LAM-18 Conference
Local Conference Programme

Day 1 - Monday 5th, September 2022

9:20-9:30	**Welcome/Introduction**	**Organizers**	
9:30-10:10	Plenary Session I		
	Plenary Talk Medium-range Order and Cluster Connectivity	**Xun-Li Wang** City University of Hong Kong, China	**PL1**
10:10-11:00	Session A1 Structural Properties of Glasses		
10:10-10:40	**Invited Talk** The Intermediate-Range Structure of Glasses as seen from their Magnetic Properties and Under an Optical Microscope	**Giancarlo Jug** Università dell'Insubria, Italy	**IL1**
10:40-11:00	Structural Origin of Temperature Memory Effect of Quenched Strain in Metallic Glasses	**Masato Ohnuma** Hokkaido University, Japan	**O1**
11:00-11:20	**Coffee Break**		
11:20-12:05	Session A2 Synthesis of Metallic Glasses		
11:20-11:45	**Local Committee Member Talk** Synthesis and Mechanical Property of Highly Structure Controlled Metallic Glasses by Thermal Rejuvenation Technique	**Junji Saida** Tohoku University, Japan	**CL1**
11:45-12:05	High-entropy design and its influence on glass-forming ability in Zr–Cu-based metallic glass	**Yusuke Ohashi** Tohoku University, Japan	**O2**
12:05-14:00	**Lunch**		
14:00-15:30	Session A3 Dynamic Properties of Metallic Glasses		
14:00-14:30	**Invited Talk** Dynamic heterogeneities in undercooled metallic alloys	**Noel Jakse** Université Grenoble-Alpes, France	**IL2**

14:30-14:50	Relaxation dynamics of glass forming metals: Study of aging anelasticity and supercooled liquid behavior in a ZrTiCuNiBe alloy	**Eloi Pineda** Universitat Politècncia de Catalunya, Spain	**O3**
14:50-15:10	Emergent structural heterogeneity and it's effect on viscosity and transport in a model binary metallic glass	**Peter Michael Derlet** Paul Scherrer Institute, Switzerland	**O4**
15:10-15:30	Creation of Three-Dimensional Relaxation State Gradient in $Zr_{50}Cu_{40}Al_{10}$ Metallic Glass Through a Thermal Process	**Rui Yamada** Tohoku University, Japan	**O5**
15:30-15:50	**Coffee Break**		
15:50-17:50	**Poster Session PS1**		

Day 2 - Tuesday 6th, September 2022

9:20-10:00	Plenary Session II **Plenary Talk** How the Liquid Structure is Formed; Bottom-up, Top-down, or Both?	**Takeshi Egami** University of Tennessee, USA	**PL2**
10:00-10:50	Session A4 Dynamic Properties		
10:00-10:30	**Invited Talk** Hydrodynamic Interaction Between Quasi-elastic and Acoustic Modes Observed by Inelastic X-Ray Scattering	**Alfred Q.R. Baron** RIKEN SPring-8 Center, Japan	**IL3**
10:30-10:50	*Ab initio* Study of Collective Excitations in Liquid Sb	**Ari Paavo Seitsonen** École Normale Supérieure, France	**O6**
10:50-11:10	**Coffee Break**		
11:10-12:15	Session A5 Phase Transition in Liquids		
11:10-11:35	**Local Committee Member Talk** Interpretation of thermodynamic anomalies of liquid water in terms of critical fluctuations	**Yukio Kajihara** Hiroshima University, Japan	**CL2**

11:35-11:55	Phase relation between supercooled liquid and amorphous Silicon	**Junpei T. Okada** Tohoku University, Japan	**O7**
	Cancelled		**O8**
11:55-14:00	**Lunch**		
14:00-15:15	Session A6 Structure I		
14:00-14:30	**Invited Talk** Structure of amorphous Cu-Ge-Te and the implications for its functionality	**Jens Rüdiger Stellhorn** Hiroshima University, Japan	**IL4**
14:30-14:55	**Local Committee Member Talk** X-ray and neutron diffraction of semi-crystalline isotactic poly (4-methyl-1-pentene) with alkane absorption	**Ayano Chiba** Keio University, Japan	**CL3**
14:55-15:15	Direct observation of concentration fluctuations in Au-Si eutectic liquid by small-angle neutron scattering	**Yoshifumi Sakaguchi** Comprehensive Research Organization for Science and Society (CROSS), Japan	**O9**
15:15-15:35	**Coffee Break**		
15:35-16:20	Session A7 Dynamic and Transport Properties		
15:35-16:00	**Local Committee Member Talk** Structural Relaxation in Complex Liquid Metals Antimony and Bismuth by Means of Coherent Quasi-Elastic Neutron Scattering and Time -Space Correlation Function	**Yukinobu Kawakita** Japan Atomic Energy Agency, Japan	**CL4**
16:00-16:20	Estimating Thermal Conductivity of Silver Chalcogenides Using Machine-Learning Interatomic Potentials	**Kohei Shimamura** Kumamoto University, Japan	**O10**
16:20-16:40	**Coffee Break**		
16:40-18:40	**Poster Session PS2**		

Day 3 - Wednesday 7th, September 2022

9:20-10:00	Plenary Session III		
	Plenary Talk Supercritical Elasticity and Structural Entanglement of Multicomponent alloys	**Yang Ren** City University of Hong Kong, China	**PL3**
10:00-11:15	Session A8 Liquids and Glasses under Pressure		
10:00-10:30	**Committee Member Talk** Investigation of local structural changes in GeSe2 glass under ultra-high pressure	**Andrea Di Cicco** University of Camerino, Italy	**CL5**
10:30-10:55	**Local Committee Member Talk** Bonding and structure of liquid iron-light-element-oxygen ternary alloys under high pressure: molecular dynamics simulations	**Satoshi Ohmura** Hiroshima Institute of Technology, Japan	**CL6**
10:55-11:15	Inelastic X-ray scattering measurements of liquid Fe-S at high pressure	**Yoichi Nakajima** Kumamoto University, Japan	**O11**
11:15-11:35	**Coffee Break**		
11:35-12:45	Session A9 Properties under Pressure and Shear Strain		
11:35-12:05	**Committee Member Talk** Simulation study of the collective excitations in liquid sodium under high pressure	**Jean-François Wax** Université de Lorraine, France	**CL7**
12:05-12:25	Structure of liquid Cd under high-pressure condition	**Fabio Iesari** Aichi Synchrotron Radiation Center, Japan	**O12**
12:25-12:45	*Ab initio* simulation for the ductility mechanism of silver chalcogenides	**Hinata Hokyo** Kumamoto University, Japan	**O13**
12:45-14:00	**Lunch**		

14:00-15:30	Session A10 Properties of Metallic Glasses		
14:00-14:30	**Invited Talk** Reverse Monte Carlo modeling: state of affairs and applications to metallic glasses	**László Pusztai** Wigner Research Centre for Physics, Hungary	**IL5**
14:30-15:00	**Invited Talk** Long-time and intermittent structural evolution of metallic glasses	**Robert Maaß** Federal Institute for Materials Research and Testing (BAM), Germany	**IL6**
15:00-15:30	**Invited Talk** Decoupling between thermodynamic and dynamical glass transitions in high-entropy metallic glasses	**Takeshi Wada** Tohoku University, Japan	**IL7**
15:30-15:50	**Coffee Break**		
15:50-17:00	Session A11 Structure II		
15:50-16:20	**Invited Talk** Structure Determination in a new Type of Amorphous Molecular Solids with Extreme Nonlinear Optical Properties	**Wolf -C. Pilgrim** Philipps-University of Marburg, Germany	**IL8**
16:20-16:40	Static Structure of Liquid Ag_2Se Based on Molecular Dynamics Simulations Using Artificial Neural Network Potential	**Akihide Koura** Kumamoto University, Japan	**O14**
16:40-17:00	Semianalytic Formula for Multiphonon Thermal Diffuse Scattering in Solids	**Hikaru Kitamura** Kyoto University, Japan	**O15**
17:00-18:35	**Free time**		
18:35-	**Boarding**		
18:50-	**Dinner**		

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Day 4 - Thursday 8th, September 2022

JST CEST			
16:00-17:00 **9:00-10:00**	Session R1 Structure and Dynamics of Liquids I		
16:00-16:30 9:00-9:30	**Invited Talk** Dynamic properties of liquids of interest in nuclear energy production: liquid Li-Pb alloys and molten UO_2	**Luis E. González** Universidad de Valladolid, Spain	**RIL1**
16:30-17:00 9:30-10:00	**Committee Member Talk** Origin of Positive Sound Dispersion in Simple Liquids and Liquid Alloys	**Taras Bryk** Institute for Condensed Matter Physics of NASU, Ukraine	**RCL1**
17:00-17:10 **10:00-10:10**	**Coffee Break**		
17:10-18:35 **10:10-11:35**	Session R2 Structure and Dynamics of Liquids II		
17:10-17:40 10:10-10:40	**Committee Member Talk** Chemical short-range order in undercooled Cu-Ni melts	**Dirk Holland Moritz** Institute of Materials Physics in Space, Germany	**RCL2**
17:40-17:55 10:40-10:55	**Corporate Webinar Talk** Company Introduction and Gas Atomization Technology	**Teppei Ishikawa** MAKABE R&D Co.,LTD	**RCW0**
17:55-18:15 10:55-11:15	The Short-Range Order in Liquid Water	**Neta Ellert** Ben-Gurion University of the Negev, Israel	**RO1**
18:15-18:35 11:15-11:35	Impact of sulfur addition on the structure and dynamics of Ni-Nb alloys	**Nicolai Lukas Grund** Institute of Materials Physics in Space, Germany	**RO2**
18:35-20:00 **11:35-13:00**	**Meal Break**		
20:00-21:10 **13:00-14:10**	Session R3 Structure and Dynamics of Non-Crystalline Materials I		
20:00-20:30 13:00-13:30	**Invited Talk** Cluster-plus-glue-atom Model and the Thus-obtained Composition Genes for Metallic Glasses	**Chuang Dong** Dalian Jiaotong University, China	**RIL2**

20:30-20:50 13:30-13:50	Composition Optimization Based on Cluster-plus-glue-atom Model for Bulk Metallic Glass $Zr_{55}Cu_{30}Al_{10}Ni_5$	**Shuang Zhang** Dalian Jiaotong University, China	**RO3**
20:50-21:10 13:50-14:10	Colorless and high refractive SnO- and Sb_2O_3-containing borosilicate glasses	**Kazuki Mitsui** Ehime University, Japan	**RO4**
21:10-21:20 **14:10-14:20**	**Coffee Break**		
21:20-22:30 **14:20-15:30**	Session R4 Structure and Dynamics of Non-Crystalline Materials II		
21:20-21:50 14:20-14:50	**Invited Talk** Understanding diffraction patterns of glassy, liquid and amorphous materials via topological analyses	**Yohei Onodera** Kyoto University, Japan	**RIL3**
21:50-22:10 14:50-15:10	Local structural investigation of non-crystalline materials at high pressure	**Xinguo Hong** Center for High Pressure Science and Technology Advanced Research, China	**RO5**
22:10-22:30 15:10-15:30	The structure of bismuth oxide glasses	**Katsuki Hayashi** Ehime University, Japan	**RO6**
22:30-22:40 **15:30-15:40**	**Coffee Break**		
22:40-23:40 **15:40-16:10**	Session R5 Structure and Dynamics of Non-Crystalline Materials III		
22:40-23:00 15:40-16:00	Atomic structure of bulk metallic glasses studied by transmission electron microscopy, synchrotron-radiation X-ray diffraction, scanning tunneling microscopy and ab-initio molecular dynamics simulation	**Dmitri V. Louzguine** National Institute of Advanced Industrial Science and Technology (AIST), Japan	**RO7**
23:00-23:20 16:00-16:20	Short range order controlling the atomic dynamics in metallic glasses	**Xiao-Dong Wang** Zhejiang University, China	**RO8**
23:20-23:40 16:20-16:40	On the relationship between structural state, mechanical properties and wear resistance of a cu-based bulk metallic glass	**Paul Laffont** University Grenoble Alpes, SIMaP, France	**RO9**

Day 5 - Friday 9th, September 2022

JST / CEST			
16:00-17:15 **9:00-10:15**	Plenary Session / Session R6 Phase Transitions and Thermophysical Behaviors I / State of the Art Manufacturing		
16:00-16:40 9:00-9:40	**Plenary Talk** Behaviors of disordered alloys under high temperature and pressure	**Jian-Zhong Jiang** Zhejiang University, China	**RPL1**
16:40-16:55 9:40-9:55	**Corporate Webinar Talk** Heraeus AMLOY Technologies – The transition from scientific innovation to series production of high-performance application solutions	**Hans-Jürgen Wachter** Global Head of Heraeus AMLOY, Germany	**RCW1**
16:55-17:15 9:55-10:15	Large-scale density fluctuations during structural transition in metallic glass forming liquid beyond medium range order	**Fan Yang** Institute of Materials Physics in Space, Germany	**RO10**
17:15-17:25 **10:15-10:25**	**Coffee Break**		
17:25-18:20 **10:25-11:20**	Session R7 Poster Short Presentation		
18:20-19:00 **11:20-12:00**	**Poster Session RPS1**		
19:00-20:00 **12:00-13:00**	**Meal Break**		
20:00-21:00 **13:00-14:00**	Session R8 Phase Transitions and Thermophysical Behaviors II		
20:00-20:20 13:00-13:20	Structure and dynamics in the no-man's land of phase-change materials	**Shuai Wei** Aarhus University, Denmark	**RO11**
20:20-20:40 13:20-13:40	Thermoplastic forming capacity of a ZrCoAl metallic glass for surface patterning	**Loïcia Gaudilliere** University Grenoble Alpes, SIMaP, France	**RO12**
20:40-21:00 13:40-14:00	Shape memory effect in metallic glasses	**Tianding Xu** Zhejiang University, China	**RO13**

21:00-21:10 **14:00-14:10**	**Coffee Break**		
21:10-22:10 **14:10-15:10**	Session R9 Phase Transitions and Thermophysical Behaviors III		
21:10-21:30 14:10-14:30	Role of Y content on glass-forming ability and soft magnetic properties of Co-Y-B metallic glasses	**Shuang Ma** Dalian University of Technology, China	**RO14**
21:30-21:50 14:30-14:50	Formation of a local structural order in the aluminum melt before crystallization	**Vadim B.Vorontsov** Ural State University of Railway transport (USURT), Russia	**RO15**
21:50-22:10 14:50-15:10	Development of metal-metalloid high-entropy bulk metallic glasses with ultrahigh thermal stability and strength	**Yanhui Li** Dalian University of Technology, China	**RO16**
22:10-22:20 15:10-15:20	**Coffee Break**		
22:20-23:00 **15:20-16:00**	Session R10 Phase Transitions and Dynamic Properties		
Cancelled			**RO17**
22:20-22:40 15:20-15:40	Change of collective dynamics in supercooled glass-forming aluminium film	**Dmitrii Fleita** HSE University, Russia	**RO18**
22:40-23:00 15:40-16:00	Atomic transport properties of $Bi_{1-x}Zn_x$ segregating alloys	**G. M. Bhuiyan** University of Dhaka, Bangladesh	**RO19**

Day 6 - Monday 12th, September 2022

JST / CEST			
16:00-17:00 **9:00-10:00**	Session R11 Machine Learning I		
16:00-16:30 9:00-9:30	**Invited Talk** High-Dimensional Neural Network Potentials for Simulations of Complex Systems	**Jörg Behler** Universität Göttingen, Germany	**RIL4**
16:30-17:00 9:30-10:00	**Invited Talk** Structural inheritance and machine learning for materials design: from study of liquid to prediction crystals	**Nikolay Chtchelkatchev** Vereshchagin Institute for High Pressure Physics, Russia	**RIL5**
17:00-17:10 **10:00-10:10**	**Coffee Break**		
17:10-18:00 **10:10-11:00**	Session R12 Poster Short Presentation		
18:00-18:40 **11:00-11:40**	**Poster Session RPS2**		
18:40-20:00 **11:40-13:00**	**Meal Break**		
20:00-20:50 **13:00-13:50**	Session R13 Machine Learning II		
20:00-20:30 13:00-13:30	**Invited Talk** Finite-temperature modeling of materials with first-principles accuracy	**Michele Ceriotti** École Polytechnique Fédérale de Lausanne, Switzerland	**RIL6**
20:30-20:50 13:30-13:50	Composition Dependence of Melting Temperature of Rb-Na Alloy Using First-principles-based Thermodynamic Integration	**Ayu Irie** Kumamoto University, Japan	**RO20**
20:50-21:00 **13:50-14:00**	**Coffee Break**		

21:00-22:00 **14:00-15:00**	Session R14 Thermodynamics and Structure of Non-Crystalline Materials I		
21:00-21:30 14:00-14:30	**Invited Talk** Response of the Free Energy Landscape to Temperature Modulation and Aging	**Takashi Odagaki** Kyushu University and Research Institute for Science Education Inc., Japan	**RIL7**
21:30-22:00 14:30-15:00	**Invited Talk** New understanding of liquid thermodynamics, viscosity and its lower bounds	**Kostya Trachenko** Queen Mary University of London, United Kingdom	**RIL8**
22:00-22:10 **15:00-15:10**	**Coffee Break**		
22:10-23:00 **15:10-16:00**	Session R15 Thermodynamics and Structure of Non-Crystalline Materials II		
22:10-22:40 15:10-15:40	**Invited Talk** Thermodynamic and Structural Studies on Glass Transitions of Molecular Glasses	**Osamu Yamamuro** The University of Tokyo, Japan	**RIL9**
22:40-23:00 15:40-16:00	On the thermodynamics and its connection to structure in the Pt-Pd-Cu-Ni-P bulk metallic glass forming system	**Nico Neuber** Saarland University, Germany	**RO21**
23:00-23:10 **16:00-16:10**	**Closing**	**Organizers**	

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Local Poster Programme

Day 1 - Monday 5th, September 2022

15:50-17:50 Poster Session PS1

Day 2 - Tuesday 6th, September 2022

16:40-18:40 Poster Session PS2

P1	Determination of cooperatively rearranging regions in binary glass former	**Tomoko Mizuguchi** Kyoto Institute of Technology, Japan
P2	Novel Experimental Scheme for Microscopic Study of Johari-Goldstein Process	**Makina Saito** Tohoku University, Japan
P3	Configurational entropy of an isotropic monatomic glass	**A. Ueno** Kyoto Institute of Technology, Japan
P4	Anomaly of Linear Thermal Expansion Coefficient induced by rejuvenation treatment	**Tomoya Oshikiri** Hokkaido University, Japan
P5	The structural analysis of low-density liquid phosphorus using reverse Monte Carlo simulation	**Takuya Nishioka** Ehime University, Japan
P6	Local Structure of $Ga_{85.8}In_{14.2}$ eutectic liquid alloy and its pressure temperature melting line	**Andrea Di Cicco** University of Camerino, Italy
P7	Development of an Analysis Method for Liquid Electrolyte at a Lithium Electrode Interface using X-ray Total Reflection	**Koji Kimura** Nagoya Institute of Technology, Japan
P8	Structure of amorphous $Mg_{85}Zn_6Y_9$ alloy as a seed of a long-period stacking ordered structure	**Shinya Hosokawa** Kumamoto University, Japan
P9	Collective dynamics of liquid sulfur across the polymerization transition temperature probed by inelastic x-ray scattering	**Shinya Hosokawa** Kumamoto University, Japan
P10	Phonon dynamics of liquid Hg probed by inelastic x-ray scattering	**Shinya Hosokawa** Kumamoto University, Japan

P11	Inelastic x-ray scattering experiments for liquid $GeCu_2Te_3$	**Masanori Inui** Hiroshima University, Japan
P12	Q-gap behavior of low energy excitations in liquid Sb and liquid Bi observed by inelastic x-ray scattering measurements	**Masanori Inui** Hiroshima University, Japan
P13	Phonon dispersion curves in the type-I crystalline and molten clathrate compound $Eu_8Ga_{16}Ge_{30}$	**Masanori Inui** Hiroshima University, Japan
P14	Density response function of valence electrons in liquid Li	**Kazuhiro Matsuda** Kumamoto University, Japan
P15	Relationship Between Liquid Dynamics and Potential Energy Landscape	**Noel Jakse** Université Grenoble Alpes, CNRS, France
P16	Selecting atomic fingerprints for high-dimensional neural network potentials: adaptive group lasso approach	**Johannes Sandberg** Université Grenoble Alpes, CNRS, France
P17	GeO_2 glass structure from neural network potential molecular dynamics –dependence of intermediate-range order on density functional approximation	**Kenta Matsutani** Yamagata University, Japan
P18	Optical properties of molten pure copper by density functional theory	**Susumu Kato** National Institute of Advanced Industrial Science and Technology (AIST), Japan

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Day 5 - Friday 9th, September 2022

JST / CEST	
17:25-18:20 10:25-11:20	Session R7 Poster Short Presentation
18:20-19:00 11:20-12:00	**Poster Session RPS1**

Day 6 - Monday 12th, September 2022

17:10-18:00 10:10-11:00	Session R12 Poster Short Presentation
18:00-18:40 11:00-11:40	**Poster Session RPS2**

RP1	Development and optimization of sulfur-containing novel Ti-based Bulk Metallic Glasses and the correlation between primary crystalline phases, thermal stability and mechanical properties	**Lucas Matthias Ruschel** Saarland University, Germany	**R7** RPS1 RPS2
RP2	Structural analysis of etidronate disodium	**Hironori Shimakura** Niigata University of Pharmacy and Applied Life Sciences, Japan	**R7** RPS1 RPS2
RP3	Topological analysis for α-AgI	**Shuta Tahara** University of the Ryukyus, Japan	**R7** RPS1 RPS2
RP4	Glass transition temperature of nickel based binary alloys and its interparticle dynamics features	**Dmitrii Fleita** Joint Institute for High Temperatures of the Russian Academy of Sciences, Russia	**R7** RPS1 RPS2
RP5	Local density fluctuation realized in Nb-Ni amorphous alloys	**Toru Kawamata** Tohoku University, Japan	**R7** RPS1 RPS2
RP6	Unsupervised topological learning of crystal nucleation in pure metals	**Sébastien Becker** Université Grenoble-Alpes, France	RPS1 **R12** RPS2

P1	Determination of cooperatively rearranging regions in binary glass former	**Tomoko Mizuguchi** Kyoto Institute of Technology, Japan	**R7** RPS1
P2	Novel Experimental Scheme for Microscopic Study of Johari-Goldstein Process	**Makina Saito** Tohoku University, Japan	**R7** RPS1 RPS2
P5	The structural analysis of low-density liquid phosphorus using reverse Monte Carlo simulation	**Takuya Nishioka** Ehime University, Japan	RPS1 **R12** RPS2
P7	Development of an Analysis Method for Liquid Electrolyte at a Lithium Electrode Interface using X-ray Total Reflection	**Koji Kimura** Nagoya Institute of Technology, Japan	**R7** RPS1
P8	Structure of amorphous $Mg_{85}Zn_6Y_9$ alloy as a seed of a long-period stacking ordered structure	**Shinya Hosokawa** Kumamoto University, Japan	**R7** RPS1
P9	Collective dynamics of liquid sulfur across the polymerization transition temperature probed by inelastic x-ray scattering	**Shinya Hosokawa** Kumamoto University, Japan	**R7** RPS1
P10	Phonon dynamics of liquid Hg probed by inelastic x-ray scattering	**Shinya Hosokawa** Kumamoto University, Japan	**R7** RPS1
P11	Inelastic x-ray scattering experiments for liquid $GeCu_2Te_3$	**Masanori Inui** Hiroshima University, Japan	RPS1 **R12** RPS2
P12	Q-gap behavior of low energy excitations in liquid Sb and liquid Bi observed by inelastic x-ray scattering measurements	**Masanori Inui** Hiroshima University, Japan	RPS1 **R12** RPS2
P13	Phonon dispersion curves in the type-I crystalline and molten clathrate compound $Eu_8Ga_{16}Ge_{30}$	**Masanori Inui** Hiroshima University, Japan	RPS1 **R12** RPS2
P14	Density response function of valence electrons in liquid Li	**Kazuhiro Matsuda** Kumamoto University, Japan	RPS1 **R12** RPS2

P15	Relationship Between Liquid Dynamics and Potential Energy Landscape	**Noel Jakse** Université Grenoble Alpes, CNRS, France	**R12** RPS2
P16	Selecting atomic fingerprints for high-dimensional neural network potentials: adaptive group lasso approach	**Johannes Sandberg** Université Grenoble Alpes, CNRS, France	RPS1 **R12** RPS2
P17	GeO_2 glass structure from neural network potential molecular dynamics –dependence of intermediate-range order on density functional approximation	**Kenta Matsutani** Yamagata University, Japan	RPS1 **R12** RPS2
P18	Optical properties of molten pure copper by density functional theory	**Susumu Kato** National Institute of Advanced Industrial Science and Technology (AIST), Japan	RPS1 **R12** RPS2

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Day 5 - Friday 9th, September 2022

JST CEST			
17:25-18:20 10:25-11:20	Session R7 Poster Short Presentation		
17:25-17:30 10:25-10:30	Development and optimization of sulfur-containing novel Ti-based Bulk Metallic Glasses and the correlation between primary crystalline phases, thermal stability and mechanical properties	**Lucas Matthias Ruschel** Saarland University, Germany	**RP1**
17:30-17:35 10:30-10:35	Structural analysis of etidronate disodium	**Hironori Shimakura** Niigata University of Pharmacy and Applied Life Sciences, Japan	**RP2**
17:35-17:40 10:35-10:40	Topological analysis for α-AgI	**Shuta Tahara** University of the Ryukyus, Japan	**RP3**
17:40-17:45 10:40-10:45	Glass transition temperature of nickel based binary alloys and its interparticle dynamics features	**Dmitrii Fleita** Joint Institute for High Temperatures of the Russian Academy of Sciences, Russia	**RP4**
17:45-17:50 10:45-10:50	Local density fluctuation realized in Nb-Ni amorphous alloys	**Toru Kawamata** Tohoku University, Japan	**RP5**
17:50-17:55 10:50-10:55	Determination of cooperatively rearranging regions in binary glass former	**Tomoko Mizuguchi** Kyoto Institute of Technology, Japan	**P1**
17:55-18:00 10:55-11:00	Novel Experimental Scheme for Microscopic Study of Johari-Goldstein Process	**Makina Saito** Tohoku University, Japan	**P2**
18:00-18:05 11:00-11:05	Development of an Analysis Method for Liquid Electrolyte at a Lithium Electrode Interface using X-ray Total Reflection	**Koji Kimura** Nagoya Institute of Technology, Japan	**P7**
18:05-18:10 11:05-11:10	Structure of amorphous $Mg_{85}Zn_6Y_9$ alloy as a seed of a long-period stacking ordered structure	**Shinya Hosokawa** Kumamoto University, Japan	**P8**
18:10-18:15 11:10-11:15	Collective dynamics of liquid sulfur across the polymerization transition temperature probed by inelastic x-ray scattering	**Shinya Hosokawa** Kumamoto University, Japan	**P9**

18:15-18:20 11:15-11:20	Phonon dynamics of liquid Hg probed by inelastic x-ray scattering	**Shinya Hosokawa** Kumamoto University, Japan	**P10**

Day 6 - Monday 12th, September 2022

JST CEST			
17:10-18:00 **10:10-11:00**	Session R12 Poster Short Presentation		
17:10-17:15 10:10-10:15	Unsupervised topological learning of crystal nucleation in pure metals	**Sébastien Becker** Université Grenoble-Alpes, France	**RP6**
17:15-17:20 10:15-10:20	The structural analysis of low-density liquid phosphorus using reverse Monte Carlo simulation	**Takuya Nishioka** Ehime University, Japan	**P5**
17:20-17:25 10:20-10:25	Inelastic x-ray scattering experiments for liquid $GeCu_2Te_3$	**Masanori Inui** Hiroshima University, Japan	**P11**
17:25-17:30 10:25-10:30	Q-gap behavior of low energy excitations in liquid Sb and liquid Bi observed by inelastic x-ray scattering measurements	**Masanori Inui** Hiroshima University, Japan	**P12**
17:30-17:35 10:30-10:35	Phonon dispersion curves in the type-I crystalline and molten clathrate compound $Eu_8Ga_{16}Ge_{30}$	**Masanori Inui** Hiroshima University, Japan	**P13**
17:35-17:40 10:35-10:40	Density response function of valence electrons in liquid Li	**Kazuhiro Matsuda** Kumamoto University, Japan	**P14**
17:40-17:45 10:40-10:45	Relationship Between Liquid Dynamics and Potential Energy Landscape	**Noel Jakse** Université Grenoble Alpes, CNRS, France	**P15**
17:45-17:50 10:45-10:50	Selecting atomic fingerprints for high-dimensional neural network potentials: adaptive group lasso approach	**Johannes Sandberg** Université Grenoble Alpes, CNRS, France	**P16**
17:50-17:55 10:50-10:55	GeO_2 glass structure from neural network potential molecular dynamics –dependence of intermediate-range order on density functional approximation	**Kenta Matsutani** Yamagata University, Japan	**P17**
17:55-18:00 10:55-11:00	Optical properties of molten pure copper by density functional theory	**Susumu Kato** National Institute of Advanced Industrial Science and Technology (AIST), Japan	**P18**