

Wednesday, September 27 (Young Investigators' meeting)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
10:30-12:00	Registration			
12:00-13:30	Basic science	Young investigators meeting	Simmonds M. (Australia), Tamas A. (USA), Anker M. (Germany)	
12:00-12:15		Contrast enhanced ultrasound as an innovative option for therapy evaluation in head and neck squamous cell carcinoma	Rink M. (Germany)	Jung E.M., Künzel J.
12:15-12:30				
12:30-12:45				
12:45-13:00				
13:00-13:15				
13:15-13:30				

Thursday, September 28 (GH)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
08:00-...	Registration			
09:00-10:30	Basic science	Germany-Hongkong symposium on microcirculation	Blocki A. (Hongkong), Braune S (Germany), Küpper JH (Germany)	
09:00-09:15		Human Induced Pluripotency Stem Cell-Derived Human Liver Organoid Construction	Wang L. (Germany)	Nie Y., Liu Y., Zhou Y., Xu X., Wang W., Ma N. Aydogmus N., Harb K., Bär S., Westphal S., Storsberg J., Jung F.
09:15-09:30		Influence of Arthrospira platensis extract or of biologically active ingredients on growth and function of human endothelial cells	Krüger-Genge A. (Germany)	Dzierga A., Jung C-G-H., Küpper J-H., Jung F.
09:30-09:45		Effects of an aqueous extract of Arthrospira platensis on the activation and aggregation of human platelets	Braune S. (Germany)	
09:45-10:00		Neoangiogenesis in human tissue in the CAM Model	Härteis S. (Germany)	
10:00-10:15		In vitro Mimicking the Epithelial Folding Using the Polydopamine Film	Nie Y. (Germany)	
10:15-10:30		Human liver hepatoma cell line HepG2 with stable recombinant CYP2B6 expression as in-vitro microsomal model for biotransformation	Schulz C. (Germany)	Liu Y, Wang W., Xu X., Wang L., Ma N. Majchrak K, Herzog N, Dziergwa A, Jung F, Küpper J-H
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30	Basic science	Microcirculation and stem cells	Ma N. (Germany), Härteis S. (Germany), Gurtner G (California)	
11:00-11:15		Stabilization and improving the functionality of micro vascular networks in microfluidic devices	Blocki A. (Hongkong)	Tarmom M., Jung C-G-H., Waldeck P., Petrick P., Jung F., Küpper J-H.
11:15-11:30		Establishment of coculture system for studying the influence of extracts from Arthrospira platensis on human colon cancer and non-ca	Braune S. (Germany)	
11:30-11:45		TGF- β 1 and Macrophage derived-Conditioned Medium synergistically drive Epithelial-to-Mesenchymal Transition in a Lung Cancer Cell	Joyce (Hongkong)	
11:45-12:00		Integrating hypoxia with defined xenogeneic serum-free synthesis augments pro-angiogenic potential of mesenchymal stem cell (MSC)	KK (Hongkong)	
12:00-12:15		Design and fabrication of a vascularized organotypic skin construct	Amit (Hongkong)	
12:15-12:30		Investigating the effects of a cytokine storm in a micro-physiological system of the microvasculature.	Christy (Hongkong)	
12:30-13:30	Lunch break / Exhibition visit			
13:30-15:00		Microsurgery and tissue engineering in the field of plastic surgery / Autologous fat transfer	Radke C. (Austria), Kotaro Y. (Japan), Kokai L. (USA)	
13:30-13:45		Why and how are stem cells the future of medicine	Alt E. (Germany)	Hazur J., Karakaya E., Bider F., Groll J., Alexiou Ch., Boccaccini R., Detsch R., Cicha I., Fethaus O., Prantl L. Henckell A., Eigenbger A., Prantl L., Pawlik M.
13:45-14:00		Retention rate of the fat and mechanisms of modulation tissue	Kokai L. (USA)	
14:00-14:15		Cell-specific responses of oxidative stress induced by alginate di-aldehydehydrogels	Genc H.(Germany)	
14:15-14:30		Cell-enriched lipotransfer leads to an increase in viability without manipulating the adipose derived stem cells	Eigenberger A. (Germany)	
14:30-14:45		Hyperbaric oxygen treatment for autologous fat grafting	Felthaus O. (Germany)	
14:45-15:00		Retention rate of autologous fat grafts Keynote I	Kokai L. (USA) Kotaro Y. (Japan)	
15:00-15:30	Coffee break / Exhibition visit			
15:30-17:00		MIDAS Symposium: Endothelial aspects of fluid management - from lab to bedside	Lehmann C. (USA), Cerny V. (Czech Republic), Hiebl B. (Germany)	
15:30-15:45		Endothelial aspects of fluid management	Lehmann C. (USA)	
15:45-16:00		Clinical impact of endothelial glycocalyx research	Cerny V. (Czech Republic)	
16:00-16:15		Approaches for glycocalyx protection – results of research on animal models	Astapenko D. (Czech Republic)	
16:15-16:30		Maldistribution of fluid studied by volume kinetics	Hahn R. (Sweden)	
16:30-16:45		Red blood cells lingering impacts hematocrit distribution in the microcirculation	Rashidi Y. (Germany)	
16:45-17:00		A new approach to study blood coagulation by measuring the AC phase shift response in parallel with blood viscosity	Antonova N. (Bulgaria)	
19:00-19:45	Historic old town	Guided city tour		
20:00	Historic Wurstkuchl	Get together welcome reception and dinner		

Thursday, September 28 (KH)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
08:00-...	Registration			
09:00-10:30		Blood Rheology I	Brun J.F. (France), Fornal M. (Poland), Wenzel F. (Germany)	
09:00-09:15		Sphingosine-1-phosphate amplifies the adverse effects induced by amyloid beta peptide on the oxygen dependence of erythrocyte membrane	Misiti F. (Italy)	
09:15-09:30		Body composition assessed by segmental bioimpedance analysis as a complex determinant of hemorheology	Brun J.F. (France)	
09:30-09:45		Expedition 5300 - Reduced red blood cell deformability is associated with excessive erythrocytosis in the highest city of the world	Stauffer E. (France)	
09:45-10:00		Effect of carotenoids on the physicochemical properties and functioning of erythrocytes	Fiedor J. (Polen)	
10:00-10:15		A new clinical mechanical marker of red blood cell deformability: sickle cell disease example	Viallat A. (France)	
10:15-10:30		The Role of Plasma for the mechanical properties of Blood Suspensions	Windberger U. (South Africa)	
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30		Blood Rheology II	Saldanha C. (Portugal), Mantskava M. (Georgia), Graf B. (Germany)	
11:00-11:15		Altered hemorheology in Fontan and Glenn circulations: the single ventricle as a rheologic disease model	Suriyany S. (USA)	
11:15-11:30		Red blood cell nitric oxide production	Suriyany S. (USA)	
11:30-11:45		Leptin as a potential regulator of blood rheology	Brun J.F. (France)	
11:45-12:00		Numerical analysis of the lateral movement of a deformable spherical capsule in pulsatile channel flows	Takeishi N. (Japan)	
12:00-12:15		Effects of 30-minutes and 24-hours Moderate Normobaric Hypoxia Exposure on Hematological and Hemorheological Parameters in Rats	Grau M. (Germany)	
12:15-12:30		Connection blood rheology and characteristics of form elements in patients with acute lymphoblastic leukemia	Mantskava M. (Georgia)	
12:30-13:30	Lunch break / Exhibition visit			
13:30-15:00	Basic science	Modeling of cell dynamics: Cytoskeleton and membrane	Antonova N. (Bulgaria), Fornal M. (Poland), Tamas A. (USA)	
13:30-13:45		Usefulness of hemorheological investigations in Mycoplasma pulmonis infection of laboratory rats	Barath V. (Hungary)	Varga A., Matrai A.A., Nemeth N., Deak A.
13:45-14:00		Advances of hemodynamics in cardiology Evaluation	Gori T. (Germany)	
14:00-14:15		Hemorheological and hemodynamic comparison of arterio-venous shunts with various size and location as experimental heart failure model	Fazekas L. (Hungary)	
14:15-14:30		Evaluation of angiogenesis in the 3D-in-vivo-tumor-model-potential	Pion E. (Myanmar)	
14:30-14:45		Crosstalk between hemorheology, hemostasis and immune system in severe COVID-19: a novel approach	Schrick D. (Hungary)	
14:45-15:00		Upcyting and characterization of human hepatocytes after isolation from chimeric mouse liver	Anders L. (Germany)	Schulze L., Herzog N., Kah J., Lüth S., Küpper J-H.
15:00-15:30	Coffee break / Exhibition visit			
15:30-17:00	Clinical	Microsurgery of peripheral nerves and vessels	Aszmann O. (Austria), Gohritz A. (Switzerland), Hong JP. (South-Korea)	
15:30-15:45		Keynote	Hong JP. (South Korea)	
15:45-16:00		The perfusion index as a noninvasive method for monitoring revascularized and replanted digits	Strauss C. (Germany)	
16:00-16:15		Periphereral nerve surgery in chronic pain and sensory deficits	Gohritz A. (Switzerland)	
16:15-16:30		Correlation between facial vascularized composite allotransplantation rejection and laboratory markers	Knoedler L. (Germany)	Aszmann O., Schaefer D.
16:30-16:45		Prevention of pressure sore recurrence by vastus lateralis excitation and transfer - The PreVENt-Concept	Klein S. (Germany)	
16:45-17:00		Advances in facial nerve reanimation	Kehrer A. (Germany)	
19:00-19:45	Historic old town	Guided city tour		
20:00	Historic Wurstkuchl	Get together welcome reception and dinner		

Thursday, September 28 (Verwaltung)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
08:00-...	Registration			
09:00-10:30		Exercise and microcirculation	Ahmadizad S. (Iran), Connes P. (France), Brun J-F. (France)	
09:00-09:15		Targets Identified From Exercised Heart: Killing Three Birds With One Stone	Xiao J. (China)	
09:15-09:30		Arterial stiffness and aerobic eccentric exercise: the good, the bad or the ugly	Mourot L. (France)	
09:30-09:45		Long term effects of exercise training on blood rheology in connection to body composition and metabolism	Brun J. (France)	
09:45-10:00		Exercise training and microcirculation	Ahmadizad S. (Iran)	
10:00-10:15		Effects of a "Living High-Training High" Altitude Training Camp on Total Hemoglobin Mass, Blood Rheology and Red Blood Cells Sen	Carin R. (France)	
10:15-10:30		Impact of 160.9 km/230 km ultramarathon-races on hematological and hemorheological parameters, and markers of inflammation, oxil	Grau M. (Germany)	
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30		Rheology, Microcirculation and Clinical Outcomes in Sickle Cell Disease	Detterich J. (USA), Connes P. (France), Corbacioglu S. (Germany)	
11:00-11:15		Abnormal mitochondria retention in mature sickle red blood cells	Esperti S. (France)	
11:15-11:30		A new clinical mechanical marker of red blood cell deformability: sickle cell disease example	Viallat A. (France)	
11:30-11:45		Increased mitochondria retention in mature red blood cells from Sickle cell patients (HbSS and HbSC genotypes)	Esperti S. (France)	
11:45-12:00		Modulatory Effects of Phosphodiesterases and Adenylyl Cyclase Signaling Pathway on Red Blood Cell Deformability of Sickle Cell Pa	Yalcin Ö. (Turkey)	
12:00-12:15		Cationic ion channel candidates for the Psickle conductance in sickle cells	Nader E. (France)	
12:15-12:30		Connecting the fundamental rheologic disease with clinical vascular phenotype	Detterich J. (USA)	
12:30-13:30	Lunch break / Exhibition visit			
14:00-15:00	Conference room (Capacity ca.	Editorial board meeting (IOS Press - Clinical Hemorheology and Microcirculation)	Jung F., Prantl L.	
		Delegates meeting European Society for Clinical Hemorheology and Microcirculation (ESCHM)	Brun J.F. et al.	
15:00-15:30	Coffee break / Exhibition visit			
15:30-17:00		Microrheological responses of blood cells under normal and pathological conditions	Antonova N. (Bulgaria), Nash G. (UK), Ahmadizad (Tehran)	
15:30-15:45		Laser-optical methods in the study of red blood cell aggregation in pathology	Priezzhev A. (Russia)	
15:45-16:00		The correlation of red blood cell and platelets aggregation in patients suffering from arterial hypertension	Lugovtsov A. (Russia)	
16:00-16:15		Impact of comorbidities in red blood cell aggregation	Ermolinskiy P. (Russia)	
16:15-16:30		Microrheological responses of red blood cells to donors of gasotransmitters as a model of cellular responses to this type of signalling	Muravyov A. (Russia)	Antonova N., Paskova V., Koytchev E., Chalakov H.
16:30-16:45		Changes in the regulatory mechanisms of the microvascular tone in patients with type 2 diabetes mellitus	Velcheva I. (Bulgaria)	
16:45-17:00		Negative Rheological Responses to Heat Adaptation – A Climate Change Concern	Ajayi O.I. (Rwanda)	
19:00-19:45	Historic old town	Guided city tour		
20:00	Historic Wurstkuchl	Get together welcome reception and dinner		

Friday, September 29 (GH)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
08:00-09:00	Morning Meeting		Rennert J. (Germany), Stroszczyński C. (Germany), Sidhu P. (UK)	
09:00-10:30	Basic science	Artificial vascular anastomosis, hemodynamics and hemorheology	Nemeth N. (Hungary), Toth K. (Hungary), Von Tempelhoff G.F. (Germany)	
09:00-09:15		Acute microcirculatory, hemorheological and metabolic effects of severe renal ischemia-reperfusion and ischemic preconditioning in the rat	Adorjan D.M. (Hungary)	Fazekas L., Varga A., Matrai A.A., Barabasi K., Peto K., Nemeth N.
09:15-09:30		Effects of tissue desiccation and BGP-15 on the regeneration of artificial vascular anastomoses in the rat: hemorheological, hemodynamic and metabolic effects	Fazekas L. (Hungary)	Handari D., Linh Dan L.T., Varga A., Matrai A.A., Nemeth N.
09:30-09:45		Systemic arterio-venous and porto-renal venous micro-rheological differences and their alterations during small intestine anastomosis	Varga A. (Hungary)	Matrai A.A., Barath B., Deak A., Vanyolos E., Salignac Brasil F., Mehta A., Lesznak T., Nemeth N.
09:45-10:00		Rheology of single cells	Szydlak R. (Poland)	Varga A., Barath B., Minhee P., Vanyolos E., Loczi L., Orban-Kalmandi R., Bagoly Zs, Jouppila A, Lassila R, Nemeth N, Deek A,
10:00-10:15		The effect of a dual antiplatelet and anticoagulant (APAC) agent on red blood cell deformability and aggregation in an experimental model of thrombotic microangiopathy	Matrai A.A. (Hungary)	
10:15-10:30		In vitro Mimicking the Epithelial Folding Using the Polydopamine Film	Wang L (Germany)	
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30	Clinical applications	CEUS in the spotlight of microcirculation	Sidhu P. (United Kingdom), Jung E.-M. (Germany), Dong, Y. (China)	
11:30-11:45		Introduction: CEUS and EFSUMB Guidelines	Sidhu P. (United Kingdom)	
11:45-12:00		New technical developments CEUS for vascular diagnostics	Clevert D.A. (Germany)	
12:00-12:15		Current aspects of ablative tumor therapy	Wiggemann P. (Germany)	
12:15-12:30		New developments of contrast agents	Greis C. (Germany)	
12:30-12:45		Current aspects of lymph node diagnostics in ENT: CEUS and elastography	Künzel J. (Germany)	
12:45-13:00		New applications of CEUS in soft tissue and urogenital tumors	Spiescke P. (Germany)	
12:30-13:30	Lunch break / Exhibition visit			
13:30-15:00	Clinical applications	Microcirculation and wound healing	Bruns C. (Cologne), Schreml S. (Germany), Jung F. (Germany), Gurtner G. (USA)	
13:30-13:45		Keynote	Gurtner G. (USA)	
13:45-14:00		Challenging perfusion in reconstructive microsurgery - advantages of postoperative regional anesthesia	Sogorski A. (Germany)	
14:00-14:15		Antibiotic therapy in reconstructive surgery of deep sternal wound infections	Unbehaun P. (Germany)	
14:15-14:30		Factors influencing the shape, size, symmetry and scarring of the nipple-areola complex after bilateral reduction mammoplasty	Diesch S. (Germany)	
14:30-14:45		Mechanochemical characterization of cells in health and disease	Pogoda K. (Poland)	
14:45-15:00		Broad-spectrum antibiotics for the treatment of necrotizing fasciitis	Brebant V. (Germany)	
15:00-15:30		Revolutionizing anemia diagnostics: Smartphone-based, non-invasive image processing for hemoglobin evaluation	Yalcin O. (Turkey)	Torun B.I., Goktas P.
15:00-15:30	Coffee break / Exhibition visit			
15:30-17:00	Clinical applications	Hemorheological and clinical approaches to tissue damage	Maruyama T (Japan), Lehmann C. (Canada), Geis S (Germany)	
15:30-15:45		Coagulation / hypercoagulation / rheology in tissue transplants	Thomas B. (Germany)	
15:45-16:00		Impact of fluid restrictive hemodynamic support on tissue with low ischemic tolerance	Anker A. (Germany)	
16:00-16:15		Prognostic significance of red cell distribution width in senile heart failure patients	Maruyama T. (Japan)	Nakashima K, Hieda M, Akashi K.
16:15-16:30		Blood clot phenotyping by laostress	Windberger U. (Austria)	Geimer V.
16:30-16:45		Sonography in the fatty liver epidemic	Peschel G. (Germany)	
16:45-17:00		Decellularized extracellular matrix derived biomaterials in regenerative medicine	Nikolaevich V. (Russia)	
17:00-18:00	Opening Ceremony	Dirk Hellwig (Dean Faculty of Medicine) Christiane J. Bruns (President German Society of Surgery) Constantin Berger - Keynote on Artificial Intelligence (Technical University of Munich, Helmholtz Center) Walter Röhrl (Honorary Guest, a legend in the motorsport world)	Prantl L. (Germany), Jung F. (Germany)	
18:00-18:15	Fahraeus medal ceremony	Laudatio (Viruses and red cell rheology) Blood rheology and vascular function in sickle cell trait and sickle cell disease: from pathophysiological mechanisms to clinical usefulness	Saldanha C. (Portugal) Connes P. (France)	
18:15-18:30	ISCH Medal Award Lecture			
19:30-....	Brauhaus am Schloss (at the castle)	Banquet Gloria, Princess of Thurn and Taxis		

Friday, September 29 (KH)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
08:00-09:00	Morgenbesprechung	Morgenbesprechung	Rennert J. (Germany), Stroszczynski C. (Germany), Sidhu P. (UK)	
09:00-10:30		New aspects of interventional tumor therapy	Müller-Schilling M.(Germany), Stroszczynski C. (Germany), Clevert D.-A. (Germany)	
09:00-09:15		TIPS and TIPS revision: challenges in interventional radiology and ultrasound	Scharf G. (Germany)	
09:15-09:30		Electrochemotherapy (ECT): new directions in liver tumor therapy and ultrasound	Luerken L. (Germany)	
09:30-09:45		New aspects of intraoperative ultrasound of the liver	Hackl C. (Germany)	
09:45-10:00		CEUS in differential diagnosis of hepatocellular carcinoma	Dong Y. (China)	
10:00-10:15		Prevention of artifacts by CEUS	Kubale R. (Germany)	
10:15-10:30		Evaluation of intraoperative ultrasound of pancreatic tumors	Brunner S. (Germany)	
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30	Basic science	Macro- and Microcirculation in Heart Diseases	Gori T. (Germany), Toth K. (Hungary), Biyoung KL.(Korea)	
11:30-11:45		MACCUS - Modulation of coronary venous pressure is associated with changes in microvascular resistances	Gori T. (Germany):	Galos G., Rabai M., Szabo R., Szabados E., Toth K., Sandor B.
11:45-12:00		The influence of COVID-19 pandemic on patients' medical condition participating in cardiac rehabilitation.	Szalai R. (Pecs)	Jakso P., Tokes-Fuzesi M., Molnar T.
12:00-12:15		Crosstalk between hemorheology, hemostasis and immune system in severe COVID-19: a novel approach	Schrick D. (Pecs)	
12:15-12:30		Hemodynamic effect of intracoronary acetylcholine - assessment of guidelines-directed diagnosis	Gori T. (Germany)	
12:30-12:45		Sublingual microcirculatory phenotype differs between cardiogenic and non-cardiogenic shock patients	Duse D. (Germany)	Erkens R., Wollborn J., Flick M., Fengler K., Thiele H., Saugel B., Kelm M., Jung C., Bruno R.
12:45-13:00		Sublingual proportions of perfused vessels do not predict the short-term outcome of patients suffering from shock – A post hoc analysis	Bruno R. (Germany)	Duse D., Wollborn J., Flick M., Fengler K., Erkens R., Thiele H., Saugel B., Kelm M., Jung C.
12:30-13:30	Lunch break / Exhibition visit			
13:30-15:00		IOP/CEUS perfusion	Pfister K. (Germany), Kaiser U. (Germany)	
13:30-13:45		Intraoperative ultrasound of lung tumors: New directions for CEUS	Schauer M. (Germany)	
13:45-14:00		Kidney and kidney transplant: Quantification of perfusion - what is possible?	Putz F.J. (Germany)	Brandenstein M., Jung E.-M.
14:00-14:15		Current aspects of thyroid diagnostics with CEUS and MicroFlow	Wiesinger I. (Germany)	
14:15-14:30		Tumor perfusion and intraoperative ultrasound of the liver	Dropco I. (Germany)	
14:30-14:45		Malformation: Diagnostic with ultrasound monitoring during intervention	Platz Batista da Silva N. (Germany)	
14:45-15:00		Current aspects of EVAR diagnostics and periprocedural ultrasound	Schierling W. (Germany)	
15:00-15:30	Coffee break / Exhibition visit			
15:30-17:00		Body foreign surfaces interactions with cells	Cooke B. (Australia),Evans S-A (Grest Britain), Pavlov V. (Russia)	
15:30-15:45		Haemocompatibility of the BiVACOR Total Artificial Heart	Simmonds M. (Australia)	
15:45-16:00		Decellularized extracellular matrix derived biomaterials in regenerative medicine	Pavlov V. (Russia)	
16:00-16:15		Particulate air pollution and the detrimental effects on the circulatory system	Evans S.A. (Great Britain)	
16:15-16:30		Impact of Hematocrit and Erythrocyte Deformability on Coagulation in Healthy Subjects	Martin M. (France)	
16:30-16:45		Evaluation of platelet-rich plasma combined or not with hyaluronic acid on vaginal rejuvenation: an ex-vivo study	Berndt S. (Switzerland)	
16:45-17:00		Thrombogenicity of cardiovascular devices: Mutual and relative effect of biomaterial and shear stress	Bozzi S. (Italy)	
17:00-18:00	Opening Ceremony	Dirk Hellwig (Dean Faculty of Medicine) Christiane J. Bruns (President German Society of Surgery) Constantin Berger - Keynote on Artificial Intelligence (Technical University fo Munich, Helmholtz Center) Walter Röhrli (Honorary Guest, a legend in the motorsport world)	Prantl L. (Germany), Jung F. (Germany)	
18:00-18:15	Fahraeus medal ceremony	Laudatio (Viruses and red cell rheology) Blood rheology and vascular function in sickle cell trait and sickle cell disease: from pathophysiological mechanisms to clinical usefulness	Saldanha C. (Protugal) Connes P. (France)	
18:15-18:30	ISCH Medal Award Lecture			
20:00-....	Brauhaus am Schloss	Banquet		

Friday, September 29 (ZMK G)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
08:00-09:00	Morgenbesprechung	Morgenbesprechung	Rennert J. (Germany), Stroszczynski C. (Germany), Sidhu P. (UK)	
09:00-10:30		Blood Rheology III	Simmonds M. (Australia), Butler P. (USA), Yalcin Ö. (Turkey)	
09:00-09:15		MIZAR: A novel rheometer to improve accessibility of hemorheology research	Frappa F. (USA)	
09:15-09:30		Shear history can alter erythrocyte biophysics and cell stability in subsequent low-shear flows	McNamee A. (Australia)	
09:30-09:45		Evaluation of Erythrocyte Aggregation in Women with Preeclampsia by a Microfluidic Device and by Developed Software	Abadjieva E. (Bulgaria)	
09:45-10:00		Evolution of the erythrocyte membrane fatty acids composition in morbidly obese patients after bariatric surgery	Fornal M. (Poland)	
10:00-10:15		Red cell aggregation assessment via the Mizar®; a fully automated rheometer	Kuck L. (Australia)	
10:15-10:30		The role of membrane undulations in red blood cells with reduced levels of sialic acid in adhesion induced by macromolecular depletion	Preissing T. (Germany)	
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30		Blood Rheology IV	Windberger U. (South Africa), Herr W. (Germany), Shin S. (South Korea)	
11:30-11:45		The Effect of Fibrinogen Concentration on the Erythrocytes in Blood Clots from Patients with Type 2 Diabetes Mellitus	Alexandrova-Watanabe A. (Bulgaria)	
11:45-12:00		Mechanotransduction via Piezo in red blood cells	Kuck L. (Australia)	
12:00-12:15		Blood Clot Phenotyping by laostress	Windberger U. (South Africa)	
12:15-12:30		Sub-populations of red blood cells and blood fluid properties	Kuck L. (Australia)	
12:30-12:45		Expression analysis of circulating miRNAs related with the response to immunotherapy in clear cell renal cell carcinoma	Asadullina D. (Russia)	
12:45-13:00		Relationships between lifestyle physical activity and acute symptoms, blood viscosity and vascular abnormalities in sub-Saharan Africa	Diaw M. (Senegal)	
12:30-13:30	Lunch break / Exhibition visit			
13:30-15:00		Oxidative Stress	Grau M. (Germany), Simmonds M. (Australia), Felthaus O. (Germany)	
13:30-13:45		Red blood cell nitric oxide synthase phosphorylation during hypoxia in the active human forearm	Simmonds M. (Australia)	
13:45-14:00		Effects Of 30-minutes and 24-hours Moderate Normobaric Hypoxia Exposure on Hematological and Hemorheological Parameters In	Grau M. (Germany)	
14:00-14:15		A Simple Mathematical Model for Blood Flow and Oxygen Diffusion in Hepatic Sinusoids	Shi Y. (China)	
14:15-14:30		Roxyscan: a semi-automated method to evaluate the red blood cell's	Hernandez C. (Netherlands)	
14:30-14:45		Response to oxidative stress	Simmonds M. (Australia)	
14:45-15:00		Hemorheological adaptations to progressive resistance training in untrained young men	Hassani V.M. (Iran)	Hajmohammadi A.A., Rajabi H., Ahmadizad S.
15:00-15:30	Coffee break / Exhibition visit			
15:30-17:00		Platelets and Thrombosis	Manning K. (USA), Burkhardt R. (Germany), Shi Y. (China)	
15:30-15:45		Challenges and Insights to Developing Predictive Thrombosis Models	Manning K. (USA)	
15:45-16:00		Assessment of therapeutic platelet inhibition in cardiacpatients with a microfluidic platelet function test: Anysis-P2Y12 assay	Shin S. (South Korea)	
16:00-16:15		Circulating platelet-derived microparticles modulate platelet adhesion and thrombus formation under flow	Redaelli A. (Italy)	
16:15-16:30				
16:30-16:45		Thrombin generation assay in silico: an Uncertainty Quantification study	Nicoud F. (France)	
16:45-17:00		Adhesion of platelets activated by thrombin to intact endothelial cells	Shimano K. (Japan)	
17:00-18:00	Opening Ceremony	Dirk Hellwig (Dean Faculty of Medicine) Christiane J. Bruns (President German Society of Surgery) Constantin Berger - Keynote on Artificial Intelligence (Technical University fo Munich, Helmholtz Center) Walter Röhrl (Honorary Guest, a legend in the motorsport world)	Prantl L. (Germany), Jung F. (Germany)	
18:00-18:15	Fahraeus medal ceremony	Laudatio (Viruses and red cell rheology)	Saldanha C. (Protugal)	
18:15-18:30	ISCH Medal Award Lecture	Blood rheology and vascular function in sickle cell trait and sickle cell disease: from pathophysiological mechanisms to clinical usefulness	Connes P.	
20:00-....	Brauhaus am Schloss	Banquet		

Saturday, September 30 (GH)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
09:00-10:30		Vascular surgery	Pfister K. (Germany), Geis S. (Germany)	
09:00-09:15		Results after major amputation in a tertiary level hospital	Rupp M. (Germany)	
09:15-09:30		Neuromodulation: a way after revascularization?	Cucuruz B. (Germany)	
09:30-09:45		Wound healing and hernia after abdominal aortic aneurysm - prophylactic mesh or small bite suturing?	Sachsamanis G. (Germany)	
09:45-10:00		Different concepts after major amputation - proof or principal?	Ruppert V. (Germany)	
10:00-10:15		Toe transplantation	Brix E. (Germany)	Kehrer A.
10:15-10:30		Tigris™ - A successful stent concept without future?	Stehr A. (Germany)	Betz T.
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30		Hemorheology and microcirculation in experimental surgery	Nemeth N (Hungary), Toth K (Hungary)	
11:00-11:15		Artificial vascular anastomoses, hemodynamics and hemorheology	Nemeth N. (Hungary)	Bernat B., Barath B., Varga A., Matrai A.A., Shaked O., Fiebai O.P., Al-Smadi W.M., Filler Cs., Juhasz T., Priksz D., Juhasz B., Szilvassy Z., Nemeth N.
11:15-11:30		Hemorheological and hemodynamic comparison of arterio-venous shunts with various size and location as experimental heart failure	Fazekas L. (Hungary)	Quais M., Fazekas L., Matrai A.A., Vanyolos E., Nemeth N.
11:30-11:45		Microcirculatory and tensile strength alterations in small intestine end-to-end anastomoses in a porcine model	Varga A. (Hungary)	Barkoczi B., Fazekas L.A., Varga A., Ho V., Trencsenyi Gy., Szabo J., Nagy T., Orlik B., Nemeth N., Deak
11:45-12:00		Micro-rheological and microcirculatory deterioration in a mesenchymal mesoblastic nephroma rat model	Matrai A. (Hungary)	Varga A., Matrai A.A., Nemeth N., Deak A.,
12:00-12:15		Usefulness of hemorheological investigations in Mycoplasma pulmonis infection of laboratory rats	Barath V. (Hungary)	
12:15-12:30		The role of plasma for the mechanical properties of blood suspensions	Windberger U. (Austria)	
12:30-12:45	Poiseuille Lecture	The rheology of interactions between leukocytes, platelets and the vessel wall in thrombo-inflammation	Nash G.B. (UK)	
12:45-13:00		Closing ceremony	Prantl L. (Germany), Jung F. (Germany)	

Saturday, September 30 (KH)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
09:00-10:30				
09:00-09:15		Effects of gold, silver and titanium oxide nanoparticles on the stability and functionality of erythrocytes. Their potential impact on the de	Burda K. (Poland)	
09:15-09:30		State of erythrocyte microrheology under influence of nitrogen oxide and hydrogen sulfide in norm and in pathology	Muravyov A. (Russia)	
09:30-09:45		In Vitro Model of Cardiac Microvascular Obstruction with Porcine Microthrombi	Obrist D. (Switzerland)	
09:45-10:00		Decarbonization of Arthrospira platensis production via utilization of atmospheric CO ₂ as exclusive carbon source: proof of principle	Jung C.G.H. (Germany)	
10:00-10:15		Development of primary-like hepatocyte systems with inducible proliferationbased on the MMTV promoter	Baumgard J. (Germany)	
10:15-10:30		Effect of Hyperglycaemia and Advanced Glycation End Products on Macrophage Cytoskeletal Assembly and Inflammation	Adams R.A. (UK)	
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30		Biocompatibility of implants and cancer induced lymphedema	Cedidi G. (Germany), Ghoritz A. (Switzerland), Heine N. (Germany)	
11:00-11:15		Endothelialization of polyurethane-based fibrous scaffolds: The effects of surface structure and coating	Civelek M. (Germany)	Butruk-Raszaja B., Lopianiak I., Wojasinski M.,
11:15-11:30		New developments in breast implants	Cedidi C. (Germany)	Kopec K., Genc H., Ciach T., Cicha I.
11:30-11:45		Update breast implant illness	Von Fritschen U. (Germany)	
11:45-12:00		Lymphovenous anastomosis in lymphedema surgery of the lower limb	Heine N. (Germany)	
12:00-12:15		Activability of rat platelets after silicone exposure in the closed-loop model	Christer T. (Germany)	Robering J.W., Hiebl B.
12:15-12:30		Sacrificial poly-oxazoline templates enable reproducible fabrication of bifurcating microchannels and rapid in vitro endothelialization	Cicha I. (Germany)	Genc H., Ryma M., Nadernezhad A., Friedrich O., Lyer S., Alexiou C.H., Groll J.
12:30-12:45	Poiseuille Lecture	The rheology of interactions between leukocytes, platelets and the vessel wall in thrombo-inflammation	Nash G.B. (UK)	
12:45-13:00		Closing ceremony	Prantl L. (Germany), Jung F. (Germany)	

Saturday, September 30 (Verwaltung)

Time	Theme	Title/Topic	Author/Chair	Co-Authors
09:00-10:30		Measurement techniques and rheology of biological flow	Kawashima D. (Japan), Sugihara-Seki M. (Japan)	
09:00-09:15		Measurement techniques and rheology of biological flow	Sugihara-Seki M. (Japan)	
09:15-09:30		Dielectric property analysis of blood during heparin administration	Ueno S. (Japan)	
09:30-09:45		Biorheology for Organ Engineering and Transplantation	Obara H. (Japan)	
09:45-10:00		Electrical tomographic intra-extracellular imaging for evaluation of ion transfer via ion channel	Kawashima D. (Japan)	
10:00-10:15		Non-invasive Ion Channel Screening by Electrical Impedance Tomography with Extracellular Voltage Activation	Ihsan M.F. (Japan)	
10:15-10:30		Numerical analysis of the lateral movement of a deformable spherical capsule in pulsatile channel flowsin pulsatile channel flows	Naoki Takeishi	
10:30-11:00	Coffee break / Exhibition visit			
11:00-12:30		Platelet Biology	Shin S. (South Korea), Pindur G. (Germany)	
11:00-11:15		The effect of shear rate on up-taking of extracellular substance for platelet	Inoue M. (Japan)	
11:15-11:30		Detection of diagnostic and prognostic biomarker/s in immune thrombocytopenic purpura	Cilek N. (Turkey)	
11:30-11:45		Platelet Proteome Reveals Novel Therapeutic Targets for Hypercoagulation in Pseudoexfoliation Syndrome	Ugurel E. (Turkey)	
11:45-12:00		Fast Assessment of Hemostasis and Fibrinolysis in Emergency Settings: Introducing FastER TEG	Shin S. (South Korea)	
12:00-12:15		Platelet microvesicles as a predictor of the development of thromboembolic complications in patients with malignant neoplasms	Pavlov V. (Russia)	
12:15-12:30		Margination of platelet-sized particles in red blood cell suspensionsflowing through a Y-shaped microchannel	Sugihara-Seki M. (Japan)	
12:30-12:45	Poiseuille Lecture	The rheology of interactions between leukocytes, platelets and the vessel wall in thrombo-inflammation	Nash G.B. (UK)	
12:45-13:00		Closing ceremony	Prantl L. (Germany), Jung F. (Germany)	

Saturday, September 30 (ZMK G) Deutsche Tagung

Time	Theme	Title/Topic	Author/Chair	Co-Authors
		Deutsche Tagung		
9:10-9:25		Latest developments in ultrasound diagnostics of the microvasculature	Jung E.M., Dong Y., Jung F.	Wenzel F. (Schwenningen), Küpper J-H. (Senftenberg)
09:30-09:45		Kumulative Betrachtung von Erythropoietin-Ringversuch	Toll L. (Schwenningen/Köln)	Thevis M., Schellenberg I., Wenzel F.
09:45-10:00		Kommutabilität von Ringversuchsproben	Vierbaum L. (Schwenningen)	Schellenberg I., Wenzel F.
10:00-10:15		Establishment of an axenic culture of Arthrospira platensis	Nghinaunye T. (Senftenberg)	Jung C.G.H., Küpper J.H., Jung F., Braune S.
10:15-10:30		Growth of Arthrospira platensis utilizing atmospheric CO ₂ as exclusive carbon source	Jung C.G.H. (Senftenberg)	Nghinaunye T., Waldeck P., Braune S., Petrick I., Küpper J-H., Jung F.
10:30-10:45		Mikrobiom bei Long-Covid-Erkrankung	Schnee P. (Schwenningen)	Schmidt J, Blessing F, Wenzel F.
10:45-11:00	Coffee break / Exhibition visit			
		Deutsche Tagung		
11:00-11:15		Isolation von Lymphendothelzellen aus Ratten und Schweinen	Robering J.W. (Hannover)	Christer T., Hiebl B.
11:15-11:30		Charakterisierung genetischer Aktivierungsmaster porciner und humaner Thrombozyten nach PEI- und Glas-Exposition	Christer T. (Hannover)	Robering J.W., Hiebl B.
11:30-11:45		Amyloid Einlagerung, Zellinfiltration und Mineralisierung in degenerierten Bioprothesen der Aortenklappenposition	Dittfeld C. (Dresden)	Sopper T., Petrov A., Jannasch A., Matschke K., Tugtekin S.M.
11:45-12:00		Ultrastructural morphology of organoids from head and neck squamous cell carcinomas following irradiation	Fisch A.S. (Berlin)	Tinhofer-Keilholz I., Plendl J.
12:00-12:15		Inducible expression systems for modulated protein expression in hepatocytes	Baumgart J. (Senftenberg)	Schulz C., Herzog N., Jung F., Küpper J-H.
12:15-13:00	Coffee break / Exhibition visit			
		Deutsche Tagung		
13:00-13:15		Intracranial hemorrhage on CT: mimics, pitfalls, and limitations that bring down an AI	Niehues S. (Berlin), G. Pindur (Homburg/Saar)	
13:15-13:30		Hämorrhheologisches Monitoring während Immuntherapie bei Mehrlingsschwangerschaften	Niehues S. (Berlin) Von Tempelhoff G.F. (Hanau)	Hartrumpf L., Pohl S., Simm A., Szabó G., Saemann L. (Halle, Heidelberg)
13:30-13:45		The senomorphic agent ruxolitinib protects the endothelial function of the rat aorta after vascular ischemia/reperfusion injury	Naujoks P. (Heidelberg)	
13:45-14:00		Multimodal Imaging of Soft Tissue tumors and artificial Intelligence. TOP Gun Imaging	Jung E.M., Jung F. (Regensburg – Senftenberg)	
14:00-14:15		Closing ceremony	Prantl L. (Germany), Jung F. (Germany)	

Saturday, September 30 (Practical)

Time	Theme	Title/Topic	Author/Chair
12:30-13:30	Coffee break / Exhibition visit		
13:30-15:00	Practical course	Modern multimodal ultrasound diagnostics for free tissue transfer in plastic surgery - Practical aspects	Jung E.-M./ Lamby P./ Kehrer A.
13:30-13:45		Device instruction	Jung E.-M./ Lamby P./ Kehrer A.
13:45-14:00		Flow optimization	Jung E.-M./ Lamby P./ Kehrer A.
14:00-14:15		Perforator mapping for free tissue transfer	Jung E.-M./ Lamby P./ Kehrer A.
14:15-14:30		Modern techniques	Jung E.-M./ Lamby P./ Kehrer A.
14:30-14:45		Mobile ultrasound	Jung E.-M./ Lamby P./ Kehrer A.
14:45-15:00		Quiz	Jung E.-M./ Lamby P./ Kehrer A.
15:00-15:30	Coffee break / Exhibition visit		
15:30-17:00	Practical course	Modern multimodal ultrasound diagnostics for free tissue transfer in plastic surgery - Theoretical aspects	Jung E.-M./ Lamby P./ Kehrer A.
15:30-15:45		Ultrasound and free tissue transfer	Jung E.-M./ Lamby P./ Kehrer A.
15:45-16:00		B-Mode, Duplex and FKDS	Jung E.-M./ Lamby P./ Kehrer A.
16:00-16:15		Elastography and CEUS	Jung E.-M./ Lamby P./ Kehrer A.
16:15-16:30		Perforator mapping for free tissue transfer	Jung E.-M./ Lamby P./ Kehrer A.
16:30-16:45		Research presentations	Jung E.-M./ Lamby P./ Kehrer A.
16:45-17:00			