

**MEMOIRS  
OF THE  
COLLEGE OF SCIENCE**

**UNIVERSITY OF KYOTO**

**SERIES A**

---

**VOL. XXIX**

**1958~1961**

---

**KYOTO**

## CONTENTS OF VOLUME XXIX

	PAGE
<b>T. Mikumo</b> —A Consideration on Generation Mechanism of Local Earthquake. . . . .	221
<b>T. Nakao</b> —Magnetic Resonance in $Ti_mMg_nFe_{3-m-n}O_4$ Ferrites and their Magnetization. . . . .	241
<b>A. Hirai</b> —Temperature Dependence of Spin Lattice Relaxation Time of $Cl^{35}$ in Pure Quadrupole Resonance. . . . .	257
<b>H. Ogata, H. Itoh, Y. Masuda, K. Takamatsu, M. Kawashima, A. Masaike and I. Kumabe</b> —Numerical Differential Cross Sections of the $(p, \alpha)$ Reactions on $Al^{27}$ , $Mn^{55}$ and $Co^{59}$ . . . . .	267
<b>K. Yuhara</b> —Hydrological Study of Atami Hot Springs. . . . .	283
<b>Y. Toba</b> —Drop Production by Bursting of Air Bubbles on the Sea Surface (III). Study by Use of a Wind Flume. . . . .	313
<b>A. Hirai and T. Kawai</b> —NMR Pulse Apparatus and its Application to the Investigation of Internal Motion of High Polymer (Poly-propylene). . . . .	345
<b>S. Tanaka</b> —Electron Density Measurement by Microwave Interferometer. . . . .	353
<b>S. Tanaka</b> —Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (I). . . . .	361
<b>S. Tanaka</b> —Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (II). . . . .	371
<b>S. Tanaka</b> —Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (III). . . . .	381
<b>S. Tanaka</b> —Microwave Conductivity of Bounded Plasma. . . . .	395

## INDEX OF AUTHORS TO VOLUME XXIX

---

	PAGE
<b>Fujiki, Y.</b> —A New Compound in Au-Pd Alloy System. . . . .	197
<b>Fukunaga, K.</b> (see Nakamura, T., Fukunaga, K., Takamatsu, K. and Yasumi, S.)	141
<b>Hashi, T., Hirai, A., Sasaki, M. and Kawai, T.</b> —Nuclear Magnetic Resonance Pulse Apparatus. . . . .	205
<b>Hattori, A. and Yada, B.</b> —Optical Observations of the Second Russian Earth Satellite.	107
<b>Hirai, A.</b> (see Hashi, T., Hirai, A., Sasaki, M. and Kawai, T.). . . . .	205
<b>Hirai, A.</b> —Temperature Dependence of Spin Lattice Relaxation Time of Cl <sup>35</sup> in Pure Quadrupole Resonance. . . . .	257
<b>Hirai, A. and Kawai, T.</b> —NMR Pulse Apparatus and its Application to the Investigation of Internal Motion of High Polymer (Poly-propylene). . . . .	345
<b>Ishida, Y.</b> —Ultrasonic Velocity and Adiabatic Compressibility of Mixture of Sulfuric Acid and Water. . . . .	91
<b>Ishida, Y.</b> —Adiabatic Compressibility of Aqueous Solution of Inorganic Acid. . . . .	187
<b>Itoh, H.</b> (see Ogata, H., Itoh, H., Masuda, Y., Takamatsu, K., Kawashima, M., Masaike, A. and Kumabe, I.). . . . .	267
<b>Kamitsuki, A.</b> —On the Seismic Waves reflected at the Mohorovičić Discontinuity (II).	19
<b>Kamitsuki, A.</b> —On Local Character of Poisson's Ratio in the Earth's Crust. . . . .	163
<b>Kamitsuki, A.</b> —On Azimuthal Distribution of the Crustal Poisson's Ratio in case of Earthquake Occurrence. . . . .	213
<b>Kawai, T.</b> (see Hashi, T., Hirai, A., Sasaki, M. and Kawai, T.). . . . .	205
<b>Kawai, T.</b> (see Hirai, A. and Kawai, T.). . . . .	345
<b>Kawashima, M.</b> (see Ogata, H., Itoh, H., Masuda, Y., Takamatsu, K., Kawashima, M., Masaike, A. and Kumabe, I.). . . . .	267
<b>Kumabe, I.</b> (see Ogata, H., Itoh, H., Masuda, Y., Takamatsu, K., Kawashima, M., Masaike, A. and Kumabe, I.). . . . .	267
<b>Masaike, A.</b> (see Ogata, H., Itoh, H., Masuda, Y., Takamatsu, K., Kawashima, M., Masaike, A. and Kumabe, I.). . . . .	267
<b>Masuda, Y.</b> (see Ogata, H., Itoh, H., Masuda, Y., Takamatsu, K., Kawashima, M., Masaike, A. and Kumabe, I.). . . . .	267
<b>Mikumo, T.</b> —On the Periods of Seismic Waves observed in Local Earthquakes. . . . .	1
<b>Mikumo, T.</b> —A Consideration on Generation Mechanism of Local Earthquake. . . . .	221
<b>Nakamura, T., Fukunaga, K., Takamatsu, K. and Yasumi, S.</b> —Absolute Measurement of $\gamma$ -quanta. . . . .	141
<b>Nakau, T.</b> —Magnetic Resonance in Ti <sub>m</sub> Mg <sub>n</sub> Fe <sub>3-m-n</sub> O <sub>4</sub> Ferrites and their Magnetization.	241
<b>Nishitake, T.</b> —On the Materials in the Earth's Mantle. . . . .	37
<b>Nishitake, T.</b> —Elasticity of Solids at High Pressure and the Earth's Mantle. . . . .	47

## INDEX OF AUTHORS TO VOLUME XXIX

	PAGE
Ogata, H., Itoh, H., Masuda, Y., Takamatsu, K., Kawashima, M., Masaike, A. and Kumabe, I.—Numerical Differential Cross Sections of the ( $p, \alpha$ ) Reactions on Al <sup>27</sup> , Mn <sup>55</sup> and Co <sup>59</sup> . . . . .	267
Sasaki, M. (see Hashi, T., Hirai, A., Sasaki, M. and Kawai, T.) . . . . .	205
Takamatsu, K. (see Nakamura, T., Fukunaga, K., Takamatsu, K. and Yasumi, S.)	141
Takamatsu, K. (see Ogata, H., Itoh, H., Masuda, Y., Takamatsu, K., Kawashima, M., Masaike, A. and Kumabe, I.) . . . . .	267
Takemoto, S.—Ferromagnetic Resonance in Ni-Cd Ferrite System at Microwave Frequencies. . . . .	153
Tanaka, S.—Electron Density Measurement by Microwave Interferometer. . . . .	353
Tanaka, S.—Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (I)	36
Tanaka, S.—Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (II)	371
Tanaka, S.—Absorption at Electron Cyclotron Resonance in Slightly Ionized Gases (III)	381
Tanaka, S.—Microwave Conductivity of Bounded Plasma. . . . .	395
Toba, Y.—Drop Production by Bursting of Air Bubbles on the Sea Surface (III). Study by Use of a Wind Flume. . . . .	313
Tomotika, T.—On the Influence of Oxygen Gas upon the Optical Absorption Bands of Evaporated Barium Oxides in the Ultraviolet Region. . . . .	75
Yada, B. (see Hattori, A.) . . . . .	107
Yamano, M.—Precise Measurement of Frequency Shift of Ammonia Inversion Spectrum.	57
Yamano, M.—Center Frequency of Ammonia Inversion Spectrum in Low Pressure Region. . . . .	67
Yasumi, S. (Nakamura, T., Fukunaga, K., Takamatsu, K., and Yasumi, S.) . .	141
Yuhara, K.—Hydrological Study of Atami Hot Springs. . . . .	283