

FINAL PROGRAM

Tuesday, 7 November [Day 2]

Topic	10:30-12:30		14:00-16:00		16:30-18:30/18:50		
	New materials		Japanese Activity for New Fatigue Curves and Fatigue Analysis 1		Japanese Activity for New Fatigue Curves and Fatigue Analysis 2		
Phoenix	Chair : Benjamin Guennec(Toyama Prefectural Univ) & Takayuki Shiraiwa(The University of Tokyo)		Chair : Masahiro Takanashi (IHI Corporation) & Akhiko Hirano (Hitachi-GE Nuclear Energy Ltd) & Masao Itatani (Toshiba Energy Systems & Solutions Corporation)		Chair : Motoki Nakane (Hitachi-GE Nuclear Energy Ltd) & Saito Toshiyuki (Toshiba Energy Systems & Solutions Corporation)		
	P-201	Assessment of the four-point bending fatigue properties of zirconia-reinforced Ti6Al-4V nanocomposite processed by laser powder bed fusion	P-207	Overview of Japanese Activity for New Fatigue Curves and Fatigue Analysis	P-213	Effect of Machined Surface Finish on Fatigue Life of Carbon Steel	
	P-202	Effect of Volume Fraction of Network Structure Composed of High-Entropy CrMnFeCoNi Alloy on Fatigue Crack Propagation in 304L Stainless Steel Compact	P-208	Development of Best Fit Curves	P-214	Fatigue crack initiation and growth behavior of specimen with machined surface layer under low cycle fatigue regime	
	P-203	Fatigue damage evaluation of coarse and fine grains in notched austenitic stainless steel with harmonic structure	P-209	Definition of Fatigue Life in Best fit Curves and Large Components	P-215	QA Sheet for Variability Factors in Fatigue Life of S-N Curve –Introduction of Activity for Development of ‘Fatigue Knowledge Platform’ in JWES (1) –	
	P-204	Retarded Crack Growth and Self Sensing Ability of Metal-Matrix Composites produced by High-Pressure Torsion	P-210	Mean Stress Correction Method for Fatigue Analysis	P-216	QA Sheet for Fatigue Analysis of Weld Joint –Introduction of Activity for Development of ‘Fatigue Knowledge Platform’ in JWES (2) –	
	P-205	Fatigue crack propagation of nano particles reinforced Al matrix composite	P-211	Investigation of Mean Stress Effect for Local Strain Behavior at Notch Root of Large-Scale Plate Specimen	P-217	QA Sheet for Difference between Post Construction Code for Pressure Vessel and Damage Tolerance Design of Aircraft –Introduction of Activity for Development of ‘Fatigue Knowledge Platform’ in JWES (3) –	
P-206	Fatigue behavior of accumulative roll bonded Cu/Nb laminate materials	P-212	Verification of SWT Method for Notched Components	P-218	Status of Codification for New Fatigue Curves and Fatigue Analysis		
Dahlia1	Chair : Tohikazu Akahori (Meijo Univ) & Liguao Zhao(Nanjing Univ of Aeronautics and Astronautics)		Chair : Tilmann Beck(RPTU Kaiserslautern-Landau) & Takayuki Yonezawa(Nippon Steel Corporation)		Chair : Yi SHI(Shanghai Jiao Tong University) & Shigeru HAMADA(Kyushu University)		
	D1-201	Change in mechanical properties and surface morphology of alpha+beta type titanium alloy subjected to gas nitriding duplex treatment	D1-207	Experimental and numerical investigations of the influence of grain orientation on the fatigue behavior of coarse-grained nickel-based superalloys	D1-213	Investigation of defect induced crack and fatigue crack growth behavior of a P/M nickel based superalloy and corresponding life prediction	
	D1-202	Fatigue property evaluation of Ti-Ta Alloy Rods Using Spinal Fixation Model	D1-208	Fatigue Crack Extension Mode for 18Ni Martensitic Steel and Its Effect on Fatigue Limit	D1-214	In-situ Observation of Fatigue Crack Propagation in Soda-Lime Glass with Vickers Indentation-induced Initial Crack under Four-Point Bending	
	D1-203	Evaluation of Corrosion, Wear and Tribocorrosion Properties of Ti-Ta Alloys	D1-209	Carbon content effect on fatigue crack extension behavior and extension mode in 18%Ni martensitic steels	D1-215	Intrinsic fatigue resistance and the influence of material defects	
	D1-204	Effect of Angioplasty on Fatigue Resistance of Nitinol Stent in Femoropopliteal Artery	D1-210	Fatigue crack propagation behavior of Ferritic steels with different cyclic softening properties	D1-216	Investigation of the influence of physical notch parameters on fatigue life and fatigue life scatter in EN AW-2618A	
Dahlia2	Chair : Bo Li(East China University of Science and Technology) & Yajing Li(East China University of Science and Technology)		Chair : Aditya Pandey(Indian Institute of Technology Roorkee) & Atsuhiko KOYAMA(Nagasaki University)		Chair : Jakob Blankenhagen(Technical University of Munich) & Koji Takahashi(Yokohama National University)		
	D2-201	High cycle fatigue behavior of CoCrFeNi high entropy alloy manufactured with laser powder bed fusion	D2-207	A study on fatigue properties of wire-arc additively manufactured Inconel 718 alloy	D2-214	Cyclic plastic material behavior of novel high manganese austenitic stainless steel Printdur® HSA additively manufactured by PBF-LBM	
	D2-202	Fatigue Properties of WAAM-manufactured components	D2-208	A study on different heat-treatment cycles for additively manufactured Ni-based alloy and its fatigue properties	D2-215	Effect of Heat Treatment on Fatigue Life of Ti-6Al-4V Alloy with Additively Manufactured Layer and Conventional Wrought Layer	
	D2-203	Inferior fatigue resistance of additively-manufactured Ni-based superalloy 718 and its dominating factor	D2-209	The effect of surface modification on crack propagation properties and fatigue life on Ti-6Al-4V alloy formed by electron beam lamination	D2-216	Process Parameters and Fatigue Crack Initiation in Cold Spray	
	D2-204	Combined effect of surface integrity parameters on the fatigue strength of Laser Powder Bed Fusion (L-PBF) 316L stainless steel	D2-210	Applicability of non-ideal powders in powder bed fusion processes - Fatigue life of additively manufactured structures	D2-217	An assessment of the high-temperature fatigue properties of additively manufactured nickel-based alloys	
	D2-205	Effect of Post-Processing on Fatigue Performance of SLM Ti6Al4V Alloy	D2-211	Influence of Heat-treatment on Fatigue Properties of Super Duplex 2507 Stainless Steel produced by Directed Energy Deposition Process	D2-218	Microstructure modification to increase resistance to fatigue crack propagation in titanium alloys made by wire based directed energy deposition process	
D2-206	Low Cycle Fatigue Behavior of Wire Arc Additive Manufactured and Solution Annealed 308 L Stainless Steel	D2-212	Influence of manufacturing history and resulting microstructure on the very high cycle fatigue behavior of additively manufactured samples	D2-219	Combined Effect of Shot and Laser Peening on Fatigue Strength of Additively Manufactured Aluminum Alloy		
Cosmos1	Chair : Zhiping Xu(Tsinghua University) & Balajee Ananthasayanam(Honda Aero Inc.)		Chair : Zhe ZHANG(Tianjin University) & Norihiko Hana(Mitsubishi Electric Corporation)		Chair : Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology) & Stéphanie DESCHANEL (INSA-Lyon)		
	C1-201	A Data Science Approach to Understanding Fatigue	C1-207	Mechanoreponsive luminogen (MRL)-based real-time and visible detection method for fatigue damage	C1-213	Real time fatigue crack detection on welded specimens by applying inductive Thermography. Simulation and experimental results	
	C1-202	Identification of Plastic-Creep Fatigue Damage Rule for Aluminum Alloys Using Particle Swarm Optimization Method	C1-208	Self-heating and rapid fatigue limit prediction for angle-ply thermoplastic composites under tensile fatigue load based on the infrared thermography technology	C1-214	Evaluation of Fatigue Strength by Dissipated Energy of Dissimilar FSW Joints of Aluminum Alloy and Steel sheets.	
	C1-203	Dimensioning a Reference Volume Element for Detecting Fatigue Cracks in Equiaxed Titanium Alloy	C1-209	Using 3D energy-dispersive μ Laue diffraction to study fatigue damage evolution in materials showing wavy and planar slip behaviour	C1-215	POD modeling of a flexible array eddy current NDT method for near-surface cracks in the tenon-groove structure of a turbine disk and its application for damage tolerance assessment	
	C1-204	Slow Adoption of Modern Statistical Methods in Industrial Applications for the Development of Fatigue Curves	C1-210	Evaluation of fatigue strength of Cr-Mo steel based on dissipated energy measurement	C1-216	Metalayer-based piezoelectric transducer for unidirectional excitation and reception of SH guided wave	
	C1-205	Development of Fatigue Curve with Multiple Competing Failure Modes	C1-211	Crack shape identification from surface deformation using inverse analysis			
C1-206	Fatigue Deformation Behavior and Life Prediction in a Newly-Developed Cast Aluminum Alloy	C1-212	Fatigue Crack Behavior of 304 Stainless Steels using Synchrotron X-ray Tomography and Diffraction: Influence of the Martensite Fraction and Role of Inclusions				
Cosmos2	Chair : Carl Fischer(Fraunhofer Institute for Mechanics of Materials IWM) & Emiel Amsterdam(NLR)		Chair : Jie-WeiGao(Univ of Electronic Science and Technology of China) & Fabien Lefebvre(CETIM)		Chair : Bastian Blinn(RPTU Kaiserslautern) & Masayuki Kamaya(Institute of Nuclear Safety System, Inc.)		
	C2-201	Finite element study on the influence of the phase shift on plasticity-induced crack closure and the crack tip opening displacement under thermomechanical fatigue loading	C2-207	Damage tolerance assessment of heavy-duty freight railway axle steel with various-shape artificial defects	C2-213	Analysis of the defect tolerance of bainitic 100Cr6 with high retained austenite content	
	C2-202	Mixed mode crack growth behaviour considering plasticity-induced and roughness-induced closure	C2-208	Fretting fatigue damage of axial interference fit structures subjected to fretting wear	C2-214	Cyclic indentation - A new method to estimate the fatigue strength by considering the cyclic deformation behavior	
	C2-203	Improved Analytical Tool for Crack Closure Evolution after Overload and Underload	C2-209	Research on fatigue assessment method of high-speed train axle based on axle box acceleration	C2-215	Study on fatigue damage of axle excited by High Frequency	
	C2-204	Crack closure effects at negative load ratios	C2-210	An entropy-based approach to low cycle fatigue damage evolution for GH4169 at intermediate and elevated temperature	C2-216	A Study of Rate Process Analysis on the Rotating Bending Fatigue Limit of Carbon Steel	
	C2-205	On the strain energy release rate and fatigue crack growth rate in metallic alloys	C2-211	Proposition and Development of the General Relation between Tensile and Fatigue Strengths of Metallic Materials	C2-217	Mean stress sensitivity for carbide-rich PM tool steels	
Ran1	Chair : Aerial Leonard(The Ohio State Univ) & Ulich Krupp(RWTH Aachen Univ)		Chair : Yabin Yan(East China University of Science and Technology) & Ankur Chauhan(Indian Institute of Science)		Chair : Jean-Bernard VOGT(University de Lille) & LiHe Qian(Yanshan University)		
	R1-201	Fatigue strength evaluation of 1180MPa class recycled steel	R1-207	In situ SEM experimental study on the fatigue failure of micro-single-crystal copper	R1-213	Low cycle fatigue of a fully pearlitic steel	
	R1-202	Influence of Dislocation Interactions on Fatigue Crack Initiation in Additively Manufactured Nickel-Aluminum-Bronze Alloys	R1-208	Dislocation networks in the (111) cell boundaries in fatigued near-[111] copper single crystals	R1-214	Cyclic plasticity of a 9Ni steel	
	R1-203	Notched High Cycle Fatigue and Macrozones in Ti-6Al-4V	R1-209	Improvement of stress corrosion cracking resistance by low cycle fatigue of a CrNiMoV steel	R1-215	Secondary orientation effects on the low cycle fatigue behaviors of rectangular-sectional Ni-based single crystal superalloys at medium and high temperatures	
	R1-204	In situ observation and crystal plasticity simulation of internal fatigue crack initiation and propagation behavior around synthetic hard alpha inclusions embedded in Ti-6Al-4V	R1-210	Cryoforged nanotwinned CoCrNi medium-entropy alloy with exceptional fatigue resistance at cryogenic temperature	R1-216	Improved fatigue resistance of heterogeneous materials: suppress strain localization and damage accumulation	
	R1-205	A novel micromechanism-based fatigue model for FCC single crystal combining crystal plasticity with CDM	R1-211	Elucidation of small fatigue crack initiation behavior on polycrystal Ti-22V-4Al	R1-217	Nanostructure; 316L stainless steel; Low-cycle fatigue life; Ductility; Cumulative plastic strain	
R1-206	Initiation and Growth of Short Fatigue Cracks in Tempered Martensitic and Bainitic Steels	R1-212	Low-cycle fatigue response of an equiatomic CrFeNi multi-principal element alloy	R1-218	Effect of AI on the Low-Cycle Fatigue Properties of Fe-Mn-C TWIP Steel		
Ran2	Chair : Kohei FUKUCHI(Akita University) & Oliver Jordan(RPTU Kaiserslautern-Landau)		Chair : Masahiro Takanashi (IHI Corporation) & Akhiko Hirano (Hitachi-GE Nuclear Energy Ltd) & Masao Itatani (Toshiba Energy Systems & Solutions Corporation)		Chair : Shiyu Suzuki(JAXA) & Tuan Duc Nguyen(Siemens Energy)		
	R2-201	Characterization of low-cycle fatigue fracture surfaces of aluminum alloys at high-temperature using fractal dimension analysis	<p>FATIGUE2026 presentation</p>	R2-213	Transition from crack retardation to acceleration under high temperature dwell-fatigue loading in a wrought Ni-base superalloy	R2-213	Transition from crack retardation to acceleration under high temperature dwell-fatigue loading in a wrought Ni-base superalloy
	R2-202	Acceleration of Creep-Fatigue Damage in Ni-Base Superalloy due to Viscoelasticity at Elevated Temperature by Considering Local Stress		R2-214	Evaluation of fatigue and creep-fatigue damage levels on the basis of engineering damage mechanics approach	R2-214	Evaluation of fatigue and creep-fatigue damage levels on the basis of engineering damage mechanics approach
	R2-203	Cold dwell fatigue response of aero-engine component titanium alloys: Influence of hold time and peak stress		R2-215	Acceleration Mechanism of Intergranular Cracking of Stainless Steel SUS316LN at Elevated Temperature Caused by Local Strain Energy Around Grain Boundaries	R2-215	Acceleration Mechanism of Intergranular Cracking of Stainless Steel SUS316LN at Elevated Temperature Caused by Local Strain Energy Around Grain Boundaries
	R2-204	Molecular Dynamics Analysis of the Acceleration Mechanism of the Degradation of Grain Boundary Strength in Alloy GH4169 Caused by δ -Phase Precipitation		R2-216	Cyclic deformation behaviors and damage mechanisms in P92 steel under creep-fatigue: Effects of hold condition and oxidation	R2-216	Cyclic deformation behaviors and damage mechanisms in P92 steel under creep-fatigue: Effects of hold condition and oxidation
	R2-205	Modified Kitagawa-Takahashi Approach for Improved Lifetime Prediction under Creep-Fatigue Loading of Polycrystalline Gas Turbine Components		R2-217	Numerical Analysis of P91 notched specimen by damage-coupled inelastic constitutive model	R2-217	Numerical Analysis of P91 notched specimen by damage-coupled inelastic constitutive model
R2-206	Probabilistic Modelling of creep-fatigue interaction in polycrystalline Nickel-base alloy based on the Kitagawa-Takahashi diagram	R2-218			R2-218		

FINAL PROGRAM

Wednesday, 8 November [Day 3]

10:30-12:30			14:00-16:00 /16:20			16:30-18:30/18:50			
Phoenix	Japanese Activity of Fatigue design and Evaluation Committee in Society of Automotive engineers of Japan			Growth of short and long cracks 3			Growth of short and long cracks 4		
	Chair : Toshiaki Nakamaru(Nissan Motor Co., LTD) & Hiroaki Kawamura(Toyota motor corporation)			Chair : Yali Yang (Shanghai University of Engineering Science) & Committee			Chair : Motoki Sakaguchi(Tokyo Institute of Technology) & Xiaoguang Yang(Beihang University)		
	P-301	Activities of Fatigue design and Evaluation Committee in Society of Automotive engineers of Japan	Toshiaki Nakamaru(Nissan Motor Co., LTD)	P-307	The Cyclic R-Curve for Predicting Growth and Arrest of Short Cracks	Keisuke Tanaka(Nagoya University)	P-313	Fatigue crack propagation in a single crystal and a two-dimensional polycrystalline Ni-base superalloys	Motoki Sakaguchi(Tokyo Institute of Technology)
	P-302	Evaluation of Fatigue Characteristics of CFRP Bonding Materials by Urethane Adhesive	Masayuki Osada(Hiroshima University)	P-308	Study on fatigue propagation shape of surface crack	Yali Yang (Shanghai University of Engineering Science)	P-314	Quantitative analysis of fatigue damage of Inconel 718 after creep-fatigue fracture based on micro-pillar tests	Ji Wang(East China University of Science and Technology)
	P-303	Investigation of the Effects of Adherend Materials and Epoxy Adhesive Properties on the Fatigue Strength	Hiroaki Kawamura(Toyota motor corporation)	P-309	Influence of exposure to moist air on the fatigue striation formation in a Ti75 7351 alloy	Gilbert HÉNAFF(University of Poitiers)	P-315	A Study on Fatigue Crack Propagation in Steel Rail Weld Zones Based on Damage Mechanics and Cohesive Zone Model	Chenhao Ji(Beihang University)
P-304	Investigation of the effects of adhesive edge shape and Adherend stiffness on fatigue strength of adhesive bonded specimens	Masashi Inoue(Toyota Industries Corporation)	P-310	A physically small crack growth model based on CTOD	Lu Han(Beihang University)	P-316	Effect of sustained load on fatigue crack growth behavior of FG96 at elevated temperature	Zhifang WANG(Beihang University)	
Dahliat	Experimental techniques, corrosion			Additive Manufacturing 4			Additive Manufacturing 5		
	Chair : Catherine MABRU(University de Toulouse) & Damien DESGACHES(AIRBUS Atlantic)			Chair : Lea Strauss(University of the Bundeswehr Munich) & Fabien Szymka(Institut Polytechnique de Paris)			Chair : Rui Fu(Harbin Institute of Technology) & Baris Telmen(Institut Polytechnique de Paris)		
	D1-301	Contribution of the self-heating method in the characterization of the fatigue damage of materials with defects resulting from additive manufacturing	Catherine MABRU(University de Toulouse)	D1-307	Fatigue Life Prediction of PBF-LB AISI10Mg based on Roughness and Residual Stress	Lea Strauss(University of the Bundeswehr Munich)	D1-313	High-Cycle and Very-High-Cycle Fatigue Behavior and Life Prediction of Ti-6Al-4V Fabricated by Laser Powder Bed Fusion	Rui Fu(Harbin Institute of Technology)
	D1-302	Study on Mechanical Properties of Anode Material for Lithium Ion Batteries in Water	Shiori Tagai(Tokyo City University)	D1-308	Defects tolerance and fatigue limit prediction in additive manufactured titanium alloy Ti6Al4V	Abdul KhadarSyed(Coventry University)	D1-314	Low-cycle fatigue of conventional and additively manufactured IN939 superalloy	Tomáš BABINSKY(Institute of Physics of Materials, Czech Academy of Sciences)
	D1-303	Effect of cyclic hardening on stress corrosion cracking behavior of NiCrMoV steel welded joints	Yuhui Huang(East China University of Science and Technology)	D1-309	Structure Integrity Analysis of Additive Manufactured Cabin Door: Design-Manufacture-Fatigue behavior	Yu'e MA(Northwestern Polytechnical University)	D1-315	Coupling effects of microstructure and defects on fatigue properties of 3D-printed Ti-6Al-4V	Zhenjun Zhang(Institute of Metal Research, Chinese Academy of Sciences)
	D1-304	Investigation of Fatigue Crack Growth Behavior in Fine Particle Peened 7075 Aluminum Alloy using Digital Image Correlation	Yuichi ONO(Tottori University)	D1-310	Fatigue damage evolution and tolerance in additively manufactured metals	Alexander Koch(TU Dortmund University)	D1-316	Cyclic Strain Localization in Fatigued 316L Stainless Steel Manufactured Additively using Selective Laser Melting (SLM)	Jiří MAN(Institute of Physics of Materials, Czech Academy of Sciences)
Dahliat	Hydrogen embrittlement			Joint			Case studies and industrial applications		
	Chair : Aman Arora (Kyushu University) & Daniel Osorio(University of Stuttgart)			Chair : Hsin ShenHo(Zhengzhou University) & Yoshihiko UEMATSU(Gifu University)			Chair : Marcel Krochmal(University of Kassel) & Taizo MAKINO(Nippon Steel Corporation)		
	D2-301	Development of an experimentally informed model for fatigue crack initiation in metals due to hydrogen	Aman Arora (Kyushu University)	D2-307	Effects of tightening torque on vibration fatigue performance of single-lap joints: modal parameter analyses	Hsin ShenHo(Zhengzhou University)	D2-314	On the fatigue properties of a S550MC+100Cr6 clad steel in different fatigue regimes	Marcel Krochmal(University of Kassel)
	D2-302	Influence of the interaction hydrogen/microstructure on low-cycle fatigue behavior and fatigue crack growth in a precipitation-hardened nickel-based superalloy.	Achraf Radi(University of Technology of Compiègne)	D2-308	Evaluation of Fatigue Properties of Adhesive Bond joint with Laser Patterning Surface Treatment	Ryuta Yotsutani(Hiroshima University)	D2-315	Fatigue behavior of an Off-highway axle subjected to a variable amplitude strain-based load spectrum derived from field tests	Jacopo Pelizzari(University of Padua)
	D2-303	Some impact of hydrogen concentration and distribution on low cycle fatigue behavior of an alpha titanium alloy	Larissa Caroline Martins Moreira(La Rochelle University)	D2-309	Effect of Plate Thickness Ratio on the Fatigue Strength Properties of Friction Stir Spot Welds of Aluminum Alloy	Yuki NOSE(Hiroshima University)	D2-316	Evaluation of Fatigue Strength of Full-scale Induction-hardened Axles for Railway Vehicles and Its Estimation under Very-High-Cycle Regime	Taizo MAKINO(Nippon Steel Corporation)
	D2-304	Review of the antagonists' processes of hydrogen on physical mechanisms of plasticity and their consequences on fatigue behavior of fcc metals	Xavier FEUGAS (La Rochelle University)	D2-310	Influencing Factors on Fatigue Strength of SPR joint in Magnesium Alloy	Yukio MIYASHITA(Nagaoka University of Technology)	D2-317	Double-sided ultrasonic surface rolling process for improving the surface integrity and vibration fatigue resistance of thin-walled blade-like samples	Zhang Kaiming(East China University of Science and Technology)
Cosmos1	Surface engineering 1			Surface engineering 2			Surface engineering 3		
	Chair : Shirin FALAKBOLAND(RPTU Kaiserslautern) & Koichiro NAMBU(Osaka Sangyo University)			Chair : Yang Liu(Northeastern University) & Kiyotaka MASAKI(Saitama Institute of Technology)			Chair : Verónica VELLOSO(Sao Paulo State University) & Chang Ye(Zhengzhou University)		
	C1-301	Influence of organically modified sol-gel SiO2 coating on the VHCF behavior of austenitic stainless steel AISI 904L	Shirin FALAKBOLAND(RPTU Kaiserslautern)	C1-307	High Temperature Stability Mechanism of Fatigue Resistance of Warm Laser Shock Peened IN718 Superalloy	Yang Liu(Northeastern University)	C1-313	Study of the Ti-6Al-4V fatigue behavior superficially treated by plasma immersion ion implantation (PIII) combined with shot peening as pre and post treatment	Verónica VELLOSO(Sao Paulo State University)
	C1-302	Improvement in Fatigue Strength by Ball Burnishing of Aluminum Alloy with a Surface Defect	Kohei Wakamatsu(Yokohama National University)	C1-308	Effect of Multifunction Cavitation on Rotating Bending Fatigue Properties of Low Alloy Steel Rods	Keisuke Ono(Shizuoka University)	C1-314	Low-cycle fatigue investigation of Cr/CrN multilayer coated Ti-6Al-4V alloy with equiaxed microstructure	Martin Ferreira Fernandes(Sao Paulo State University)
	C1-303	Effect of Residual Stress on Internal Crack Initiation and Propagation of Induction Heated and Quenched AISI4140 Steel with Different Hardened Layer Depths	Tomofumi Aoki(Keio University)	C1-309	Evaluation of the effect of stress ratio and compressive residual stress on the fatigue properties of shot-peened AISI4140 specimens, considering residual stress relaxation	Motoaki Hayama(Keio university)	C1-315	Effect of Nitrided-Fine Particle Peening on Formation of Nitrided Layer and Fatigue Properties of Titanium Alloys	Ryuichi Tachigaya(Shizuoka University)
	C1-304	Controlling Factors of Scanning Cyclic Press on the Surface Modification of Magnesium Alloy	Nao Fujimura(Hokkaido University)	C1-310	Effect of Gas Carburizing on Axial Fatigue Strength of SCM420H Steel	Takayuki Komoriya(The University of SCM420H Steel)	C1-316	Effect of Fine Iron-Sulfide Particle Peening on Rotating Bending Fatigue Properties of Low Alloy Steel	Shotaro NOGUCHI(Shizuoka University)
Cosmos2	Fatigue modelling and simulation 1			Fatigue modelling and simulation 2			Fatigue modelling and simulation 3		
	Chair : Thomas Ebbott(Endurica LLC) & Mauro Madia(Bundesanstalt für Materialforschung und -prüfung)			Chair : Pascale KANOUTE(ONERA) & Wenyi Yan(Monash University)			Chair : Andris Freimanis(VTT Technical Research Center of Finland) & Huang Yuan(Tsinghua University)		
	C2-301	Life Prediction and Virtual Qualification of an Elastomeric Engine Mount	Thomas Ebbott(Endurica LLC)	C2-307	Multiaxial Fatigue Criteria for the Fatigue Life Assessment of Metallic Assemblies	Pascale KANOUTE(ONERA)	C2-313	Fatigue modelling of martensitic steel for engine components	Andris Freimanis(VTT Technical Research Center of Finland)
	C2-302	Vibration fatigue life prediction of 60Si2Mn fastener clips based on CDM theory and ML model.	Yifei Dong(Beihang University)	C2-308	Crack Closure and Fatigue Crack Growth under Variable Amplitude Loading	Andrei Kotousov(The University of Adelaide)	C2-314	A fast Neuber-type Finite Element simulator to calibrate a multi-mechanism HCF model of alloys with process-induced pores	Abhishek Palchoudhary(Mines Paris, PSL University)
	C2-303	Deep Learning-enabled Cyclic Deformation Modeling of Single Crystal Ni-based Superalloy Considering the Effect of Microstructure State	Long TAN(Beihang University)	C2-309	A mesoscopic damage model for the low-cycle fatigue of an extruded magnesium alloy	Ziyi Wang(Southwest Jiaotong University)	C2-315	FFT-based Crystal Plasticity Simulation of Cyclic Loading of SLM AISI10Mg	Manoj Singh Bishr(Indian Institute of Technology Roorkee)
	C2-304	Determination of the Kitagawa-Takahashi diagram for the EA4T railway axle steel by means of the cyclic R-curve method	Mauro Madia(Bundesanstalt für Materialforschung und -prüfung)	C2-310	A Simple and Accurate Fatigue Life Prediction Method under Variable Loading	Shoma Ueda(Tokyo City University)	C2-316	Creep Rate of Anode Material for Lithium-ion Batteries under High Temperature Environment	Kairi Shiraishi(Tokyo City University)
Ran1	Cyclic deformation and crack initiation 4			Cyclic deformation and crack initiation 5			Cyclic deformation and crack initiation 6		
	Chair : Viet Duc LE(Arts et Métiers Institute of Technology) & Zhefeng Zhang(Institute of Metal Research, Chinese Academy of Sciences)			Chair : Constanze Backes(RPTU Kaiserslautern) & Lei Xu(Institute of Metal Research, Chinese Academy of Sciences)			Chair : Shuxin Chang(Southwest Jiaotong University) & Committee		
	R1-301	Investigation of the torsional fatigue crack initiation mechanisms in the cast AISi7Mg0.3 aluminum alloy using combined 3D X-ray CT and diffraction contrast tomography in a synchrotron beamline	Viet Duc LE(Arts et Métiers Institute of Technology)	R1-307	Influence of mechanical fatigue on magnetic properties of electrical steels	Constanze Backes(RPTU Kaiserslautern)	R1-314	Experimental investigation of early strain localizations on ferrite-pearlite steel under cyclic loading.	Nagesh Narasimha Prasad(Univ. Lille)
	R1-302	Fatigue damage and temperature evolution under anisotropic cyclic deformation in a single crystal Ni-base superalloy using notched specimens	Putt Thanakun(Tokyo Institute of Technology)	R1-308	Influence of different temperatures on the fatigue behavior of fully ferritic high chromium steel	Patrick Lehner(RPTU Kaiserslautern)	R1-315	Multi-mechanism constitutive model for uniaxial ratcheting of extruded AZ31 magnesium alloy at room temperature	Yu Lei(Southwest Jiaotong University)
	R1-303	Phase-field simulation on the martensitic transformation/reorientation toughening behaviors of single crystal NiTi shape memory alloy	Junyuan Xiong(Southwest Jiaotong University)	R1-309	Cyclic Simple Shear Properties of Single- and Poly-crystalline Fe and Fe73wt%Si alloys	Mamoru HAYAKAWA(Nippon Steel Corporation)	R1-316	Cyclic responses and damage evolution of ultra-high strength steel under low-cycle fatigue	Feinong Gao(Beijing Institute of Technology)
	R1-304	Analysis and modeling of the strain distribution and evolution during a fatigue test in ULCF and LCF. Application on a friction stir welded specimen from steel and aluminum	Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology)	R1-310	Effect of Lüders strain localization on notch fatigue of medium manganese steels	Xiangbo Hu(Hunan university)	R1-317	Mechanism-based assessment of profiles made from directly recycled hot extruded EN AW-6060 aluminum chips	Alexander Koch(TU Dortmund University)
Ran2	Very high cycle fatigue 1			Very high cycle fatigue 2			Journals' Meeting		
	Chair : Luis Reis(DMEC) & Bernd M. SCHÖNBAUER(University of Natural Resources and Life Sciences)			Chair : Yoshinobu Shimamura(Shizuoka University) & Tao Wu(Nanjing University of Aeronautics and Astronautics)					
	R2-301	Different Axial/Shear Stress Ratios under Tension/Torsion UFT	Luis Reis(DMEC)	R2-307	Effect of Mean Torsional Stress on Torsional Fatigue Strength in the Very High Cycle Regime for Spring and Bearing Steels	Yoshinobu Shimamura(Shizuoka University)			
	R2-302	Effects of microstructure refinement and metallic adhesion on the sub-surface fatigue crack propagation process in Ti6Al4V alloy	Hiroyuki OGUMA(National Institute for Materials Science)	R2-308	Study and modeling of Fatigue Properties at Very Large Cycles from Self-heating Tests under Cyclic Loads	Théo SEVEDE(IRD.L)			
	R2-303	20 kHz cantilever fatigue testing of high strength precision strip steels in different load conditions	Mohamed Sadek(Karlstad University)	R2-309	A naturally initiated internal fatigue crack growth process in beta titanium alloy using in situ synchrotron radiation multiscale computed tomography	Gaoge Xue(Hokkaido University)			
	R2-304	Fatigue assessment in the HCF and VHCF regimes of PM-HIPed Inconel 625	Faezeh Javadzadeh Kalahroudi(Karlstad University)	R2-310	Physics-informed neural networks for very high cycle fatigue	Mingliang Zhu(East China University of Science and Technology)			

FINAL PROGRAM

Friday, 10 November [Day 5]

8:00-10:00 Thermo-mechanical fatigue 1		
Chair : Vincent Maurel(Mines Paris, PSL University) & Xu Chen(Tianjin University)		
D1-501	Anisotropic thermomechanical fatigue assessment of nickel-base single crystal alloys	Jiawei Xu(Tsinghua University)
D1-502	Role of temperature gradient in thermo-mechanical fatigue analyzed through micro-cracks growth	Vincent Maurel(Mines Paris, PSL University)
D1-503	Crack Growth Behavior of 316LN Stainless Steel under Thermo-mechanical and Isothermal Fatigue Loading	Yiming Zheng(Tianjin University)
D1-504	Material characterization of pearlitic railway steels exposed to simultaneous thermal and mechanical cycling	Erika Steyn(Chalmers University of Technology)
D1-505	Thermomechanical fatigue behavior of 316LN stainless Steel	Xu Chen(Tianjin University)

10:30-12:30 Thermo-mechanical fatigue 2		
Chair : Mi Wang(Beihang University) & Lu ZHANG(Nanjing University of Aeronautics and Astronautics)		
D1-507	A CTOD-based fatigue crack growth model under high temperature and dwell time	Mi Wang(Beihang University)
D1-508	A comparison of the thermomechanical fatigue behavior of electron-beam-melted and conventional Inconel 718	Stefan Guth(Karlsruhe Institute of Technology)
D1-509	Development of a thermal fatigue characterization protocol for metal alloys, adapted to characterize the strength of repaired structures	Nicolas Thureau(Institut Polytechnique de Paris)
D1-510	Cyclic deformation and fracture mechanisms of powder-metallurgy nickel-based superalloy under thermo-mechanical fatigue	Lu ZHANG(Nanjing University of Aeronautics and Astronautics)
D1-511	Constitutive Modelling of alloys under high temperature low-cycle and thermal-mechanical fatigue: a key issue in component design	Luc REMY(Mines Paris, PSL University)

14:00-16:00 Crack growth thresholds		
Chair : Hisao Matsunaga(Kyushu University) & Salim ÇALIŞKAN(Turkish Aerospace)		
D1-513	Quantitative Evaluation of the Sliding-mode Crack-closure Affecting the Shear-mode Fatigue Crack-growth Threshold in Ni-based Superalloy 718	Hisao Matsunaga(Kyushu University)
D1-514	Fatigue crack propagation behavior of Inconel 718 superalloy aged with different temperature/stress coupled fields	Lei WANG(Northeastern University)
D1-515	In-situ scanning electron microscopy observation of crack closure of non-propagating fatigue crack in Fe alloy	Atsushi Takayama(Nippon Steel Corporation)
D1-516	Fatigue Limit Evaluation of Ni-based Superalloy 718, Considering the Competition between Opening- and Shear-mode Fatigue Crack-growth	Yuya Tanaka(Fukuoka University)
D1-517	Investigation of failure analysis for AISI 4340 steels on near threshold region	Salim ÇALIŞKAN(Turkish Aerospace)

Life prediction methodology, software development 1		
Chair : Marcos Pereira(Pontifical Catholic University of Rio de Janeiro) & Marion Bartsch(German Aerospace Center)		
D2-501	Investigation on Fatigue Life Estimation of GH4169 Superalloy at Elevated Temperature Based on Thermodynamic Entropy Generation	Liangliang ZUO(Beihang University)
D2-502	Modelling the effect of a superficial defect over the fatigue-life structural steels: a modified version of the S-N curve	Marcos Pereira(Pontifical Catholic University of Rio de Janeiro)
D2-503	Multiscale Modeling Strategy for Accurately Predicting Fatigue Life of Steels	YOO CHAN(Korea University)
D2-504	A Physics-informed Neural Network for Probabilistic Fatigue Life Prediction under Constant Amplitude Loading with Overloads	Shan Jiang(Minzu University of China)
D2-505	Probabilistic estimation of the Woehler and Goodman-Haigh curves by considering the stress ratio effect	Paul DarioTOASA CAIZA(Karlsruhe Institute of Technology)
D2-506	High Temperature Fatigue Tests on Small-scale Specimens Extracted from High Pressure Turbine Blades for Calibrating an Efficient Lifetime Model	Marion Bartsch(German Aerospace Center)

Life prediction methodology, software development 2		
Chair : Tiago Castro(Pontifical Catholic University of Rio de Janeiro) & Yongzhen ZHANG(Institute of Corrosion Science and Technology)		
D2-507	On the influence of mean stresses on the predictive capability of the elliptical curve method	Tiago Castro(Pontifical Catholic University of Rio de Janeiro)
D2-508	Machine learning-based fatigue life prediction of metal materials: Perspectives of physics-informed and data-driven hybrid methods	Haijie Wang(East China University of Science and Technology)
D2-509	Prediction of fatigue crack growth life under complex environmental loads via cycle-by-cycle algorithm and XFEM	Zhiying Chen(Tsinghua University)
D2-510	On the integration of domain knowledge and branching neural network for fatigue life prediction with small samples	Lei GAN(Harbin Institute of Technology)
D2-511	Methodology for pore detection and classification with regard to fatigue of PBF-LB/M-manufactured 316L using ?CT and machine learning algorithms	Johannes Diller(Technical University of Munich)
D2-512	Prediction of Corrosion Fatigue Crack Growth Rate in Alloys Based on Quantitative Expression of Data Nonlinear Correlation	Yongzhen ZHANG(Institute of Corrosion Science and Technology)

Effective factors		
Chair : Masatoshi Kuroda(Kumamoto University) & Wandong Wang(School of Aeronautics, Northwestern Polytechnical University)		
D2-513	Separate Effects of Surface Roughness and Residual Stress on Fatigue Limit of Austenitic Stainless Steels	Masatoshi Kuroda(Kumamoto University)
D2-514	Influence of manufacturing process, heat treatment and microstructure on fatigue properties of carbide-rich high-speed steels	Lennart Mirko Scholl(RWTH Aachen University)
D2-515	Bidirectional Transformation: A Novel Approach to Enhance Fatigue Durability of Steel	Fumiyoshi Yoshinaka(National Institute for Materials Science)
D2-516	Fatigue crack growth behavior of metallic plates reinforced with bonded and prestressed retarders	Wandong Wang(School of Aeronautics, Northwestern Polytechnical University)
D2-517	An analytical approach to evaluate fatigue behaviour of notched specimens in VHCF: challenges, accomplishments and limitations	Abilio Jesus (University of Porto)
D2-518	Influence of Metallurgical Variables on Corrosion Fatigue Strength of Structural Steels	Ryuichiro Ebara (Fukuoka University)

Very high cycle fatigue 3		
Chair : Anja Weidner(TU Bergakademie Freiberg) & Chong Wang(Sichuan University)		
C1-501	Very high cycle fatigue at RT and elevated temperatures on additively manufactured materials	Anja Weidner(TU Bergakademie Freiberg)
C1-502	Contribution of self-heating measurements under cyclic loading to the study of VHCF properties at high temperature of nickel-based superalloys	Alexis MION(Institut Polytechnique de Paris)
C1-503	Nanograin formation mechanism under fatigue loadings in additively manufactured Ti-6Al-4V alloy	Wei-qian Chi(Beijing Jiaotong University)
C1-504	Very high cycle fatigue properties of bearing steels at elevated temperature	Suraj More(University of Natural Resources and Life Sciences)
C1-505	Factors in ODA-like Morphology on the Fracture Surface in Beta Titanium Alloys	Rajshree Awasthi(Hokkaido University)
C1-506	Thermodynamic Investigation on the Crack Growth Behavior at Very High Cycle Fatigue Regime	Chong Wang(Sichuan University)

Very high cycle fatigue 4		
Chair : Yuki Nakamura(National Institute of Technology, Toyota College) & Yoshiyuki Furuya(National Institute for Materials Science)		
C1-507	Construction of Probabilistic Model on Interior Crack Nucleation and Propagation in Very High Cycle Fatigue of High Strength Steels	Yuki Nakamura(National Institute of Technology, Toyota College)
C1-508	Fatigue Mechanism for an Additively Manufactured Aluminium Alloy up to Very-High-Cycle Regime	Xiangnan PAN(Institute of Mechanics, Chinese Academy of Sciences)
C1-509	Localized oxidation assisting microcrack initiation in a LPSO-reinforced Mg-RE alloy up to very-high-cycle-fatigue regime	Yao Chen(Kyushu University)
C1-510	Characterizing the very high cycle fatigue behavior of CF-PEKK material under ultrasonic cyclic bending loads	Aravind Premanand(University of Freiburg)
C1-511	New fatigue limits in gigacycle fatigue of high-strength steels	Yoshiyuki Furuya(National Institute for Materials Science)
D2-213	Very High Cycle Fatigue of Laser Additively Manufactured Titanium and Nickel Alloys	Yao CHEN (Sichuan University)

Very high cycle fatigue 5		
Chair : Elen Regitz(RPTU Kaiserslautern) & Yevgen GORASH(University of Strathclyde)		
C1-513	Microstructural changes during fatigue loading in the very high cycle regime of the metastable austenitic steel AISI 347 at 573 K	Elen Regitz(RPTU Kaiserslautern)
C1-514	Mechanism of nanograin formation and crack initiation for very high cycle fatigue of titanium alloys	Chengqi Sun(Institute of Mechanics, Chinese Academy of Sciences)
C1-516	Effects of Induction hardening and Press-Fitting on Very High Cycle Fatigue Properties of Railway Axle Steel	Makoto AKAMA(Osaka Sangyo University)

Fatigue modelling and simulation 4		
Chair : Franck MOREL(Arts et Métiers Institute of Technology) & Daiyang Gao(Nanjing University of Science and Technology)		
C2-501	Modelling Cyclic Deformation and Fatigue Crack Growth through Coupling of Phase Field and Viscoplasticity	Liguo Zhao(Nanjing University of Aeronautics and Astronautics)
C2-502	Process-performance-prediction integration oriented to fatigue life improvement: implementation in high-temperature structures based on dual-scale modeling approach	Kai-Shang LI(East China University of Science and Technology)
C2-503	Physics-based modelling of HCF variability in carburized steels	Franck MOREL(Arts et Métiers Institute of Technology)
C2-504	Phase-Field and Crystal Plasticity Coupling Model Investigation of Grain Growth under Fatigue Loading	Wei Peng(East China University of Science and Technology)
C2-505	Molecular Dynamics Analysis of the Effect of Strain Rate on the Acceleration of the Degradation of the Crystallinity of a Grain Boundary under Creep-Fatigue Loads at Elevated Temperature	Takuma Yamawaki(Tohoku University)
C2-506	Spectral method for fatigue life estimation of notched metallic structures under broad-band random vibration loadings	Daiyang Gao(Nanjing University of Science and Technology)

Fatigue modelling and simulation 5		
Chair : Kazuki Shibanuma(The University of Tokyo) & Larissa Duarte(Bundesanstalt für Materialforschung und -prüfung)		
C2-507	Multiscale Modeling Strategy for Accurately Predicting Fatigue Life of Steels	Kazuki Shibanuma(The University of Tokyo)
C2-508	A Bridging Strategy between Microscopic and Macroscopic Crack Growth Simulations for Predicting Fatigue Strength of Steels	Hongchang ZHOU(The University of Tokyo)
C2-509	An elastoplastic constitutive model for effect of loading history on ratcheting and cyclic hardening behavior	Jiawei Bai(School of Aerospace Science and Technology)
C2-510	Fatigue behavior and cyclic slip irreversibility of AlCoCrFeNi high entropy alloys: A molecular dynamics simulation study	Dongxing Pan(Hunan university)
C2-511	A Bridging Strategy between Microscopic and Macroscopic Crack Growth Simulations for Predicting Fatigue Strength of Steels	Yun-Jae Kim(Korea University)
C2-512	Fatigue assessment procedure based on effective crack propagation data and cyclic R-curve	Larissa Duarte(Bundesanstalt für Materialforschung und -prüfung)

Fatigue modelling and simulation 6		
Chair : Abel Santos (University of Porto) & Yongtao Bai(Chongqing University)		
C2-513	A unified approach for the fatigue categorization of cold-formed mild steel details	Abel Santos (University of Porto)
C2-514	A continuum damage mechanics-based machine learning approach for thermal fatigue life prediction of aluminum alloy	Zhixin Zhan(Beihang University)
C2-515	Studying the Fatigue Strength in the VHCF Regime of an Epoxy used for Fiber-Reinforced Polymers	Malo Rosemeier(Fraunhofer Institute for Wind Energy Systems IWES)
C2-516	Comprehensive Comparison between two different fatigue modeling methods for welded hollow spherical joints	Yongtao Bai(Chongqing University)
C2-517	Incorporation of Notch Size Effect Correction Factors into the Correlation Parameter between Fatigue Strength Diagrams of Smooth and Notched Specimens and Induction of Master Diagrams as Base Data for Estimation of Fatigue Strength of Machine Parts and Structural Elements	Hiroshi MATSUNO(Sojo University)

Fiber composites		
Chair : Sylvie Castagnet(University of Poitiers) & Andreas Baumann(Leibniz-Institut für Verbundwerkstoffe GmbH)		
R1-501	Fatigue Properties of Short Fiber Reinforced Polyamides exposed to acid environment	Sylvie Castagnet(University of Poitiers)
R1-502	Evaluation of Fatigue Properties of Injection Molded Plates of Short Glass Fiber Reinforced Composites Based on Matrix Phase Stress	Kenichi Shimizu(Meijo University)
R1-503	Fatigue crack evolution of thermoplastic-based fiber metal laminates under application-related temperatures	Selim Mrzljak(TU Dortmund University)
R1-504	Fatigue damage evolution and damage tolerance of composite structures	Selim Mrzljak(TU Dortmund University)
R1-505	Correlating composite fatigue to its matrix properties	Andreas Baumann(Leibniz-Institut für Verbundwerkstoffe GmbH)
R1-506		

Cyclic deformation and crack initiation 7		
Chair : Zhengguan Lu(Institute of Metal Research, Chinese Academy of Sciences) & Marek Smaga(RPTU Kaiserslautern)		
R1-507	Effect of thermal induced porosity on high-cycle fatigue and very high-cycle fatigue behaviors of hot-isostatic-pressed Ti-6Al-4V powder components	Zhengguan Lu(Institute of Metal Research, Chinese Academy of Sciences)
R1-508	Effect of powder size on fatigue properties of Ti-6Al-4V powder compact using hot isostatic pressing	Jie Wu(Institute of Metal Research, Chinese Academy of Sciences)
R1-509	Creep-fatigue crack initiation criterion for crystallographic evolutions based on damage mechanics descriptions	Run-Zi Wang(Tohoku University)
R1-510	Dynamic Evolution and Crystal Plasticity Study of GCr15 Bearing Steel Damage under Cyclic Loading	Liu Tengyuan(Institute of Metal Research, Chinese Academy of Sciences)
R1-511	Non-uniform cyclic temperature field induced deformation behavior of IN718 in thermal gradient mechanical fatigue	Shaochen BAO(Beihang University)
R1-512	Fatigue behavior of metastable Fe-based austenites	Marek Smaga(RPTU Kaiserslautern)

Cyclic deformation and crack initiation 8		
Chair : Wei Li(Beijing Institute of Technology) & Zhenlei Li(Beihang University)		
R1-514	In-situ Mesoscopic Tension and Fatigue Properties of Proton Exchange Membrane for Fuel Cell	Wei Li(Beijing Institute of Technology)
R1-515	Study on the effects of inclusions on the fatigue properties of bearing steels	Peng Zhang(Institute of Metal Research, Chinese Academy of Sciences)
R1-516	Crystallographic mechanism of fatigue failure of zirconium alloys	Conghui Zhang(Xi'an University of Architecture and Technology)
R1-517	High Frequency High Cycle Bending Fatigue Failure Mechanism of Blade-like Specimen at High Stress Ratio under Biaxial Tension-bending Load	Zhenlei Li(Beihang University)
R1-518	Improving the fatigue defect tolerance of steels by Cu precipitates	Dietmar Eifler (RPTU Kaiserslautern)

Variable amplitude loads, multiaxial and mixed mode fatigue 1		
Chair : Matus Margetin(Slovak University of Technology in Bratislava) & Michael Marx(Saarland University)		
R2-501	Application of energy-based damage accumulation rule for fatigue monitoring of structure under variable amplitude loading	Matus Margetin(Slovak University of Technology in Bratislava)
R2-502	Micromechanical study of low-cycle fatigue behavior of additively manufactured Inconel 718 superalloy at ambient and elevated temperatures	Xin Zhang(Harbin Institute of Technology)
R2-503	Strain distribution of a fir-tree tenon/mortise structure under combined high and low cycle fatigue loads	Han Yan Dr.(Beihang University)
R2-504	An in-situ SEM investigation on fatigue crack growth mechanism under single overload	Lindong Chai(Beihang University)
R2-505	Fatigue of metallic glasses after an overload as a first step to fatigue under variable amplitude loading	Michael Marx(Saarland University)
R2-506	An iso-damage model based on residual S-N curves to consider fatigue damage accumulation under HCF-VHCF loads	Tao Liang(Beihang University)

Variable amplitude loads, multiaxial and mixed mode fatigue 2		
Chair : Christian Kontermann(TU Darmstadt) & Peter Haefele(University of Applied Sciences Esslingen)		
R2-507	Crack Initiation and Relaxation Behavior of a 1Cr-Cast Steel under Multiaxial High Temperature Loading	Christian Kontermann(TU Darmstadt)
R2-508	Fatigue behaviors and life evaluation of AISI 304 under multiaxial non-proportional random loading	Yu-Chen WANG(Ritsumeikan University)
R2-509	Fatigue Life Estimation Method Using Equivalent Stress Amplitude by Smith-Watson-Topper Method for SCM440	Naoki Hashimoto(Hiroshima University)
R2-510	Investigation of the test evaluation for the determination of multiaxial material properties	Alexander Linn(Clausthal University of Technology)
R2-511	Influence of cut edge and notch on electric steel strip under constant and variable amplitude loading	Peter Haefele(University of Applied Sciences Esslingen)

Variable amplitude loads, multiaxial and mixed mode fatigue 3		
Chair : Matus Margetin(Slovak University of Technology in Bratislava) & Michael Marx(Saarland University)		
R2-501	Application of energy-based damage accumulation rule for fatigue monitoring of structure under variable amplitude loading	Matus Margetin(Slovak University of Technology in Bratislava)
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