

Contents of Volume 18, 1981

Number 1

- Editorial**
- A.L. Copley and A. Silberberg 1 4th International Congress of Biorheology,
Tokyo, Japan, 27 July to 1 August 1981
- Papers**
- A. Rakow, S. Simchon, L.A. Sung
and S. Chien 3 Aggregation of red cells with membrane altered by
heat treatment
- S.L. Adamson and M.R. Roach 9 Measurement of wall shear stress in a glass model
renal bifurcation by a technique that monitors
the rate of erosion of an opaque coating layer
- M. Kaibara, E. Fukada and
K. Sakaoku 23 Rheological study on network structure of fibrin
clots under various conditions
- Abstracts. 4th International Congress of Biorheology.
Tokyo, Japan, 27 July to 1 August 1981*
- I. Accepted Abstracts. Submitted Until the Original
Deadline of 31.1.81 to the Secretary General
- A.L. Copley 37 *Preamble*
- 39 *Abstracts*
- a. Blood (plasma, cellular elements, coagulation, etc.)
 - b. Blood vessel and blood flow (hemorheology)
 - c. Biofluids (mucus, synovial fluid, sputum, etc.)
 - d. Biosolids (bone, cartilage, joint, tooth, etc.)
 - e. Muscle, lung, skin and other organs and tissues
 - f. Biopolymers
 - g. Membrane and interface
 - h. Cellular and subcellular rheology
 - i. Experimental methods
 - j. Theories
 - k. Clinical biorheology
 - l. Other topics
- 183 *Book Review*
- 185 *Announcements*

Number 2

- A.L. Copley 189 *An Appeal to the Readers of Biorheology*
Last Call to Participate in the 4th International Congress
of Biorheology, Tokyo, Japan, July 27 to August 1, 1981
- Papers**
- L. Dintenfass and L. Fu-lung 191 Effect of flow instability (and of blood anti-instability
properties) on viscosity of blood measured in
rotational viscometer
- R.L. Long and L.V. McIntire 207 On phenomenological mechanochemical muscle models - I
- R.L. Long and L.V. McIntire 223 On phenomenological mechanochemical muscle models - II
- P. Chaturani and V.P. Rathod 235 A critical study of Poiseuille flow of couple stress fluid
with applications to blood flow
- P. Chaturani and V.S. Upadhyay 245 A two-fluid model for blood flow through small diameter
tubes with non-zero couple stress boundary condition
at interface
- C.D. Hill and A. Bedford 255 A model for erythrocyte sedimentation

	<i>Letters to the Editors-in-Chief</i>
Y. Nubar	267 Comments on "A comparison of rheological constitutive functions for whole human blood"
P.L. Easthope and D.E. Brooks	269 The effect of wall slip on the empirical constitutive function for whole blood: A reply to Y. Nubar
A.L. Copley	271 <i>Additional Abstracts. 4th International Congress of Biorheology, Tokyo, Japan, July 27 to August 1, 1981</i> II. Accepted Abstracts. Submitted to the Secretary General Until the Extended Deadline of April 20, 1981 <i>Preamble</i>
D.E. Brooks	299 News from the International Society of Biorheology 301 <i>Announcements</i>

Number 3/6

A. Silberberg	305 <i>Dedication</i> To A.L. Copley on His Seventieth Birthday
R. Skalak and S. Chien	307 Capillary Flow: History, experiments and theory
G. Bugliarello and G.M. Yanizeski	331 Some phenomenological characteristics of the laminar flow of neutrally buoyant particles in Hele-Shaw
S. Oka	347 Copley-Scott Blair phenomenon and electric double layer
A.R. Pries, K.H. Albrecht and P. Gaehrtgens	355 Model studies on phase separation at a capillary orifice
Y.C. Fung, W.C.O. Tsang and P. Patitucci	369 High-resolution data on the geometry of red blood cells
L. Dintenfass, H. Jedrzejczyk and A. Willard	387 Application of stereological methods to evaluation of aggregation of red cells in 12.5 μm slit: A photographic and statistical study
M. Kaibara and E. Fukada	405 The effect of steady flow on transient viscoelastic behavior of blood
H. Schmid-Schönbein, G.V.R. Born, P.D. Richardson, N. Cusack, H. Rieger, R. Forst, I. Rohling, Winkel, P. Blasberg and A. Wehmeyer	415 Rheology of thrombotic processes in flow: The interaction of erythrocytes and thrombocytes subjected to high flow forces
M. Joly, C. Lacombe and D. Quemada	445 Application of the transient flow rheology to the study of abnormal human bloods
J.F. Stoltz and M. Lucius	453 Viscoelasticity and thixotropy of human blood
G. Yepsen, D. Boutin, M. Litt and R. E. Kron	475 Rheological modelling of fresh blood from transient pressure measurements
D.E. Brooks and P.L. Easthope	485 Rheological characteristics of blood through the menstrual cycle
Ph. Rusch, T. Herrmann, A. Geyssant, C. Vasselon, A. Champailleur and J.C. Healy	493 Influence of oxygen tensions, intracellular enzymes and hematological factors on RBC filterability
D. Quemada	501 A rheological model for studying the hematocrit dependence of red cell-red cell and red cell-protein interactions in blood

W.D. Corry, L.J. Jackson and G.V.F. Seaman	517 The effect of hydroxyethyl starch on the rheological properties of human erythrocyte suspensions
H.L. Goldsmith, O. Licharge, M. Tessier-Lavigne and S. Spain R.L. Whitmore	531 Some model experiments in hemodynamics: VI. Two-body collisions between blood cells 557 The influence of erythrocyte shape and rigidity on the viscosity of blood
G.E. Palade, M. Simionescu and N. Simionescu	563 Differentiated microdomains on the luminal surface of the capillary endothelium
C.P. Winlove, J. Davis, A. Iacovides and A. Chabanel	569 Radioactive gold colloid as a tracer of macromolecule transport
S. Witte	579 The affinity of fluorescent labeled fibrinogen to the vessel wall as seen by vital microscopy
A. Silberberg and J. Klein	589 Structure and properties of surface adsorbed biopolymer layers: Soluble collagen adsorbed to glass
L.V. Kukhareva and V.I. Vorob'ev	601 The order-disorder transitions in fibrillar proteins. Stress-temperature dependence of hydrothermal contraction of the native collagen fibers
A. Maroudas and C. Bannon	619 Measurement of swelling pressure in cartilage and comparison with the osmotic pressure of constituent proteoglycans
K. Kuroda and N. Kamiya	633 Behavior of cytoplasmic streaming in <i>Nitella</i> during centrifugation as revealed by the television centrifuge-microscope
R. Yamamoto, S. Fujihara and Y. Masuda	643 Compression method for measurement of stress-relaxation properties of plant cell walls with reference to plant hormone actions
S.E. Charm and B.L. Wong	653 A biological probe for analyzing shear in turbulent flow
E. Puchelle, J.-M. Zahm and F. Aug	659 Viscoelasticity, protein content and ciliary transport rate of sputum in patients with recurrent and chronic bronchitis
B. Tamamushi	667 Liquid crystalline structures in relation to biorheological phenomena
H.-D. Papenfuss and J. F. Gross H. H. Hartert	673 Microhemodynamics of capillary networks 693 Resonance-thrombography, theoretical and practical elements
A. L. Copley	703 <i>Appendix</i> 725 <i>Epilogue</i> 729 <i>Author Index</i>

Author Index

- Abe, H., 94a
 Adamson, S.L., 9
 Aillaud-Calas, M.F., 49a
 Akeson, W.H., 128a, 139a
 Akiyama, M., 296a
 Albrecht, K.H., 355
 Altmann, S., 39a, 122a
 Amiel, D., 128a
 Ando, T., 168a
 Aoyagi, T., 285a
 Aquilar, J.L., 174a
 Arakawa, M., 40a, 67a
 Arima, S., 146a
 Armstrong, C.G., 124a, 125a
 Aruga, S., 149a
 Asahi, T., 98a
 Asano, M., 68a
 Asao, M., 94a
 Ashikaga, M., 296a
 Aug, F., 659
 Azuma, T., 71a, 100a, 287a
 Azumi, T., 98a
- Bang, F.B., 116a
 Bannon, C., 619
 Baratashvili, I.K., 89a
 Bedford, A., 255
 Benner, K.U., 173a, 174a
 Berga, L., 174a
 Bernardin, D., 87a
 Bialonski, K., 66a
 Blagoeva, R., 123a
 Blasberg, P., 66a, 415
 Boisseau, M., 156a
 Born, G.V.R., 415
 Bourguet, J., 54a
 Boutin, D., 475
 Boynard, M., 40a
 Brankov, G., 69a
 Brooks, D.E., 269, 273a, 485
 Brouwer, R., 110a
 Bugliarello, G., 331
 Bukowski, J., 81a
 Buonocore, M., 49a
 Butler, J., 291a
- Cardon, A., 110a
 Carr, K., 129a
 Chabanel, A., 569
 Champailleur, A., 48a, 493
 Charm, S.E., 653
 Chatain, D., 144a
 Chatani, H., 78a
 Chaturani, P., 166a, 235, 245
 Che, D., 130a
 Chicaud, P., 62a
 Chien, S., 3, 41a, 48a, 307
 Chihera, K., 94a
 Choudhury, K.R., 92a
 Chuich, G.A., 132a
 Cirette, B., 178a
 Cole, F.L., 129a
 Colombati, S., 296
 Copley, A.L., 1, 37, 189, 271, 274a, 725
 Cornhill, J.F., 162a
 Corry, W.D., 42a, 517
 Cusack, M., 415
- Dagan, J., 70a
 Daniels, W.A., 56a
- Dauer, U., 157a
 Davis, J., 569
 Delhon, A., 63a
 Delime, A., 87a
 Demont, P., 144a
 Dethmers, D.A., 127a
 Dintenfass, L., 43a, 44a, 85a, 191, 387
 Doi, H., 152a
 Dolz, J., 174a
 Dufaux, J., 55a, 59a
 Duvivier, C., 117a, 149a
- Easthope, P.L., 269, 485
 Ehrly, A.M., 70a
 Eichorn, J.L., 45a
 Einav, S., 70a
 Endo, C.M., 139a
 Essabbah, H., 46a
- Fabisiak, W., 176a
 Fabre, G., 46a
 Fang, K.H., 140a
 Fateh-Moghadam, A., 109a
 Favard, P., 54a
 Ferry, J.D., 180a
 Fischer, T.M., 46a
 Forst, R., 415
 Fujihara, S., 643
 Fujishiro, K., 285a
 Fujiwara, H., 73a
 Fukada, E., 23, 61a, 142a, 405
 Fukabayashi, T., 126a
 Fukuda, T., 281a, 282a
 Fukushima, T., 71a, 287a
 Fung, Y.C., 135a, 369
 Furuhata, H., 285a
- Gaehtgens, P., 355
 Gaillard, M., 156a
 Gaillard, S., 62a, 63a
 Geeren, M., 173a, 174a
 George, C., 156a
 Gerhards, M., 157a
 Gesch, M., 157a
 Geysant, A., 48a, 493
 Giovannini, G., 296a
 Goldsmith, H.L., 72a, 531
 Golikov, Yu.V., 132a
 Gomez, M.A., 139a
 Gotoh, F., 137a, 158a, 163a, 165a
 Gotoh, K., 73a
 Gotoh, M., 67a
 Greig, R.G., 273a
 Gross, J.F., 79a, 693
 Gupta, B.B., 74a, 129a
- Hamada, H., 118a, 295a
 Hamano, A., 83a
 Hanai, S., 284a
 Handa, H., 97a, 99a
 Hanss, M., 40a, 156a
 Hanya, S., 75a
 Harkness, J., 111a
 Hartert, H.H., 703
 Hartmann, F., 39a
 Haruta, K., 68a
 Harwood, F.L., 128a
- Hasan, Z., 129a
 Hasegawa, H., 47a
 Hasegawa, M., 76a
 Hasegawa, Y., 47a
 Hayashi, K., 97a, 99a, 294a
 Healy, J.C., 48a, 156a, 493
 Herman, G., 54a
 Herrmann, T., 48a, 156a, 493
 Higaki, S., 281a, 282a
 Hikichi, K., 146a
 Hill, C.D., 255
 Hirakawa, S., 67a, 73a
 Hiramatsu, O., 106a, 160a, 279a
 Hirata, S., 76a
 Hirokawa, A., 68a
 Hoki, N., 106a, 279a
 Honma, H., 118a
 Hori, T., 179a
 Horimoto, M., 77a, 275a
 Hosaka, K., 40a
 Hosomi, H., 76a, 78a
 Houhouyan, L., 60a
 Hu, L., 130a, 131a
 Huang, C.R., 176a
 Huang, X., 130a
- Iacovides, A., 569
 Iada, N., 281a
 Ichioka, Y., 135a
 Ida, T., 81a
 Ikemoto, S., 296a
 Inagaki, Y., 287a
 Inoue, M., 94a
 Intaglietta, M., 79a
 Ishihara, A., 75a
 Ishii, T., 278a
 Ishizaka, S., 153a, 289a
 Isogai, Y., 296a
 Ito, H., 67a
 Itoh, K., 161a
 Itoh, T., 57a
- Jackson, L.J. 42a, 517
 Jan, K.-M., 48a
 Jedrzejczyk, H., 44a. 387
 Jimbo, M., 121a
 Joly, M., 445
 Joseph, K.P., 80a
 Joshi, T., 81a
 Jou, J.M., 174a
 Judycki, W., 81a
 Juhan-Vague, I., 49a
- Kagiyama, M., 106a, 160a, 279a
 Kaibara, Makato, 23, 50a, 405
 Kaibara, Manabu, 177a
 Kaizuka, T., 78a
 Kajiyama, F., 106a, 160a, 279a
 Kameyama, M., 278a
 Kamiya, A., 90a
 Kamiya, N., 633
 Kanai, H., 102a
 Kanno, R., 285a
 Kaperonis, A.A., 41a
 Kaps, B., 39a
 Karino, T., 72a, 82a. 95a
 Katsuda, S., 78a
 Kawaguti, M., 83a, 133a
 Kawamura, Y., 57a
 Kiesewetter, H., 58a, 157a
 Kikkawa, S., 113a

Author Index

- Kikuchi, Y., 51a, 163a, 275a
 King, R.G., 41a
 Kitabatake, A., 94a
 Kitamura, K., 121a
 Klein, J., 589
 Ko, F.K., 129a
 Kobari, M., 137a, 158a, 163a, 165a
 Kobayashi, T., 177a
 Kodaira, K., 285a
 Kohsaka, T., 57a
 Koide, M., 40a
 Kon, K., 53a
 Kondo, H., 119a
 Kondo, T., 40a
 Kondo, Y., 279a
 Konno, K., 133a
 Kostrzewska, K., 81a
 Kosuge, S., 295a
 Kotera, H., 294a
 Koyama, T., 51a, 77a, 163a, 275a
 Kremer, E., 120a
 Kristol, D.S., 176a
 Kron, R.E., 475
 Kukhareva, L.V., 276a, 601
 Kuroda, K., 633
 Lacabanne, C., 144a
 Lacombe, C., 46a, 445
 Lai, W.M., 124a, 125a
 Landgraf, H., 70a
 Lauressergues, H., 63a
 Le Devehat, C., 178a
 Lelievre, J.C., 46a
 Lemoine, A., 178a
 Lerche, D., 52a
 Leterrier, F., 46a
 Levesque, M.J., 162a
 Lian, Z-J., 84a, 103a
 Liao, F-L., 85a, 191
 Lichtarge, O., 531
 Liepsch, D., 159a
 Lingard, P.S., 86a
 Litt, M., 475
 Liu, C.F., 140a
 Long, R.L., 207, 223
 Lorand, L., 50a
 Lu, E-W., 64a
 Lucius, M., 87a, 453
 Ma, S.H., 140a
 Mabuchi, K., 119a
 Maeda, H., 142a
 Maeda, N., 60a
 Maeda, T., 296a
 Maesa, N., 53a
 Magoshi, J., 142a
 Magoshi, Y., 142a
 Mahajan, S.P., 166a
 Majhi, S.N., 87a, 88a
 Majima, Y., 116a
 Mak, A.F., 124a, 125a
 Makovetsky, Yu.V., 132a, 154a
 Malher, E., 149a
 Mamisashvili, V.A., 89
 Marcel, M., 156a
 Maroudas, A., 619
 Martin, D., 149a
 Marumoto, Y., 177a
 Masuda, H., 90a
 Masuda, Y., 287a
 Masuda, Yoshio, 643
 Matsubara, T., 116a
 Matsumura, G., 295a
 Matsuo, H., 94a
 Matsuzaki, Y., 133a
 Matsuzawa, T., 71a
 Matunobu, Y., 290a
 Mauduit, Ph., 54a
 McIntire, L.V., 50a, 207, 223
 McHedlishvili, G., 91a
 Meier, Ch.D., 92a
 Mikawa, K., 285a
 Mills, P., 55a, 59a
 Miloh, Z., 70a
 Minamiyama, M., 284a
 Mineshita, T., 179a
 Mishima, A., 94a
 Misra, J.C., 92a
 Missirlia, Y.F., 93a
 Mitaku, S., 149a
 Mito, K., 106a, 279a
 Miyamoto, H., 67a
 Miyanaga, Y., 126a
 Miyoshi, Y., 116a
 Morii, T., 295a
 Morita, H., 94a
 Morita, M., 119a
 Morita, Y., 282a
 Moritake, K., 97a, 99a
 Motomiya, M., 72a, 82a, 95a, 133a
 Moulin, J.P., 49a
 Mow, V.C., 124a, 125a
 Müller, R., 58a
 Murai, S., 116a
 Muraki, N., 287a
 Murata, T., 96a
 Nagasawa, S., 97a, 99a
 Nagasawa, S., 99a
 Nakagawa, K., 161a
 Nakamura, H., 143a
 Nakamura, S., 142a
 Nakamura, T., 133a
 Nakamura, Y., 282a
 Nakanishi, S., 133a
 Nakayama, R., 98a
 Naruo, Y., 97a, 99a
 Nash, G.B., 55a
 Nerem, R.M., 162a, 280a
 Nicolas, A., 60a
 Nigam, K.M., 74a
 Niimi, H., 283a, 284a, 288a
 Niki, R., 146
 Ninomiya, I., 76a
 Nishihara, K., 160a
 Nishinari, K., 144a, 147a
 Nisizawa, M., 145a
 Nitta, J., 163a, 275a
 Nubar, Y., 267
 Numata, M., 100a
 Oda, N., 292a
 Ogawa, S., 68a
 Ohba, K., 279a
 Ohhashi, T., 100a
 Ohkubo, C., 68a
 Ohshima, N., 292a, 293a
 Oka, S., 167a, 347
 Okabe, H., 296a
 Okano, K., 143a
 Okumura, A., 97a, 99a
 Oneda, G., 81a
 Oosumi, Y., 73a
 Opitz, R., 66a
 Ozawa, S., 98a
 Palade, G.E., 563
 Pallotti, C., 167a
 Pallotti, G., 167a, 296a
 Pan, W.E., 176a
 Papenfuss, H-D., 693
 Pastore, A., 129a
 Patitucci, P., 369
 Pedley, T.J., 148a
 Petrov, N., 123a
 Pfafferott, C., 109a
 Phillips, W.M., 56a
 Piatkiewicz, W., 81a
 Presles, J.M., 60a, 63a
 Pries, A.R., 355
 Puchelle, E., 117a, 659
 Qian, M-Q., 64a
 Quemada, D., 46a, 55a, 59a, 445, 501
 Rachev, A.I., 69a
 Rafie, S., 136a
 Rahat, S., 101a
 Rakow, S., 3
 Ramet, M., 178a
 Rathod, V.P., 235
 Richardson, P.D., 415
 Rieger, H., 415
 Roach, M.R., 9
 Rohling-Winkel, I., 415
 Rooz, E., 280a
 Rose, D., 127a
 Rossignol, B., 54a
 Rozman, C., 174a
 Rusch, Ph., 48a, 493
 Saeki, Y., 134a
 Saga, M., 118a, 295a
 Saint-Blancard, J., 46a
 Sakaguchi, M., 100a
 Sakakura, Y., 116a
 Sakamoto, K., 102a
 Sakanishi, A., 105a, 180a
 Sakaku, K., 23, 57a
 Sakata, N., 81a
 Sakurai, Y., 94a
 Sasada, T., 119a
 Sato, M., 47a, 292a, 293a
 Satoh, T., 163a
 Sawada, T., 168a
 Sawanobori, K., 68a
 Schmid-Schönbein, H., 66a, 157a, 415
 Schröer, R., 58a
 Schuessler, G.B., 41a
 Seaman, G.V.F., 42a, 517
 Secomb, T.W., 46a
 Seguchi, Y., 135a
 Seiffge, D., 120a
 Sekiya, M., 53a
 Sekiya, T., 282a
 Senda, S., 94a
 Seshadri, V., 129a
 Sgries, B., 39a
 Sharan, M., 286a

Author Index

- Sharikov, A.N., 169a
 Sharma, M.G., 136a
 Shi, Y-D., 84a, 103a
 Shibata, T., 134a
 Shiga, T., 53a, 60a
 Shimizu, D., 60a
 Shimizu, H., 285a
 Shinagawa, Y., 178a
 Shio, H., 278a
 Shirasaki, Y., 126a
 Shukuya, M., 287a
 Silberberg, A., 1, 183, 305, 589
 Simchon, S., 3
 Simionescu, M., 563
 Simionescu, N., 563
 Singh, M., 80a, 104a
 Singh, M.P., 286a
 Skalak, R., 307
 Snabre, P., 55a, 59a
 Snyder, W.H., 176a
 Solagna, S., 60a
 Sone, T., 179a
 Spain, S., 531
 Spinelli, F.R., 92a
 Stöhr-Liesen, M., 46a
 Stoltz, J.F., 60a, 62a, 63a, 87a, 149a, 453
 Stoltz, M., 156a
 Stoychev, St., 69a
 Strauer, B.E., 109a
 Su, J.A., 176a
 Suda, T., 53a, 60a
 Sugawara, M., 75a, 106a, 107a, Vague, Ph., 49a
 113a
 Sugiura, M., 121a
 Sugiura, Y., 61a
 Suma, K., 106a, 107a
 Sung, L.A., 3
 Suzuki, T., 67a, 73a
 Swift, D.L., 116a
 Takada, H., 179a
 Takahashi, O., 287a
 Takami, A., 137a
 Takano, Y., 105a
 Takaya, T., 67a
 Takemitsu, N., 290a
 Takeshita, M., 121a
 Takeuchi, Y., 106a
 Tam, P.Y., 291a
 Tamamushi, B., 667
 Tanahashi, N., 137a
 Tanahashi, N., 163a, 165a
 Tanahashi, T., 168a
 Tanaka, K., 137a, 163a
 Tanaka, K., 165a
 Tanaka, T., 67a
 Taneya, S., 179a
 Taniguchi, T., 177a
 Tanishita, K., 113a
 Tanouchi, J., 94a
 Tateishi, T., 126a
 Tessier-Lavigne, M., 531
 Tokita, M., 146a, 158a
 Tomita, M., 137a, 163a, 165a
 Tomonaga, G., 106a, 279
 Torzilli, P.A., 127a
 Toyoshima, H., 98a
 Tsang, W.C.O., 369
 Tsujii, T., 107a
 Tsukamoto, Y., 119a
 Tsushima, N., 163a, 275a
 Uonine, K., 62a
 Upadhyay, V.S., 245
 Usami, S., 41a, 48a
 Uyesaka, N., 278a
 Vaishnav, R.N., 108a
 Varazashvili, M., 91a
 Vasselon, C., 48a, 493
 Vatsala, T.M., 104a
 Vawter, D.L., 170a
 Verdugo, P., 291a
 Vives Corrons, J.L., 174a
 Volger, E., 109a
 Volochine, B., 149a
 Vorob'ev, V.I., 276a, 277a,
 601
 Wang, G.R., 138a, 140a
 Wang, J., 130a, 131a
 Wani, K., 179a
 Watanabe, M., 155a
 Watanabe, Y., 76a, 78a
 Watase, M., 147a
 Wehmeyer, A., 415
 Welch, W., 110a
 Wen, G-B., 113a
 Whitemore, R.L., 557
 Whittington, R.N.B., 111a
 Willard, A., 44a, 387
 Winlove, C.P., 569
 Witte, S., 112a, 579
 Wong, B.L., 653
 Woo, S.L-Y., 128a, 139a
 Wu, W-Y., 64a, 113a
 Wu, Y.P., 138a, 140a
 Wurzinger, L.J., 66a
 Wyard, S.J., 55a
 Yagi, Y., 73a
 Yamaguchi, M., 67a
 Yamaguchi, T., 113a
 Yamakawa, T., 283a
 Yamamoto, A., 179a, 283a
 Yamamoto, K., 282a
 Yamamoto, M., 119a
 Yamamoto, R., 643
 Yamashita, H., 145a
 Yamauchi, I., 118a
 Yan, Z-Y., 114a
 Yang, R.F., 138a, 140a
 Yanizeski, G.M., 331
 Yasuda, A., 292a
 Yazawa, K., 118a
 Yepsen, G., 475
 Yokose, T., 296a
 Yonekawa, K., 68a
 Yoshida, K., 81a
 Yoshida, S., 121a
 Yoshimura, S., 285a
 Zahm, J.M., 117a, 659
 Zaiko, V.M., 169a, 171a
 Zaretskaya, J.V., 171a
 Zborowski, M., 150a
 Ziedler, H., 39a, 122a

Contents of Volume 19, 1982

Number 1/2

ii Dedication

A.L. Copley

E. Fukada

E. Fukada, Y. Mikamo, T. Takemi
and R. Natori

1 Preface and Editorial

5 Report on Fourth International Congress of
Biorheology

11 Addresses at Opening Ceremony

Plenary Lectures

E. Fukada

S. Usami

A.L. Copley

Y. Hiramoto

Y.C. Fung

W.E. Stehbens

15 Electrical phenomena in biorheology

29 Physiological significance of blood rheology

47 The future of the science of biorheology

71 Rheological properties of echinoderm eggs
during cell division

79 Biorheology in the analysis of the lung

95 Hemodynamics and atherosclerosis

Poiseuille Award Ceremony

E. Fukada

H. Wayland

Syoten Oka

A. Silberberg

103 Introduction

105 Introductory Remarks

109 Presentation of Medal

111 The mechanics and thermodynamics of separation
flow through porous, molecularly disperse, solid
media: The Poiseuille Lecture 1981

Congress Symposium: Physiological Fluid Dynamics

H. Niimi and M. Sugihara

B.K. Pai

T. Fukushima and T. Azuma

Y. Matunobu and N. Takemitsu

M. Singh and T.M. Vatsala

129 Blood rheology near a stagnation point

137 Shapes of red blood cells during micropipette
aspiration

143 The horseshoe vortex: A secondary flow
generated in arteries with stenosis, bifurcation,
and branchings

155 Wall-shear-stress relaxation due to the compliant
motion of arterial walls

165 Erythrocytes sedimentation profiles under
gravitational field as determined by He-Ne
laser. II. Influence of erythrocyte shape

Congress Papers

R.B. Whittington and J. Harkness

S. Mitaku and S. Aruga

H. Masuda, Y. Kikuchi, T. Nemoto,
A. Bukhjari, T. Togawa and A. Kamiya

M. Tokita, K. Hikichi, R. Niki
and S. Arima

T. Koyama, Y. Kikuchi, M. Horimoto,
Y. Kakiuchi, N. Tsushima and J. Nitta

175 Whole-blood viscosity, as determined by plasma
viscosity, haematocrit, and shear

185 Effect of calcium ion on the mechanical
properties of lipid bilayer membrane

197 Ultrastructural changes in the endothelial surface
of the canine carotid artery induced by wall
shear stress load

209 Dynamic viscoelastic studies on the mechanism
of milk clotting process

221 White blood cell adhesion to endothelium and
rheological behavior in microvessels of
overinflated frog's lung

Report on Satellite Meeting:

229 Hemorheological approach to
cardiovascular diseases

Non-Congress Communications

- G.W. Scott Blair
H. Rogausch
M. Singh and V. Muthukrishnan
T. Chan, M.Y. Jaffrin, V. Seshadri and C. McKay
M. Duszyk and J. Doroszewski
J.L. Dimicoli, M. Nakache and P. Peronneau
T.S. Stanwyck, R. Fischer, M. Pope and D. Seligson
F.J. Walburn and P.D. Stein
G.W. Jackson and D.F. James
A.N. Sharikov and V.M. Zaiko
J.E. Ramcharan, H.S. Shjoja, M. Piggott and D.E.M. Taylor
S. Gaillard, A. Delhon, H. Laurrensergues and J.F. Stoltz
H. Kiesewetter, H. Radtke, F. Jung, H. Schmid-Schonbein and G. Wortberg
- 231 Second European Conference on Clinical Hemorheology
Lecture: The history of rheology
Papers
237 Modifications of the erythrocyte deformability alter the effect of temperature on the relative viscosity of human blood
245 Hemorheological characteristics of blood in various diseases: Diabetes mellitus, hypertension, acute infection, ischaemic heart disease and attempted suicide
253 Flows of red blood cell suspensions through narrow two-dimensional channels
269 Surface interactions of leukemia and red cells passively moving in a quiescent fluid
281 Direct visualization of different convection phenomena at liquid solid interfaces by the use of a chemiluminescent enzymatic immobilized system
301 Studies on prestress in bone
307 The shear rate at the wall in a symmetrically branched tube simulating the aortic bifurcation
317 The hydrodynamics resistance of hyaluronic acid and its contribution to tissue permeability
331 About the importance of account of some microcirculation parameters dispersion in modelling oxygen transport
341 The effects of vibration upon blood-viscosity and red-cell mobility: A study *in vivo* and *in vitro*
353 Hemorheological and biochemical parameters in the "fatty" rat
Review Article
363 Determination of yield point: Methods and Review
Abstracts
375 Fourth Annual Meeting of Japan Society of Biorheology

383 *Publisher's Announcement*

Number 3

4. International Congress of Biorheology. 27. July-1. August 1981, Japan
Congress Symposium: Mechanical Properties of Living Tissues
- S.L.-Y. Woo
S.L.-Y. Woo, M.A. Gomez, Y.-K. Woo and W.H. Akeson
R.D. Bauer, R. Busse and A. Schabert
- 385 Mechanical properties of tendons and ligaments.
I. Quasistatic and nonlinear viscoelastic properties.
397 Mechanical properties of tendons and ligaments.
II. The relationships of immobilization and exercise on tissue remodeling.
409 Mechanical properties of arteries

K. Hayashi	425 Fundamental and applied studies of mechanical properties of cardiovascular tissues
A. Viidik, C.C. Daniels and H. Oxlund	437 On fundamental and phenomenological models, structure and mechanical properties of collagen, elastin and glycosaminoglycan complexes
R. Skalak and S. Chien	453 Rheology of blood cells as soft tissues <i>Congress papers</i>
R.N. Vaishnav and M.E. Ahmad	463 Mathematical characterization of the nonlinear thermorheological behavior of the vascular tissue
S. Nagasawa, H. Handa, Y. Naruo, A. Okumura, K. Moritake and K. Hayashi	481 Biomechanical study on aging changes and vasospasm of human cerebral arteries

Number 4

Editorial

A.L. Copley	491 Highest honor, the Japan Academy Prize, awarded to Syoten Oka for his outstanding theoretical contributions to biorheology
<i>Non-Congress Communications</i>	
<i>Papers</i>	
M. Bitbol and F. Leterrier	495 Spin label study of erythrocyte membrane submitted to a bending stress
P. Chaturani and S.P. Mahajan	507 Poiseuille flow of micropolar fluid with non-zero couple stress at boundary with applications to blood flow
P.A. Torzilli, D.E. Rose and D.A. Dethmers	519 Equilibrium water partition in articular cartilage
<i>Brief Communication</i>	
M. Singh and T.M. Vatsala	539 Sedimentation of erythrocytes under gravitational field as determined by He-Ne laser. I. Comparison with suspension of rigid spheres
<i>4. International Congress of Biorheology. 27. July-1. August 1981, Japan</i>	
<i>Congress Symposium: Red Cell Aggregation and Deformability Part I</i>	
K. Jan, S. Usami and S. Chien	543 The disaggregation effect of Dextran 40 on red cell aggregation in macromolecular suspensions
T. Suda, N. Maeda, D. Shimizu, E. Kamitsubo and T. Shiga	555 Decreased viscosity of human erythrocyte suspension due to drug-induced spherostomatocytosis
L. Dintenfass, H. Jedrzejczyk and A. Willard	567 Photographic, stereological and statistical methods in evaluation of aggregation of red cells in disease: Part I: Kinetics of aggregation
T. Koyama and Y. Kikuchi	579 Reduced red cell filtrability due to red cell plasma protein interactions

Number 5

- D. Lerche
Y. Takano and A. Sakanishi
G. Mchedlishvili and M. Varazashvili
J.-L. Eichhorn
H. Oxlund and R. Manthorpe
E. Malher, D. Martin, C. Duvivier, B. Volochine, and J.F Stoltz
- Congress Papers*
- 587 Spontaneous aggregation of washed human erythrocytes in isotonic media of reduced ionic strength. Conclusions about the spatial arrangement of the N-terminal part of the glycophorins
- 599 The viscoelasticity of dispersions of spherical cells with an anisotropic membrane
- Non-Congress Papers*
- 613 Flow conditions of red cells and plasma in microvascular bifurcations
- 621 Laser Doppler anemometry on individual red blood cells
- 631 The biomechanical properties of tendon and skin as influenced by long term glucocorticoid treatment and food restriction
- 647 New device for determination of cell electrophoretic mobility using Doppler velocimetry
- 655 *Erratum*
- 657 *Announcements*

Number 6

- M. Bitbol and F. Leterrier
M.I.G. Bloor
M. Tokita, K. Hikichi, R. Niki and S. Arima
P.N. Tandon, J.K. Misra and K.K. Srivastava
E.C. Eckstein
C.J. van Oss
G.B. Nash and S.J. Wyard
- H. Kiesewetter, U. Dauer, P. Teitel, H. Schmid-Schönbein and R. Trapp
- Non-Congress Communications*
- Papers*
- 669 Measurement of the erythrocyte orientation in a flow by spin labeling
- 681 An analysis of blood flow at low shear rates in a concentric cylinder viscometer
- 695 Application of the theory of gelation to enzymatic clotting process of casein micelle solution
- 707 Microstructural and peripheral-layer viscosity effects on peristaltic transport of seminal fluid
- 717 Rheophoresis-A broader concept of platelet dispersivity
- Letters to the Editors-in-Chief*
- 725 Shape of ageing erythrocytes
- 727 Shape of ageing erythrocytes
- 733 *Announcements*
- Congress Communication*
4. International Congress of Biorheology. 27. July-1. August 1981, Japan
- Congress Symposium: Red Cell Aggregation and Deformability Part II
- 737 The single erythrocyte rigidometer (SER) as a reference for RBC deformability

Author Index

- Ahmad, M.E., 463
 Akeson, W.H., 397
 Arima, S., 209, 695
 Aruga, S., 185
 Azuma, T., 143
- Bauer, R.D., 409
 Bitbol, M., 495, 669
 Bloor, M.I.G., 681
 Bukhari, A., 197
 Busse, R., 409
- Chan, T., 253
 Chaturani, P., 507
 Chien, S., 453, 543
 Copley, A.L., 1, 47, 491
- Danielson, C.C., 437
 Dauer, U., 737
 Delhon, A., 353
 Dethmers, D.A., 519
 Dintenfass, L., 567
 Doroszewski, J., 269
 Duszyk, M., 269
 Duvivier, C., 647
- Eckstein, E.C., 717
 Eichorn, J-L., 621
- Fischer, R., 301
 Fukada, E., 5, 11, 15, 103
 Fukushima, T., 143
 Fung, Y.C., 79
- Gaillard, S., 353
 Gomez, M.A., 397
- Handa, H., 481
 Harkness, J., 175
 Hayashi, K., 425, 481
 Hikichi, K., 209, 695
 Hiramoto, T., 71
 Horimoto, M., 221
- J.L., Dimicoli, 281
 Jackson, G.W., 317
 Jaffrin, M.Y., 253
 James, D.F., 317
 Jan, K., 543
 Jedrzejczyk, H., 567
 Jung, F., 363
- Maeda, N., 555
 Mahajan, S.P., 507
 Malher, E., 647
 Manthorpe, R., 631
 Martin, D., 647
 Masuda, H., 197
 Matunobu, Y., 155
 McKay, C., 253
 Mcchedlishvili, G., 613
 Mikamo, Y., 11
 Misra, J.K., 707
 Mitaku, S., 185
 Moritake, K., 481
 Muthukrishnan, V., 245
- Nagasawa, S., 481
 Nakache, M., 281
 Naruo, Y., 481
 Nash, G.B., 727
 Natori, R., 11
 Nemoto, T., 197
 Niimi, H., 129, 229
 Niki, R., 209, 695
 Nitta, J., 221
- Oka, S., 109
 Okumura, A., 481
 Oxlund, H., 437, 631
- Pai, B.K., 137
 Peronneau, P., 281
 Piggott, M., 341
 Pope, M., 301
- Radtke, H., 363
 Ramcharan, J.E., 341
 Rogausch, H., 237
 Rose, D.E., 519
- Sakanishi, A., 599
 Schabert, A., 409
 Schmid-Schönbein, H., 363, 737
 Scott Blairs, G.W., 231
 Seligson, D., 301
 Seshadri, V., 253
 Sharikov, A.N., 331
 Shiga, T., 555
 Shimizu, D., 555
 Shroja, H.S., 341
 Silberberg, A., 111
 Singh, M., 165, 245, 539
 Skalak, R., 453
 Srivastava, K.K., 707
 Stanwyck, T.S., 301
- Stehbens, W.E., 95
 Stein, P.D., 307
 Stoltz, J.F., 353, 647
 Suda, T., 555
 Sugihara, M., 129
- Kakiuchi, Y., 221
 Kamitsubo, E., 555
 Kamiya, A., 197
 Keisewetter, H., 363
 Keisewetter, H., 737
 Kikuchi, Y., 197, 221, 579
 Koyama, T., 221, 579
- Laurresergues, H., 353
 Lerche, D., 587
 Letterier, F., 495
 Letterier, F., 669
- Takano, Y., 599
 Takemi, T., 11
 Takemitsu, N., 155
 Tandon, P.N., 707
 Taylor, D.E.M., 341
 Teitel, P., 737
 Togawa, T., 197
 Tokita, M., 209, 695
 Torzilli, P.A., 519
 Trapp, R., 737
 Tsushima, N., 221
- Usami, S., 29, 543
- van Oss, C.J., 725
 Vaishnav, R.N., 463
 Varazashvili, M., 613
 Vatsala, T.M., 165, 539
 Viidik, A., 437
 Volochine, B., 647
- Walburn, F.J., 307
 Wayland, H., 105
 Whittington, R.B., 175
 Willard, A., 567
 Woo, S.-L-Y., 385, 397
 Woo, Y-K., 397
 Wortberg, G., 363
 Wyard, S.J., 727
- Zaiko, V.M., 331

Contents of Volume 20, 1983

Number 1

Papers

- | | | |
|--|----|---|
| M. Tokita, H. Futakuchi, R. Niki, S. Arima and K. Hikichi | 1 | Dynamic mechanical properties of milk and milk gel |
| S. Chien, E.A. Schmalzer, M.M.L. Lee, T. Impelluso and R. Skalak | 11 | Role of white blood cells in filtration of blood cell suspensions |
| E.A. Schmalzer, R. Skalak, S. Usami, M. Vayo and S. Chien | 29 | Influence of red cell concentration on filtration of blood cell suspensions |
| R. Skalak, T. Impelluso, E.A. Schmalzer and S. Chien | 41 | Theoretical modeling of filtration of blood cell suspensions |
| A.B. Corbet | 57 | On the in vivo material functions of mammalian blood |
| C. Marriott, D.T. Brown and M.F. Beeson | 71 | The use of purified mucus glycoprotein gels in the assessment of mucolytic activity |

Abstracts

- | | |
|----|--|
| 81 | 5. Annual Meeting of Japanese Society of Biorheology, 1982 |
|----|--|

107 Announcements

Number 2

Non-Congress Communications

Papers

- | | | |
|---|-----|--|
| S.N. Omenyi and R.S. Snyder | 109 | Settling of fixed erythrocyte suspension droplets |
| T. Karino and M. Motomiya | 119 | Flow visualization in isolated transparent natural blood vessels |
| M. Zborowski | 129 | Theoretical prediction of the oxygen output for a dialysis membrane with a catalyst, in a flat plate dialyzer |
| M.W. Rampling and T. Challoner | 141 | A theoretical analysis of the effects of varying fibrinogen concentration and hematocrit on the flow characteristics of blood in cylindrical tubes |
| L.M. Srivastava, V.P. Srivastava and S.N. Sinha | 153 | Peristaltic transport of a physiological fluid. Part I. Flow in non-uniform geometry |
| L.M. Srivastava, V.P. Srivastava and S.N. Sinha | 167 | Peristaltic transport of a physiological fluid. Part II. Flow in uniform geometry |
| L.M. Srivastava, V.P. Srivastava and S.N. Sinha | 179 | Peristaltic transport of a physiological fluid. Part III. Applications |
| M.G. Sharma and S. Rafie | 187 | Development of a rheological constitutive relation for a soft biological tissue |
| M. Hanss | 199 | Erythrocyte filtrability measurement by the initial flow rate method |
| A. Silberberg | 213 | <i>Announcement</i> |
| | | 4. International Congress of Biorheology.
27. July-1. August 1981, Japan |
| | | <i>Congress Symposium: Rheology
of Biolocomotion and Mucus</i> |
| P. Verdugo, P.Y. Tam and J. Butler | 215 | Biorheological matching: Mucociliary interaction and epithelial clearance |
| T. Okubo, S. Shimura, T. Takishima, Y. Otubo and K. Umeyama | 223 | Conformational structure of respiratory mucus studied by laser correlation spectroscopy |
| | 231 | Frequency distribution of viscoelastic properties of sputum studied by the raised cosine pulse method: The effects of mucolytic agents |

E. Puchelle, J.M. Zahm and C. Duvivier

- 239 Spinability of bronchial mucus. Relationship with viscoelasticity and mucous transport properties

Y. Majima, Y. Sakakura, T. Matsubara,
S. Murai and Y. Miyoshi

- 251 Mucociliary clearance in chronic sinusitis: Related human nasal clearance and in vitro bullfrog palate clearance

Number 3

Editorial

A.L. Copley

- 263 The establishment of a Professorship of Biorheology, bestowed on Alex Silberberg, at the Weizmann Institute of Science

Papers

S.P. Sutera and R. Tran Son Tay

- 267 Mathematical model of the velocity field external to a tank-treading red cell

T.W. Secomb, T.M. Fischer and R. Skalak

- 283 The motion of close-packed red blood cells in shear flow

T.W. Secomb, S. Chien, K.-M. Jan
and R. Skalak

- 295 The bulk rheology of close-packed red blood cells in shear flow

R. Skalak, M. Hanss and S. Chien

- 311 Indices of filterability of red blood cell suspensions

P.D. Richardson and S. Lazzara

- 317 Human blood oscillating axially in a tube

L. Fu-lung and L. Dintenfass

- 327 Effect of microrheology of blood on the apparent flow instability in a rotational viscometer

G.V.F. Seaman

- 343 *News from the International Society of Biorheology*

- 345 *Erratum*

- 347 *Announcement*

Number 4

A.L. Copley

- 349 *Preface*

- 351 The International Society of Biorheology

- 357 Program

- 361 Summaries

- 371 Abstracts

- 447 *Author Index*

Number 5

A.L. Copley

- 450 *Foreword*

- 451 In Memory of Bun'ichi Tamamushi (1898-1982)

S. Oka and E. Fukada

- 453 *Preface*

Papers

E. Iizuka, A. Hachimori, K. Abe,
M. Sunohara, Y. Hiraide, A. Ueyama,
K. Kamo, T. Fujiwara, F. Nakamura
and T. Uno

- 459 Comparative study on the mechanical property
of silk thread from cocoons of *Bombyx mori* L.

T. Murata

- 471 Theory of non-Newtonian viscosity of red blood
cell suspension: Effect of red cell deformation

M. Tomita, F. Gotoh, M. Yamamoto,
N. Tanahashi and M. Kobari

- 485 Effects of hemolysis, hematocrit, RBC swelling,
and flow rate on light scattering by blood in a
0.26 cm ID transparent tube

M. Watase and K. Nishinari	495	Rheological properties of mixtures of protein-polysaccharide-dynamic viscoelasticity of blend gels of acylated gelatin, kappa-carrageenan and agarose
M. Kawaguti and A. Hamano	507	Numerical study on post-stenotic dilatation
A. Sakanishi and J.D. Ferry	519	Complex viscosity of bovine red blood cells in suspensions
M. Hasegawa	531	Rheological properties and wall structures of large veins
R. Takaki and K. Yasuzumi	547	Nonuniform distribution of aggregates in a suspension flowing around a solid body
Y. Takano and A. Sakanishi	557	Shear viscoelasticity of suspensions of biological cells with fluid membrane
K. Imaizumi and T. Shiga	569	Effect of immunoglobulins and IgG-fractions on the human erythrocyte aggregation, studied by a rheoscope combined with image analyzer
S. Oka	579	A note on a theoretical study of erythrocyte sedimentation
M. Kaibara	583	Rheological behaviors of bovine blood forming artificial rouleaux
A. Kato, M. Arakawa and T. Kondo	593	Flow properties of hemolysate-loaded liposome suspensions
H. Niimi, M. Sugihara and T. Yamakawa	603	Hemorheological factors of oxygen transfer in capillary tissue unit
A. Yamamoto and H. Niimi	615	Effect of high osmotic media on blood viscosity and red blood cell deformability
A. Yamamoto, T. Mineshita and T. Toyosaki	623	Study of wall effect on the flow of milk in capillary
D. Quemada and R. Droz	635	Blood viscoelasticity and thixotropy from stress formation and relaxation measurements: A unified model
S. Seno, T. Tsujii and T. Ono	653	The anionic barrier of blood vessel walls and the possible pathologic changes due to the deionization of the barrier and plasma proteins
M. Joly, C. Lacombe and J.C. Lelievre	663	Tentative application of the tangent simple system method to the study of viscoelastic behaviour of blood
S. Shimura, T. Ōkubo, S. Maeda, T. Aoki, M. Tomioka, Y. Shindo, T. Takishima and K. Umeyama	677	Effect of expectorants on relaxation behavior of sputum viscoelasticity in vivo
H. Chmiel, I. Anadere, E. Walitza and S. Witte	685	The measurement of density and its significance in blood rheology
A.L. Copley, R.G. King and S. Chien	697	On the antithrombogenic action of low molecular weight heparins and of chondroitins A, B and C
W.D. Corry, L.J. Jackson and G.V.F. Seaman	705	Action of hydroxyethyl starch on the flow properties of human erythrocyte suspensions
A. Silberberg	719	Separation flow in matrices—Redefinition of friction coefficients
	729	<i>Author Index</i>

Number 6

- A.L. Copley and A. Silberberg 731 *Editorial*
Papers
- P. Chaturani and D. Biswas 733 Three-layered Couette flow of polar fluid with non-zero particle spin boundary condition at the interfaces with applications to blood flow
- S. Moravec and D. Liepsch 745 Flow investigations in a model of a three-dimensional human artery with Newtonian and non-Newtonian fluids. Part I
- L.M. Srivastava and V.P. Srivastava 761 On two-phase model of pulsatile blood flow with entrance effects
- D. Koutsouris, M. Hanss and R. Skalak 779 Determination of erythrocytes transit times through a 5μ "Nuclepore" filter
- V. Kafka 789 On hydraulic strengthening of bones
- V. Kafka and J. Jírová 795 A structural mathematical model for the viscoelastic anisotropic behaviour of trabecular bone
Letter to the Editors-in-Chief
- P. Chaturani, D. Biswas and S.P. Mahajan 807 Reply to the comments on—a two-fluid model for blood flow through small diameter tubes
- A.L. Copley 811 *Abstracts*
"New Methods in Biorheology", A Satellite Meeting of the 5. International Congress of Biorheology, 1983
- 811 An Introduction
- 811 Part I: Macrorheological Approaches of Bio-rheological Fluids and Solids
- 827 Part II: Microrheological Approach of Bio-rheological Fluids
- i List of Contents and Author Index Volumes
18, 19 & 20, 1981, 1982 & 1983

Author Index

- Abe, K., 459
Anadere, I., 685
Aoki, T., 677
Arakawa, M., 593
Arima, S., 1

Beeson, M.F., 71
Biswas, D., 733,807
Brown, D.T., 71
Butler, J., 223

Challoner, T., 141
Chaturani, P., 733,807
Chien, S., 11,29,41,295,
 311,697
Chmiel H., 685
Copley, A.L., 263,349,697,
 731,812
Corbet, A.B., 57
Corry, W.D., 705

Dintenfass, L., 327
Droz, R., 635
Duvivier, C., 239

Ferry, J.D., 519
Fischer, T.M., 283
Fu-lung, L., 327
Fujiwara, T., 459
Fukada, E., 451
Futakuchi, H., 1

Gotoh, F., 485

Hachimori, A., 459
Hamano, A., 507
Hanss, M., 199,311,799
Hasegawa, M., 531
Hikichi, K., 1
Hiraide, Y., 459

Iizuka, E., 459
Imaizumi, K., 569
Impelluso, T., 11,41

Jackson, L.J., 705
Jan, K.-M., 295
Jirova, J., 795
Joly, M., 663

Kafka, V., 789,795
Kaibara, M., 583
Kamo, K., 459
Karino, T., 119
Kato, A., 593
Kawaguti, M., 507
King, R.G., 697
Kobari, M., 485
Kondo, T., 593
Koutsouris, D., 779

Lacombe, C., 663
Lazzara, S., 317
Lee, M.M.L., 11
Lelievre, J.C., 663
Liepsch, D., 745

Maeda, S., 677
Mahajan, S.P., 807
Majima, Y., 251
Mariott, C., 71
Matsubara, T., 251
Mineshita, T., 623
Miyoshi, Y., 251
Moravec, S., 745
Motomiya, M., 119
Murai, S., 251
Murata, T., 471

Nakamura, F., 459
Niimi, H., 603,615
Niki, S., 1
Nishinari, K., 495

Oka, S., 451,579
Okubo, S., 677
Okubo, T., 231
Omenyi, S.N., 109
Ono, T. 653
Otubo, Y., 231

Puchelle, E., 239

Quemada, D., 635

Rafie, S., 187
Rampling, M.W., 141
Richardson, P.D., 317

Sakakura, Y., 251
Sakanishi, A., 519,557

Schmalzer, E.A., 11,29
Seaman, G.V.F., 343,705
Secomb, T.W., 283,295
Seno, S., 653
Sharma, M.G., 187
Shiga, T., 569
Shimura, S., 231,677
Shindo, Y., 677
Silberberg, A., 215,719,731
Sinha, S.N., 153,167,179
Skalak, R., 11,29,41,283,295,
 311,779
Snyder, R.S., 109
Srivastava, L.M., 153,167,179,761
Srivastava, V.P., 153,167,179,761
Sugihara, M., 603
Sunohara, M., 459
Sutera, S.P., 267

Takaki, R., 547
Takano, Y., 557
Takushima, T., 231,677
Tam, P.Y., 223
Tanahashi, N., 485
Tokita, M., 1
Tomioka, M., 677
Tomita, M., 485
Toyosaki, T., 623
Tran Son Tay, R., 267
Tsujii, T., 653

Ueyama, A., 459
Umeya, K., 231,677
Uno, T., 459
Usami, S., 29

Vayo, M., 29
Verdugo, P., 223

Walitza, E., 685
Watase, M., 495
Witte, S., 685

Yamakawa, T., 603
Yamamoto, A., 615,623
Yamamoto, M., 485
Yasuzumi, K., 547

Zahm, J.M., 239
Zborowski, M., 129