata, Mitsuyoshi, D.Sc., mineralogy and crystallography

Ogasawara, Kenshiro, D.Sc., Cenozoic stratigraphy and molluscan paleontology

Ogawa, Yujiro, D.Sc., structural geology and marine geology

Sashida, Katsuo, D.Sc., Paleozoic and Mesozoic biostratigraphy

Associate Professors:

Endo, Kazuyoshi, Ph.D., molecular paleontology

Hisada, Ken-ichiro, D.Sc., Paleozoic and Mesozoic stratigraphy and sedimentary rocks

Tsunogae, Toshiaki, Ph.D. (Sc.), metamorphic petrology and crustal evolution

Assistant Professors:

Adachi, Shuko, D.Sc., Paleozoic biostratigraphy

Anma, Ryo, Ph.D., structural geology and tectonics

Hirai, Hisako, D.Sc., Earth Planetary Highpressure Science

Komuro, Kosei, D.Sc., ore geology and geochemistry

Kurosawa, Masanori, Ph.D. (Sc.), mineralogy and geochemistry

Kyono, Atsushi, Ph.D. (Sc.), structural physics of minerals

Motoyama, Isao, Ph.D. (Sc.), Cenozoic stratigraphy and micropaleontology

Takizawa, Shigeru, D.Sc., structural geology

Research associate:

Kikuchi, Yoshibumi, Ph.D. (Sc.), Cenozoic paleoenvironment and paleontology

Research and Teaching Assistants:

Miyamoto, Makoto

Mizuno, Natsumi, B.A.

Ozaki, Shiro

Shimizu, Masahiro

Watase, Koichi, B.A.

Administrative Staff:

Sato, Chikako

The following doctor and master's theses were completed during the academic year 2004 under the supervision of the institute members.

Doctor of Philosophy (Science or Geoscience)

Kawamura, Kiichiro (2005): Systematic Development of Microfabrics of Deep-Sea Sediments into Accretionary Prism -Deposition, Compaction and Deformation -

Hoshiba, Mayumi (2005): Paleoceanographic Changes in the Northwestern Pacific Off Shimokita Peninsula During the Last 35 kyr Based on Radiolarian and Stable Isotope Analyses.

Master of Science

Aoki, Rie (2005): Conglomerate beds in the Ogamata Formation, Southern Chichibu Belt, Kanto Mountains, central Japan.

Echigo, Takuya (2005): Crystal chemistry of cation and H₂O in oxalate minerals.

Handa, Miho (2005): Characterization of deep low frequency earthquake beneath Shikoku.

Hatsuya, Kazunori (2005): Geochemistry of

- Besshi-type massive sulfide deposits in the accretionary complexes.
- Hayakawa, Takuma (2005): Experimental Study on Decompositional Mechanism and Rate of Chrysotile at High Pressures and Temperatures.
- Hirauchi, Ken-ichi (2005): Deformation structures of serpentinite in the Jikkoku Pass area, northwestern Kanto Mountains, central Japan.
- Hoshino, Mihoko (2005): Implicative behavior of rare earth elements and manganese for the origins of allanites from granitic rocks, Japan.
- Kawamura Yoshio (2005): Geology of the Sanchu Cretaceous System, Kanto Mountains, Central Japan.
- Inoue, Hirobumi (2005): Diatom analysis of cyclic sea level changes during the Early Pliocene: a study of the Tatsunokuchi Formation of the Sendai Group in southern part of Northeast Japan.
- Motoki, Hazuki (2005): Chronological and lithostratigraphical study of the Triassic Toishi-type shale in Jurassic accretionary complexes in Japan.
- Saito, Yohichiro (2005): The crystallization mechanism of spherulite in rhyolitic welded tuffs, Kamikawa village, Niigata prefecture.
- Takano, Masanobu (2005): Miocene mollluscan faunas in the Kakuda Basin, Miyagi Prefecture, Northeast Japan.
- Takeuchi, Takeshi (2005): Biphasic

- Expression Patterns of the Genes Encoding Major Shell Matrix Proteins in the Pearl Oyster *Pinctada fucata*.
- Tanaka, Katsunori (2005): The Effect of Geological Phenomena on the Consolidation Characteristics of the *Chuseki-so* (Alluvial Deposits) Examples from Tokyo Lowland, Kanto Plain.
- Tokumine, Shoichiro (2005): Geological study of large-scale bedrock creep in the Shimanto Belt along the upperstream area of Oi River, Central Japan.
- Yaba, Yuko (2005): Distribution of living coccolithophores and seasonal changes of coccolith fluxes in sediment trap from sea around Japan.

Master of Arts in Education

- Ito, Tadashi (2005): Experimental study on sedimentary process of *Monodiexodina* (Fusulinacea).
- Machida, Shin-ichi (2005): Search for post filled-ice-Ih structure of methane hydrate under high pressure.
- Obata, Takashi (2005): Production and transportation of beach sands along Wakasa bay.
- Urano, Hironori (2005): Effects of bedrock groundwater on rainfall-runoff process in small headwater catchments underlain by rhyolite, Nikko, Tochigi Prefecture, Japan.