

Bibliography of Seismology

January to June, 1949

7004. AGAMENNONE, G., "La profondita del foco dedotta dall'angolo d'emergenza delle onde sismiche", *Geofisica Pura e Applicata*, Vol. 11, No. 1, 108-112, bib., Messina, 1948.

7005. AGOCS, W. B., "Sea-bottom Slope Determination from Water Sound Arrivals", *Geophysics*, Vol. 14, No. 2, 123-132, 7 fig., Menasha, April, 1949.

7006. BATH, Marcus, "Some Long Period Variations of Microseismic Activity", *Geofisica Pura e Applicata*, Vol. 11, 121-126, 2 fig., bib., Messina, 1948.

7007. BATH, Marcus, "An Investigation of the Upsala Microseisms", *Meteorologiska Institutionen vid Kungl. Universitetet*, Messesande No. 14, 168 pp., 37 fig., 36 tables, bib., Upsala, 1949.

7008. BEMMELEN, R. W. van, "The Physico-chemical Evolution of the Earth", *Geologie en Mijnboun*, Vol. 11, No. 1, 1-21, The Hague, Feb., 1949.

J. F. S.

7009. BOAGA, Giovanni, "Sulla costituzione interna terrestre", *Geofisica Pura e Applicata*, Vol. 2, No. 3-4, 185-199, 1 fig., 3 tab., bib., Messina, 1940.

— BOER, J. de, KORRINGA, J., and KRONIG, R., "On the Internal Constitution of the Earth". See No. 7063 of this list.

7010. BRITISH ASSOCIATION SEISMOLOGICAL COMMITTEE.

"Seismological Investigations", Report on the meeting of the British Association Seismological Committee on Aug. 27, 1947.

The following papers are listed as having been presented to the above Committee:

"Mr. J. J. Shaw", by Ernest Tillotson.

"International Seismological Summary", by J. S. Hughes.

"Milne-Shaw Seismographs at Downe House, Downe, Kent", by O. J. R. Howarth.

"Seismological Work of the Department of Geodesy and Geophysics, Cambridge, 1947-48", by P. L. Willmore.

"Report of Seismic Work on the North German Explosions, 1946-47", by P. L. Willmore.

"The Generation of Microseisms", G. E. R. Deacon.

— BURTON, Gerald A., and THOMSEN, Harry L., "Winter Operation of Geophysical Equipment in the Rocky Mountain Area". See No. 7117 of this list.

— BYERLY, Perry, "The University of California Seismographic Stations", *Earthquake Notes*. See No. 7101 of this list.

— BYERLY, Perry; and VOIGT, Dorothy Stanley, "The Intensity of Earthquakes as Rated from Questionnaires". See No. 7124 of this list.

7011. CALOI, P., "Comportamento delle onde di Rayleigh in un mezzo firno-elastico indefinito", *Annali di Geofisica*, Vol. 1, No. 4, 550-567, 3 fig., 5 tab., bib., Rome, Oct., 1948.

THE
DOMINION OBSERVATORY

OTTAWA

VOLUME XIV

Bibliography of zoology

1914

7012. CALOI, P., and PERONACI, F., "Onde superficiali associate alle onde *S*, *SS*, . . . nel terremoto del' Turkestan del 2 novembre 1946", *Annali di Geofisica*, Vol. 1, No. 4, 520-524, 2 fig., 2 tab., bib., Rome, Oct., 1948.
7013. CANADIAN GEOPHYSICAL BULLETIN.
 "Canadian Geophysical Bulletin", *National Research Council of Canada*, Vol. 2, No. 2, 27 pp., Ottawa, April-June, 1948.
 The above issue contains a bibliography of Canadian Seismology and bibliography of Radioactivity of Rocks in Canada.
7014. CANADIAN GEOPHYSICAL BULLETIN.
 "Canadian Geophysical Bulletin", *National Research Council of Canada*, Vol. 2, No. 3, 38 pp., Ottawa, 1 July-30 September, 1948.
7015. CARDER, D. S., and WERNER, F. H., "Seismograph Station near Hungry Horse Dam, Montana", *Bulletin, Seismological Society of America*, Vol. 39, No. 1, 27-31, 4 fig., Berkeley, Jan., 1949.
7016. CARNEGIE INSTITUTE OF WASHINGTON.
 "Year Book No. 47; Seismic Sounding", Carnegie Institute of Washington, Report for 1947-1948, p. 60-65, 1 fig., 2 tab., Washington, 1948.
7017. CHAKRABARTY, S. K., and RICHTER, C. F., "The Walker Pass Earthquakes and Structure of the Southern Sierra Nevada", *Bulletin, Seismological Society of America*, Vol. 39, No. 2, 93-107, 1 fig., 3 tab., Berkeley, April, 1949.
7018. CRITIKOS, N. A., "Caratteristiche dei sismogrammi di terremoti prossimi ad Atene (Grecia) e fenomeni relativi nella regione epicentrale", *Geofisica Pura e Applicata*, Vol. 4, No. 2-3, 82-95, 9 fig., bib., Messina, 1942.
7019. CURRIER, L. W., "Geologic Methods and Interpretations", *Bulletin of The Highway Research Board*, No. 13, 67-76, 3 fig., Boston, 1948.
7020. CYBULSKI, W. B., PAYMAN, W., and WOODHEAD, D. W., "Explosive Waves and Shock Waves. VII. The Velocity of Detonation in Cast T.N.T.", *Proceedings, The Royal Society*, Series A, Vol. 197, No. 1048, 51-72, 17 fig., 8 tab., London, May 11, 1949.
7021. DALMASSO, Fernando,
 (1) "Sul terremoto delle Isole Eolie del 27 gennaio 1939", *Geofisica Pura e Applicata*, Vol. 1, No. 2, 80-98, 5 fig., bib., Messina, 1939.
 (2) "Sul terremoto Palermitano del 15 gennaio 1940", *Ibid.*, Vol. 2, No. 1, 42-55, 5 fig., 2 tab., bib.
7022. DELANO, George H., "Coordination of Methods in Highway Location and Design", *Bulletin of the Highway Research Board*, No. 13, 86-89, 1 fig., Boston, 1948.
7023. DEVLIN, James J., "The Electromechanical Transducer in the New Benioff Seismograph", *Bulletin, Seismological Society of America*, Vol. 28, No. 4, 255-258, 1 fig., Berkeley, Oct., 1938.

7024. DIX, C. HEWITT, "On the Minimum Oscillatory Character of Spherical Seismic Pulses", *Geophysics*, Vol. 14, No. 1, 17-20, Menasha, Jan., 1949.
7025. DOBRIN, Milton B., PERKINS, Beauregard, and SNAVELY, Benj. J., "Subsurface Constitution of Bikini Atoll as Indicated by a Seismic-refraction Survey", *Bulletin, Geological Society of America*, Vol. 60, No. 5, 807-828, 10 fig., 2 pl., bib., Washington, May, 1949.
7026. ENGINEERING NEWS-RECORD.
Items of interest to seismologists have appeared in recent issues of Vol. 142 of the above periodical (New York, 1949), as follows:
- (1) "Face Stone Earthquake-anchored on Boston Telephone Building", No. 5, p. 69, 1 fig., Feb. 3.
 - (2) "Building Walls Resist Earthquakes", No. 9, 58-60, 3 fig., Mar. 3.
 - (3) "Engineered Structures Resist Shocks as Earthquake Rocks Pacific Northwest", No. 16, p. 11, 2 fig., April 21.
 - (4) "Geophysicists Peer into Earth's Core; Consider Slow Drift of Global Crust", No. 20, p. 15, May 19.
7027. EWING, Maurice, "Structure of the Mid-Atlantic Range" (abstract), *Transactions, American Geophysical Union*, Vol. 30, No. 2, p. 170, Washington, April, 1949.
- EWING, Maurice, and HERSEY, J. B., "Seismic Reflections from Beneath the Ocean Floor". See No. 7047 of this list.
7028. FINCH, R. H., "Volcanic Tremor (Part 1)", *Bulletin, Seismological Society of America*, Vol. 39, No. 2, 73-78, 3 fig., Berkeley, April, 1949.
7029. FINCH, R. H., "The New Location of the Hawaiian Volcano Observatory", *The Volcano Letter*, No. 501, pp. 1-2, Honolulu, July-September, 1948.
7030. GALANOPOULOS, A. G., "The Koroni (Messinia) Earthquake of October 6, 1947", *Bulletin, Seismological Society of America*, Vol. 39, No. 1, 33-39, 4 fig., bib., Berkeley, January, 1949.
7031. GANE, P. G., LOGIE, H. J., and STEPHEN, J. H., "Triggered Telerecording Seismic Equipment", *Bulletin, Seismological Society of America*, Vol. 39, No. 2, 117-143, 9 fig., Berkeley, April, 1949.
7032. GARDNER, L. W., "Seismograph Determination of Salt-Dome Boundary using Well Detector Deep on Dome Flank", *Geophysics*, Vol. 14, No. 1, 29-38, 7 fig., Menasha, Jan., 1949.
7033. GEOLOGICAL SOCIETY OF AMERICA.
"Annotated Bibliography of Economic Geology", *Economic Geology Publishing Company*, Vol. 20, No. 1, 114 pp., Urbana, July, 1947.
7034. GILLULY, James, "Distribution of Mountain Building in Geologic Time", *Bulletin, Geological Society of America*, Vol. 60, No. 4, 561-590, 16 fig., 1 tab., bib., New York, April, 1949.
7035. GILMORE, Marion H., "Relation of Microseisms to Meteorology", *Transactions, American Geophysical Union*, Vol. 30, No. 2, 165-169, bib., 3 fig., Washington, April, 1949.

7036. GILS, J. M. Van, "Etude statistique des tremblements de terre enregistrés à Uccle de 1910 à 1945", *Publications du Service Séismologique et Gravimétrique*, Série S, No. 5, 19 pp., 4 fig., 8 tab., bib., Uccle, 1949.
7037. GIORGI, Maurizio, "Su alcuni aspetti caratteristici dei microsismi a Roma in relazione con fattori meteorologici", *Annali di Geofisica*, Vol. II-N. 1, 24-39, 11 fig., bib., Gennaio, 1949.
7038. GORANSON, Roy W., "Effect of Pressure on Physical Phenomena in the Crust" (abstract), *Transactions, American Geophysical Union*, Vol. 30, No. 2, p. 187, Washington, April, 1949.
7039. GUTENBERG, B., and RICHTER, C. F., "Deep-focus Earthquakes in the Mediterranean Region", *Geofisica Pura e Applicata*, Vol. 11, 130-133, 1 fig., 1 tab., bib., Messina, 1948.
7040. GUTENBERG, B., "New Data on the Lower Stratosphere", *Bulletin, American Meteorological Society*, Vol. 30, No. 2, 62-64, 1 fig., bib., Milton, Feb., 1949.
7041. GUTENBERG, B., "Earth Physics", *Physics Today*, Vol. 2, No. 2, 14-18, 4 fig., New York, Feb., 1949.
7042. GUTENBERG, B., "Unexplained Phases in Seismograms", *Bulletin, Seismological Society of America*, Vol. 39, No. 2, 79-92, 7 fig., bib., Berkeley, April, 1949.
7043. GUTENBERG, B., "Approximations in Geophysics", *Veröffentlichungen des Finnischen Geodatischen Institutes*, Nr. 36., 41-44, Helsinki, 1949.
7044. GUTENBERG, B., and RICHTER, C. F., "Erdbebengeographie und Dynamik der Erdkruste", *Die Naturwissenschaften*, Vol. 35, No. 7, S, 196-202, 5 fig., Berlin, 1948.
7045. HARDTWIG, E., "Über die Verlängerung der Periode Seismischer Wellen", *Geofisica Pura e Applicata*, Vol. 13, 75-87, 1 fig., bib., Messina, 1948.
7046. HEINRICH, ROSS R., "Three Ozark Earthquakes", *Bulletin, Seismological Society of America*, Vol. 39, No. 1, 1-8, 1 fig., 5 tab., bib., Berkeley, Jan., 1949.
- HEINRICH, ROSS R., "Saint Louis Seismology Exhibit", *Earthquake Notes*. See No. 7100 of this list.
- HEINRICH, ROSS R., and MACELWANE, J. B., S.J., "Progress Report of the Jesuit Seismological Association for the Year 1947". See No. 7074 of this list.
7047. HERSEY, J. B., and EWING, Maurice, "Seismic Reflections from Beneath the Ocean Floor", *Transactions, American Geophysical Union*, Vol. 30, No. 1, 5-14, 10 fig., bib., Washington, Feb., 1949.
7048. HERSEY, J. B., and PRESS, Frank, "Seismic Studies of Geologic Structure of the Ocean Floor" (abstract), *Transactions, American Geophysical Union*, Vol. 30, No. 2, p. 171, Washington, April, 1949.

7049. HILLER, W.,
(1) "Schwach Beben auf der Sudwestalb au 6·8 und 19·9·1948", *Seismischen Bericht des Wurtte Erdbebendieusus*, pp. 35-37, Stuttgart, 1948.
(2) "Die Explosionkatastrophe in Ludwigshaben aux Rhein au 28. Feb. 1948", *Ibid.*, 33-35, 1948.
(3) "Die Rheinalbeben in Jahre 1948", *Ibid.*, 19-21, 1948.
(4) "Erdbeben", Dietrichsche Verslag Buchhandlung, Wiesbaden, 1948.
(5) "Die Erdbebentatigbest in Sudwestdeutschland", *Die Naturwisseuschafte*, Vol. 35, No. 2, 58-60, Berlin, 1948.
7050. HODGSON, Ernest A., "The Rockburst Problem", *The Canadian Mining and Metallurgical Bulletin*, No. 440, Vol. 41, 664-666, 3 fig., Montreal, Dec., 1948.
7051. HODGSON, John H., "The Use of Rockbursts in the Study of Crustal Structure" (abstract), *Transactions, American Geophysical Union*, Vol. 30, No. 2, 186-187, Washington, April, 1949.
7052. HOPKINS, Harold, "Structure at Kirkland Lake, Ontario, Canada", *Bulletin, Geological Society of America*, Vol. 60, No. 5, 909-922, 10 fig., 1 pl., Washington, May, 1949.
7053. HOUSNER, G. W., and McCANN, G. D., "The Analysis of Strong-motion Earthquake Records with the Electric Analog Computer", *Bulletin, Seismological Society of America*, Vol. 39, No. 1, 47-56, 8 fig., 1 tab., bib., Berkeley, Jan., 1949.
7054. INGLADA, Vicente,
(1) "Tabelle degli intervalli t_{pP} — t_{pE} t_{sS} — t_S per l'analisi dei terremoti ad ipocentro profondo", *Geofisica Pura e Applicata*, Vol. 3, No. 4, 189-193, 1 fig., 2 tab., Messina, 1941.
(2) "Nota sobre la profundidad hipocentral del sismo del Apenino Toscano-Romanol de 11 de febrero de 1939", *Ibid.*, Vol. 12, No. 5-6, 181-188, 1 fig., bib., Messina, 1948.
7055. JARDETZKY, W., "On the Dynamics of the Earth's Crust", *Bulletin de la Soci t  des Amis des Sciences et des Lettres de Poznań*, Series B., 1-24, 5 fig., bib., Poznań, 1948.
7056. JEFFREYS, Harold, "The Figures of the Earth and Moon", *Monthly Notices of the Royal Astronomical Society, Geophysical Supplement*, Vol. 5, No. 7, 219-247, bib., London, July, 1948.
7057. JONES, W. M., "Tables of Azimuths and Distances", *Department of Scientific and Industrial Research, Dominion Observatory Bulletin No. S-88*, 13 pp., Wellington, 1945.
7058. JONES, W. M., "New Zealand Microseisms Associated with the Storm of 14th-16th February, 1947", *New Zealand Journal of Science and Technology*, Vol. 29, No. 3, Sec. B, 142-152, 6 fig., 1 tab., bib., Wellington, 1947.
7059. JONES, W. M., "Further Tables of Geographical Distances", *Department of Scientific and Industrial Research, Dominion Observatory Bulletin No. S-87*, 32 pp., Wellington, 1948.

7060. JONES, W. M., "Notes on Azimuths, Distances and Equidistant Azimuthal Projections in the South Pacific", *Department of Scientific and Industrial Research, Dominion Observatory Bulletin No. S-86*, 13 pp., Wellington, N.Z., 1949.
7061. KASTROP, J. E., "The Poulter Method of Geophysical Seismic Exploration", *World Oil*, 53-60, 8 fig., Jan., 1949.
7062. KELSEY, Martin C., "Studies in Fault Detection with the Reflection Seismograph", *Geophysics*, Vol. 14, No. 1, 21-28, 7 fig., Menasha, Jan., 1949.
- KORRINGA, J., KRONIG, R., and BOER, J. de, "On the Internal Constitution of the Earth". See No. 7063 of this list.
7063. KRONIG, R., BOER, J. de, and KORRINGA, J., "On the Internal Constitution of the Earth", *Physica*, Vol. 12, No. 5, 245-256, The Hague, Aug., 1946. J. F. S.
7064. LAHN, E., "Seismological Investigations in Turkey", *Bulletin, Seismological Society of America*, Vol. 39, No. 2, 67-71, Berkeley, April, 1949.
7065. LANDSBERG, H., "The Clover Creek Earthquake of July 15, 1938", *Bulletin, Seismological Society of America*, Vol. 28, No. 4, 237-241, 1 fig., Berkeley, Oct., 1938.
7066. LANDSBERG, H., "Note on Deep-focus Earthquakes, Pressure Changes, and Pole Motion", *Geofisica Pura e Applicata*, Vol. 12, No. 5-6, 177-180, 1 fig., bib., Messina, 1948.
7067. LEET, L. Don, "Vibrations from Delay Blasting", *Bulletin, Seismological Society of America*, Vol. 39, No. 1, 9-20, 7 fig., 2 tab., Berkeley, Jan., 1949.
7068. LEET, L. Don, "Microseisms", *Scientific American*, Vol. 180, No. 2, 42-45, 4 fig., Washington, Feb., 1949.
7069. LEHMANN, I., "On Two Explosions in Danish Waters in the Autumn of 1946", *Geofisica Pura e Applicata*, Vol. 11, 145-161, 9 fig., 2 tab., bib., Messina, 1948.
7070. LILL, Gordon G., "The Earth Sciences Program of the Office of Naval Research", *Scientific Monthly*, Vol. 68, No. 4, 284-287, 2 fig., 1 tab., Lancaster, April, 1949.
7071. LINEHAN, Daniel, S. J., "Seismology as a Geologic Technique", *Bulletin of The Highway Research Board*, No. 13, 77-85, 6 fig., bib., Boston, 1948.
7072. LINEHAN, Daniel, S. J., and SCOTT, Keith, "Seismic Reconnaissance for Ground-water Development", *Journal of the New England Water Works Association*, Vol. 63, No. 1, 76-95, 6 fig., bib., discussion, Boston, 1949.
- LOGIE, P. G., STEPHEN, J. H., and GANE, P. G., "Triggered Telerecording Seismic Equipment". See No. 7031 of this list.
7073. LOUDERBACK, George D., "Giovanni Agamennone" (biography), *Bulletin, Seismological Society of America*, Vol. 38, No. 4, 289-290, Berkeley, Oct., 1948.
- LYNCH, Joseph, S.J., "An Investigation of Two-second Microseisms at Fordham University", *Earthquake Notes*. See No. 7100 of this list.

- LYNCH, J. J., S.J., "Progress of Investigation of Two-second Microseisms at the Tripartite Station at Fordham University", *Earthquake Notes*. See No. 7101 of this list.
7074. MACELWANE, J. B., S.J., and HEINRICH, ROSS R., "Progress Report of the Jesuit Seismological Association for the Year 1947", *Transactions, American Geophysical Union*, Vol. 30, No. 1, 127-130, 1 fig., 1 tab., Washington, Feb., 1949.
7075. MARCELLI, L., and PANNOCCHIA, G., "Terremoto della cresta mediana Atlantica del 24 aprile 1947", *Annali di Geofisica*, Vol. 1, No. 4, 570-580, 3 tab., bib., Rome, Oct., 1948.
7076. MARKOVIC, Branimir, "Mikroseizmicki nemir u Zagrebu", *Rad Geofizickog Zavoda u Zagrebu*, Broj 1, Serija 2, 103 pp., 14 fig., 15 pl., 45 tab., bib., Zagreb, 1948.
7077. MARMER, H. A., "Sea Level Changes along the Coasts of the United States in Recent Years" (abstract), *Transactions, American Geophysical Union*, Vol. 30, No. 2, p. 201, Washington, April, 1949.
- McCANN, G. D., and HOUSNER, G. W., "The Analysis of Strong-motion Earthquake Records with the Electric Analog Computer". See No. 7053 of this list.
7078. MEINESZ, F. A. Vening,
- (1) "Disturbances of the Equilibrium within the Earth" (In German), *Die Ingenieur*, Vol. 55, 94-100, Berlin, 1940.
 - (2) "The Field of Gravity", *Handelingen van het XXVII Natuurengeneeskundig Congres*, Vol. 27, 255-257, Haarlem, 1941.
- J. F. S.
7079. MENZEL, Heinz, "Über den Begriff und die Bestimmung der Durchschnittsgeschwindigkeit in der Reflexionsseismik", *Zeitschrift für Meteorologie*, Vol. 2, No. 11, 325-329, 4 fig., 3 tab., Hamburg, 1948.
7080. MIHAĬLOVIĆ, J., "Détonations Séismiques de l'Île de Hvar", *Publication de l'Institut Séismologique de Beograd*, 31 pp., 12 fig., bib., Beograd, 1946.
7081. MIHAĬLOVIĆ, Jelenko, "Caractère Séismique de la côte sud de l'Adriatique Yougoslave", *Académie Serbe des Sciences*, 20 pp., 14 fig., bib., Beograd, 1947.
7082. MILLINGTON, G., "Ground-wave Propagation across a Land-sea Boundary", *Nature*, No. 4134, Vol. 163, p. 128, London, Jan. 22, 1949.
7083. MORELLI, Carlo, "Contributo allo studio microsismi", *Annali di Geofisica*, Vol. 1, No. 4, 621-634, 10 fig., 2 tab., bib., Rome, Oct., 1948.
7084. MORELLI, Carlo, "Studio di alcune esplosioni subacquee nel Golfo di Trieste", *Pubblicazioni dell'Istituto Nazionale di Geofisica*, No. 174, 24 pp., 3 fig., 13 tab., bib., Rome, 1949.
7085. MORELLI, Carlo, "Studio di alcune esplorazioni subacquee nel golfo di Trieste", *Annali di Geofisica*, Vol. 2, No. 1, 113-136, Gennaio, 1949.

7086. MUNK, Walter H., "Note on Period Increase of Waves", *Bulletin, Seismological Society of America*, Vol. 39, No. 1, 41-45, 2 fig., bib., Berkeley, Jan., 1949.

— MURPHY, L. M., "A Survey of Microseismic Activity", *Earthquake Notes*. See No. 7101 of this list.

7087. NATURE.

Papers of interest to seismologists have appeared in recent issues of Vol. 163 (London, 1949) of the above periodical as follows:

- (1) "Wind and Ocean Currents", No. 4137, pp. 237-238, Feb. 12.
- (2) "Recent Earthquakes", No. 4144, 542-543, April 2.
- (3) "Skipton Earthquake of 1944", No. 4146, p. 596, April 16.
- (4) "New Zealand Earthquakes during October, 1948", No. 4147, p. 633, April 23.
- (5) "Earthquakes during January", No. 4149, p. 716, May 7.
- (6) "Mekran (Baluchistan) Earthquake of November 28, 1945", No. 4149, p. 716, May 7.
- (7) "Earthquakes during February 1949", No. 4150, May 14, p. 759.
- (8) "New Zealand Earthquakes during 1946", No. 4151, p. 795, May 21, 1949.

7088. NAVARRO DE FUENTES, José Rodriguez,

- (1) "La forma de las isosistas en relación con la estructura geológica del terreno en el sismo de 20 de marzo de 1933", *Dirección General del Instituto Geográfico y Catastral*, 18 pp., 5 fig., Madrid, 1943.
- (2) "Utilisation des tables des temps de propagation des ondes séismiques pour profondeurs diverses", *Ibid.*, 12 pp., 1939.

— NORDQUIST, J. M., and RICHTER, C. F., "Minimal Recorded Earthquakes". See No. 7105 of this list.

7089. NORTHWOOD, T. D., and SIMPSON, F. W., "Depth Measurements in the Seward Ice Field by Sonic Echo-ranging", *National Research Council of Canada, Division of Physics*, Report No. PS-300, 13 pp., 31 fig., Ottawa, Dec., 1948.

7090. ODDONE, Emilio,

- (1) "Un modello inteso a mostrare la propagazione entro il globo delle onde sismiche longitudinali", *Geofisica Pura e Applicata*, Vol. 1, No. 2, 73-79, 3 fig., abst., Messina, 1939.
- (2) "Discontinuità, densità e compressibilità cubica nell'interno della terra", *Ibid.*, Vol. 1, No. 3-4, 157-174, 2 fig., 5 tab., bib., 1939.

7091. OULIANOFF, M. Nicolas, "Les séismes et les noyaux de roches basiques dans les massifs centraux alpins", *Comptes Rendus des Séances de l'Académie des Sciences*, t. 226, 2168-2170, Paris, June, 1948.

7092. OULIANOFF, N., "Analyse séismique des noyaux basiques des massifs granitiques Mont-Blanc-Vosges et Aar-Forêt Noire", *Bulletin des Laboratoires de Géologie, Minéralogie, Géophysique et du Musée Géologique de l'Université de Lausanne*, Bulletin No. 91, 15 pp., 6 fig., bib., Lausanne, 1949.

7093. OULIANOFF, N., "Les problèmes des tectoniques superposées et les méthodes géophysiques", *Bulletin des Laboratoires de Géologie, Minéralogie, Géophysique et du Musée Géologique de l'Université de Lausanne*, Bulletin No. 92, 10 pp., bib., Lausanne, 1949.
7094. OXFORD UNIVERSITY OBSERVATORY,
"The International Seismological Summary. 1937 April, May, June," 143-273,
Richmond, June, 1948.
7095. OXFORD, UNIVERSITY OBSERVATORY,
"The International Seismological Summary, 1937 July, August, September",
277-486, Richmond, Oct., 1948.
- PANNOCCHIA, G., and MARCELLI, L., "Terremoto della cresta mediana Atlantica del
24 aprile 1947". See No. 7075 of this list.
- PAYMAN, W., WOODHEAD, D. W., and CYBULSKI, W. B., "Explosive Waves and Shock
Waves. VII. The Velocity of Detonation in Cast T.N.T.". See No. 7020 of this list.
- PERKINS, Beauregard, DOBRIN, Milton B., and SNAVELY, Benj. L., "Subsurface Constitu-
tion of Bikini Atoll as Indicated by a Seismic-refraction Survey". See No. 7025 of
this list.
- PERONACI, F., and CALOI, P., "Onde superficiali associate alle onde *S*, *SS*, . . . nel
terremoto del' Turkestan del 2 novembre 1946". See No. 7012 of this list.
7096. PERRI, Emilio,
(1) "Nuovo accelerometro a massima per la componente orizzontale", *Geofisica Pura
e Applicata*, Vol. 1, No. 3-4, 137-156, 8 fig., 1 tab., bib., Messina, 1939.
(2) "Di un nuovo accelerometro e relativo metodo di lettura differenziale per la
determinazione rapida delle forze sismiche massimali", *Ibid.*, Vol. 3, No. 1, 1-11,
1941.
7097. PERRINE, C. D., "Periods in Earthquake Activity", *Bulletin, Seismological Society of
America*, Vol. 39, No. 2, 109-115, 2 fig., 2 tab., Berkeley, April, 1949.
7098. POLLI, Silvio, "Gli attuali movimenti verticali delle coste Italiane", *Istituto Geofisico*,
No. 228, 5-7, 2 tab., bib., Trieste, 1947.
7099. POLLI, Silvio, "Su di un microbarografo modificato", *Istituto Talassografico*, No. 246,
12 pp., 8 fig., 1 tab., bib., Trieste, 1949.
- PRESS, Frank, and HERSEY, J. B., "Seismic Studies of Geologic Structure of the Ocean
Floor". See No. 7047 of this list.
7100. RABBITT, Mary Collins, "Earthquake Notes", Vol. 20, No. 2, 13-20, Washington, Dec.,
1948.

The above periodical is the organ of the Eastern Section of the Seismological Society of America. The issue listed contains: Editorial Comment; Radio Communication of Teleseismic Messages; Seismic Sea Wave Warning System; An Investigation of Two-second Microseisms at Fordham University; Saint Louis Seismology Exhibit; Seismicity of the Earth in 1948; New Method of Seismic Exploration; Earthquake Epicentres by Punched Card Machines; Epicentres.

7101. RABBITT, Mary Collins, "Earthquake Notes", Vol. 20, No. 3, pp. 21-28, Washington, March, 1949.

The above periodical is the organ of the Eastern Section of the Seismological Society of America. The issue listed contains: Annual Meeting of the Eastern Section, A Survey of Microseismic Activity; Progress of Investigation of Two-second Microseisms at the Tripartite Station at Fordham University; The University of California Seismograph Stations; Ann Arbor Seismograph Station; University of Washington Seismograph Station; Notes; U.S. Coast and Geodetic Survey 1948 Seismological Code for International Use; Epicentres.

7102. RAMIREZ, J. Emilio, S.J., "The Pasto, Colombia, Earthquake of July 14, 1947", *Bulletin, Seismological Society of America*, Vol. 38, No. 4, 247-256, 8 fig., 1 tab., Berkeley, Oct., 1948.

7103. REPETTI, W. C., S.J., "The Manila Observatory, Manila, Philippines", 43 pp., Washington, D.C., 1948.

7104. RICE, R. B., "A Discussion of Steep-dip Seismic Computing Methods", *Geophysics*, Vol. XIV, No. 2, 109-122, 5 fig., Menasha, April, 1949.

— RICHTER, C. F., and CHAKRABARTY, S. K., "The Walker Pass Earthquakes and Structure of the Southern Sierra Nevada". See No. 7017 of this list.

— RICHTER, C. F., and GUTENBERG, B., "Deep-focus Earthquakes in the Mediterranean Region". See No. 7039 of this list.

— RICHTER, C. F., and GUTENBERG, B., "Erdbebengeographie und Dynamik der Erdkruste". See No. 7044 of this list.

7105. RICHTER, C. F., and NORDQUIST, J. M., "Minimal Recorded Earthquakes", *Bulletin, Seismological Society of America*, Vol. 38, No. 4, 257-261, 1 fig., 4 tab., Berkeley, 1948.

7106. RICKER, Norman, "Attenuations and Amplitudes of Seismic Waves", *Transactions, American Geophysical Union*, Vol. 30, No. 2, 184-186, 3 fig., bib., Washington, April, 1949.

7107. ROTHÉ, J. P., "Tremblements de terre et anomalies magnétiques", *Geofisica Pura e Applicata*, Vol. 11, 134-144, 5 fig., bib., Messina, 1948.

7108. RYERSON, Knowles A., "The Seventh Pacific Science Congress", *Science*, No. 2839, Vol. 109, 529-533, New York, May 27, 1949.

7109. SCHOLTE, J. G., "On the Large Displacements Commonly Regarded as Caused by Love-waves and Similar Dispersive Surface Waves", *Proceedings Kon. Ned. Akademie Wetenschappen*, Vol. 51, No. 3, 969-976, Amsterdam, Oct., 1948.

J. F. S.

7110. SCIENCE NEWS LETTER.

Articles of interest have appeared in recent issues of Vol. 55 (Washington, 1949), as follows:

- (1) "Hawaii's Volcano Harmless", No. 4, p. 63, Jan. 22.

- SCOTT, Keith, and LINEHAN, Daniel, S.J., "Seismic Reconnaissance for Ground-water Development". See No. 7072 of this list.
7111. SEIWELL, H. R., and WADSWORTH, George P., "A New Development in Ocean Wave Research", *Science*, No. 2829, Vol. 109, 271-274, 6 fig., bib., Washington, March 18, 1949.
7112. SHEPARD, Francis P., "Submarine Canyons", *Scientific American*, Vol. 180, No. 4, p. 40-43, 3 fig., New York, April, 1949.
7113. SIEBERG, A., "Processi meccanici nella distruzione degli edifici per azioni sismiche", *Geofisica Pura e Applicata*, Vol. 3, No. 3, 125-141, 13 fig., bib., Messina, 1941.
- SIMPSON, F. W., and NORTHWOOD, T. D., "Depth Measurements in the Seward Ice Field by Sonic Echo-Ranging". See No. 7089 of this list.
- SNAVELY, Benj. L., PERKINS, Beauregard, and DOBRIN, Milton B., "Subsurface Constitution of Bikini Atoll as Indicated by a Seismic-refraction Survey". See No. 7025 of this list.
- STEPHEN, J. H., GANE, P. G., and LOGIE, H. J., "Triggered Telerecording Seismic Equipment". See No. 7031 of this list.
7114. STONELEY, Robert, "The Seismological Implications of Aeolotrophy in Continental Structure", *Monthly Notices of the Royal Astronomical Society*, Geophysical Supplement, Vol. 5, No. 8, 343-353, bib., London, March, 1949.
7115. STONELEY, Robert, "The Continental Layers of Europe", *Bulletin, Seismological Society of America*, Vol. 38, No. 4, 263-274, bib., Berkeley, Oct., 1948.
7116. SWAN, B. G., "Index of Wells Shot for Velocity", *Geophysics*, Vol. 14, No. 1, 58-66, 1 tab., Menasha, Jan., 1949.
7117. THOMSEN, Harry L., and BURTON, Gerald A., "Winter Operation of Geophysical Equipment in the Rocky Mountain Area", *Geophysics*, Vol. 14, No. 1, 10-16, 3 fig., Menasha, Jan., 1949.
7118. TIENSTRA, J. M., "The Foundation of the Calculus of Observations and the Method of Least Squares", *Bulletin Geodésique*, No. 10, 289-306, 5 fig., Paris, Oct., 1948.
7119. TILLOTSON, Ernest, "Seismology in Great Britain", *Nature*, No. 4143, Vol. 163, 500-501, 1 tab., London, March 26, 1949.
7120. TSUBOI, Chuji, "Frequency Distribution of P-S Duration Times in Relation to Geographical Distribution of Earthquake Origins", *Geophysical Notes*, No. 41, 8 pp., 4 fig., 1 tab., bib., Tokyo, 1948.
7121. ULRICH, Franklin P., "Progress Report of the Seismological Work by the United States Coast and Geodetic Survey in the Western United States During 1947", *Bulletin, Seismological Society of America*, Vol. 38, No. 4, 275-288, 4 fig., 2 tab., Berkeley, Oct., 1948.

7122. VAJK, Raoul, "Geophysical Developments in Europe During the War", *Geophysics*, Vol. XIV, No. 2, 101-108, 1 map, 1 tab., bib., Menasha, April, 1949.
7123. VELDKAMP, J., "De Ontplaffing op Helgoland en de Structuur van de Aardkrust in N.W. Europa", *Tijdschrift v. h. Kon. Ned. Aardrijkskundig Genootschap*, Vol. 66, No. 2, 150-161, Leiden, March, 1949.
7124. VOIGT, Dorothy Stanley, and BYERLY, Perry, "The Intensity of Earthquakes as Rated from Questionnaires", *Bulletin, Seismological Society of America*, Vol. 39, No. 1, 21-26, 3 tab., Berkeley, Jan., 1949.
- WADSWORTH, George P., and SEIWELL, H. R., "A New Development in Ocean Wave Research". See No. 7111 of this list.
7125. WALLACE, Robert E., "Structure of a Portion of the San Andreas Rift in Southern California", *Bulletin, Geological Society of America*, Vol. 60, No. 4, 781-806, 3 fig., 1 tab., 1 map, bib., New York, April, 1949.
7126. WANNER, E., "Über den Tiefgang der Alpenfaltung", *Eclogae Geologicae Helvetiae*, Vol. 41, No. 1, 125-134, 3 fig., 6 tab., bib., Basel, 1948.
7127. WANNER, E., "Erdbebengeräusche", *Geofisica Pura e Applicata*, Vol. 11, 127-129, 2 fig., Messina, 1948.
- WERNER, F. H., and CARDER, D. S., "Seismograph Station near Hungry Horse Dam, Montana". See No. 7015 of this list.
- WILSON, James T., "Ann Arbor Seismograph Station", *Earthquake Notes*. See No. 7101 of this list.
7128. WOLFE, C. W., "The Blister Hypothesis", *Scientific American*, Vol. 180, No. 6, 16-21, 3 fig., New York, June, 1949.
- WOODHEAD, D. W., CYBULSKI, W. B., and PAYMAN, W., "Explosive Waves and Shock Waves. VII. The Velocity of Detonation in Cast T.N.T.". See No. 7020 of this list.
7129. YOSHIDA, Koso, "On the Partial Reflection of Long Waves", *Geophysical Notes*, No. 31, 14 pp., 3 fig., Tokyo, 1948.
7130. ZANON, Francesco S.,
 (1) "Microsismi prodotti da urti", *Geofisica Pura e Applicata*, Vol. 4, No. 2-3, 97-102, 2 fig., Messina, 1942.
 (2) "Microsismi meteorici", *Ibid.*, Vol. 11, No. 5-6, 200-209, bib., 1948.
7131. Kawasumi, Hiroshi, "Seismology in Japan 1939-1947", *Earthquake Research Institute*, Tokyo, 1948.

The following list of papers was assembled by Kawasumi. It is a complete bibliography of Japanese seismological works from 1939. It is printed here, with the permission of the authors and the U.S. Geological Survey in order that this Bibliography may be as complete as possible. The manuscript accompanying the bibliography will be published in a forthcoming issue of the Bulletin of the Seismological Society of America.

Papers from the Central Meteorological Observatory and its substations.

In *Geophysical Magazine* published by the same Observatory.

1939. Vol. 12.

S. Syono: "On the Propagation of Tremors over the Plane Surface of a Semi-infinite Perfect Elastic Solid (II)".

H. Honda and H. Ito: "On the Period of the P-waves and the Magnitude of the Earthquake".

M. Morita and Y. Yosimura: "On Seismic Waves at Large Distances. (A study of the north Chile Earthquake of February 23, 1933. Part I. Travel times.)"

In the "*Kensin Ziho*" (*Seismometrical Journal*, in Japanese language).

1940 Vol. 11.

H. Honda and H. Ito: "The Deep-seated Earthquake of April 21, 1939, that Originated in the Northern Part of the Japan Sea. (ScS and the Rigidity of the Earth's Central Core. 3rd paper.)"

H. Ito: "The Deep-seated Earthquake of April 21, 1939 that Originated in the Northern Part of the Japan Sea".

M. Morita: "The Distribution of the Amplitudes of Bodily Waves of Distant Earthquakes. (On the anomalous zone in the magnitude of teleseismic motion. 2nd paper.)"

H. Honda and A. Masatuka: "On the Seismogenic Stress Working Within the Earth's Crust in Japan and Her Vicinity".

K. Sagisaka: "On the Deep-seated Earthquake of April 15, 1935, that Originated near Takayama, Gifu Prefecture".

Kisawa: "On the Reflection and Refraction of Seismic Waves at the Surface of the Earth's Inner Core".

K. Soeda: "On the Deformation of Semi-infinite Elastic Body due to some Internal Nuclei of Strain".

1941 Vol. 11.

T. Hirono: "On the Visco-elastic Waves (3rd paper)".

S. Homma: "On the Method of Study on the Mechanism of Occurrence of Deep-seated Earthquakes. (Preliminary report.)"

S. Homma: "On the Effect of the Surface Layer on the Amplitude of P-wave in Near Earthquakes".

T. Hirono: "On the Subsidence of Soft Ground due to Surface Loading".

Kizawa: "Study on the Chilean Earthquake of Jan. 25, 1939".

A. Masatuka: "On the Relation between the First Impulsion of P-wave together with the Seismographic Type and the Position of the Epicentre of the Felt Earthquakes in Tokyo".

T. Kadowaki: "On the Deformation of Semi-infinite Elastic Solid due to Temperature Variation".

1942. Vol. 12.

T. Hirono: "On the Propagation of Elastic Waves due to Periodic Forces Operating at the Surface of a Semi-infinite Elastic Solid".

S. Homma: "Effect of the Topography on the Surface Vibration of Ground".

S. Homma: "On a Method of Deducing the Depth of the Vertex of a Seismic Ray".

H. Takagi: "The Vibration of Tsunami Waves at the Continental Shelf".

Z. Kawase: "Study on Microseisms. (1) (Microseisms at Taihoku.)"

S. Homma: "On the Rayleigh Wave in the Horizontally Isotropic Elastic Body".

S. Homma: "On the Initial Value Problem of Elastic Waves".

K. Soeda: "On the Deformation of Semi-infinite Elastic Body due to some Internal Nuclei of Strain. (Supplement.)"

K. Soeda: "On the Deformation of Stratified Semi-infinite Solid due to Surface Statical Forces".

T. Hirono, K. Soeda, and S. Homma: "On the Resonance Phenomena of Vibrating Bodies".

S. Homma: "Two Problems in the Calibration of Instrumental Constants of Seismographs".

S. Homma: "Summary of the Seismic Observations in Philippine Islands".

In the "*Tōkyō-Kisyō-dai Himitsu Hōkoku*" (*Private Meteorological Report of the Central Meteorological Observatory.*) (In Japanese language.)

K. Sagisaka, S. Homma, Y. Homma, H. Takagi, K. Soeda, and A. Masatuka: "On the Microseisms Caused by Typhoons".

In the "*Tyūō-Kisyōdai Kenkyū Sokuhō*" (*the Provisional Research Report of the Central Meteorological Observatory.* In Japanese language).

S. Homma: "On the Relation of the Vertical Structure in the Ground and the Force of Gravity on the Surface".

S. Homma: "On the Rayleigh Wave Having Two Modes in the Stratified Semi-infinite Elastic Solid".

"Report of the Tōnankai Earthquake of Dec. 7, 1944".

"Report of the Nankai Earthquake of Dec. 21, 1946".

Both published by the Central Meteorological Observatory in Japanese language.

In the "*Kisyō Syūsi*" (*the Journal of the Meteorological Society of Japan*).

1939. 11 Series, Vol. 17.

S. Homma: "On Rayleigh Waves and Stoneley Waves".

1940. Vol. 18.

S. Homma: "On the Love-waves in Heterogeneous Elastic Solid".

1940. Vol. 19.

S. Homma: "On a Numerical Solution of Wave Equation in Elastic Medium Similar to the Method of Y. Takahasi for the Problem of Heat Conduction".

Papers Published in the *Bulletin of the Earthquake Research Institute* Vol. XVII.

PART 1—March, 1939.

K. Sezawa and K. Kanai, "The Range of Possible Existence of Stoneley-waves, and Some Related Problems" (in English).

K. Sezawa and K. Kanai, "Damping of Periodic Visco-Elastic Waves with Increase in Focal Distance. II." (In English.)

K. Sezawa and K. Kanai, "A Contribution to the Tidal Theory of the Origin of the Solar Planets" (in English).

- K. Kanai, "Model Experiments for Confirming the Dissipation Phenomena (Scattering) in the Seismic Vibration of a Structure" (in English).
- K. Iida, "Forced Shearing Vibrations of a Structure. Part I". (In English.)
- K. Iida, "Elastic and Viscous Properties of a Certain Kind of Rock" (in English).
- K. Iida, "Determining Young's Modulus and the Solid Viscosity. Coefficients of Rocks by the Vibration Method" (in English).
- T. Nagata, "Geophysical Studies of Volcano Mihara, Oosima Island. V. Torsion Balance Survey on Mt. Mihara. Part I". (In English.)
- G. Imamura and T. Sekiguti, "Elevated Shorelines and Precise Levellings in Determining the Gradients of Crustal Deformation" (in English).
- N. Miyabe, "Vertical Displacements in Regions Markedly Deformed" (in English).
- T. Hagiwara and S. Omote, "Land Creep at Mt. Tyausu-yama. (Determination of Slip Plane by Seismic Prospecting.)" (In English.)
- T. Hagiwara and S. Omote, "Comparative Observations of Acceleration of Earthquake Motions in the Compound of the Tokyo Imperial University. Part II" (in Japanese).
- M. Isimoto, K. Iida et Z. Kinoshita, "Construction d'un microsismographe mécanique pour la composante verticale" (en Français).
- T. Saita, "Experiments in the Vibration and Destruction of a Wooden Dwelling House" (in Japanese).
- Y. Ôtuka, "On the Earthquakes that occurred in November, 1938, on the Pacific Coast of Northeastern Japan" (in Japanese).

PART 2—June, 1939

- K. Sezawa and K. Kanai, "The Requisite Condition for Rayleigh-waves for Transmission through an Inner Stratum of the Earth" (in English).
- K. Sezawa and K. Kanai, "Microseisms Caused by Transmission of Atmospheric Disturbances. Part I" (in English).
- K. Sezawa and K. Kanai, "On the Packet Velocity of Dispersive Elastic Waves of Irregular Form" (in English).
- K. Kanai, "Theory of the Aseismic Properties of the Brace Strut (sudikai) in a Japanese-style Building. Part I" (in English).
- G. Nisimura and T. Takayama, "The Vibration due to an Obliquely Incident Longitudinal Wave of Harmonic Type of a Surface Stratum Adhering Closely to the Subjacent Medium, and the Properties of its Resonance Conditions". (Second Paper. In English.)
- G. Nisimura and T. Takayama, "Vibrations due to Obliquely Incident Longitudinal Waves of Shock Type of a Surface-Layer of an Elastic Earth's Crust (I)". (In English.)
- G. Nisimura and T. Takayama, "Stationary Vibrations due to an Obliquely Incident Transversal Wave of Harmonic Type of the Surface-layer of an Elastic Earth's Crust (First Paper)". (In English.)
- C. Tsuboi, "Relation between the Gravity Anomalies and the Corresponding Subterranean Mass Distribution (III)". (In English.)
- C. Tsuboi, T. Kaneko, S. Miyamura, and T. Yabasi, "Relation between the Gravity Anomalies and the Corresponding Subterranean Mass Distribution (IV). Isostasy in the United States of America" (in English).
- T. Nagata, "A 'Free-Air' Reduction of Local Magnetic Anomalies" (in English).
- M. Hayakawa, "The Most Suitable Formula for Gravity Values in Tyōsen, Japan" (in English).

S. Yamaguti, "The Structure of the Earth's Crust near the Japan Trench, off Sanriku, and also near the Inland Sea of Japan" (in English).

M. Ishimoto et K. Iida, "Observations sur les séismes enregistrés par le micro-sismographe construit dernièrement (I)". (In Japanese.)

Y. Ōtuka, "Tectonic Classification of the Japanese Islands as referred to their Cainozoic History (I)". (In English.)

H. Tsuya, "Mineralogical and Chemical Composition of the Kantō Loam from Turumi, Yokohama" (in English).

H. Tsuya, "Geological Observations of the Landslide Scar of 1938 on Mt. Tsukuba, with an Interpretation of the Structural Relation between the Gabbro and the Granite of the Mountain" (in Japanese).

K. Sezawa and K. Kanai, "Temperature Distribution within the Earth in its Semi-gaseous State" (in English).

K. Sezawa and K. Kanai, "The Formation of Boundary Waves at the Surface of a Discontinuity within the Earth's Crust (II)". (In English.)

K. Sezawa and K. Kanai, "Microseisms Caused by Transmission of Atmospheric Disturbances. II" (in English).

K. Kanai, "Theory of the Aseismic Properties of the Brace Strut (Sudikai) in a Japanese-style Building. Part II" (in English).

K. Kanai, "Theory of the Aseismic Properties of the Brace Strut (Sudikai) in a Japanese-style Building. Part III. The Effect of Wave Scattering (Dissipation)." (In English).

R. Takahasi, "Results of Continuous Observations on the Length of a Base-line at Komaba, Tokyo" (in Japanese).

T. Minakami, "Explosive Activities of Volcano Kusatu-Sirano during 1937 and 1938 (Part I.)" (In English.)

T. Matuzawa and K. Sato, "Bestätigung der Existenz der langperiodischen Schwingungen dei grossen Erdbeben" (in Deutschen).

T. Hagiwara, "The Ogasima Earthquake of May 1st, 1939" (in Japanese).

N. Miyabe and R. Takei, "The Deformation of the Earth's Surface that Accompanied the Ogasima Earthquake of May 1st, 1939" (in Japanese).

Y. Ōtuka, "On the Earthquake Fissures that Occurred on May 1st, 1939, in the Ogasima Region, Akita Prefecture, Japan" (in Japanese).

PART 4—December, 1939

K. Sezawa, "The Plasticity Conditions Requisite for the Formation of Normal and Reverse Faults" (in English).

K. Sezawa and K. Kanai, "Temperature Distribution within a Semi-gaseous Earth. Part II" (in English).

K. Sezawa and K. Kanai, "On Shallow Water Waves Transmitted in the Direction Parallel to a Sea Coast, with Special Reference to Love-waves in Heterogeneous Media" (in English).

K. Kanai, "Theory of the Aseismic Properties of the Brace Strut (Sudekai) in a Japanese-style Building. Part IV. The effect of Material Inner Damping" (in English).

K. Kanai, "Theory of the Aseismic Properties of the Brace Strut (Sudekai) in a Japanese-style Building. Part V. Model Experiment Confirmation" (in English).

N. Miyabe, "Variation in the Rate of Subsidence of the Earth's Surface in Tokyo" (in Japanese).

F. Kishinouye and K. Iida, "The Tsunami that accompanied the Oga Earthquake of May 1st, 1930" (in English).

K. Iida, "Observations sur les séismes enregistrés par le microséismographe construit dernièrement (2)". (In Japanese).

K. Iida, "Velocity of Elastic Waves in a Granular Substance" (in English).

H. Tsuya, "On the Form and Structure of Volcanic Bombs, with Special Reference to the Origin of the Basaltic Bombs from Volcano Huji (Fuji)". (In Japanese).

"Results of Recent Precise Levelling along the line, Zentuzi-Koti, Sikoku."

VOL. XVIII. PART 1—March, 1940.

K. Sezawa and K. Kanai, "Dispersive Rayleigh-waves of Positive or Negative Orbital Motion, and Allied Problems" (in English).

K. Sezawa and K. Kanai, "The Plasticity Conditions for the Formation of Normal and Reverse Faults. II" (in English).

K. Sezawa and K. Kanai, "Temperature Distribution within a Semi-gaseous Earth. Part II" (in English).

R. Yosiyama, "Elastic Waves from a Point in an Isotropic Heterogeneous Sphere. Part II" (in English).

N. Miyabe, "Studies in the Sinking of the Earth's Surface in Tokyo, IV. Periodic Movements of the Ground in Hukagawa, Tokyo" (in Japanese).

K. Iida, "Sur l'élasticité et la contraction du sol à Maru-no-uti, Tokyo" (in Japanese).

T. Nagata, "Some Physical Properties of the Lavas of Volcanoes Asama and Mihara. II. Magnetic Susceptibility" (in English).

PART 2—June, 1940

K. Sezawa and K. Kanai, "The Effect of Distribution of Heat-generating Source on the Temperature Gradient in the Earth's Crust" (in English).

K. Sezawa and K. Kanai, "The Action of Soil Layers and of the Ocean as Dynamic Dampers to Seismic Surface Waves, and Notes on a Few Previous Papers" (in English).

K. Sezawa and K. Kanai, "Viscosity Distribution within the Earth. Preliminary Notes" (in English).

T. Minakami, "Magnetic Surveys of Volcano Asama. Part 2" (in English).

T. Hagiwara, "The Ogasima Earthquake and its Aftershock" (in English).

T. Matuzawa, M. Hayakawa, Y. Hattori, T. Kaneko und S. Miyamura, "Erdbebenhaurigkeit in Bezug auf die Stellung der Sonne und des Mondes" (in Deutschen).

T. Nagata, "On the Natural Remanent Magnetization of the Lava composing the Central Cone of Volcano Mihara" (in English).

N. Nasu, "Studies on the Propagation of an Artificial Earthquake Wave through Superficial Soil or Sand Layers, and the Elasticity of Soil and Sand. III" (in Japanese).

T. Hagiwara and S. Omote, "Seismic Prospecting on a Sea Bottom" (in English).

H. Tsuya and T. Nubajanum, "Nubir Activity of Volcano Sakurazima in October, 1939" (in Japanese).

S. Iziri, "On the 'Itoigawa-Sizouka tectonic line' in the Minamikoma district, Yamanasi Prefecture, Japan" (in Japanese).

PART 3—September, 1940

K. Sezawa and K. Kanai, "Dynamical Absorption of the Energy of Rayleigh-waves and Love-waves by Weak Surface Layers" (in English).

K. Sezawa and K. Kanai, "Thermodynamical Origin of the Earth's Core. I" (in English).

K. Kanai and K. Sezawa, "Effect of Distribution of Masses in a Rahme Floor on Seismic Structural Vibration, and Model Experimental Confirmations of that Effect With a New Vibration Table" (in English).

C. Tsuboi, "Relation between the Gravity Anomalies and the Corresponding Subterranean Mass Distribution. (V) Isostatic Anomalies and the Undulation of the Isostatic Geoid in the United States of America" (in English).

K. Kishinoue, "The Unusually Large Microseisms of Oct. 21, 1938, at Hongo, Tokyo" (in English).

H. Tsuya, "Geological and Petrological Studies of Volcano Huzi (Fuji) III. 3. Geology of the Southwestern Foot of Volcano Huzi" (in Japanese).

T. Saita, "The Great Chilean Earthquake of January 24, 1939" (in Japanese).

"The Results of Precise Level, along the line from Sibata to Taira, the line in the neighbourhood of Taira, and the line that crosses Mt. Asama" (in Japanese).

PART 4—December, 1940

K. Sezawa and K. Kanai, "A Fault Surface or a Block Absorbs Seismic Wave Energy" (in English).

K. Kanai and K. Sezawa, "On the Problem of Instabilities of Higher Orders in a Seismometer. I" (in English).

N. Miyabe, "Studies in the Sinking of the Earth's Surface in Tokyo. V." (in Japanese).

F. Kishinouye, "A Supplement to A. W. Lee's paper—'A World-wide Survey of Microseismic Disturbances recorded during January, 1930'" (in English).

K. Iida, "Grands séismographes accélérométriques d'une tonne pour les composantes horizontales et verticales; leur construction et leurs enregistrements" (en français).

K. Iida, "Sur les caractéristiques des ondes séismiques d'après mes observations à l'aide des grands séismographes accélérométriques d'un tome" (en français).

K. Iida, "Observations sur les séismes enregistrés par le microséismographe (3): A. Intensité et distribution d'espèce des séismes d'après les observations à Mitaka, Tokyo. B. Comparaison entre les séismes à Mitaka et ceux observés à Hongo, Tokyo" (en japonais).

L. Ooda, "The Elastic Properties of Soil, Particularly in Relation to its Water Content" (in English).

T. Saita, "The Earthquake-proof Building in the Site of the Hikone Castle" (in Japanese).

T. Saita, "The Earthquake-proof Buildings in the Kyōto Imperial Palace" (in Japanese).

VOL. XIX

PART 1—March, 1941

K. Sezawa and K. Kanai, "Thermodynamical Origin of the Earth's Core. II" (in English).

K. Kanai and K. Sezawa, "On the Problem of Instabilities of Higher Orders in a Seismometer. II" (in English).

K. Sezawa and K. Kanai, "Viscosity Distribution within the Earth. II. On the Shadow Zone for Seismic Waves" (in English).

C. Tsuboi and S. Yamaguti, "Relation between the Gravity Anomalies and the Corresponding Subterranean Mass Distribution. VI" (in English).

S. Yamaguti, "In the Change in the Heights of the Monthly Mean Sea-level at Aburatube and Hosozima" (in English).

T. Nagata, "The Mode of Causation of Thermo-Remanent Magnetism in Igneous Rocks. Preliminary Note" (in English).

R. Takahasi and K. Hirono, "Changes in the Vertical Intensity of Geomagnetism that Accompanied the Eruption of Miyakezima, in 1940" (in English).

N. Miyabe, "Tsunami Associated with the Earthquake of August 2, 1940" (in Japanese).

Y. Ōtuka, "Geology of Mt. Zizō and Hōō, Yamanasi Prefecture. Japan" (in Japanese).

H. Kuno, "Characteristics of Deposits Formed by Pumice Flows and Those by Ejected Pumice" (in English).

PART 2—June, 1941

K. Sezawa and K. Kanai, "Transmission of Arbitrary Elastic Waves from a Spherical Source, Solved with Operational Calculus. I" (in English).

K. Sezawa and K. Kanai, "On the Initial Movement of a Seismograph Subjected to an Arbitrary Earthquake Motion, Solved with Operational Calculus. I" (in English).

K. Kanai and K. Sezawa, "On the Problem of Instabilities of Higher Orders in a Seismometer. III. Experiments with a New Vertical Vibration Table" (in English).

R. Yosiyama, "Elastic Waves from a Point in an Isotropic Heterogeneous Sphere. Part 3" (in English).

T. Saita and H. Matuo, "Earthquake Vibration on Quays and on Reclaimed Ground in the Harbour of Yokohama" (in Japanese).

T. Hagiwara, "Observation of Changes in the Inclination of the Earth's Surface at Mt. Tukuba" (Second Report, in English).

N. Miyabe, "Upward Deformation of the Land in Tyugoku" (in English).

N. Miyabe, "Secular Changes in the Heights of Yearly Mean Sea-Level at Japan" (in English).

N. Miyabe and S. Hukunisi, "Results of Releveling in Tōkyō in 1940" (in Japanese).

H. Tsuya, R. Takahasi, T. Hagiwara, T. Minakami, T. Nagata, S. Omote and K. Hirano, "The Eruption of Miyake-sima, One of the Seven Isu Islands, in 1940" (in English).

T. Nagata, "A Geomagnetic Island Study of the Minor Activities of Volcano Mihara, Oosima Island, August 1940" (in English).

T. Matuzawa, "Über die empirische Formel von Ishimoto und Iida zwischen der Ebenhäufigkeit und der Amplitude" (in Deutschen).

PART 3—September, 1941

K. Sezawa and K. Kanai, "Transmission of Arbitrary Elastic Waves from a Spherical Source, Solved with Operational Calculus, II" (in English).

K. Sezawa and K. Kanai, "On the Initial Movement of a Seismograph Subjected to an Arbitrary Earthquake Motion, Solved with Operational Calculus. II" (in English).

C. Tsuboi, "A Problem of Weighted Mean" (in English).

N. Nasu and C. Yasuda, "Recent Earthquakes of the Kwantō District" (in English).

H. Tsuya, "The Eruption of Miyake-sima, One of the Seven Izu Islands, in 1940. Geological Observations of the Miyake-sima Eruption of 1940. II" (in English).

T. Hagiwara, "A New Device for Remote Mechanical Recording of Slow Movements" (in English).

R. Takahasi and K. Hirano, "A New Horizontal Component Seismograph for Comparison Observations" (in Japanese).

R. Takahasi and K. Hirano, "Seismic Vibrations of Soft Ground" (in Japanese).
"Results of Re-triangulation in Miyake-sima" (in Japanese).

K. Sezawa and K. Kanai, "On the Propagation of Rayleigh-waves in Dispersive Elastic Media" (in English).

K. Kanai, "The Seismic Vibration of a Saw-tooth Roof Structure" (in English).

C. Tsuboi, "Secular Deformations of the Base Line Rhombus at Mitaka in Relation to Seismic Activities in its Vicinity" (in English).

T. Nagata, "Measurement of Changes in Magnetic Susceptibility of Igneous Rocks with Temperature in a Weak Magnetic Field" (in English).

H. Tsuya, "On the Form and Structure of Volcanic Bombs from Volcano Miyake-sima" (in English).

T. Minakami, "Magnetization of the New Lava-Flows of Miyakesima Island" (in English).

S. Omote, "The Third Topographic Survey of the New Parasitic Cones and the New Lava Flow of Miyake-sima Island" (in English).

F. Kishinouye, T. Nagata and S. Miyamura, "A Statistical Investigation of the Strong Earthquake of July 15, 1941. Near Nagano" (in Japanese).

K. Kanai, "On the Damage to Buildings in the Nagano Earthquake of July 15, 1941" (in Japanese).

T. Saita, "The Peculiarities of Dwelling House Construction and the Earthquake Damages in Zenkōji Plain, Nagano Prefecture" (in Japanese).

Military Land Survey, "Results of Revisions of Triangulation and Levelling in the Neighbourhood of Ogasima. Akita Prefecture" (in Japanese).

VOL. XX

PART 1—March, 1942

K. Sezawa and K. Kanai, "Transmission of Arbitrary Elastic Waves from a Spherical Source, Solved with Operational Calculus. III" (in English).

T. Matuzawa, "Tempersturverlauf an der Bodenoberffache und der Spannungs zustand in der Erdkruste" (im Deutschen).

C. Tsuboi, "Relations Between Gravity Anomalies and the Surrounding Subterranean Mass Distribution (VII)" (in Japanese).

T. Minakami, "Mean Density of Volcano Asama" (in English).

- T. Minakami, "On the Distribution of Volcanic Ejecta. (Part I.) The Distributions of Volcanic Bombs ejected by the Recent Explosions of Asama" (in English).
- T. Minakami, "On the Distribution of Volcanic Ejecta. (Part II.) The Distribution of Mt. Asama Pumice in 1783" (in English).
- T. Nagata, "A Note on Regional Anomaly and Secular Variation in Geomagnetism" (in English).
- S. Yamaguti, "On the Changes in the Heights of the Monthly Mean Sea-level at Aburatube and Hosozima. A Supplementary Note" (in English).
- S. Omote, "Crustal deformations in Miyake-sima Island that Accompanied the Volcanic Activities in 1940" (in English).
- N. Miyabe, "Notes on Crustal Deformations in Miyake-sima" (in English).
- H. Tsuya, "Secondary Melting of Basaltic Ejecta by Volcanic Exhalations" (in Japanese).
- T. Matuzawa, "Seismometrische Untersuchungen des Erdbebens von 2. März 1933. IV. Raumverteilung der Wellenstrahlung aus dem Herd" (in Deutschen).
- N. Miyabe and Y. Inaba, "A Mechanical Property of Soil" (in Japanese).
- T. Nagata, "The Mode of Development of Thermo-Remanent Magnetism in Igneous Rocks. II" (in English).
- F. Kishinouye, "A Portable Horizontal Tromometer" (in Japanese).
- K. Kanai and K. Sezawa, "A Vibration Table with Simultaneous Horizontal and Vertical Motions" (in Japanese).
- N. Nasu, "Seismic Exploration of River Deposits" (in English).
- N. Nasu, "A Note on Seismic Prospecting in Coal Fields" (in English).
- R. Takei, "Results of Releveling in the Neighbourhood of Nagano" (in Japanese).

PART 2—June, 1942

- K. Sezawa and K. Kanai, "The Effect of Cooling on a Plastic Earth under Gravitational Forces. III" (in Japanese).
- K. Sezawa and K. Kanai, "On the Transmission of Tsunamis in a Sea of any Depth" (in Japanese).
- T. Matuzawa, "Der Temperaturverlauf an der Bodeneberfläche und der Spannungszustand in der Erdkruste. II. Verzerrung in drei Dimensionen" (in Deutschen).
- N. Nasu, "Propagation of Seismic Waves Through an Intervening Bed to Slow Speed" (in Japanese).
- F. Kishinouye, "Experiments with Elastic Waves in the Ground. I" (in Japanese).
- C. Tsuboi, and S. Miyamura, "Direkte Messungen der Verbiegung eines hölzernen Gebäudes beim Beben" (in Japanese).

PART 3—September, 1942

- C. Tsuboi, S. Miyamura und T. Kuwabara, "Eie erdmagnetische Störung und das Mondalter" (in Japanese).
- H. Tsuya, "Notes on the Asigara Beds" (in Japanese).
- H. Tsuya, "Note on the West Wing of the Kannawa Thrust-Fault" (in Japanese).
- T. Hagiwara, "A Note on the Theory of the Vertical Motion Seismograph" (in English).
- K. Kanai "Three-dimensional Vibrations of a Framed Structure. II" (in Japanese).
- T. Saita, "The Development of the Collapse of Lake Hamana" (in Japanese).

PART 4—December, 1942

R. Takahashi, "On Seismic Sea Waves Caused by Deformations of the Sea Bottom" (in Japanese).

S. Nagahara, "Deformation of an Elastic Body under the Influence of a Gravitational Field" (in Japanese).

C. Tsuboi, "Schwereanomalien und unterirdische Massenverteilung. (VIII) Mechanismus der Isostasie" (in Japanese).

T. Minakami, "On Volcanic Activities and Tilting of the Earth's Surface" (in English).

T. Minakami, K. Matusita and S. Utibori, "Explosive Activities of Volcano Kusatu-Sirane during 1938 and 1942. Part II" (in English).

S. Iziri, "On Some Stratigraphical Problems in the Geology of the Iisaka District, Hukusima Prefecture, North-eastern Japan" (in Japanese).

K. Kanai, "Vibration Experiments with an Actual Wooden Building Conducted with a View to Confirming the Aseismic Properties of the Brace-struts (Sudikai) and the Principal Column (Daikoku-basira)" (in Japanese).

VOL. XXI

PART 1—March, 1943

T. Nagata, "The Natural Remanent Magnetism of Volcanic Rocks and Its Relation to Geomagnetic Phenomena" (in English).

S. Miyamura, "Vermessung eines Teiles von Nivellieroute am Fluss Yeneshire" (in Japanese).

K. Kanai, "Vibration Experiments with an Actual Wooden Building Conducted with a view to Confirming the Seismic Properties of the Brace-struts (Sudikai) and the Principal Column (Daikoku-basira). Supplementary Notes" (in Japanese).

S. Miyamura, "Verbiegung eines Hölzernen Gebäudes beim Erdbeben (Zweite Mittrilung) (in Japanese)".

PART 2—June, 1943

T. Matuzawa, "Elastische Wellen in einem anistropen Medium" (in Deutschen).

C. Tsuboi, "Dependence on Amplitude of the Oscillation Period of Gravity Pendulums" (in Japanese).

T. Hagiwara and S. Omote, "Some Investigations on the Crustal Deformations at the Foot of Mt. Huzi". Part I (in Japanese).

T. Nagata, K. Akasi and T. Rikitake, "The Natural Remanent Magnetism of Sedimentary Rocks. Preliminary Note" (in English).

F. Kishinouye, "Studies on Lake-Ice" (in Japanese).

K. Kanai, "The Effect of the Tenons (Hoze) on the Vibrations in a Japanese Style Building" (in Japanese).

S. Kawada, "Untersuchung des neuen Sees Gebildet infolge des Erdbebens von Jahre 1941 in Taiwan (Formosa)" (in Japanese).

PARTS 3 AND 4—September—December, 1943

R. Takahashi, "Transmission and Reflexion of Tunami Waves at Sea Ridges and Continental Shelves" (in Japanese).

N. Miyabe and S. Hukunisi, "Studies in the Sinking in Tokyo. VII. Results of Relevelling in 1942" (in Japanese).

S. Yamaguti, "On the Changes in the Heights of the Monthly Mean Sea-level at Aburatube, Hosozima, Wazima, and Oayore" (in Japanese).

- T. Nagata, "The Magnetic Hysteresis Curve of Volcanic Rocks" (in Japanese).
- T. Nagata, "Regional Anomaly and Secular Variation in Geomagnetism" (in Japanese).
- H. Tsuya, "Geological and Petrological Studies of Volcano Huzi (Fuji), IV. 4. Structure and Distribution of the Parasitic Volcanoes" (in Japanese).
- Y. Ōtuka, "Geologic Structure of the Western Ibara District, Northeast of Sizouka City" (in Japanese).
- Y. Ōtuka, "Geologic Consideration of the Abnormal Temperature Distribution in the Hot Springs at Atami, Sizouka Prefecture, Japan" (in Japanese).
- S. Omote, "The Tottori Earthquake of March 4, 1943" (in Japanese).
- S. Omote, "On the Coda Waves of the Earthquake Motions. Part I" (in Japanese).

VOL. XXII

PART I—March, 1944

- H. Tsuya, "Geological Observations of the Earthquake Faults (Sikano and Yosioka) of 1943 in Tottori Prefecture" (in Japanese).
- S. Omote, "The Preliminary Report on the Aftershocks of the Tottori Earthquake" (in Japanese).
- T. Minakami, "Microseismic Observation of Tottori Aftershocks" (in Japanese).
- S. Miyamura, "Die zwei Verwerfungen beim Tottori-Beben vom 10. Sept. 1943 und ihre Bewegungen nach dem Beben" (im Japanischen).
- T. Matuzawa, "Über die Verschiebung von Komainu dem Tottori-Gros-beben" (im Japanischen).
- T. Hagiwara, "Movement along the Fault that Appeared in the Tottori Earthquake and the Change in the Inclination of the Earth's Surface" (in Japanese).
- T. Nagata, "Variation in Earth-Current in the Vicinity of the Sikano fault" (in Japanese).
- "Reports of the Precise Levellings in the Tottori District carried out after the Earthquake of 1943" (in Japanese).

PARTS 2-4—June-December, 1944

- T. Matuzawa, "Über die Schaden von Terii beim Erdbeben" (im Japanischen).
- K. Takouti, "Some Problems Concerning the Earth Tide and Latitude Variation" (in Japanese).
- C. Tsuboi, "Die Dichte der unter der Erdkruste liegenden Materie" (im Japanischen).
- T. Minakami, "Variation of Magnetic Declination of Volcano Asama" (in Japanese).
- T. Matuzawa, "Über die Bewegung eines Punktsystems" (im Deutschen).
- S. Omote, "On the Coda Waves of Earthquake Motions." Part 2 (in Japanese).
- F. Kishinouye and K. Iwama, "Propagation of Shock Waves in Soil" (in Japanese).

VOL. XXIII

PARTS 1-4—January-December, 1945

- T. Hagiwara, "On the Periods of the Vibration that is Produced by Superposing Several Simple Harmonic Vibrations of Different Period and Amplitude" (in Japanese).
- R. Takahasi, "On Seismic Sea Waves Caused by Deformations of the Sea Bottom". Second Report (in Japanese).

T. Rikitake, "On the Damping Force of a Magnetic Damper" (in Japanese).

S. Omote, "On the Coda Waves of Earthquake Motions" (in Japanese).

T. Nagata, Y. Harada, and K. Hirao, "The Natural Remanent Magnetism of Sedimentary Rocks". Part II (in Japanese).

F. Kisinouye, "Damages from the Tottori Earthquake on Sept. 10, 1943" (in Japanese).

Papers in the *Special Bulletin of the Earthquake Research Institute*, 1945. No. 4.

Takesi Minakami: "Distribution of the Damage due to the Tonankai Earthquake".

Setumi Miyamura: "General Report on the Study of Earthquake Damages in the Tokai District on Dec. 7, 1944".

Syun'itiro Omote: "On the Tunami Accompanied by the Tōnankai Earthquake of Dec. 7, 1944".

Kiyosi Kanai: "Provisional Report on the Damage of Fuctoeies in Case of the Earthquake that Originated off the Coast of Tōtōmi".

1947. No. 5.

Hiroshi Kawasumi and Yasuo Satō: "General Report of the Nankai Earthquake of Dec. 21, 1946".

Kiyosi Kanai, Teizi Tanaka and Sigeihiko Kaneko: "Provisional Notes on the Damage of Buildings in the Nankai Earthquake of Dec. 21, 1946".

Setumi Miyamura, Hideo Masuda and Syūzō Sakuma: "Seismic Damage in Hyōgo Prefecture, Especially on the Island of Awazi".

Ryūtarō Takahasi: "Provisional Report on the Damage of the Railway in the Western Kii-Ise Line".

Nobuzi Nasu, Tosiaki Sirai, Masazi Kawaima, Syūzō Oouti, Ryūtarō Takahasi, Fuyuhiko Kisimouye, Ryohei Ikegami and Tetou Akima: "General Report on the Tunami that Accompanied the Nankai Earthquake of Dec. 21, 1946 (Tunami in the Wakayama Prefecture)".

Syun'itiro Omote: "Preliminary Note on the Tunami which Attacked the Coast of the Sikoku District".

Fuyuhiko Kishinouye and Ryōhei Ikegami: "Observations of the Tunami in the Wakayama Prefecture in Case of the Nankai Earthquake of Dec. 21, 1946".

Takesi Minakami, Setumi Miyamura and Syūzō Sakuma: "Observation of the Aftershocks at Gobō-mati, Wakayama Prefecture. (Special Notes on the relation between the earthquake motion and the underground.)"

Takahiro Hagiwara, Sadanori Murauti and Zyūhei Yamada: "Observations of Aftershocks at Tomioka-mati, Tokusima Prefecture, and Murote-mati, Kōti Prefecture".

Takesi Nagata and Atusi Okada: "Precise Re-levelling in the Vicinity of Murotozaki. Tilting Motion before and after the Earthquake".

Takahiro Hagiwara and Zyūhei Yamada: "Observations of the Change of the Ground Tilt at Murotozaki by means of Water-tube Tilt-meter".

Tunezi Rikitake and Zyūhei Yamada: "Observation of the Earth Current at Tomioka-mati, Tulusima Prefecture after the Nankai Earthquake".

Tunezi Rikitake: "Variations of the Hot Spring at Dōgo due to the Nankai Earthquake".

Fuyuhiko Kisinouye and Hideo Matuda: "Result of Observations at Hongō Tōkyō, of the Nankai Earthquake of 1946".

Papers awaiting publication in the *Bulletin of the Earthquake Research Institute*.

Y. Harada, T. Hatakeyama and T. Ōbayasi: "The Result of Geomagnetic Study on the Latest Eruption of Sakurazima and Magnetic Properties of the New Ejecta".

Tuneji Rikitake: "Notes on the Electromagnetic Induction within the Earth".

Ryōhei Ikegami and Fuyuhiko Kishinouye: "A Study on the Overturning of a Rectangular Column" (in Japanese).

Takesi Minakami and Sadae Utiberi: "The Tōnankai Earthquake Damage and Aftershocks" (in Japanese).

Syun'itirō Omote: "The Tsunami that Accompanied the Great Earthquake of Dec. 7, 1944" (in Japanese).

Hiromichi Tsuya: "A Remarkable Earthquake Fault Formed during the Mikawa Earthquake of January 13, 1945" (in Japanese).

Syun'itirō Omote: "A Preliminary Report on the Aftershocks of the Mikawa Earthquake" (in Japanese).

Syun'itirō Omote: "Comparison of the Vulnerability Rates of the Ground Revealed in the Tōnankai and Mikawa Earthquakes" (in Japanese).

Setumi Miyamura: "Geographische verteilung der Gebäudeschaden des Tōkaidō-bens vom 7. Dez. 1944. (Erste Mitteilung)" (in Japanese).

Naomi Miyabe: "The Degree of Destruction of Wooden Houses by Earthquakes".

Takahiro Hagiwara, Syun'itirō Omote, Sadanori Murauchi, Kazuhiko Akasi and Zyūhei Yamada: "The Eruption of Mt. Sakura-zima in 1946" (in Japanese).

Takasi Nagata, Syūzō Sakuma and Naoshi Fukushima: "On the Lava Flow Newly Ejected from Sakura-zima Volcano" (in Japanese).

Takesi Minakami and Kazue Iwama: "Recent Activity of Sakura-zima. (I) (2)" (in Japanese).

Takesi Nagata, Tosi Asada and Zirō Suzuki: "Volcanic Tremors of Short Periods at the Eruption of Sakura-zima" (in Japanese).

Kiyosi Kanai and Teizi Tanaka: "Detonation and Short Period Tremors Accompanying Volcanic Activity" (in Japanese).

T. Nagata, M. Kawano and T. Ōbayasi: "Detonation and Smoke that Accompanied the Eruption of Sakura-zima" (in Japanese).

Y. Harada, T. Hatakeyama and T. Ōbayasi: "The Result of Geomagnetic Study on the Latest Eruption of Sakura-zima and Magnetic Properties at the New Ejecta" (in Japanese).

T. Rikitake and K. Muraoka: "Measurement of Earth Current in Sakura-zima after the Eruption" (in Japanese).

T. Nagata, K. Hirao, M. Fukusima and T. Takahasi: "The Change in Point-discharge Current due to the Volcanic Smoke of Sakura-zima".

Ryōhei Morimoto: "Geological and Petrological Notes on Eruption of Sakura-zima in 1946. Part I. Geological Observation" (in Japanese).

H. Masuda: "On the Land Upheaval near the Crater of Volcano Usu at its Eruption in 1944" (in Japanese).

Setumi Miyamura: "A Measurement of the Land-deformation that Accompanied the new Side Volcano of the Mt. Usu in Hokkaido" (in Japanese).

Ryōhei Ikegami and Fuyuhiko Kishinouye: "A Study on the Overturning of a Rectangular Column in the Case of the Nankai Earthquake of Dec. 21, 1946".

Hisasi Kuno: "Geology of the Volcano Hakone and its Surrounding Region".

Yasuo Satō: "Boundary Conditions in the Problem of Generation of Elastic Waves".

Syun'itirō Omote: "On the Coda Waves of Earthquake (4) (5)".

Yasuo Satō: "Transformations of Wave-functions related to the Transformation of coordinates Systems".

Naomi Miyabe: "On the Crustal Deformations as Revealed by the Revision of Precise Levels in Japan" (in Japanese).

Naomi Miyabe: "Study on the Subsidence of the Ground in Tokyo". 8th report (in Japanese).

Tsunezi Rikitake and Fuyuhiko Kishinouye: "On the Electric Properties of Ground in the Domain of High Frequency (in Japanese)".

Tsunezi Rikitake: "Electrical State of the Earth's Interior Inferred from Variations in the Earth's Magnetic Field. Part I".

Unpublished papers read at the meeting of the *Earthquake Research Institute*.

1943.

Hiroshi Kawasumi: "On Intensity and Magnitude of Earthquakes".

Hiroshi Kawasumi: "On the Energy Law Concerning the Earthquake Occurrence".

Hiroshi Kawasumi: "On the Energy Law on the Occurrence of Aftershocks".

Hiroshi Kawasumi: "A New Definition of Seismicity, and Comparison of the Seismicities in Japan, Philippine Islands East Indies and in United States of America".

Hiroshi Kawasumi and Tosi Asada: "On the Earthquakes Around the Tokyo Bay".

Hiroshi Kawasumi, Setumi Miyamura and Yasuo Satō: "Preliminary Note on the Study of the Tottori Earthquake by Means of Post-card Method".

Hiroshi Kawasumi and the Students of the Geophysical Institute; "On the Distribution of Acceleration of the Earthquake Motion in the Meizo-seismic Area of the Tottori Earthquake".

Hiroshi Kawasumi and Setumi Miyamura: "On the Earthquake of Oct. 13, 1943 at the Southern Part of the Lake Noziri".

1944.

Yasuo Satō: "Study on the Waves Propagated Along Elastic Plates. I. II".

Setumi Miyamura: "On the Fruruma Earthquake of Oct. 13, 1943".

Yasuo Satō: "Intensity Distribution of the Tottori Earthquake".

1945.

Yasuo Satō and Zirō Suzuki: "Study of the Tōnankai Earthquake by Means of the Post-card Method".

Setumi Miyamura: "Some Statistics on the Human Feelings on the Earthquake from the Data Obtained by Post-card Method".

Kiyosi Kanai: "Group Velocities of the Dispersive Surface Waves, I. The Case of Love-waves in One Layer Crust".

Takahiro Hagiwara and Sadanori Murauti: "A Simple Apparatus for the Calibration of the Magnification of Displacement Seismographs".

1946.

Chuji Tsuboi: "Pendulum as a Wave-filter".

Kiyosi Kanai: "Group Velocities of the Dispersive Surface Waves. II".

Kiyosi Kanai and Sigeihiko Kaneko: "Reconstruction of the Horizontal Shaking Table".

Setumi Miyamura: "A Photographic Enlarging Apparatus Conveniently Used for the Analysis of Seismograms".

Kiyosi Kanai: "Group Velocities of the Dispersive Surface Waves. III. Rayleigh Waves in One Layer Crust and Comparison of the Rayleigh M_2 - and Love-waves".

Kiyosi Kanai: "On the Surface Wave Phases of Near Earthquakes".

Tetuo Akima: "Construction of Low-pass Wave-filter by Means of Torsion Pendulum and some Experiments Thereof".

Huyuhiko Kishinouye: "Some Statistics on the Felt Tokyo Earthquakes".

Masami Hayakawa: "Preliminary Report on the Variation Revealed from the Variation of the Velocity of Seismic Waves".

Setumi Miyamura and Tetuo Akima: "Application of the Torsion-pendulum-filter to the Study of Earthquake Motions and Seismic Waves".

Chuji Tuboi, Tahite Isida and Masahisa Sugiura: "On the Types of Seismograms".

Kiyosi Kanai and Setu Simizu: "A Problem of Vibration of a Structure Solved by means of the Operational Method".

Kiyosi Kanai and Sigeihiko Kaneko: "Experiment on the Vibration of a Structure in Case When the Ground Motion Begins Suddenly".

Kiyosi Kanai and Teizi Tanaka: "A Consideration of the Damage of Buildings Due to Earthquakes".

Setumi Miyamura: "Note on the Forced Oscillation of Linear Oscillator".

Seiti Yamaguti: "On the Variation of Mean Sea Levels at Aburatube and Hososima".

Yosiaki Kosikawa: "A Seismometrical Study on the Great Tōnankai Earthquake of 1944".

Takamasa Nakano: "Relation Between the Percentage of the Damaged Houses due to Earthquake and the Underground Structure".

Kiyosi Kanai: "On the Sezawa (M_2) Waves".

1947.

Masami Hayakawa and Yosimi Mori: "Characteristics of the Haeno Seismometer".

Tetuo Tateisi and Masami Hayakawa: "Three Dimensional Problems in Seismic Prospecting".

Syun'itiro Omote: "A Consideration of the Time Rate of Crustal Deformation".

The Geographical Research Institute: "Result of the Precise Levelling in Sikoku and Kii Peninsulas".

Ryūtarō Takahasi and Isamu Aida: "On the Tsunami at Susaki-mati, Kōti Prefecture".

Ryōsiti Komukai: "On the Upheaval and Subsidence of Ground due to the Nankai Earthquake".

Hiroshi Kawasumi and Yasuo Satō: "On the Variation of the Ground Levels at the Time and After the Nankai Earthquake".

Hiroshi Kawasumi and Yasuo Satō: "On the Subsidence of Ground Around the Susaki Bay and in the Vicinity of Kōti City".

Takahiro Hagiwara and Masao Watanabe: "Observation of the Change of Ground Tilt at the Muroto-zaki".

Takuiti Matuzaki: "On the Tsunami that Accompanied the Nankai Earthquake".

Syun'itirō Omote: "On the Source of the Tsunami as Determined from Mareographic Data".

Ryūtarō Takahasi, Isamu Aida and Tokutarō Hatori: "Report on the Study of the Tsunami at Sin-us-mati, Kōti Prefecture".

Hiroshi Kawasumi and Yasuo Satō: "Some Material on the Tsunami that Accompanied the Nankai Earthquake".

Hiroshi Kawasumi and Yasuo Satō: "On the Intensity and Damage due to the Nankai Earthquake".

Ryōhei Morimoto, Setumi Miyamura, Yasaka Saizyō and Sōhei Kaizuka: "Seismic Damages in Kōti Prefecture".

Takeshi Minakami and Syūzō Sakuma: "On the Vibration Characteristics of the Grounds in Kōti City as Revealed from the Observations of the Aftershocks of the Nankai Earthquake".

Teizi Tanaka, Tomisaburō Suzuki and Sigehiko Kaneko: "Results of the Seismic Prospecting Executed in Nakamura-mati, Kōti Prefecture".

Kiyosi Kanai: "Relation between the Underground Structure and the Earthquake Damage in Nakamura-mati, Kōti Prefecture".

Ryūtarō Takahasi: "On the Predominant Periods in the Earthquake Motions on Very Thick Soft Ground".

Takeshi Nagata: "On the Crustal Deformation Accompanying the Nankai Earthquake".

Tunezi Rikitake and Sadanori Murauchi: "The Tsunami in the Tubakidemari Bay".

Nobuzi Nasu, Tosiaki Sirai and Masazi Kawasuma: "Tsunami at Urade, Tanezaki and Kure in Kōti Prefecture".

Masami Hayakawa: "Time Variation of the Velocity of Seismic Waves".

Seiti Yamaguti: "On the Relation between the Variation of Mean Sea Level and Earthquakes".

Yasuo Satō: "Studies on the Miscellaneous Phenomena Accompanying Earthquakes. I. On the Damage of Buildings due to Earthquakes. II".

Nakayama: "Report on the Measurement of the Subsidence of the Bottom of Mikawa Bay in the Case of the Mikawa Earthquake".

Kiyosi Kanai: "On the Damage of Buildings due to Earthquakes. II".

Seiti Yamaguti: "On the Variations of Mean Sea Level before and after Earthquakes".

Fuyuhiko Kishimouye, Setumi Miyamura and Ryōhei Ikegami: "Comparative Observations of Microseisms in the Vicinity of Nisie-mati, Mikawa Province".

Yasuo Satō: "Studies on the Miscellaneous Phenomena Accompanying Earthquakes. II. On the possibility of optical explanation of the so-called visible waves".

Chūji Tsuboi: "On Seismic Activity".

Hiroshi Kawasumi and Yasuo Satō: "Some Statistics on the Damage of Wooden Houses and 'dozo' Japanese Godowns due to Earthquakes".

Yasuo Satō: "On the Generation of Seismic Waves in one Layer Crust".

Senno: "On the Results of Echo Soundings in the Epicentral Region of the Nankai Earthquake of 1946".

Papers in the "Zisin", the *Journal of the Seismological Society of Japan*.

1939. Vol. 11.

Fuyuhiko Kishinouye, Tetuiti Kaneko, Takeo Matuda and Yasuo Satō: "A Simple Seismograph, Easily Made".

Hidezō Tanakadate: "Kuttyaro Earthquake of 1938 (2)".

Mishio Ishimoto: "On the Lens Magnification of Seismograms".

Ryōiti Yosiyama: "On the Elastic Waves in Heterogeneous Media".

Yosio Katō: "On the Strong Earthquake of Nov. 5, 1938 that Originated off the Coast of Iwaki Province".

Naomi Miyabe: "On the Block Structure of the Earth's Crust".

Takeo Matuzawa: "Distribution of Epicenters of Aftershocks".

Ryōiti Yosiyama: "Elastic Waves in Heterogeneous Media".

Ryūtarō Takahasi and Takesi Nagata: "On the Swarm of Earthquakes which Occurred Near Ōsima Island on June 18, 1939 and Afterwards".

Akitune Imamura: "On the Ancient Seismic Activities in Mutu Dewa Districts".

Fuyuhiko Kishinouye: "Large Microseisms on Oct. 21, 1938 (1)".

Mishio Ishimoto: "On the Geometrical Magnification of Seismographs".

Ryōiti Yosiyama: "Elastic Waves in Heterogeneous Media".

Fuyuhiko Kishinouye, Takeo Matuda, Yasuo Satō, Masahide Tominaga and Hiziri Takagi: "Field Study on the Oga Earthquake of May 1, 1939".

Akitune Imamura: "The Oga Earthquake and the Account of Travel of Sugae Masumi".

Ryūgen Maruyama: "Determination of the Crustal Blocks from the Horizontal Movement of the Ground".

Huyuhiko Kishinouye: "Large Microseisms on Oct. 21, 1938 (2)".

Kinkiti Musya: "On the Luminous Phenomena as Observed in cases of the Earthquakes that Originated at Oguni, off the Promontory Hinomisaki and off the Coast of Iwaki Province".

Seizō Haeno: "On a Method of Automatic Control of the Magnification of a Seismometer".

Fuyuhiko Kishinouye and Kumizi Iida: "On the Tsunami that Accompanied the Oga Earthquake".

Akitune Imamura: "Notes on the Oga Earthquake".

Seizō Haeno: "On Time Marking Devices for Seismometers for Prospecting. I. A Device using electric discharging bulb".

Naomi Miyabe: "On the Variation of the Rate of Subsidence of the Ground in Tōkyō".

Fuyuhiko Kishinouye: "Large Microseisms on Oct. 21, 1938 (3)".

Akitune Imamura: "The Oga Earthquake and Abnormal Behaviour of Fishes".

Seizō Haeno: "Tables for Graphical Solutions of Underground Structure in Seismic Prospecting".

Hidezō Tanakadate: "On the Tilting of Crustal Block in Case of the Oga Earthquake".

Yosio Katō and Seiki Itō: "The Earthquakes in September, 1939 in Naruko and Onikoobe District".

Nobuzi Nasu: "On Travel Times of Elastic Waves in Ground and a Method of Analysis Thereof".

1940. Vol. 12.

Kumizi Iida: "A Consideration of the Distribution of the Direction of the First Impulsion of Earthquakes and that of Tunami Waves".

Takahiro Hagiwara: "Distribution of Aftershocks of the Oga Earthquake of May, 1939".

Fuyuhiko Kishinouye: "Report on the Experiment on Elastic Waves in Lake Ice at Suwako".

Hidezō Tanakadate: "On the Tilting of the Crustal Block in case of the Oga Earthquake (continued)".

Kōzi Hukutomi: "On the Anomalous Change of the Water Levels at the Rendaizi Hot Spring in Idu Province before and after the Sidouka Earthquake of July 10, 1935".

Ryūtarō Takahasi and Kintarō Hirano: "Construction of a Simple Seismometer".

Akitune Imamura: "On the Crustal Deformations in the Kii and Muroto Peninsulas".

Akitune Imamura: "The Heights of Tunamis at Hiromura, Kii Province in cases of Earthquakes of Hōei and Ansei".

Seizō Haene: "On Time Marking Devices of Four Seismometers for Prospecting. II. Device of synchronous-motor-type".

Kumizi Iida: "On the Construction of a Large Acceleration Seismograph of One Ton, and the Seismograms Obtained Thereof".

Saemontarō Nakamura: "On the Period of a Seismograph and its Damping".

Chūzi Tsuboi: "A Simple Device for Obtaining a Uniform Rate of Revolution".

Takeo Matuzawa: "Effect of the Self Induction in the Electromagnetic Damper".

Takeshi Minakami: "Volcanic Microtremors Accompanied by the Eruption of the Miyake-zima".

Naomi Miyabe: "A Brief Note on the Tunami that Accompanied the Earthquake of Aug. 2, 1940 Originating in the Northern Part of the Japan Sea".

Kumizi Iida: "On the Magnitudes and the Predominating Periods of Earthquakes".

1941. Vol. 13.

Tokutarō Yahasi: "A Nomogram for the Determination of Distance between two Points on the Earth's Surface".

Nobuzi Nasu: "On the Recording Apparatus for Seismometer".

Akitune Imamura: "On the Great Hakuō Earthquake".

Nebuzi Nasu: "A Measurement of the Velocity of Elastic Waves by Means of the Ikebe Speed-meter".

Huyuhike Kishinouye: "On the Physical Properties of the Ground (1)".

Nebuzi Nasu: "On a Portable Vibrograph".

Hiroshi Kawasumi: "On the Earthquake of May 6, 1941 that Originated in Suika District, Northern Manchuria".

Takeo Matuzawa: "On the Motion of Ground at the Epicentral Region of the Great Indian Earthquake of June 12, 1897".

Akitune Imamura: "On the Land-deformation Accompanying the Oga Earthquake of 1939".

Tokutarō Yahasi: "Provisional Report on the Strong Earthquake of Nagano District on July 15, 1941".

Kumizi Iida: "Measurement of the Elastic Moduli of Rocks by means of a Vibration Method".

- Fuyuhiko Kishinouye: "Study on the Nagano Earthquake of July 15, 1941".
- Ryōiti Yoshiyama: "Elastic Waves in Heterogeneous Media (on the proper-oscillation of ground)".
- Chūzi Tsuboi, Setumi Miyamura and Ken Zitukawa: "Construction of a Precise Recording Apparatus for Seismometer".
- Tokitarō Saita: "On the Earthquake Proof Structure, 'Zisin no Ma', made in the Tokugawa Period".
- Nebuzi Nasu: "Seismic Prospecting in Coal Fields".

1942. Vol. 14.

- Yanosuke Ootuka: "An Active Folding Structure".
- Chūzi Tsuboi: "A New Representation of Forced Oscillations".
- Chūzi Tsuboi and Setumi Miyamura: "On the Vibration of Seismometer Subjected to Damping Force Proportional to Absolute Velocity".
- Ryōiti Yoshiyama: "On the Attenuation Coefficient of Seismic Waves (on the deficiency in the magnitude of S-wave, etc.)".
- Takahirō Hagiwara: "On the Vertical Seismographs (1)".
- Yasuo Satō and Tunezi Rikitake: "Surface Deformation of a Semi-infinite Elastic Body due to Moving Load of Rectangular Shape".
- Ryōiti Yoshiyama: "On the Magnitude of Epicentres".
- Huyuhiko Kishinouye and Tokutarō Yahashi: "An Amplifier Fed by Alternating Current for Artificial Seismic Experiment".
- Chūzi Tsuboi, Setumi Miyamura and Ken Zitukawa: "A New Device of Shifting the Drum of a Seismograph".
- Akitune Imamura: "Supplementary Notes on the Earthquakes of Mutu Dewa Districts".
- Kiyoshi Kanai: "A Vibration Experiment for Testing the Effect of the Brace Strut and the Main Column in a Wooden Japanese Building".
- Saemontarō Nakamura: "On the Magnification of Seismographs with Elastic Spring Suspensions".
- Kuyuhiko Kiahinouye: "A Measurement of the Vibration of a Dam".

1943. Vol. 15.

- Akitune Imamura: "On the Revision of the old Documents on the Tunamis in Japan".
- Hiroshi Kawasumi: "Intensity of Earthquakes and Seismic Intensity Scales".
- Syun'itirō Omote: "On the Coda Waves of Distant Earthquakes".
- Syun'itirō Omote: "On a Portable Vibrograph (2)".
- Fuyuhiko Kiahinouye: "Effect of the Driving Rate of the Recorder on the Writing Index of a Seismograph".
- Syun'itirō Omote: "Observation of the Great Sanriku Earthquake of March 3, 1933 in Tōkyō and Yokohama Cities".
- Syun'itirō Omote: "Provisional Report on the Tottori Earthquakes on March 4, 1943".
- Akitune Imamura: "On the Ancient Hinai Earthquake".
- Zirō Kawase: "On the Severe Kagi Earthquake on Dec. 17, 1941".
- Akitune Imamura: "On the Tsunami that Accompanied the Great Earthquake of 1605, in the Tōkai and Nankai Districts".

Akitune Imamura: "Inference of Epicentre by means of the Tyōkō Seismoscope".

Kiyoo Kanai: "On the Nature of the M_2 Waves".

Akitune Imamura: "Notes on the Earthquakes in the Provinces of Suruga, Tōtōmi and Mikawa".

Akitune Imamura: "On the Tilting of the South Eastern Block of Tōtōmi".

Akitune Imamura: "On Precursory Phenomena to the Anegawa Earthquake".

Fuyuhiko Kiahineuye: "General Report of the Damage Caused by the Tottori Earthquake of Sept. 10, 1943".

Syun'itirō Omote: "Provisional Report on the Observation of Aftershocks of the Tottori Earthquake on Sept. 10, 1943".

Takeshi Minakami and Sadaiti Utiberi: "Observation of the Aftershocks of the Tottori Earthquake by a Seismograph of High Magnification. (Provisional report.) Special Note on the Proper Oscillation of Ground".

Takeshi Nagata: "Observation of the Potential Difference of Earth Current near the Sikana Fault which Appeared in the Tottori Earthquake".

Takahire Hagiwara: "Observation of the Motion at the Fault and Tilt on the Ground".

Setumi Miyamura: "Levelling across the Sikano and Yosioka Faults".

Naomi Miyabe and Masami Hayakawa: "Oscillation of a Pond Surface".

Manabu Kobayaahi: "On the Relation of Geological Structure and Earthquakes in Aidu District".

Syun'itirō Omote: "On the Coda Waves of Near Earthquakes".

Akitune Imamura: "On the Precursory Phenomena to the Mine Owari Earthquake".

1944. Vol. 16.

Akitune Imamura: "On the Precursory Phenomena of Large Earthquakes in Inaba and Hōki Provinces".

Akitune Imamura: "Re-examination of the Kowakubi Earthquake".

Akitune Imamura: "Some Excellent Observations and Descriptions on Earthquakes found in the Ancient Documents of Japan".

Akitune Imamura: "The First Great Earthquake in the Authentic History of Japan".

Akitune Imamura: "Development of the Conception Concerning Earthquakes and Volcanoes in Japan".

Setumi Miyamura: "On the Intensity of Earthquakes and the Depth of the Hypocentre".

Akitune Imamura: "Notes on the Earthquakes Originating off the Coast of Tōtōmi".

Kinkiti Musya: "Characteristics of the Destructive Earthquakes in the Tyūgeku Districts".

Seismological papers in the "*Geophysical Notes*" published irregularly from the Geophysical Institute in the Faculty of Science, Tokyo University, in mimeographic printing.

1946. No. 5.

Tamie Hisayama: "A New Method of Determining the Moduli of Visco-elasticity" (in Japanese).

Chūzi Tsuboi: "On Passive Seismicity".

1947.

Chūzi Tsuboi: "On Passive Seismicity".

Kōzō Yosida, Tamie Yamagiwa, Kinzirō Kaziura and Izumi Suzuki: "Report of the Tsunami that Accompanied the Nankai Earthquake (1)" (in Japanese).

Kōzō Yosida: "Report on the Tsunami that Accompanied the Nankai Earthquake" (in Japanese).

Kōji Hidaka: "Note on the Hawaiian Tsunami of April 1, 1946".

Tatuzō Obayasi and Takesi Nagata: "Relation Between the Tilting and Tidal Loading at the Cape Muroto-zaki" (in Japanese).

Tosi Asada: "On a Transducer of Variable-magnetic-flux Type (in Japanese)".

Tosi Asada: "Vibration of Ground due to Surface Shocks".

Kunio Hirano: "On the Variation of Earth Current after the Nankai Earthquake (1)".

Zirō Suzuki and Tosi Asada: "On the Aftershocks of the Nankai Earthquake.

I. Statistical description of the aftershocks.

II. Periods of the earthquake motions.

III. Analysis of the earthquake motion" (in Japanese).

Unpublished papers read at the meeting of the same Institute.

Hitosi Takeuti: "On the Mechanism of Occurrence of a very Shallow Earthquake (Nov. 1946)".

Zirō Suzuki: "On S-waves (Dec. 1946)".

Zirō Suzuki: "Notes on the Formula of Ishimoto and Iida (April, 1947)".

Atusi Okada: "On the Results of the Precise Levelling Re-run in the South Eastern Part of the Sikoku after the Nankai Earthquake (Sept. 1947)".

Chūzi Tsuboi: "On Seismic Activity (Oct. 1947)".

Kyōzi Tazima: "A Device for Obtaining a Uniform Revolution (Jan. 1948)".

Papers from the *Geophysical Institute, Faculty of Science, Kyoto University.*

Eiiti Nisimura: "On Earth Tides.

Part I. Rigidity of the upper mantle of the earth.

Part II. Particular Motion of the Earth near an active fault.

Part III. Rigidity of the earth.

Part IV. Tidal variation of latitude (First paper).

Part V. Tidal variation of latitude (Second paper).

Part VI. Time variation of the elasticity of the earth crust.

Part VII. Elastic anisotropy of the earth's upper mantle".

(Special publications).

Kenzō Sassa: "On the Upheaval and Subsidence of Ground due to Meteorological Changes". (*Japanese Journal of Astronomy and Geophysics* in Japanese Language. Vol. 1, 1940.)

Kenzō Sassa: "Further Notes on the Upheaval and Subsidence of Ground due to Meteorological Changes". (*Report of the Hatteri Hokokwai*, Vol. 10, 1943.)

Ryō Tanahasi, Kenzō Sassa, Yositora Yokowo and Eiiti Nisimura: "On the Relation of Earthquake Damage and the Ground Structure as Revealed in Cases of the Tōkai Earthquake and its Aftershocks". (*Kensetu Kōgaku, the Journal of Constructive Engineering*) 2, 1948.

Kenzō Sassa: "Some Problems on the Earthquake Forecasting". (*Ibid.*, 3, 1948.)

Kenzō Sassa: "Note on the Peculiar Change of Ground Tilt Before and After the Great Totterri Earthquake". (*Kwagaku*, 14, 1944.)

In the *Tikyū-Buturi*, the *Bulletin on Geophysics*, published in Japanese language from the same institute.

1941, Vol. 5.

Kenzō Sassa: "Preliminary Notes on the Reports of the Abuyama Seismological Observatory".

Kenzō Sassa and Eiiti Nisimura: "Preliminary Notes on the Observation of Ground Tilt".

Eiiti Nisimura: "On Earth Tides.

I. Rigidity of the upper mantle of the earth.

II. Particular motion of the earth surface near an active fault.

III. Rigidity of the earth.

IV. Tidal variation of latitude (1st paper).

V. Tidal variation of latitude (2nd paper)".

Papers awaiting publication in the same Bulletin.

Kenzō Sassa and Sadao Tani: "Variation of the Ground Tilt due to the Meteorological Effects".

Kenzō Sassa: "Deformation of the Surface Layer of the Earth due to Meteorological Change, with Supplement on the Extensometer of Ground".

Kenzō Sassa: "On the Crustal Deformation in the Vicinity of Aso Volcano, with Supplement on the Geothermal Change at Iida near Kuzyū Volcano".

Kenzō Sassa: "A Conspicuous Variation of Ground Tilt before and after a Large Earthquake".

Kenzō Sassa and Hazime Hayazi: "A Seismometer Measuring the Inclination of Ground, with a Supplement on the Strain Seismometer".

Kenzō Sassa: "A Seismometer for Seismic Prospecting and Some Problems in Seismic Prospecting".

Eiiti Nisimura: "On the Nature of the Artificial Seismic Waves".

Sadao Tani, Yuzi Itō and Hirozi Kazikawa: "On the Earthquakes in the Kinki District".

Papers from the *Tōhoku University*.

Saemontarō Nakamura: "On the Period and Damping of Seismometers" (*Science Report Tōhoku Imperial University*, Ser. 1, vol. 29, 1940).

Saemontarō Nakamura: "On Seismometers" (*Jap. Journ. Astro. Geophys.* in Japanese, vol. 1, 1941).

Papers from the *Kyūsyū University*.

Ryōiti Yesiyama: "On the Travel Time Curve and the Position of the Epicentre of the Nankai Earthquake". (Read at the meeting of the Earthquake Research Institute, in Nov. 1947.)

Haruwo Matuwa: "On the Vibration of Reclaimed Ground During a Large Earthquake" (*Kensetu-Kōgaku*, 3, 1948).

Papers in the "*Tikyū-Buturigaku Kenkyū Sekuhē*" (*Provisional Reports of the Geophysical Studies*) of the Physical Institute of Nageya University in mimeographic printing.

1947.

Naomi Miyabe, Tekutarō Yahasi and Hirokiti Neda: "Reports on the Mikawa Earthquake of Jan. 13, 1945" (in Japanese).

Naomi Miyabe: "Studies on the Subsidence of the Earth's Surface in Tokyo—VIII".

Tetuo Tuda: "Determination of Young's Modulus and Solid Viscosity Coefficients of Rocks by the Vibration Analysis".

Seismological paper in the *Science Report of the Higher Agricultural and Forestry School at Gihu*.

1947. No. 61.

Tokutarō Yahasi: "On the Damage of the Earthen Dam at Kasahara-mati Gihu Prefecture due to the Earthquake of Dec. 7, 1944" (in Japanese).

Papers in the *Proceedings of the Imperial Academy*. 1939. Vol. 15.

Sakuhei Fujiwara: "The Law of Disturbance".

Akitune Imamura: "Land Deformations and Seismic Activity in the Mutu-Dews District".

Mishie Ishimoto: "Caractéristique de la faille sismique et la cause de sa production".

1940. Vol. 16.

Akitune Imamura: "Later Crustal Deformations in the Tango District".

1941. Vol. 17.

Yanosuke Ōtuka: "Active Rock Falling in Japan".

Akitune Imamura and Naomi Miyabe: "Land Deformations on the Western Littoral of Sikoku".

Akitune Imamura and Yanosuke Ōtuka: "Land Deformations as Revealed through the Revisions of Precise Levels Linking Niihori with Sendai".

1943. Vol. 19.

Akitune Imamura: "The Historical Hinai Earthquake, with Special Reference to Time of its Occurrence as Presumed from the Presence of Certain Apparatus Unearthed from a Buried House".

Katutada Sezawa and I. Utida: "On the Phenomena of Instability in Undamped Quasi-harmonic Vibration. Part I".

Akitune Imamura: "Land Deformations in the South Eastern Part of Tōtōmi".

1944. Vol. 20.

Takesi Nagata: "Measurement of Earth Current in the Vicinity of Sikano Fault".

Katutada Sezawa and I. Utida: "On the Phenomena of Instability in Undamped Quasi-harmonic Vibration. Part II".

Akitune Imamura and Yanosuke Ōtuka: "Results of Revision of the Level Line Linking Oodate with Morioka".

Akitune Imamura: "On the Great Mino Earthquake of 1833".

Following papers were communicated to the Imperial Academy but are not yet printed.

1945.

Akitune Imamura: "Land Deformations Associated with the Recent Tōkaidō Earthquake".

1946.

Akitune Imamura: "On the Great Depression Earthquakes of 701 in Tango and 1596 in Bungo".

Akitune Imamura: "Migration of Active Centre in the Seismic Zone off the Pacific Coast of Japan".

Akitune Imamura: "Seismic Activity on Both Sides of Fossa Magna".

Akitune Imamura: "A Chain of Landslides as Caused by Seismic Fault".

1947.

Akitune Imamura: "On some great earthquakes originating in the depressed region lying between Wakasa and Ise Bays".

Akitune Imamura: "On seismic activity in Sikoku and Tyūgeku".

Akitune Imamura: "On the Tukusi earthquake of 679".

Akitune Imamura: "On the seismic activity of Northeast Japan".

Akitune Imamura: "The destructive Nadati earthquake of 1751 with special reference to the seismic activity of the Iteigawa-Suntō line".

Akitune Imamura: "On the chronic and acute tilting of SW Sikoku".

Akitune Imamura: "Supplementary note on migration of active centre on the Pacific seismic zone of Japan".

Akitune Imamura: "On seismic activity in Hokkaidō".

Akitune Imamura: "On emergence of large earthquakes from common seat".

Akitune Imamura: "Chronic or acute land deformation occurring along the Median line".

Akitune Imamura: "Volcanoes driving volcanic dust abundantly to an extraordinary altitude".

Akitune Imamura: "Some instances of two destructive earthquakes regarded as a single shock".

Akitune Imamura: "On a system of large regional earthquakes originated in SE Kwantō".

Akitune Imamura: "On interval of time between two large earthquakes emerging from neighbouring origins".

Akitune Imamura: "Some large earthquakes originating in the southern part of the Kinki district".

Papers in the *Japanese Journal of Astronomy and Geophysics*. 1939. Vol. 16.

Akitune Imamura: "Tyōkō and His Seismoscope".

Akitune Imamura: "On the Seismic Activity of the Mutu-Dewa District in Early Times".

Vol. 17.

Akitune Imamura and Masuo Meriya: "Mareographic Observations of the Tunamis in Japan During the Period 1894 to 1924".

In *Japanese Journal of Astronomy and Geophysics*, in Japanese language.

1944. Vol. 1.

Akitune Imamura and Katuhiko Mutō: "Mareographic Records of Tunamis in Japan".

LIST OF COLLABORATORS

The initials appended to various items throughout the *Bibliography* indicate, in each case, the contribution by the respective collaborator.

STEENHUIS, J. F., Haarlem, Spaaine, The Netherlands. J.F.S.