Contents

Discovery of a skeleton of the *Hydrodamalis* sea cow from the Lower Pleistocene Iimuro Formation, Komae City, Tokyo, central Japan
Naoki Kohn, Daigoro Yakushi and Eiichi Kobayashi  ⋅ 1

Biofacies and environmental change in the Japan Sea -Past, present and to the future
Kazutaka Amano, Takuya Itaki and Toshiaki Iriyuki  ⋅ 5

The Omma-Manganji fauna and its temporal change
Kazutaka Amano  ⋅ 6

Relationship between Pliocene ostracode assemblages and marine environments along the Japan Sea side regions in Japan
Toshiaki Iriyuki and Katsura Ishida  ⋅ 13

Faunal changes of cryophilic ostracods (Crustacea) in the Japan Sea, in relation to oceanographic environment: an overview
Hirokazu Ozawa  ⋅ 21

Historical changes in the Pliocene foraminiferal fauna in the Japan Sea oil-field region and its paleoceanographic implications
Satoshi Hanagata  ⋅ 29

Radiolarian assemblage and environmental changes in the Japan Sea since the Late Miocene
Shin-ichi Kamikuri and Isao Motoyama  ⋅ 35

Historical changes of deep-sea radiolarians in the Japan Sea during the last 640 krys
Takuya Itaki  ⋅ 43

The cause of the temporal changes in the Tsushima Current during interglacial periods in the late Pliocene-early Pleistocene Japan Sea -reexamination of the early Pleistocene occurrences of the planktonic foraminifer *Globocamella inflata*
Akihisa Kitamura  ⋅ 52

Late Pliocene climate change in the middle to high latitude region of northern hemisphere as seen from calcareous nannofossil assemblages
Tokiiku Sato  ⋅ 60

Formation of deep-sea fauna and changes of marine environment in the Japan Sea
Shigeaki Kojima, Kenro Adachi and Yasumi Kodama  ⋅ 67

Responses of the lower trophic level ecosystem of the Japan Sea to the North Pacific decadal variation in the latter half of the 20th century
Sanoe Chiba  ⋅ 72

International Geoscience Programme (IGCP) and contribution to the world
Hiromichi Hirano  ⋅ 78

Proceedings  ⋅ 82