ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
David McDowell	Georgia Institute of Technology, Atlanta, Georgia, United States of America	ADVANCING MICROSTRUCTURE-SENSITIVE FATIGUE SELECTION AND DESIGN VIA COMPUTATION AND DATA SCIENCE [Honor Lecture]	Honor 1	6/12/23 8:30	40	Honor Lecture
Subra Suresh	MIT, Cambridge, Massachusetts, United States of America	DEEP LEARNING FROM NATURE AND MACHINES: FRACTURE AND FATIGUE OF ENGINEERED AND BIOLOGICAL MATERIALS [Plenary Lecture]	Plenary 1	6/12/23 9:15	40	Plenary Lecture
David Wilkinson	McMaster University, Hamilton, Ontario, Canada	THE PATH TO HIGH FORMABILITY AND DAMAGE TOLERANCE IN 3RD GENERATION HIGH STRENGTH STEELS [Plenary Lecture]	Plenary 2-01	6/13/23 8:30	40	Plenary Lecture
William Curtin	Brown University, Providence, Rhode Island, United States of America	HYDROGEN EMBRITTLEMENT IN STEELS AND HIGH ENTROPY ALLOYS [Plenary Lecture]	Plenary 2-02	6/13/23 9:15	40	Plenary Lecture
Huseyin Sehitoglu	University of Illinois, Urbana, United States of America	INTERFACE NANOSTRUCTURES AND MECHANISMS CRITICAL FOR FATIGUE [Plenary Lecture]	Plenary 3-01	6/13/23 16:30	40	Plenary Lecture
Norman Fleck	University of Cambridge, United Kingdom of Great Britain and Northern Ireland	THE FAILURE OF ADHESIVE LAYERS: FROM FAST FRACTURE TO STRESS CORROSION [Plenary Lecture]	Plenary 3-02	6/13/23 17:15	40	Plenary Lecture
Robert McMeeking	University of California, Santa Barbara, United States of America	FRACTURE AND THE LIMITATION IT PLACES ON TECHNOLOGY: FROM LITHIUM-ION BATTERIES TO MEDICAL IMPLANTS [Presidential Lecture]	Plenary 4-01	6/14/23 8:30	40	Presidential Lecture
Tong-Yi- Zhang	Hong Kong University of Science and Technology, Guangzhou, China	DOMAIN KNOWLEDGE-GUIDED MACHINE LEARNING AND CASE STUDIES OF METAL OXIDATION [Plenary Lecture]	Plenary 4-02	6/14/23 9:15	40	Plenary Lecture
A.T. Yokobori	Teikyo University, Itabashi -ku, Japan	NONINVASIVE DIAGNOSIS OF BLOOD VESSEL DISEASES RELATED TO VISCOELASTIC DETERIORATION OF BLOOD VESSEL WALL [Plenary Lecture]	Plenary 5-01	6/15/23 8:30	40	Plenary Lecture
Claudio Ruggieri	University of Sao Paulo, SP, Brazil	CRITICAL CONCERNS AND CHALLENGES IN FRACTURE AND FATIGUE ASSESSMENTS OF CORROSION RESISTANT ALLOY (CRA) PIPES WITH DISSIMILAR WELDMENTS: SUBSEA APPLICATIONS AND BEYOND [Plenary Lecture]	Plenary 5-02	6/15/23 9:15	40	Plenary Lecture
Sylvie Pommier	LMPS and Safran, Paris-Saclay, France	MODELING FRETTING FATIGUE IN MULTIAXIAL AND VARIABLE LOADING CONDITIONS [Plenary Lecture]	Plenary 6-01	6/16/23 8:30	40	Plenary Lecture
R. Narasimhan	Indian Institute of Science, Bangalore , India	TENSILE TWINNING: BANE OR BOON FOR FRACTURE OF MAGNESIUM ALLOYS [Plenary Lecture]	Plenary 6-02	6/16/23 9:15	40	Plenary Lecture
Robert O. Ritchie	University of California Berkeley, United States of America	DAMAGE-TOLERANCE IN NATURAL AND ENGINEERING MATERIALS [Honor Lecture]	Honor 2	6/16/23 14:00	40	Honor Lecture
Sharlotte Kramer	Sandia National Laboratories, Albuquerque, New Mexico, United States of America	THE FOURTH SANDIA FRACTURE CHALLENGE - PREDICTING PUNCTURE IN A METAL STRUCTURE [Keynote]	Symp01-M1-1	6/12/23 10:30	30	Symposium 1: Ductile Fracture Under Complex Loading
Diego Felipe Sarzosa Burgos	University of Sao Paulo, Brazil	PREDICTING DUCTILE FRACTURE FOR MIXED MODE OF LOADING USING THE MODIFIED MOHR-COULOMB CRITERION	Symp01-M1-2	6/12/23 11:00	20	Symposium 1: Ductile Fracture Under Complex Loading
Cédric Sénac	Université Paris-Saclay, CEA, Service d'Etude des Matériaux Irradiés, Gif-sur-Yvette, France	MICROMECHANICAL MODELING OF THE COMPETITION BETWEEN TRANSGRANULAR AND INTERGRANULAR DUCTILE FRACTURE	Symp01-M1-3	6/12/23 11:20	20	Symposium 1: Ductile Fracture Under Complex Loading
Thirupathi Maloth	Johns Hopkins University, Baltimore, United States of America	COUPLED CRYSTAL PLASTICITY PHASE-FIELD MODEL FOR DUCTILE FRACTURE IN POLYCRYSTALLINE MICROSTRUCTURES	Symp01-M1-4	6/12/23 11:40	20	Symposium 1: Ductile Fracture Under Complex Loading

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Antonio Kaniadakis	Institut Clément Ader, ISAE-SUPAERO, Toulouse, France	A UNIFIED NONLINEAR XFEM-CZM BASED METHODOLOGY TO DEAL WITH DUCTILE FRACTURE	Symp01-M1-5	6/12/23 12:00	20	Symposium 1: Ductile Fracture Under Complex Loading
Kazutake Komori	Daido University, Nagoya, Aichi, Japan	PREDICTING DUCTILE FRACTURE DURING TORSION TESTING USING ELLIPSOIDAL VOID MODEL AND ANALYTICAL MODEL	Symp01-M2-1	6/12/23 14:00	20	Symposium 1: Ductile Fracture Under Complex Loading
Kim Lau Nielsen	Technical University of Denmark, Kongens Lyngby, Denmark	VOID SIZE, SHAPE, AND ORIENTATION EFFECTS UNDER INTENSE SHEARING ACROSS SCALES	Symp01-M2-2	6/12/23 14:20	20	Symposium 1: Ductile Fracture Under Complex Loading
Amine Benzerga	Texas A&M University, College Station, Texas, United States of America	ANALYSES OF DUCTILE FRACTURE USING HUNNY THEORY	Symp01-M2-3	6/12/23 14:40	20	Symposium 1: Ductile Fracture Under Complex Loading
Johan Hoefnagels	Eindhoven University of Technology, Eindhoven, Netherlands	1-TO-1 COMPARISON OF SEM-DIC TO CP STRAIN FIELDS OF ULTRATHIN STEEL FILMS TO UNRAVEL PLASTICITY TO DAMAGE INITIATION	Symp01-M2-4	6/12/23 15:00	20	Symposium 1: Ductile Fracture Under Complex Loading
Yazid Madi	Centre des Matériaux, MINES Paris, CNRS UMR 7633, PSL Research University , France	DEVELOPMENT OF A MICRO-SENT TEST TO DETERMINE TOUGHNESS USING X-RAY SYNCHROTRON TOMOGRAPHY	Symp01-M2-5	6/12/23 15:20	20	Symposium 1: Ductile Fracture Under Complex Loading
Longhui Zhang	University of Oxford, United Kingdom of Great Britain and Northern Ireland	INFLUENCE OF LARGE STRAIN REVERSE LOADING ON DYNAMIC STRAIN LOCALIZATION AND FAILURE OF DUCTILE METALLIC RODS	Symp01-M3-1	6/12/23 16:30	20	Symposium 1: Ductile Fracture Under Complex Loading
Mostafa Shazly	The British University in Egypt, Cairo, Egypt	ELEVATED TEMPERATURE DYNAMIC DEFORMATION OF AISI 321 AUSTENITIC STAINLESS STEEL	Symp01-M3-2	6/12/23 16:50	20	Symposium 1: Ductile Fracture Under Complex Loading
Francois Roubaud	Framatome, Paris, La Defense, France	A GURSON-TYPE LAYER MODEL FOR DUCTILE POROUS SOLIDS CONTAINING ARBITRARY ELLIPSOIDAL VOIDS WITH ISOTROPIC AND KINEMATIC HARDENING	Symp01-Tu1-1	6/13/23 10:30	20	Symposium 1: Ductile Fracture Under Complex Loading
Shuyue Wang	KTH Royal Institute of Technology, Stockholm, Sweden	A NON-LOCAL GURSON MODEL WITH TWO FRACTURE-MECHANISM ASSOCIATED LENGTH SCALES: SUPPORTED BY NUMERICAL ANALYSES AND EXPERIMENTS	Symp01-Tu1-2	6/13/23 10:50	20	Symposium 1: Ductile Fracture Under Complex Loading
Reiner Trautmannsberger	Ostbayerische Technische Hochschule (OTH) Regensburg, Germany	ASSESSMENT OF EXISTING OFFSHORE GAS TRANSIMISSION PIPELINES IN TERMS OF DUCTILE FRACTURE CONTROL USING A MODELING FRAMEWORK	Symp01-Tu1-3	6/13/23 11:10	20	Symposium 1: Ductile Fracture Under Complex Loading
Pilar Fernandez-Pison	Universidad Carlos III de Madrid, Spain	FLOW AND FRACTURE OF AUSTENITIC STAINLESS STEELS AT CRYOGENIC TEMPERATURES: EXPERIMENTS AND SIMULATIONS	Symp01-Tu1-4	6/13/23 11:30	20	Symposium 1: Ductile Fracture Under Complex Loading
Wei Jun Wong	Delft University of Technology, Delft, Netherlands	ESTIMATING PLASTICITY AND DUCTILE DAMAGE MODEL PARAMETERS FOR S355-S690 STEEL FROM MILL TEST CERTIFICATE DATA	Symp01-Tu1-5	6/13/23 11:50	20	Symposium 1: Ductile Fracture Under Complex Loading
Kevin Jacob	IIT Bombay, Mumbai, India	EFFECT OF HPT PROCESSING ON FRACTURE BEHAVIOUR OF MARAGING STEELS	Symp01-Tu2-1	6/13/23 14:00	20	Symposium 1: Ductile Fracture Under Complex Loading
Yannis Korkolis	Ohio State University, Columbus, United States of America	DUCTILE FRACTURE OF SS-304L MICROTUBE UNDER COMBINED AXIAL FORCE AND INTERNAL PRESSURE	Symp01-Tu2-2	6/13/23 14:20	20	Symposium 1: Ductile Fracture Under Complex Loading
Asmae Elochi	Centre des Matériaux, Mines Paris,PSL Research University, Paris, France	MODELING OF THE ELASTO-PLASTIC BEHAVIOR OF HSLA X140 STEEL: EFFECT OF PRE-STRAIN AND TRIAXIALITY	Symp01-Tu2-3	6/13/23 14:40	20	Symposium 1: Ductile Fracture Under Complex Loading
Hiroto Shoji	Graduate School of Engineering, Osaka University, Japan	MICRO-STRUCTURAL DAMAGE ANALYSIS FOR PREDICTING THE EFFECT OF LOADING PATH ON DUCTILITY OF TWO-PHASE STEELS	Symp01-Tu2-4	6/13/23 15:00	20	Symposium 1: Ductile Fracture Under Complex Loading

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Nizia Mendes-Fonseca	McMaster University, Hamilton, Ontario, Canada	STRAIN EVOLUTION AND DAMAGE DEVELOPMENT DURING TIGHT-RADIUS BENDING OF ADVANCED HIGH STRENGTH STEELS	Symp01-Tu2-5	6/13/23 15:20	20	Symposium 1: Ductile Fracture Under Complex Loading
Concetta Pelligra	McMaster University, Hamilton, Ontario, Canada	THE INFLUENCE OF TRANSFORMATION INDUCED PLASTICITY IN THIRD-GENERATION ADVANCED HIGH STRENGTH STEELS	Symp01-Tu2-6	6/13/23 15:40	20	Symposium 1: Ductile Fracture Under Complex Loading
Nicolas Larrosa	University of Bristol, United Kingdom of Great Britain and Northern Ireland	A MODIFIED J-Q CONSTRAINT APPROACH TO ASSESS EFFECTIVE NOTCH FRACTURE TOUGHNESS	Symp01-W1-1	6/14/23 10:30	20	Symposium 1: Ductile Fracture Under Complex Loading
James Newman	Mississippi State University, Mississippi State, United States of America	FRACTURE ANALYSES OF THIN-DUCTILE MATERIALS USING CRITICAL CTOA AND TWO-PARAMETER FRACTURE CRITERION	Symp01-W1-2	6/14/23 10:50	20	Symposium 1: Ductile Fracture Under Complex Loading
Sihan Cheng	Université Paris-Saclay, Gif-sur-Yvette, France	CHARACTERIZATION AND NUMERICAL SIMULATION OF DUCTILE CRACK INITIATION AND PROPAGATION IN CT SPECIMENS OF DIFFERENT SIZES MACHINED FROM A 316L THICK PLATE	Symp01-W1-3	6/14/23 11:10	20	Symposium 1: Ductile Fracture Under Complex Loading
Zeng Chen	University of Bristol, United Kingdom of Great Britain and Northern Ireland	APPLICATION OF A NOVEL UNIFIED PARAMETER ON CHARACTERIZING IN-PLANE AND OUT-OF-PLANE CRACK-TIP CONSTRAINTS FOR AL7075 T651 SEN(B) SPECIMENS	Symp01-W1-4	6/14/23 11:30	20	Symposium 1: Ductile Fracture Under Complex Loading
Zeljko Bozic	University of Zagreb, Croatia	FRACTURE MODELLING AND ANALYSIS OF MULTIPLE SITE CRACKS IN PLATES UNDER LATERAL PRESSURE	Symp01-W1-5	6/14/23 11:50	20	Symposium 1: Ductile Fracture Under Complex Loading
Carmine Maletta	University of Calabria, Rende, Italy	MULTIAXIAL FATIGUE BEHAVIOR OF SLM TI6AL4V ALLOY: X-RAY COMPUTED M-TOMOGRAPHY ANALYSIS [Keynote]	Symp02-M1-1	6/12/23 10:30	40	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Rami Bouaziz	Czech Technical University, Prague, Czech Republic	BIAXIAL LOADING IMPACT ON FATIGUE CRACK PROPAGATION IN METALLIC MATERIALS	Symp02-M1-2	6/12/23 11:10	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Emiel Amsterdam	Royal NLR, Marknesse, Netherlands	BACK TO BASICS FOR THE FATIGUE CRACK GROWTH RATE IN METALLIC ALLOYS	Symp02-M1-3	6/12/23 11:30	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Fabien Briffod	The University of Tokyo, Japan	FATIGUE AND DWELL-FATIGUE BEHAVIOR OF A FORGED TI-6AL-4V ALLOY INVESTIGATED BY HIGH-RESOLUTION DIGITAL IMAGE CORRELATION	Symp02-M1-4	6/12/23 11:50	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
K. S. Ravi Chandran	University of Utah, Salt Lake City, United States of America	A DIRECT APPROACH TO FATIGUE CRACK GROWTH UNDER LARGE SCALE PLASTICITY (PRESENTATION IN HONOR OF JODEAN MORROW, UNIVERSITY OF ILLINOIS)	Symp02-M1-5	6/12/23 12:10	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Hans-Jürgen Christ	Universität Siegen, Germany	EFFECT OF DYNAMIC EMBRITTLEMENT ON FATIGUE CRACK PROPAGATION MECHANISM AND CRACK GROWTH RATE IN IN718 [Keynote]	Symp02-M2-1	6/12/23 14:00	40	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Pengxu Ren	Kyushu University, Fukuoka, Japan	FATIGUE CRACK EXTENSION MODE OF 18%NI MARTENSITIC STEEL	Symp02-M2-2	6/12/23 14:40	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Shigeru Hamada	Kyushu University, Nishi-ku Fukuoka, Japan	DAMAGE ACCUMULATION MODE FATIGUE CRACK PROPAGATION AND PROPAGATION BEHAVIOR PREDICTION METHOD	Symp02-M2-3	6/12/23 15:00	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Kishore Appunhi Nair	Johns Hopkins University, Baltimore, Maryland, United States of America	CRACK TIP ENHANCED CRYSTAL PLASTICITY PHASE FIELD MODEL FOR CRACK PROPAGATION IN TI64 ALLOYS	Symp02-M2-4	6/12/23 15:20	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Ayhan Ince	Concordia University, Montreal, Quebec, Canada	A GENERALIZED TWO-PARAMETER DRIVING FORCE MODEL FOR SHORT AND LONG FATIGUE CRACK PROPAGATION	Symp02-M2-5	6/12/23 15:40	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Thierry Palin-Luc	Arts et Metiers Institute of Technology, Talence, France	INFRARED TEMPERATURE MEASUREMENT AND X-RAY TOMOGRAPHY FOR INTERNAL FATIGUE CRACK MONITORING DURING ULTRASONIC FATIGUE TESTS [Keynote]	Symp02-M3-1	6/12/23 16:30	30	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Zeineb Meskine	Safran Tech, France	THERMO-MECHANICAL FATIGUE CRACK GROWTH INVESTIGATION FOR CAST AUSTENITIC STAINLESS STEEL	Symp02-M3-2	6/12/23 17:00	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Ting Zhu	Georgia Institute of Technology, Atlanta, Georgia, United States of America	CRYSTAL PLASTICITY MODELING OF FATIGUE CRACK GROWTH IN STAINLESS STEEL	Symp02-M3-3	6/12/23 17:20	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Longguan Jin	Korea University, Seoul, Korea (Republic of)	DEVELOPMENT OF THE NOVEL MIXED MODE ULTRASONIC FATIGUE TEST SYSTEM BASED ON FREQUENCY RESPONSE FUNCTION AND DYNAMIC MODAL ANALYSIS	Symp02-M3-4	6/12/23 17:40	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Fabien Szmytka	ENSTA Paris Institut Polytechnique de Paris, IMSIA, Palaiseau, France	CONSTITUTIVE MODELING OF ALLOYS UNDER HIGH TEMPERATURE LOW-CYCLE AND THERMAL- MECHANICAL FATIGUE: A KEY ISSUE IN COMPONENT DESIGN [Keynote]	Symp02-Tu1-1	6/13/23 10:30	40	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Yongming Liu	Arizona State University, Tempe, AZ, United States of America	FATIGUE ANALYSIS WITHOUT CYCLE COUNTING: SUBCYCLE FATIGUE CRACK GROWTH AND EQUIVALENT INITIAL FLAW SIZE MODEL	Symp02-Tu1-2	6/13/23 11:10	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Masahiro Takanashi	IHI Corporation, Yokohama, Kanagawa, Japan	PROPOSAL OF FATIGUE DESIGN METHOD FOR STRUCTURAL DISCONTINUITES CONSIDERING STRES GRADIENT	Symp02-Tu1-3	6/13/23 11:30	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Amir Abdelmawla	Iowa State University, Ames, United States of America	EFFECT OF PRE-ACCUMULATED PLASTIC STRAIN ON STRESS CORROSION CRACKING AND FATIGUE LIFE OF STEELS; EXPERIMENT AND MODELING	Symp02-Tu1-4	6/13/23 11:50	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Ulrich Krupp	RWTH Aachen University, Aachen, Germany	MONITORING FATIGUE DAMAGE IN HYPOEUTECTIC AL-SI CASTINGS WITH VARYING MICROSTRUCTURE CHARACTERISTICS [Keynote]	Symp02-Tu2-1	6/13/23 14:00	30	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
André Carvalho	State University of Ponta Grossa, PR, Brazil	CRYSTALLOGRAPHIC ORIENTATION ANALYSIS OF FATIGUE CRACK SURFACE FROM AA7050 SAMPLES WITH MULTI-STAGE AGING TREATMENTS	Symp02-Tu2-2	6/13/23 14:30	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Luca Patriarca	Politecnico di Milano, Italy	ORIENTATION-DEPENDENT FATIGUE ASSESSMENT OF TI6AL4V MANUFACTURED BY L-PBF	Symp02-Tu2-3	6/13/23 14:50	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Wael Abuzaid	American University of Sharjah, United Arab Emirates	FUNCTIONAL FATIGUE PROPERTIES OF TINIZRSN BIOCOMPATIBLE SHAPE MEMORY ALLOY	Symp02-Tu2-4	6/13/23 15:10	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Wenyi Yan	Monash University, Clayton, Victoria, Australia	NUMERICAL ANALYSIS OF ROLLING CONTACT FATIGUE CRACK GROWTH ON CURVED RAILWAY TRACKS	Symp02-W1-1	6/14/23 10:30	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Abdalrhaman Koko	University of Oxford,United Kingdom of Great Britain and Northern Ireland	FATIGUE TESTING FOR COATINGS: A SYSTEMATIC APPROACH USING MICRO-IMPACT TESTING ON TIN	Symp02-W1-2	6/14/23 10:50	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture
Ming Dao	Massachusetts Institute of Technology, Cambridge, MA, United States of America	FATIGUE OF HUMAN RED BLOOD CELLS IN HEALTH AND DISEASE	Symp02-W1-3	6/14/23 11:10	20	Symposium 2: JoDean Morrow & Paul Paris Memorial Symposium on Fatigue & Fracture

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Alberto Carpinteri	Politecnico di Torino, Italy	GYPSUM AND QUARTZ SPECIMENS IN COMPRESSION FAILURE: FRACTO-EMISSIONS AND RELATED STOICHIOMETRIC BALANCES [Keynote]	Symp03-M1-1	6/12/23 10:30	40	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Ludmila Botvina	Baikov Institute of Metallurgy and Materials Science, Russian Academy of Sciences, Moscow, Russian Federation	ACOUSTIC EMISSION AND DAMAGE OF PRE-CYCLED STRUCTURAL STEELS	Symp03-M1-2	6/12/23 11:10	20	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Ninel Alver	Ege University, Turkey	PERFORMANCE OF 1D-CNN TRAINED WITH AE DATA FOR DAMAGE ESTIMATION IN CONCRETE STRUCTURES	Symp03-M1-3	6/12/23 11:30	20	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Ninel Alver	Ege University, Turkey	AN ARTIFICIAL INTELLIGENCE-BASED DAMAGE DETECTION MODEL FOR MONITORING REINFORCED CONCRETE STRUCTURES	Symp03-M1-4	6/12/23 11:50	20	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Tomoki Shiotani	Kyoto University, Katsura Campus, Nishikyo-Ku, Kyoto, Japan	INTEGRATION OF ELASTIC WAVE VELOCITY INTO BIM OF DAM FACILITY [Keynote]	Symp03-M2-1	6/12/23 14:00	40	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Manabu Enoki	The University of Tokyo, Bunkyo-ku, Tokyo, Japan	STRUCTURAL HEALTH MONITORING OF FATIGUE BEHAVIOR FOR TI ALLOYS BY DATA ASSIMILATION OF AE	Symp03-M2-2	6/12/23 14:40	20	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Nicolas Ospitia	Vrije Universiteit Brussel, Department of Mechanics of Materials and Constructions, , Belgium	ACOUSTIC EMISSION AND ELECTROMAGNETIC MONITORING OF THIN TRC SANDWICH COMPOSITES IN BENDING	Symp03-M2-3	6/12/23 15:00	20	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Vidya Sagar Remalli	Indian Institute of Science, Bangalore, Karnataka, India	APPLICATION OF ACOUSTIC EMISSION TESTING IN ORDER TO UNDERSTAND MODE I FRACTURE PROCESS IN STEEL FIBRE REINFORCED CONCRETE	Symp03-M2-4	6/12/23 15:20	20	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Vimalathithan Paramsamy Kannan	Politecnico di Bari, Italy	INVESTIGATION OF THE MECHANICAL PERFORMANCE OF THE UNSATURATED POLYESTER/CENOSPHERE SYNTACTIC FOAMS USING ACOUSTIC EMISSION TECHNIQUE	Symp03-M2-5	6/12/23 15:40	20	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Dimitrios Aggelis	Department of Mechanics of Materials and Constructions, Vrije Universiteit Brussel, Brussels, Belgium	RECENT ADVANCES IN ULTRASOUND MONITORING OF CRACKING AND SELF-HEALING OF CONCRETE [Keynote]	Symp03-M3-1	6/12/23 16:30	40	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Giuseppe Lacidogna	Politecnico di Torino, Italy	EXPERIMENTAL ANALYSIS BY ACOUSTIC EMISSION ON FULL-SCALE PC DECK BEAMS AFTER 50 YEARS OF SERVICE [Keynote]	Symp03-M3-2	6/12/23 17:10	30	Symposium 3: Fracto-emissions in Structural and Seismic Monitoring
Claudio Ruggieri	University of Sao Paulo USP, Brazil	REVISITING LOCAL APPROACHES TO CLEAVAGE FRACTURE: AN OVERVIEW OF PROGRESS AND CHALLENGES FOR ENGINEERING-LEVEL APPLICATIONS	Symp04-Th1-1	6/15/23 10:30	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Tamás Fekete	Centre for Energy Research, Budapest, Hungary	EVOLUTION OF GRIFFITH'S CONCEPT FROM 1921 TO THE PRESENT	Symp04-Th1-2	6/15/23 10:50	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
K. S. Ravi Chandran	University of Utah, Salt Lake City, United States of America	GRIFFITH FRACTURE THEORY FOR THE SIZE EFFECT ON STRENGTH OF BRITTLE MATERIALS	Symp04-Th1-3	6/15/23 11:10	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Mitsuru Ohata	Graduate School of Engineering, Osaka University, Osaka, Japan	LOCAL APPROACH TO CORRELATE CLEAVAGE FRACTURE TOUGHNESS WITH MICROSTRUCTURE OF STEEL	Symp04-Th1-4	6/15/23 11:30	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Dov Sherman	Tel-Aviv University, Tel-Aviv, Israel	MACRO CLEAVAGE ENERGY TO MICRO BOND BREAKING MECHANISMS- SHORTER IS TOUGHER	Symp04-Th1-5	6/15/23 11:50	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Praveen Kumar	Indian Institute of Science, Bangalore, India	FAILURE OF THERMALLY SPRAYED 7YSZ COATINGS UNDER CYCLIC BENDING	Symp04-Th1-6	6/15/23 12:10	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Kazuma Shimizu	Osaka University, Osaka, Japan	NEW MODEL FOR BRITTLE FRACTURE ASSESSMENT UNDER COMBINED STRESS FIELD BASED ON THE LOCAL APPROACH	Symp04-Th2-1	6/15/23 14:00	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Daniela V. Klein	KTH Royal Institute of Technology, Stockholm, AB, Sweden	INFLUENCE OF HETEROGENEITY ON FAILURE PROBABILITY BASED ON WEAKEST LINK MODELING	Symp04-Th2-2	6/15/23 14:20	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Regis Kenko	Mines Paris, PSL University, Centre for Material Sciences (MAT), Paris, France	STATISTICAL SIMULATION OF FRACTURE TOUGHNESS IN SEGREGATED RPV STEEL USING DEEP-LEARNING-BASED RANDOM FIELD GENERATION AND HIGH-FIDELITY FEA MODELING	Symp04-Th2-3	6/15/23 14:40	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Jacques Besson	Mines Paris PSL -- Centre des Materiaux --- CNRS UMR 7633, Corbeil-Essonnes, France	USING MIXED FINITE ELEMENTS AND REMESHING TO ASSESS BRITTLE FAILURE USING THE BEREMIN MODEL	Symp04-Th2-4	6/15/23 15:00	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Jacques Besson	EDF R&D, Moret-sur-Loing-Orvanne 77250, France	COUPLING OF A GRADIENT-ENHANCED GTN MODEL TO THE BEREMIN MODEL FOR THE SIMULATION OF DUCTILE-TO-BRITTLE TRANSITION	Symp04-Th2-5	6/15/23 15:20	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
George Gazonas	CCDC Army Research Laboratory, Aberdeen Proving Ground, Maryland, United States of America	PERIDYNAMIC MODELING OF DYNAMIC FRACTURE OF B4C IN A SPLIT-HOPKINSON PRESSURE BAR	Symp04-Th2-6	6/15/23 15:40	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Marcelo Paredes	Texas A&M University, Galveston, United States of America	DUCTILE-BRITTLE TRANSITION FRACTURE MODE AND THE OCCURRENCE OF ABNORMAL FRACTURE APPEARANCE IN X65 Q & T SEAMLESS PIPELINE STEEL	Symp04-Th3-1	6/15/23 16:30	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Xian-Kui Zhu	Savannah River National Lab, Aiken, South Carolina, United States of America	ANALYTICAL SOLUTION OF CMOD COMPLIANCE FOR SINGLE EDGE NOTCHED TENSION SPECIMENS IN END-CLAMPED CONDITIONS	Symp04-Th3-2	6/15/23 16:50	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Barna Szabo	Engineering Software Research and Development Inc., Chesterfield, United States of America	PREDICTORS OF CRACK PROPAGATION	Symp04-Th3-3	6/15/23 17:10	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Saim Abbas	Indian Institute of Technology, Bombay, Mumbai, India	NOVEL BENDING BASED METHODS FOR INTERFACE FRACTURE ENERGY MEASUREMENT OF THERMAL SPRAY COATINGS	Symp04-Th3-4	6/15/23 17:30	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Haimin Yao	The Hong Kong Polytechnic University, Hong Kong	A GENERALIZED SOLUTION TO THE COMBO-CRACK PROBLEM	Symp04-F1-1	6/16/23 10:30	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Yuri Petrov	St.-Petersburg State University & RAS Inst Probl Mech Engng, St.-Petersburg, Russian Federation	AN ANALOGY IN FRACTURE DYNAMICS: CRACKS AS OSCILLATORS	Symp04-F1-2	6/16/23 11:10	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
Vera Petrova	University of Stuttgart, Germany	THERMAL FRACTURE ANALYSIS OF FUNCTIONALLY GRADED COATINGS ON A HOMOGENEOUS SUBSTRATE	Symp04-F1-3	6/16/23 11:30	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Christos Athanasiou	Georgia Tech, Atlanta, United States of America	OPERANDO EXPERIMENTS TO CHARACTERISE BRITTLE FRACTURE-LIKE EVENTS IN CERAMIC ELECTROLYTES VIA PHOTOELASTICITY	Symp04-F1-4	6/16/23 11:50	20	Symposium 4: Brittle Fracture: 100 years After Publication of Griffith's Theory
James Burns	University of Virginia, Charlottesville, United States of America	EXPLORING THE PHNOMENOLOGY AND GOVERNING MECHANISMS FOR THE LOADING RATE DEPENDENCE OF ENVIRONMENTALLY ASSISTED CRACKING IN STRUCTURAL ALLOYS	Symp05-Tu1-1	6/13/23 10:30	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Chris San Marchi	Sandia National Laboratories, Livermore, California, United States of America	COMPARISON OF LINEAR-ELASTIC FRACTURE AND ELASTIC-PLASTIC FRACTURE OF FERRITIC STEELS IN GASEOUS HYDROGEN	Symp05-Tu1-2	6/13/23 10:50	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Laura De Pue	Ghent University, Belgium	HYDROGEN EMBRITTLEMENT SUSCEPTIBILITY OF L485MB PIPELINE STEEL AND WELD THROUGH TENSILE TESTING WITH DIFFERENT STRESS TRIAXIALITIES	Symp05-Tu1-3	6/13/23 11:10	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Luciano Santana	Centre des Matériaux, MINES Paris, CNRS UMR 7633, PSL Research University, France	REVISITING THE DISC TEST METHOD FOR THE STUDY OF HYDROGEN EMBRITTLEMENT IN STEEL	Symp05-Tu1-4	6/13/23 11:30	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Joseph Ronevich	Sandia National Laboratories, Livermore, California, United States of America	EFFECTS OF TESTING RATE ON HYDROGEN-ASSISTED FRACTURE OF FERRITIC STEELS	Symp05-Tu1-5	6/13/23 11:50	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Byoung-Ho Choi	Korea University, Seoul, Korea (Republic of)	MODELING OF STRESS CORROSION CRACK INITIATIONS OF POLYETHYLENE PIPE TRANSPORTING CHLORINATED WATER	Symp05-Tu2-1	6/13/23 14:00	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Michal Sedlak Mosesson	Royal Institute of Technology KTH, Stockholm, Sweden	MODDELING OF INTERGRANULAR STRESS CORROSION CRACKING MECHANISM THROUGH COUPLING OF SLIP-OXIDATION AND COHESIVE ZONE MODEL	Symp05-Tu2-2	6/13/23 14:20	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Gustavo Castelluccio	Cranfield University, Bedfordshire, United Kingdom of Great Britain and Northern Ireland	INTEGRATED MODELING OF STRESS CORROSION CRACKING IN SUPERALLOYS	Symp05-Tu2-3	6/13/23 14:40	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Kuo Yuan	University of Bristol, United Kingdom of Great Britain and Northern Ireland	IN-SITU CORROSION SMALL PUNCH TEST ON STRESS CORROSION CRACKING WITH DIGITAL IMAGE CORRELATION	Symp05-Tu2-4	6/13/23 15:00	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Vivek Vishwakarma	Indian Institute of Technology Roorkee, India	COUPLED CORROSION AND FATIGUE EFFECTS IN REINFORCED CEMENT CONCRETE MEMBERS USING MULTI-PHYSICS APPROACH	Symp05-Tu2-5	6/13/23 15:20	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
David Mittermayr	Institute of Polymeric Materials and Testing, Johannes Kepler University Linz, Linz / Upper Austria, Austria	ENVIRONMENTAL STRESS CRACKING RESISTANCE OF HIPS UNDER CYCLIC LOADING USING CRACKED ROUND BAR SPECIMENS	Symp05-W1-1	6/14/23 10:30	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Michael Budinski	NTSB, Washington, DC, United States of America	RECENT NATURAL GAS PIPELINE ACCIDENTS INVOLVING HYDROGEN INDUCED CRACKING	Symp05-W1-2	6/14/23 10:50	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
John Emery	Sandia National Laboratories, Cumberland, ME, United States of America	FATIGUE DESIGN SENSITIVITIES OF STATIONARY TYPE 2 HIGH-PRESSURE HYDROGEN VESSELS	Symp05-W1-3	6/14/23 11:10	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
T.E.F. Silva	INEGI, Porto, Portugal	MECHANICAL CHARACTERIZATION AND DEFECT ANALYSIS OF NATURAL GAS PIPELINE STEEL TOWARDS HYDROGEN INJECTION	Symp05-W1-4	6/14/23 11:30	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Robert Wheeler	Sandia National Laboratories, Livermore, California, United States of America	SUBCRITICAL CRACK GROWTH IN HIGH-PRESSURE HYDROGEN AND HYDROGEN WITH OXYGEN IMPURITY	Symp05-W1-5	6/14/23 11:50	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Kaushik Kethamukkala	Arizona State University, Tempe, Arizona, United States of America	CRACK GROWTH-BASED FATIGUE LIFE PREDICTION FOR AGING PIPELINE STEEL IN HYDROGEN WITH PRE-EXISTING CORROSION	Symp05-W1-6	6/14/23 12:10	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Toshihito Ohmi	Shonan Institut of Technology, Fujisawa, Kanagawa, Japan	NUMERICAL ANALYSIS OF HYDROGEN DIFFUSION AROUND THE NOTCH UNDER CYCLIC LOADING WITH AN OVERLOAD	Symp05-W2-1	6/14/23 14:00	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Mingjie Zhao	Cornell University, Ithaca, New York, United States of America	MATERIAL DISSOLUTION AT THE CRACK TIP	Symp05-W2-2	6/14/23 14:20	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Akinobu Shibata	National Institute for Materials Science, Tsukuba, Japan	THREE-DIMENSIONAL ANALYSIS ON HYDROGEN-RELATED INTERGRANULAR CRACK PROPAGATION IN MARTENSITIC STEEL	Symp05-W2-3	6/14/23 14:40	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Scott Grutzik	Sandia National Laboratories, Albuquerque, New Mexico, United States of America	EFFECTS OF CRACK TIP STRESS RELAXATION ON SUBCRITICAL CRACK GROWTH IN SILICATE GLASSES: THRESHOLD AND STOCHASTICITY	Symp05-W2-4	6/14/23 15:00	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Daniella Lopes Pinto	Centre des Matériaux, Mines Paris, PSL Research University / Transvalor S.A., Paris, France	MODELING OF HYDROGEN EMBRITLLEMENT USING MIXED NONLOCAL FINITE ELEMENTS	Symp05-W2-5	6/14/23 15:20	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Armin Halilovic	KTH Royal Institute of Technology, Stockholm, Sweden.	FRACTURE TOUGHNESS CHARACTERIZATION OF HIGH STRENGH MARTENSITIC STEELS SUBJECTED TO HYDROGEN	Symp05-W3-1	6/14/23 16:30	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
David Lindblom	KTH Royal Institute of Technology, Stockholm, Sweden	IN-SITU NEUTRON IMAGING AND MODELING OF HYDROGEN EMBRITTLEMENT IN HIGH STRENGTH STEELS	Symp05-W3-2	6/14/23 16:50	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Rama Srinivas Varanasi	Institute for Materials Research, Tohoku University, Sendai, Miyagi, Japan	HYDROGEN EMBRITTLEMENT BEHAVIOR OF A 1.5 GPA CLASS DUAL-PHASE STEEL	Symp05-W3-3	6/14/23 17:10	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Pierrick Francois	CEA Saclay / MINES Paris, France	FRACTURE TOUGHNESS OF ZIRCALOY-4 CLADDING IN CASE OF DELAYED HYDRIDE CRACKING	Symp05-W3-4	6/14/23 17:30	20	Symposium 5: Hydrogen Embrittlement and Environmentally Assisted Cracking
Chad Landis	University of Texas at Austin, United States of America	CRACK TIP TRANSFORMATION ZONE MORPHOLOGY IN SMA MATERIALS WITH TRANSFORMATION SOFTENING [Keynote]	Symp06-W2-1	6/14/23 14:00	40	Symposium 6: Microstructures and Fracture in Advanced Materials
Aidin Barabi	Polytechnique Montreal, Quebec, Canada	EFFECT OF STRAIN RATE AND REFORMED AUSTENITE ON MECHANICAL PROPERTIES OF AISI 415 STAINLESS STEEL	Symp06-W2-2	6/14/23 14:40	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Yabin Yan	East China University of Science and Technology, Shanghai, China	FROM CONTINUUM TO QUANTUM MECHANICS STUDY ON THE FRACTURE OF NANOSCALE NOTCHED BRITTLE MATERIALS	Symp06-W2-3	6/14/23 15:00	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Felix Bödeker	Technische Hochschule Mittelhessen, Gießen, Germany	MICROMECHANICAL MODELING OF THE FRACTURE PROCESS IN ADVANCED METAL SANDWICH PLATES USING FFT-BASED HOMOGENIZATION	Symp06-W2-4	6/14/23 15:20	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Luc Bremaud	I2M / CEA / 3SR, Bordeaux, Gironde / Le Barp, Gironde / Saint Martin d'Hères, Auvergne-Rhône-Alpes, France	NUMERICAL MODELING OF SPALLING PHENOMENON ON ALUMINA BY DISCRETE ELEMENT METHOD.	Symp06-W2-5	6/14/23 15:40	20	Symposium 6: Microstructures and Fracture in Advanced Materials

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Jie Wang	Zhejiang University, Hangzhou, Zhejiang, China	THE JUMPING DIELECTRIC BREAKDOWN BEHAVIOR INDUCED BY CRACK PROPAGATION IN FERROELECTRIC MATERIALS: A PHASE FIELD STUDY [Keynote]	Symp06-W3-1	6/14/23 16:30	30	Symposium 6: Microstructures and Fracture in Advanced Materials
Luis Llanes	CIEFMA - Universitat Politècnica de Catalunya - BarcelonaTechCIEFMA -, Barcelona, Spain	TOUGHNESS AND FATIGUE CRACK GROWTH MECHANISMS OF WC-CO CERAMIC-METAL COMPOSITES: A COMPARATIVE STUDY USING CONTROLLED SMALL INDENTATION FLAWS AND LONG THROUGH-THICKNESS CRACKS	Symp06-W3-2	6/14/23 17:00	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Kaikai Li	Harbin Institute of Technology, Shenzhen, Guangdong, China	STRUCTURE EVOLUSTIONS AND MECHANICS OF MATERIALS DURING ELECTROCHEMCIAL ION INSERTION	Symp06-W3-3	6/14/23 17:20	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Kenneth Liechti	University of Texas Austin, United States of America	HIGH QUALITY GROWTH AND ADHESION ENERGY MEASUREMENT OF BILAYER GRAPHENE ON SAPPHIRE	Symp06-W3-4	6/14/23 17:40	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Xiangyu Li	Southwest Jiaotong University, PR ChinaChengdu, Sichuan, China	FRACTURE OF 2D RANDOM POROUS MEDIA PHASE FIELD MODELING AND MACHINE LEARNING [Keynote]	Symp06-Th1-1	6/15/23 10:30	30	Symposium 6: Microstructures and Fracture in Advanced Materials
Dong Li	Nanyang Technological University, Singapore	ADVANCES IN NECKING-ASSISTED CONTROLLED FRAGMENTATION BY COMPOSITE COLD DRAWING [Keynote]	Symp06-Th1-2	6/15/23 11:00	30	Symposium 6: Microstructures and Fracture in Advanced Materials
Yong Zhang	Tongji University, Shanghai, China	PHASE FIELD MODELING OF COUPLING EVOLUTION OF POLARIZATION, FRACTURE, AND DIELECTRIC BREAKDOWN IN FERROELECTRIC MATERIALS.	Symp06-Th1-3	6/15/23 11:30	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Manon Lenglet	ONERA/MINES Paris, PSL University, Châtillon, France	FATIGUE DAMAGE MODELLING OF ALUMINIUM ALLOY POLYCRYSTALS CONTAINING INTERMETALLIC PHASES	Symp06-Th1-4	6/15/23 11:50	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Oscar Lopez-Pamies	University of Illinois at Urbana-Champaign, Urbana, United States of America	GRIFFITH FRACTURE IN VISCOELASTIC ELASTOMERS DONE RIGHT	Symp06-Th1-5	6/15/23 12:10	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Hongjun Yu	Harbin Institute of Technology, Harbin, Heilongjiang, China	I-INTEGRAL FOR MAGNETO-ELECTRO-ELASTIC MATERIALS WITH RESIDUAL STRAIN [Keynote]	Symp06-Th2-1	6/15/23 14:00	30	Symposium 6: Microstructures and Fracture in Advanced Materials
S Arjun Sreedhar	Indian Institute of Science, Bangalore, India	EFFECT OF TEMPERATURE ON THE MODE I FRACTURE BEHAVIOR OF A ROLLED MAGNESIUM ALLOY	Symp06-Th2-2	6/15/23 14:30	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Xiaoguang Yang	Beihang University, Beijing, China	SMALL CRACK GROWTH BEHAVIORS AND CLOSURE EFFECTS IN A NICKEL-BASE POWDER METALLURGY SUPERALLOY AT HIGH TEMPERATURE	Symp06-Th2-3	6/15/23 14:50	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Mohamed Sadek	Karlstad Universtity, Karlstad, Sweden	20 KHZ CRACK GROWTH RATE TESTING IN ADVANCED HIGH STRENGTH TOOL STEELS	Symp06-Th2-4	6/15/23 15:10	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Sergey Kozinov	Ruhr University Bochum, Germany	MIXED FINITE ELEMENT METHOD FOR FRACTURE MODELING OF PIEZO- AND FERROELECTRIC MATERIALS WITH STRAIN GRADIENTS (FLEXOELECTRICITY) [Keynote]	Symp06-Th3-1	6/15/23 16:30	30	Symposium 6: Microstructures and Fracture in Advanced Materials
Yangqin Guo	Southwest Jiaotong University, PR China, Chengdu, China	THE INFLUENCE OF FLEXOELECTRIC EFFECT ON THE DOMAIN STRUCTURE AND FRACTURE TOUGHNESS OF FERROELECTRIC MATERIALS	Symp06-Th3-2	6/15/23 17:00	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Helio Goldenstein	University of São Paulo, SP, Brazil	THE USE OF CHEVRON-NOTCH METHODOLOGY IN THE DETERMINATION OF FRACTURE TOUGHNESS OF HIGH STRENGTH TOOL STEELS	Symp06-Th3-3	6/15/23 17:20	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Ashraf Bastawros	Iowa State University, Ames, United States of America	CHARACTERIZATION OF ICE ADHESION: MODES OF LOADING AND MICROSTRUCTURE	Symp06-Th3-4	6/15/23 17:40	20	Symposium 6: Microstructures and Fracture in Advanced Materials

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Bingbing Hao	Harbin Institute of Technology, Harbin, China	HOW DOES THE CRACK VELOCITY AFFECT THE CRACK FRONT DEFORMATION AND THE EFFECTIVE TOUGHNESS IN HETEROGENEOUS MATERIAL?	Symp06-F1-1	6/16/23 10:30	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Sophie Schackert	Fraunhofer Institute for Mechanics of Materials IWM, Freiburg, Germany	GROWTH AND COALESCENCE OF MULTIPLE CRACKS - EXPERIMENTS AND FRACTURE MECHANICS BASED MODEL	Symp06-F1-2	6/16/23 10:50	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Martina Prof. Zimmermann	TU Dresden, Germany	CHARACTERIZATION OF THE DAMAGE TOLERANCE OF NANODESIGNED COATINGS BASED ON HIGH ENTROPY ALLOYS	Symp06-F1-3	6/16/23 11:10	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Boyu Pan	RWTH Aachen University, Aachen, Germany	A HYBRID EXPERIMENTAL AND NUMERICAL INVESTIGATION ON THE FRACTURE PROPERTIES OF ZIRCONIUM WITH MAX PHASE COATINGS COVERING A WIDE RANGE OF STRESS STATES	Symp06-F1-4	6/16/23 11:30	20	Symposium 6: Microstructures and Fracture in Advanced Materials
Gregory Deierlein	Stanford University, Stanford, California, United States of America	TOWARDS PRACTICAL SIMULATION OF STEEL FRACTURE IN STRUCTURAL AND EARTHQUAKE ENGINEERING APPLICAITONS [Keynote]	Symp07-W1-1	6/14/23 10:30	40	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Surajit Dey	North Dakota State University, Fargo, North Dakota, United States of America	MICROVOID CHARACTERISTICS AT FRACTURE IN ASTM A992 STEEL UNDER MONOTONIC AND ULTRA-LOW CYCLE FATIGUE LOADING	Symp07-W1-2	6/14/23 11:10	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Zucheng Yao	Tongji University, Shanghai, China	DUCTILE FRACTURE OF LOW-YIELD-POINT STEEL UNDER DIFFERENT STRESS STATED	Symp07-W1-3	6/15/23 10:30	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Amit Kanvinde	University of California Davis, United States of America	MULTISCALE SIMULATION OF STRUCTURAL WELDMENTS	Symp07-W1-4	6/15/23 10:50	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Sudip Talukdar	Indian Institute of Technology Guwahati, India	FATIGUE LIFE ASSESSMENT OF A TRUSS GIRDER BRIDGE USING LINEAR FRACTURE MECHANICS APPROACH	Symp07-W2-1	6/14/23 14:00	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Liuyang Feng	National University of Singapore	ENHANCED REAL TIME FATIGUE CRACK MONITORING AND UPDATING IN WELDED STRUCTURAL COMPONENTS	Symp07-W2-2	6/14/23 14:20	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Kevin Koch	Technische Universität Bergakademie Freiberg, Germany	EFFECT OF NON-METALLIC INCLUSIONS ON THE FRACTURE TOUGHNESS OF 42CRMO4 STEEL IN THE DUCTILE-BRITTLE TRANSITION RANGE	Symp07-W2-3	6/14/23 14:40	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Bohan Li	Tongji University, Shanghai, China	LOW-CYCLE FATIGUE ANALYSIS OF ALUMINUM ALLOY GUSSET JOINTS AND LATTICED SHELL BASED ON CONTINUUM DAMAGE MECHANICS	Symp07-W2-4	6/14/23 15:00	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Tamilselvan Nambirajan	Indian Institute of Technology, Roorkee, India	MODELLING OF PLASTICITY AND DUCTILE FRACTURE FOR LOW TO MEDIUM INDIAN STRUCTURAL STEEL GRADES	Symp07-W2-5	6/14/23 15:20	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Weichen Kong	Tsinghua University, Beijing, China	THE TIP FIELDS OF SHARP V-NOTCH UNDER CREEPING CONDITION CONSIDERING OUT-OF-PLANE EFFECT	Symp07-W3-1	6/14/23 16:30	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Xian-Kui Zhu	Savannah River National Lab, Aiken, South Carolina, United States of America	CONSTANT CTOA DETERMINATION FOR STABLE DUCTILE CRACK GROWTH AND ITS APPLICATION TO RUNNING FRACTURE CONTROL FOR GAS TRANSMISSION PIPELINE	Symp07-W3-2	6/14/23 16:50	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Andre Melado	Espirito Santo Federal Institute, Vitória - ES, Brazil	FRACTURE TOUGHNESS OF HIGH STRENGTH DUCTILE CAST IRON PRODUCED BY QUENCHING AND PARTITIONING PROCESS.	Symp07-W3-3	6/14/23 17:10	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Francois Churlaud	AEF, SNCF, Massy, France	FAILURE ANALYSIS AND RESIDUAL LIFE ESTIMATION USING A MIXED METHOD OF X-RAY FRACTOGRAPHY AND SIMULATION	Symp07-W3-4	6/14/23 17:30	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Robert Dodds	University of Illinois at Urbana-Champaign, United States of America	WARP3D: OPEN SOURCE SOFTWARE FOR 3D NONLINEAR FRACTURE MECHANICS [Keynote]	Symp07-Th1-1	6/15/23 10:30	40	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Timothy Truster	University of Tennessee, Knoxville, United States of America	ASSESSING UNCERTAINTY IN CREEP LIFE OF GRADE 91 STEEL USING CRYSTAL PLASTICITY AND GRAIN BOUNDARY MICROSTRUCTURAL MODELS	Symp07-Th1-2	6/15/23 11:10	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Greg Thorwald	Quest Integrity, Boulder, Colorado, United States of America	3-D CRACK MODELING CASE STUDIES FOR FITNESS-FOR-SERVICE ASSESSMENT USING WARP3D AND FEACRACK	Symp07-Th1-3	6/15/23 11:30	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Huck Beng Chew	University of Illinois Urbana-Champaign, United States of America	CRACK-DEFECT INTERACTIONS IN ADDITIVELY MANUFACTURED TI-6AL-4V: DUAL SCALE POROSITY MODELLING USING WARP3D	Symp07-Th1-4	6/15/23 11:50	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Xudong Qian	National University of Singapore	A NODE RELEASE APPROACH TO CALIBRATE COHESIVE PROPERTIES FOR FRACTURE SPECIMENS AND WELDED PLATE CONNECTIONS	Symp07-Th2-1	6/15/23 14:00	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Claudio Ruggieri	University of Sao Paulo, SP, Brazil	3-D CONSTRAINT EFFECTS IN SUBSIZE SE(B) SPECIMENS OF NFA-14YWT WITH TRANSVERSE DELAMINATION	Symp07-Th2-2	6/15/23 14:20	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Brian Leitch	Canadian Nuclear Laboratories, Chalk River, Ontario, Canada	WARP3D AT CANADIAN NUCLEAR LABORATORIES	Symp07-Th2-3	6/15/23 14:40	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Bruce Williams	CanmetMATERIALS, Natural Resources Canada, Hamilton, Ontario, Canada	PIPE RUPTURE SIMULATIONS FOR TWO-PHASE CO2-MIXTURE	Symp07-Th2-4	6/15/23 15:00	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Frederick (Bud) Brust	Engineering Mechanics Corporation of Columbus, Ohio, United States of America	VFT COMPUTATIONAL WELD MODELING CODE ADAPTED TO WARP3D: PROBLEMS OF CRACK GROWTH AND FRACTURE IN RESIDUAL STRESS FIELDS	Symp07-Th2-5	6/15/23 15:20	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Andy Ziccarelli	North Carolina State University, Raleigh, North Carolina, United States of America	DEVELOPMENT AND VALIDATION OF A COMPUTATIONAL FRAMEWORK TO SIMULATE DUCTILE CRACK PROPAGATION IN STEEL STRUCTURES DUE TO ULTRA-LOW CYCLE FATIGUE USING WARP3D	Symp07-Th2-6	6/15/23 15:40	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Yiping Wu	Monash University, Melbourne, Victoria, Australia	MIXED MODE FATIGUE CRACK GROWTH BEHAVIOUR UNDER MICROSTRUCTURAL VARIATION IN FLASH-BUTT WELDS	Symp07-Th3-1	6/15/23 16:30	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Enrico Lucon	National Institute of Standards and Technology, Boulder, Colorado, United States of America	FRACTURE TOUGHNESS CHARACTERIZATION OF 316L STAINLESS STEEL WELDED PLATES AT LIQUID NITROGEN (77 K) AND LIQUID HELIUM (4 K) TEMPERATURES	Symp07-Th3-2	6/15/23 16:50	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Alireza Zangouie	University of Saskatchewan, Saskatoon, Canada	EFFECT OF BOLT PRELOAD ON FRETTING FATIGUE BEHAVIOUR OF DOUBLE LAP BOLTED JOINTS WITH CLASS B SURFACE FINISH IN HIGH-CYCLE FATIGUE: EXPERIMENTAL AND NUMERICAL INVESTIGATION.	Symp07-Th3-3	6/15/23 17:10	20	Symposium 7: "Fracture in Large Scale Metallic Infrastructure: Advances, Challenges, and Opportunities"
Reinhard Pippan	Austrian Academy of Sciences, Leoben, Austria	SIMILITUDE A BASIC CORNERSTONE FOR THE ANALYSES OF CRACK PROPAGATION [Keynote]	Symp08-Tu1-1	6/13/23 10:30	40	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Mark Jhon	Institute of High Performance Computing, Singapore	COMPETITION BETWEEN INTERGRANULAR AND TRANSGRANULAR FAILURE IN ALUMINUM ALLOY: EXPERIMENTS AND CRYSTAL PLASTICITY MODELING	Symp08-Tu1-2	6/13/23 11:10	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Vignesh Babu Rao	University of Utah, Salt Lake City, United States of America	USING DEEP LEARNING TO PREDICT MICROSTRUCTURALLY SMALL FATIGUE CRACK GROWTH PARAMETERS IN POLYCRYSTALLINE MATERIALS	Symp08-Tu1-3	6/13/23 11:30	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Takayuki Shiraiwa	The University of Tokyo, Japan	FORWARD AND INVERSE ANALYSIS OF TENSILE PROPETIES OF DUAL-PHASE STEELS	Symp08-Tu1-4	6/13/23 11:50	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Pania Newell	University of Utah, Salt Lake City, United States of America	INVESTIGATION OF HIERARCHICAL POROUS STRUCTURES USING PHASE-FIELD FRACTURE MODELING INFORMED BY MOLECULAR DYNAMICS SIMULATION [Keynote]	Symp08-Tu2-1	6/13/23 14:00	40	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Sailendu Biswal	Indian Institute of Technology Delhi, New Delhi, India	FRICTIONAL CRACK GROWTH INITIATION IN A NATURAL ORTHOTROPIC QUASI-BRITTLE SOLID	Symp08-Tu2-2	6/13/23 14:40	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Vincent Longchamp	University of Limoges - IRCER, CEA, Bordeaux, Nouvelle-Aquitaine, France	MICROSCALE DISCRETE ELEMENT SIMULATION OF SHOCK WAVE PROPAGATION IN PLASMA SPRAYED CERAMICS	Symp08-Tu2-3	6/13/23 15:00	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Martin Kroon	Linnaeus University, Växjö, Sweden	REGULARIZATION OF DAMAGE AND FAILURE USING A NON-LOCAL HARDENING VARIABLE IN AN EULERIAN FORMULATION OF INELASTICITY	Symp08-Tu2-4	6/13/23 15:20	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Ashwij Mayya	Sorbonne Université, CNRS, Paris, France	UNRAVELING THE INTERMITTENCY OF DAMAGE EVOLUTION FOR PREDICTING THE FAILURE OF QUASI-BRITTLE SOLIDS	Symp08-Tu2-5	6/13/23 15:40	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Leslie Banks-Sills	Tel Aviv University, Ramat Aviv, Israel	QUANTIFYING THE EFFECT OF FIBER BRIDGING ON MODE I QUASI-STATIC AND FATIGUE TESTING [Keynote]	Symp08-W1-1	6/14/23 10:30	40	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Swapnil Patil	Indian Institute of Technology Hyderabad, Kandi, India	ANALYSIS OF RIGID CURVED INCLUSION EMBEDDED IN A SOFT MATRIX: EXPERIMENTAL INSIGHTS	Symp08-W1-2	6/14/23 11:10	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Mohamed Amine Faham	Univ. Lille, CNRS, Lille, France	ANALYSIS OF PLASTICITY IN COMPRESSION PRECRACKING	Symp08-W1-3	6/14/23 11:30	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
William Musinski	University of Wisconsin-Milwaukee, United States of America	EXAMINING SUB-GRAIN DRIVING FORCES FOR SMALL CRACK GROWTH [Keynote]	Symp08-W2-1	6/14/23 14:00	40	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Brian Phung	University of Utah, Salt Lake City, United States of America	PREDICTING MICROSTRUCTURALLY SENSITIVE FATIGUE-CRACK PATH IN WE43 MAGNESIUM USING HIGH-FIDELITY NUMERICAL MODELING AND THREE-DIMENSIONAL EXPERIMENTAL CHARACTERIZATION	Symp08-W2-2	6/14/23 14:40	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Gustavo Castelluccio	Cranfield University, Bedfordshire, United Kingdom of Great Britain and Northern Ireland	EFFECT OF LOCAL HETEROGENEITY ON FRACTURE DRIVING FORCES	Symp08-W2-3	6/14/23 15:00	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis
Glynn Gallaway	Purdue University, West Lafayette, Indiana, United States of America	CONSIDERATIONS ON THE R-CURVE OF HUMAN CORTICAL BONE	Symp08-W2-4	6/14/23 15:20	20	Symposium 8: Beyond Similitude: Role of Multiscale Heterogeneity in Fracture Prognosis

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Ashley Spear	University of Utah, Salt Lake City, United States of America	PREDICTING MICROSTRUCTURE-SENSITIVE FRACTURE BEHAVIOR IN AM IN625 USING A DAMAGE-ENABLED ELASTO-VISCOPLASTIC FFT FRAMEWORK	Symp09-Tu1-1	6/13/23 10:30	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Alexander Caputo	Georgia Institute of Technology, Atlanta, Georgia, United States of America	EFFECTS OF PROCESS CONDITIONS AND MICROSTRUCTURE ON THE FATIGUE AND FRACTURE OF AM IN718 UNDER	Symp09-Tu1-2	6/13/23 10:50	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Jim Lua	Global Engineering and Materials, Inc., Princeton, United States of America	MICROSTRUCTURE-PROPERTY PREDICTIONS AND MULTISTAGE FATIGUE LIFE PREDICTION OF HOLE RESTORATION COUPONS USING AFSD	Symp09-Tu1-3	6/13/23 11:10	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Timo Brune	Technical University of Darmstadt, Hesse, Germany	SHORT CRACK GROWTH BEHAVIOR OF IN718 UNDER HIGH TEMPERATURE CONDITIONS IN CONSIDERATION OF PLASTICITY INDUCED CRACK CLOSURE	Symp09-Tu1-4	6/13/23 11:30	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Juan Carlos Nieto-Fuentes	Universidad Carlos III de Madrid, Leganes, Spain	MICROSTRUCTURALLY INFORMED HIGH-VELOCITY IMPACT EXPERIMENTATION ON ADDITIVELY-MANUFACTURED METALLIC MATERIALS	Symp09-Tu1-5	6/13/23 11:50	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Mohammadbagher Mahtabi	Purdue University Northwest, Hammond, Indiana, United State of America	CRACK GROWTH-BASED FATIGUE-LIFE PREDICTION OF ADDITIVELY MANUFACTURED MATERIALS	Symp09-Tu1-6	6/13/23 12:10	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Bryan Proano	Kyushu University, Fukuoka, Japan	INFLUENCE OF THE CONTOUR PARAMETER IN MICROSTRUCTURE DUALITY AND FRACTURE INITIATION IN NON-COMBUSTIBLE MAGNESIUM ALLOYS FABRICATED BY LASER POWDER BED FUSION	Symp09-Tu2-1	6/13/23 14:00	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Taeseul Park	Kyushu university, Fukuoka, Japan	EVALUATION OF STRENGTH CHARACTERISTICS FOR NON-COMBUSTIBLE MAGNESIUM ALLOY PRODUCTS FABRICATED BY LASER POWDER BED FUSION UNDER AS-BUILT CONDITION	Symp09-Tu2-2	6/13/23 14:20	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Garrett Pataky	Clemson University, Clemson, South Carolina, United States of America	REDUCING LOW CYCLE FATIGUE LIFE SCATTER OF ADDITIVE MANUFACTURED ALSI10MG USING LASER SHOCK PEENING	Symp09-Tu2-3	6/13/23 14:40	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Nha Uyen Huynh	Sandia National Labs, Albuquerque, New Mexico, United States of America	COMPUTATIONAL MODELING FOR IDENTIFYING VOIDS IN ADDITIVELY MANUFACTURED AL-SI10-MG	Symp09-Tu2-4	6/13/23 15:00	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Raj Das	RMIT University, Melbourne, Victoria, Australia	FINITE ELEMENT MODELLING IN PREDICTING THE EFFECT OF DEFECTS ON STRESS CONCENTRATION AND FATIGUE LIFE OF L-PBF ALSI10MG ALLOY	Symp09-Tu2-5	6/13/23 15:20	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Bernd Gludovatz	UNSW Sydney, Australia	IMPACT OF MICRO AND MESOSTRUCTURE ON THE FAILURE RESISTANCE OF LASER POWDER BED FUSION-PROCESSED MATERIALS	Symp09-W1-1	6/14/23 10:30	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Nagaraja Iyyer	Technical Data Analysis Inc, Falls Church, United States of America	PREDICTING SURFACE ROUGHNESS IN METALLIC ADDITIVELY MANUFACTURED PARTS USING MACHINE LEARNING	Symp09-W1-2	6/14/23 10:50	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Ghita Bahaj Filali	CNRS, GeM, Nantes, France	ANALYSIS OF FATIGUE CRACK GROWTH WITH OVERLOAD EFFECTS THROUGH T-STRESS	Symp09-W1-3	6/14/23 11:10	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Dimitrios Nikas	Karlstad University, Karlstad, Sweden	HIGH CYCLE FATIGUE OF AM PRODUCED HOT WORK TOOL STEEL	Symp09-W2-1	6/14/23 14:00	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Zachary Harris	University of Pittsburgh, Pittsburgh, Pennsylvania, United States of America	ON THE MECHANISTIC ORIGINS OF THE INCREASED HYDROGEN ENVIRONMENT-ASSISTED CRACKING SUSCEPTIBILITY OF AM 17-4PH STEEL	Symp09-W2-2	6/14/23 14:20	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Michael Roach	University of Virginia, Charlottesville, United States of America	ENVIRONMENTAL CRACKING OF ADDITIVELY MANUFACTURED 316L STAINLESS STEEL	Symp09-W2-3	6/14/23 14:40	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Ravi Kiran	North Dakota State University, Fargo, United States of America	DEFECT STATISTICS AND FRACTURE INITIATION MECHANISMS IN AS-BUILT AND HEAT-TREATED ADDITIVE MANUFACTURED 17-4 STEEL	Symp09-W2-4	6/14/23 15:00	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Punit Kumar	Lawrence Berkeley National Lab, Berkeley, California, United States of America	RESISTANCE TO FRACTURE AND FATIGUE IN ADDITIVELY MANUFACTURED ALLOYS [Keynote]	Symp09-Th1-1	6/15/23 10:30	30	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Grégoire Brot	ONERA, the French Aerospace Lab, Université Paris Saclay, Châtillon, France	VERY HIGH-CYCLE FATIGUE BEHAVIOR OF ADDITIVELY MANUFACTURED TI-6AL-4V USING ULTRASONIC FATIGUE MACHINE AND SELF-HEATING TESTING.	Symp09-Th1-2	6/15/23 11:00	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Taylor Sloop	Georgia Institute of Technology, Atlanta, Georgia, United States of America	ANALYSIS OF POROSITY EFFECTS ON SPALL FAILURE OF ADDITIVELY MANUFACTURED 316L SS	Symp09-Th1-3	6/15/23 11:20	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Brian Fuchs	Sandia National Laboratories, Albuquerque, New Mexico, United States of America	FAILURE CHARACTERIZATION IN 17-4PH STAINLESS STEEL ACROSS MULTIPLE MANUFACTURING METHODS	Symp09-Th1-4	6/15/23 11:40	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Ali Fatemi	University of Memphis, Memphis, Tennessee, United States of America	MODELING OF MIXED-MODE CRACK GROWTH BEHAVIOR IN LB-PBF TI-6AL-4V USING A CRITICAL PLANE FRAMEWORK	Symp09-Th2-1	6/15/23 14:00	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Melody Mojib	University of Washington, Seattle, United States of America	SIGNIFICANCE OF INTRA-BUILD DESIGN VARIABLES ON THE FRACTURE TOUGHNESS PROPERTIES OF ELECTRON BEAM MELTED TI6AL4V	Symp09-Th2-2	6/15/23 14:20	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Derek Warner	Cornell University, Ithaca, New York, United States of America	FACTORS GOVERNING THE FATIGUE PERFORMANCE OF AM TI-6AL-4V COMPONENTS	Symp09-Th2-3	6/15/23 14:40	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Naila Hfaiedh	Léonard de Vinci Pôle Universitaire, Research Center, Paris La Défense, France	FATIGUE LIFE PREDECTION OF THE AA2024-T351 ALUMINUM ALLOY	Symp09-Th2-4	6/15/23 15:00	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Fabien Szmytka	ENSTA Paris, Institut Polytechnique de Paris, France	MECHANICAL RESISTANCE ASSESMENT OF 316L STAINLESS STEEL ADDITIVELY-REPAIRED STRUCTURES	Symp09-Th2-5	6/15/23 15:20	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
David Roucou	ENSTA Paris, France	FRACTURE TOUGHNESS OF A DUPLEX STAINLESS STEEL BUILT BY DIRECTED ENERGY DEPOSITION : EFFECT OF THE DEPOSITION DIRECTION	Symp09-Th2-6	6/15/23 15:40	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Yu Qiao	OTH Regensburg, Regensburg, Germany	ACCELERATED DESIGN AND INTEGRITY ASSESSMENT OF ADDITIVELY MANUFACTURED METALLIC STENTS USING MACHINE-LEARNING MODELS	Symp09-F1-1	6/16/23 10:30	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Raj Das	RMIT University,Melbourne, Victoria, Australia	FATIGUE LIFE OF LASER POWDER BED FUSION (L-PBF) ALSI10MG ALLOY: EFFECTS OF SURFACE ROUGHNESS AND POROSITY	Symp09-F1-2	6/16/23 10:50	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Reza Talemi	KU Leuven, Ghent, Belgium	FATIGUE LIFETIME ESTIMATION OF ELECTRON BEAM MELTED MICRO-SIZED PARTS BASED ON SURFACES REGENERATED BY MACHINE LEARNING APPROACH	Symp09-F1-3	6/16/23 11:10	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Franck Morel	LAMPA, Arts et Métiers Institute of Technology, Angers, France	EFFECTS OF DEFECT, LOADING MODE AND MICROSTRUCTURE ON LPBF 316L FATIGUE BEHAVIOR	Symp09-F1-4	6/16/23 11:30	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Christine Smudde	University of California, Davis,United States of America	CORRECTING FOR RESIDUAL STRESS EFFECTS ON FATIGUE CRACK GROWTH RATES OF ADDITIVELY MANUFACTURED TYPE 304L STAINLESS STEEL	Symp09-F1-5	6/16/23 11:50	20	Symposium 9: Fatigue and Fracture of Additively Manufactured Materials
Jamie Kruzic	University of New South Wales, Sydney, NSW, Australia	RELATING NANOSCALE STRUCTURE AND PROPERTIES TO MACROSCALE FRACTURE TOUGHNESS FOR BULK METALLIC GLASSES [Keynote]	Symp10-W3-1	6/14/23 16:30	40	Symposium 10: Small Scale Specimen Testing

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Alejandro Barrios	Sandia National Laboratories, Albuquerque, New Mexico, United States of America	IN SITU SEM HIGH-THROUGHPUT CYCLIC TESTING OF FREESTANDING THIN FILMS	Symp10-W3-2	6/14/23 17:10	20	Symposium 10: Small Scale Specimen Testing
Raghu V. Prakash	Indian Institute of Technology Madras, Chennai, Tamilnadu, India	UNDERSTANDING FATIGUE DAMAGE PROGRESSION IN A STRUCTURAL STAINLESS STEEL THROUGH CYCLIC BALL INDENTATION TESTING	Symp10-W3-3	6/14/23 17:30	20	Symposium 10: Small Scale Specimen Testing
Olivier Pierron	Georgia Tech, Atlanta, Georgia, United States of America	DETERMINING THE RATE-CONTROLLING, GRAIN-BOUNDARY-MEDIATED MECHANISMS IN ULTRAFINE GRAINED AU AND AL FILMS	Symp10-W3-4	6/14/23 17:50	20	Symposium 10: Small Scale Specimen Testing
Christoph Kirchlechner	Karlsruher Institut of Technology, Eggenstein-Leopoldshafen, Germany	INSIGHTS INTO VOID NUCLEATION AND GROWTH IN A DUAL PHASE STEEL BY SMALL SCALE MECHANICAL TESTING [Keynote]	Symp10-Th1-1	6/15/23 10:30	40	Symposium 10: Small Scale Specimen Testing
Qi Zhu	Nanyang Technological University, Singapore	IN SITU TRANSMISSION ELECTRON MICROSCOPY STUDY OF NANOMECHANICAL DEFORMATION AND ATOMIC-SCALE FRACTURE IN HIGH ENTROPY ALLOYS	Symp10-Th1-2	6/15/23 11:10	20	Symposium 10: Small Scale Specimen Testing
Lina Daza	Georgia Tech, Atlanta, Georgia, United States of America	EFFECTS OF IRRADIATION DAMAGE LEVELS ON ACTIVATION VOLUME AND DEFORMATION MECHANISMS IN IRRADIATED GOLD THIN FILMS USING IN SITU TEM STRAINING	Symp10-Th1-3	6/15/23 11:30	20	Symposium 10: Small Scale Specimen Testing
Eloho Okotete	Karlsruhe Institute of Technology, Eggenstein-Leopoldshafen, Germany	QUANTIFICATION OF INTERFACE STRENGTH OF A THIN FILM USING A NEW MICROCANTILEVER GEOMETRY.	Symp10-Th1-4	6/15/23 11:50	20	Symposium 10: Small Scale Specimen Testing
Dong Liu	University of Bristol, United Kingdom of Great Britain and Northern Ireland	EVALUATING THE INTERFACIAL TOUGHNESS OF GAN-ON-DIAMOND USING BLISTERING METHOD WITH NANO-INDENTATION	Symp10-Th1-5	6/15/23 12:10	20	Symposium 10: Small Scale Specimen Testing
Daniel Kiener	Montanuniversität Leoben, Leoben, Austria	IMPACT OF GRAIN BOUNDARY MODIFICATIONS ON FRACTURE TOUGHNESS OF TUNGSTEN BASED NANOMATERIALS [Keynote]	Symp10-Th2-1	6/15/23 14:00	40	Symposium 10: Small Scale Specimen Testing
Elsiddig Elmukashfi	University of Oxford, United Kingdom of Great Britain and Northern Ireland	A NOVEL SMALL-SCALE BEND GEOMETRY CREEP TEST TO EVALUATE DEFORMATION AND CAVITATION DAMAGE IN POLYCRYSTALLINE AND BI CRYSTAL COPPER	Symp10-Th2-2	6/15/23 14:40	20	Symposium 10: Small Scale Specimen Testing
Ashwini Kumar Mishra	Indian Institute of Technology Bombay, India	ANALYSIS OF FRACTURE BEHAVIOUR OF MULTILAYERS BY CANTILEVER AND CLAMPED BEAM BENDING GEOMETRY	Symp10-Th2-3	6/15/23 15:00	20	Symposium 10: Small Scale Specimen Testing
Stanislav Zak	Erich Schmid Institute of Materials Science, Austrian Academy of Sciences, Leoben, Austria	OPTIMIZATION AND USE OF HIGH-THROUGHPUT MICROMECHANICAL TESTING DESIGN FOR 3D-PRINTED POLYMERS	Symp10-Th2-4	6/15/23 15:20	20	Symposium 10: Small Scale Specimen Testing
Santiago El Awad	University of Houston, Texas, United States of America	MICRO-BENDING FOR MULTI-SCALE FRACTURE CHARACTERIZATION OF CEMENT-BASED MATERIALS AND CERAMICS	Symp10-Th2-5	6/15/23 15:40	20	Symposium 10: Small Scale Specimen Testing
Brad Boyce	Sandia National Laboratories, Albuquerque, New Mexico, United States of America	HIGH-CYCLE FATIGUE IN THE TEM: NANOCRYSTALLINE METALS [Keynote]	Symp10-Th3-1	6/15/23 10:30	40	Symposium 10: Small Scale Specimen Testing
Luis Llanes	CIEFMA - Universitat Politècnica de Catalunya - BarcelonaTech, Barcelona, Spain	UNDERSTANDING OF TOUGHENING IN CEMENTED CARBIDES BY MEANS OF SMALL-SCALE MECHANICAL TESTING AND CHARACTERIZATION	Symp10-Th3-2	6/15/23 11:10	20	Symposium 10: Small Scale Specimen Testing

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Belkacemi Said	Centre des Matériaux, Mines Paris, CNRS UMR 7633, PSL Research University, Paris, France	CHARACTERIZATION METHODOLOGY OF PIPELINE STEELS USING MINIATURE SPECIMENS	Symp10-Th3-3	6/15/23 11:30	20	Symposium 10: Small Scale Specimen Testing
Praveen Kumar	Indian Institute of Science, Bangalore, India	EFFECT OF ELECTRIC CURRENT ON PRE-CRACKED THIN METALLIC SHEETS: FROM CRACK PROPAGATION TO CRACK HEALING [Keynote]	Symp10-F1-1	6/16/23 10:30	40	Symposium 10: Small Scale Specimen Testing
Rohit Kumar Yadav	Department of Metallurgical Engineering and Materials Science, IIT Bombay, India	FRACTURE AND FATIGUE BEHAVIOR OF ADDITIVELY MANUFACTURED MAR-M 509 CO-BASED SUPERALLOYS	Symp10-F1-2	6/16/23 11:10	20	Symposium 10: Small Scale Specimen Testing
Xing Liu	Georgia Tech, Atlanta, Georgia, United States of America	INTEGRATING SIMULATION, MACHINE LEARNING, AND EXPERIMENTAL APPROACHES FOR HIGH-THOUGHPUT SMALL-SCALE FRACTURE INVESTIGATIONS	Symp10-F1-3	6/16/23 11:30	20	Symposium 10: Small Scale Specimen Testing
Pietro Cornetti	Politecnico di Torino, Torino, Italy	3D FINITE FRACTURE MECHANICS UNDER MODE I LOADING: THE FLAT ELLIPTICAL CRACK [Keynote]	Symp11-Tu1-1	6/13/23 10:30	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Dominique Leguillon	CNRS - Sorbonne Université, Paris, France	ON THE DIFFICULTY OF IMPLEMENTING THE COUPLED CRITERION TO PREDICT GLASS FRACTURE [Keynote]	Symp11-Tu1-2	6/13/23 11:10	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Sara Jiménez Alfaro	Sorbonne University, Paris, France	MODELING OF GLASS MATRIX COMPOSITES BY THE COUPLED CRITERION AND THE MATCHED ASYMPTOTICS APPROACH. THE ROLE OF A SINGLE PLATELET.	Symp11-Tu1-3	6/13/23 11:50	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
María De Los Ángeles Herrera Garrido	Universidad de Sevilla, Spain	ON-LINE TOOL FOR ANALYSIS OF SINGULAR STRESSES AND DISPLACEMENTS IN ANISOTROPIC MULTI-MATERIAL CORNERS	Symp11-Tu1-4	6/13/23 12:10	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Zohar Yosibash	Tel Aviv University, Faculty of Engineering, School of Mechanical Engineering, Tel Aviv, Israel	ON FFM/PFM FAILURE CRITERIA FOR METALS UNDERGOING SSY - NEW INSIGHTS AT V-NOTCHED TIPS [Keynote]	Symp11-Tu2-1	6/13/23 14:00	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Israel García	Universidad de Sevilla, Spain	CRACK DEFLECTION AT CURVED INTERFACES. A FINITE FRACTURE MECHANICS ANALYSIS [Keynote]	Symp11-Tu2-2	6/13/23 14:40	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Arturo Chao Correas	Politecnico di Torino, Turin, Italy	FINITE FRACTURE MECHANICS VERSUS PHASE FIELD: A CASE STUDY ON THE CRACK ONSET FROM CIRCULAR HOLES UNDER BIAXIAL LOADING CONDITIONS	Symp11-Tu2-3	6/13/23 15:20	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Sachin Yadav	Indian Institute of Technology Delhi, Hauz Khas, New Delhi, India	MECHANICS OF THE INTERACTION OF TWO PARALLEL, SIMULTANEOUSLY GROWING CRACKS USING LEFM	Symp11-Tu2-4	6/13/23 15:40	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Luca Susmel	University of Sheffield, Sheffield, United Kingdom of Great Britain and Northern Ireland	THE THEORY OF CRITICAL DISTANCES TO MODEL THE STATIC STRENGTH OF ADDITIVELY MANUFACTURED CONCRETE/POLYMERS CONTAINING MANUFACTURING DEFECTS/VOIDS [Keynote]	Symp11-W1-1	6/14/23 10:30	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Vladislav Mantic	Universidad de Sevilla, Spain	SINGULAR ELASTIC SOLUTIONS IN CORNERS AND CRACKS WITH SPRING BOUNDARY CONDITIONS WITH VARYING STIFFNESS [Keynote]	Symp11-W1-2	6/14/23 11:10	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Karthik Ambikakumari Sanalkumar	Universidad de Sevilla, Spain	FEM IMPLEMENTATION OF THE COUPLED CRITERION BASED ON MINIMIZATION OF THE TOTAL ENERGY SUBJECTED TO A STRESS CONDITION TO PREDICT MIXED MODE CRACK ONSET AND GROWTH	Symp11-W1-3	6/14/23 11:50	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Mahsa Sakha	ETH Zurich, Switzerland	MODELING HYDRAULIC FRACTURE INITIATION OF A NOTCH-FREE WELLBORE IN ANISOTROPIC ROCKS	Symp11-W1-4	6/14/23 12:10	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Alberto Sapora	Politecnico di Torino, Italy	V-NOTCHED COMPONENTS UNDER TORSIONAL FATIGUE LOADING [Keynote]	Symp11-W2-1	6/14/23 14:00	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Luis Tavara	University of Seville, Spain	MULTIPLE DELAMINATIONS PREDICTION ON ILTS SPECIMENS BY AN ABAQUS IMPLEMENTATION OF THE COUPLED CRITERION OF FFM AND LEBIM [Keynote]	Symp11-W2-2	6/14/23 14:40	40	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Jean Vereecke	I2M, CNES, Bordeaux, France	STUDY OF INTRA- AND INTER-LAMINAR DAMAGE INTERACTIONS IN LAMINATED COMPOSITES USING FINITE FRACTURE MECHANICS	Symp11-W2-3	6/14/23 15:20	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Amir Mohammad Mirzaei	Politecnico di Torino, Italy	FATIGUE LIFE PREDICTIONS OF NOTCHED COMPONENTS BASED ON FINITE FRACTURE MECHANICS	Symp11-W2-4	6/14/23 15:40	20	Symposium 11: "Finite Fracture Mechanics: Theoretical Aspects, Numerical Procedures, and Experimental Applications"
Sikang Yan	University of Kaiserslautern, Germany	A PHASE FIELD FATIGUE MODEL FOR COMPLEX LOADING SITUATIONS [Keynote]	Symp12-Th1-1	6/15/23 10:30	40	Symposium 12: Phase-Field Models of Fracture
Diego Infante-Garcia	Universitat Politècnica de València, Spain	NUMERICAL ASSESSMENT OF PHASE-FIELD APPROACH IN WESTERGAARD'S PROBLEM UNDER MIXED MODE LOADING	Symp12-Th1-2	6/15/23 11:10	20	Symposium 12: Phase-Field Models of Fracture
Reshmi Maria Jose	Indian Institute of Technology, Roorkee, India	A PHASE FIELD MODEL FOR DAMAGE NUCLEATION IN GEOPOLYMER COMPOSITES	Symp12-Th1-3	6/15/23 11:30	20	Symposium 12: Phase-Field Models of Fracture
Michael Salvini	University of Bristol, United Kingdom of Great Britain and Northern Ireland	COUPLING CRYSTAL PLASTICITY WITH PHASE FIELD FRACTURE FOR CREEP DAMAGE FORMATION ANALYSIS IN AUSTENITIC AND FERRITIC STEELS	Symp12-Th1-4	6/15/23 11:50	20	Symposium 12: Phase-Field Models of Fracture
Paras Kumar	Institute of Applied Mechanics, Friedrich-Alexander Universität Erlangen-Nürnberg, Germany	A VERSATILE PHASE-FIELD FRACTURE MODEL FOR POLYMER COMPOSITES: CAPTURING THEIR MULTI-FACETED FRACTURE BEHAVIOR VIA GRADED INTERPHASES	Symp12-Th1-5	6/15/23 12:10	20	Symposium 12: Phase-Field Models of Fracture
Aditya Kumar	Georgia Institute of Technology, Atlanta, Georgia, United States of America	NUCLEATION AND PROPAGATION OF FRACTURE IN ELASTOMERS DURING POKER-CHIP EXPERIMENTS	Symp12-Th2-1	6/15/23 14:00	20	Symposium 12: Phase-Field Models of Fracture
Lamia Mersel	Ecole Centrale Nantes, Onera, Lille, France	A FLEXIBLE COMPUTATIONAL FRAMEWORK FOR A HIGH-PERFORMANCE EXTENSION OF A QUASI-STATIC PHASE-FIELD MODELING TO A DYNAMIC REGIME	Symp12-Th2-2	6/15/23 14:20	20	Symposium 12: Phase-Field Models of Fracture

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Anatoli Mitrou	DEMec, Faculdade de Engenharia, Universidade do Porto, Porto, Portugal	SIMULATION OF OFF-AXIS FRACTURE OF THIN-PLY COMPOSITE LAMINATES USING PHASE FIELD	Symp12-Th2-3	6/15/23 14:40	20	Symposium 12: Phase-Field Models of Fracture
Retam Paul	Indian Institute of Technology Kanpur, Uttar Pradesh, India	PHASE FIELD MODELLING OF BRITTLE FRACTURE: AN EXTENSION TO FRACTURE SURFACE TOPOLOGY	Symp12-Th2-4	6/15/23 15:00	20	Symposium 12: Phase-Field Models of Fracture
Sindhu Bushpalli Shivareddy	FIDAMC, Madrid, Spain	A SIMPLE ABAQUS PHASE FIELD IMPLEMENTATION FOR THE STUDY OF TRANSVERSE CRACKING IN COMPOSITE LAMINATES	Symp12-Th2-5	6/15/23 15:20	20	Symposium 12: Phase-Field Models of Fracture
P.C. Sidharth	Indian Institute of Technology Madras, Chennai, Tamil Nadu, India	MODELING FRACTURE IN FUNCTIONALLY GRADED MATERIALS WITH PHASE-FIELD METHOD	Symp12-Th2-6	6/15/23 15:40	20	Symposium 12: Phase-Field Models of Fracture
Fabian Welschinger	Robert Bosch GmbH, Renningen, Baden-Württemberg, Germany	A PHASE-FIELD MODEL FOR THE MULTISCALE ANALYSIS OF FRACTURE IN SHORT GLASS FIBER REINFORCED POLYMERS [Keynote]	Symp12-F1-1	6/16/23 10:30	40	Symposium 12: Phase-Field Models of Fracture
Heng Feng	Western University, London, Ontario, Canada	PHASE FIELD MODELING ON ELASTOMERS CONSIDERING THE NONLINEAR MATERIAL VISCOSITY	Symp12-F1-2	6/16/23 11:10	20	Symposium 12: Phase-Field Models of Fracture
Janel Chua	Carnegie Mellon University, Pittsburgh, Pennsylvania, United States of America	AN AUGMENTED PHASE-FIELD MODEL WITH VISCOUS STRESSES FOR DEFECT DYNAMICS	Symp12-F1-3	6/16/23 11:30	20	Symposium 12: Phase-Field Models of Fracture
Maxime Levy	Tel Aviv University, Tel Aviv - Yafo, Israel	AN FE-EXPERIMENTAL METHOD FOR DETERMINING QCT-BASED CORTICAL BONE FRACTURE TOUGHNESS AND ULTIMATE STRESS [Keynote]	Symp12-F1-4	6/16/23 11:50	40	Symposium 12: Phase-Field Models of Fracture
Huajian Gao	Nanyang Technological University, Singapore	STRONG AND TOUGH FIBROUS HYDROGELS REINFORCED BY MULTISCALE HIERARCHICAL STRUCTURES WITH MULTIMECHANISMS [Keynote]	Symp13-M1-1	6/12/23 10:30	40	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Lennart Behlen	University of Kassel, Kassel, Hessen, Germany	MAXWELL STRESS AND ELECTROSTRICTION IN DIELECTRICS AND THEIR IMPLICATIONS FOR FRACTURE MECHANICS	Symp13-M1-2	6/12/23 11:10	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Panagiotis Danoglidis	The University of Texas at Arlington, United States of America	ENHANCING THE POST-CRACK TENSILE STRAIN CAPACITY OF CEMENT-BASED COMPOSITES USING FIBRILLAR WASTE BYPRODUCTS	Symp13-M1-3	6/12/23 11:30	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Zihui Xia	University of Alberta, Edmonton AB, Canada	FAILURE MECHANISMS AND STATISTICAL METHOD FOR THE FATIGUE LIFE PREDICTION OF COKE DRUMS	Symp13-M1-4	6/12/23 11:50	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Krishnaswamy Ravi-Chandar	University of Texas, Austin, United States of America	NUCLEATION AND GROWTH OF CRACKS IN ELASTOMERS [Keynote]	Symp13-M2-1	6/12/23 14:00	40	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Mirko Pejatovic	Ghent University, Belgium	BRITTLE FAILURE IN HYBRID STEEL-GLASS BEAM-COLUMN JOINT PROTOTYPE. EXPERIMENTAL INVESTIGATION AND NUMERICAL MODELLING.	Symp13-M2-2	6/12/23 14:40	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Keqiang Hu	Nanjing University of Aeronautics and Astronautics, , China	A MODE-III CRACK WITH SURFACE EFFECT IN A MAGNETOELECTROELASTIC MEDIUM	Symp13-M2-3	6/12/23 15:00	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Apoorv Verma	Indian Institute of Technology Bombay, Mumbai, India	ROLE OF WIRE ASPECT RATIO AND CRACK ASPECT RATIO ON FRACTURE BEHAVIOR OF WIRE SPECIMEN	Symp13-M2-4	6/12/23 15:20	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Panagiotis Danoglidis	The University of Texas at Arlington, United States of America	MULTISCALE TOUGHENING MECHANISM IN HYBRID FIBER REINFORCED CEMENT-BASED NANOCOMPOSITES	Symp13-M2-5	6/12/23 15:40	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Efstathios Theotokoglou	National Technical University of Athens, Athens/Attiki, Greece	THEORETICAL, EXPERIMENTAL AND COMPUTATIONAL STUDY THE OFF-AXIS ELASTIC CONSTANTS, FRACTURE AND STRENGTH OF UNIDIRECTIONAL FIBER COMPOSITE [Keynote]	Symp13-M3-1	6/12/23 16:30	30	Symposium 13: Failure Mechanisms in Advanced Materials and Structures

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Ashish Singh	IIT Delhi, India	USING ANALYTICAL APPROACH FOR CALCULATING LOCALIZED STRESS FIELD NEAR CENTRAL SLIT CRACK IN AMORPHOUS MATERIAL AT ATOMISTIC SCALE	Symp13-M3-2	6/12/23 17:00	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Sunil Kumar Dutta	Indian Institute of Technology Delhi, New Delhi, India	MECHANICS OF INTERACTION OF GROWING CRACK WITH GRAIN BOUNDARY IN BICRYSTAL SOLIDS	Symp13-M3-3	6/12/23 17:20	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Andrea Carolina Oña Vera	Ghent University, Gent, Belgium	LONG-TERM PERFORMANCE OF POST-INSTALLED CONCRETE SCREWS	Symp13-M3-4	6/12/23 17:40	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Zengtao Chen	University of Alberta, Canada	NON-FOURIER HEAT CONDUCTION AND NONLOCAL THEORY, RECENT PROGRESS AND APPLICATION IN THERMAL FRACTURE ANALYSIS [Keynote]	Symp13-Tu1-1	6/13/23 10:30	40	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Kaitlynn Fitzgerald	Sandia National Labs, Albuquerque, New Mexico, United States of America	USING A HIERARCHY OF POROSITY TO IMPROVE THE FRACTURE TOUGHNESS OF METAMATERIALS	Symp13-Tu1-2	6/13/23 11:10	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Kalliopi-Artemi Kalteremidou	Vrije Universiteit Brussel, Brussels, Belgium	THE IMPACT OF MULTIAXIALITY ON THE STATIC AND FATIGUE FRACTURE OF CARBON/EPOXY POLYMER COMPOSITES	Symp13-Tu1-3	6/13/23 11:30	20	Symposium 13: Failure Mechanisms in Advanced Materials and Structures
Christopher Nellis	U.S. Nuclear Regulatory Commission, Washington DC, United States of America	APPLICATIONS OF THE EXTREMELY LOW PROBABILITY OF RUPTURE (XLPR) CODE	Symp14-M1-1	6/12/23 10:30	20	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Robert Kurth	Engineering Mechanics Corporation, Columbus, Ohio, United States of America	XLPR: A PROBABILISTIC CODE FOR FATIGUE AND PWSCC ANALYSIS OF WELD IN NUCLEAR POWER PLANT	Symp14-M1-2	6/12/23 10:50	20	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Christopher Ulmer	U.S. Nuclear Regulatory Commission, Washington, DC, United States of America	FAVPRO: NRC'S 21ST CENTURY REACTOR PRESSURE VESSEL PROBABILISTIC FRACTURE ANALYSIS TOOL	Symp14-M1-3	6/12/23 11:10	20	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Harry Millwater	University of Texas at San Antonio, United States of America	ADAPTIVE MULTIPLE IMPORTANCE SAMPLING FOR STRUCTURAL RISK ASSESSMENT [Keynote]	Symp14-M1-4	6/12/23 11:30	30	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Mauro Madia	Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany	FRAUCTURE MECHANICS-BASED PROBABLISTIC STRUCTURAL INTEGRITY ASSESSMENT FOR AERO-ENGINE TURBINE DISK	Symp14-M1-5	6/12/23 12:00	20	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Christian Amann	Siemens Energy GmbH & Co KG, Bottrop, NRW, Germany	PROBABILISTIC FRACTURE MECHANICS FOR HEAVY-DUTY GAS TURBINE ROTOR OPERATIONS IN THE ENERGY SECTOR [Keynote]	Symp14-M2-1	6/12/23 14:00	30	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Craig Mcclung	Southwest Research Institute, San Antonio, Texas, United States of America	A SOFTWARE FRAMEWORK FOR PROBABILISTIC FATIGUE CRACK GROWTH ANALYSIS OF METALLIC COMPONENTS [Keynote]	Symp14-M2-2	6/12/23 14:30	30	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Robert Kurth	Engineering Mechanics Corporation, Columbus, Ohio, United States of America	PROLOCA 7.1 A PROBABILISTIC FRAMEWORK FOR FATIGUE ANALYSIS OF ALUMINUM AND WELD STEEL STRUCTURES [Keynote]	Symp14-M2-3	6/12/23 15:00	30	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Mauro Madia	Bundesanstalt für Materialforschung und -prüfung (BAM), Germany	PROBABILISTIC STRUCTURAL INTEGRITY ASSESSMENT OF WELDED JOINTS [Keynote]	Symp14-M2-4	6/12/23 15:30	30	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Matthew Kirby	Southwest Research Institute, San Antonio, Texas, United States of America	PROBABILISTIC CRITICAL FLAW SIZE ASSESSMENTS IN THE CIRCUMFERENTIAL WELDS OF LAYERED PRESSURE VESSELS [Keynote]	Symp14-M3-1	6/12/23 16:30	30	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Tero Mäkinen	Aalto University, Espoo, Finland	INTERMITTENCY IN FATIGUE CRACK GROWTH AND FATIGUE STRIATIONS	Symp14-M3-2	6/12/23 17:00	20	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Grant West	Cornell University, Ithaca, New York, United States of America	TOWARDS HIGH THROUGHPUT FATIGUE CHARACTERIZATION	Symp14-M3-3	6/12/23 17:20	20	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Alex Arzoumanidis	Psylotech, Inc., Evanston, Illinois, United States of America	A LOADING HISTORY AGNOSTIC FREE ENERGY BASED FRACTURE CRITERION	Symp14-M3-4	6/12/23 17:40	20	Symposium 14: "Probabilistic Aspects of Fatigue Crack Growth and Fracture: Frameworks, Tools, and Applications"
Erdogan Madenci	University of Arizona, Tucson, United States of America	PERIDYNAMIC MODELING OF CRACKING AND DEGRADATION IN CHARRING AND NON-CHARRING MATERIALS DURING ABLATION [Keynote]	Symp15-W1-1	6/14/23 10:30	30	Symposium 15: Advanced Computational Methods in Fracture
Ayhan Ince	Concordia University, Montreal, Quebec, Canada	A PERIDYNAMIC FATIGUE MODEL BASED ON TWO-PARAMETER REMAINING-LIFE FORMULATION	Symp15-W1-2	6/14/23 11:00	20	Symposium 15: Advanced Computational Methods in Fracture
Swati Gupta	Cornell University, Ithaca, New York, United States of America	FAST INFERENCE OF CRACK TIP POSITION AND STRESS INTENSITY FACTORS FROM DISPLACEMENT DATA	Symp15-W1-3	6/14/23 11:20	20	Symposium 15: Advanced Computational Methods in Fracture
Jorge G. Diaz	Universidad Industrial de Santander, Bucaramanga, Colombia	LEAST SQUARES METHOD FOR MODE III SIF CALCULATION	Symp15-W1-4	6/14/23 11:40	20	Symposium 15: Advanced Computational Methods in Fracture
Shanhu Li	ANSYS, Inc, Canonsburg, Pennsylvania, United States of America	SIMULATING CRACK CLOSURE WITH COHESIVE ZONE ELEMENTS DURING CRACK GROWTH	Symp15-W1-5	6/14/23 12:00	20	Symposium 15: Advanced Computational Methods in Fracture
Sobhan Pattajoshi	Indian Institute of Technology, Roorkee, India	DYNAMIC FRACTURE BEHAVIOR OF LAYERED COMPOSITE AGAINST MULTIPLE PROJECTILE IMPACT LOADING [Keynote]	Symp15-W2-1	6/14/23 14:00	30	Symposium 15: Advanced Computational Methods in Fracture
Shashwat Kapoor	Indian Institute of Technology, Roorkee, India	COMPUTATIONAL INVESTIGATION OF DYNAMIC FRACTURE BEHAVIOR OF MULTI-LAYERED STRUCTURES AGAINST MULTIPLE BALLISTIC IMPACTS	Symp15-W2-2	6/14/23 14:30	20	Symposium 15: Advanced Computational Methods in Fracture
Sankha Subhra Aditya	University of Alabama, Tuscaloosa, Alabama, United States of America	APPLICATION OF CONCURRENT ATOMISTIC-CONTINUUM COUPLING TO STUDY FRACTURE IN POLYMER NANOCOMPOSITES	Symp15-W2-3	6/14/23 14:50	20	Symposium 15: Advanced Computational Methods in Fracture
Mykhailo Dovzhyk	National Academy of Sciences of Ukraine, Kyiv, Ukraine	FRACTURE OF HIGHLY ELASTIC AND COMPOSITE MATERIALS AT COMPRESSION ALONG NEAR-SURFACE CRACK IN CASE OF SMALL DISTANCE BETWEEN FREE SURFACE AND CRACK	Symp15-W2-4	6/14/23 15:10	20	Symposium 15: Advanced Computational Methods in Fracture
Guoyu Lin	Ansys, Inc., Canonsburg, Pennsylvania, United States of America	RECENT ADVANCEMENTS AND APPLICATIONS IN DEVELOPMENT OF SMART CRACK GROWTH SIMULATION	Symp15-W2-5	6/14/23 15:30	20	Symposium 15: Advanced Computational Methods in Fracture

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
David Melching	German Aerospace Center (DLR), Cologne, Germany	ADVANCED CRACK TIP FIELD QUANTIFICATION USING DIGITAL IMAGE CORRELATION, MACHINE LEARNING, AND INTEGRAL EVALUATION [Keynote]	Symp15-W3-1	6/14/23 16:30	30	Symposium 15: Advanced Computational Methods in Fracture
Patrick G. Mongan	University of Limerick, Limerick, Ireland (Republic of)	AN AUTOMATED PROCESS FOR SOLVING DUCTILE DAMAGE PARAMETER SELECTION USING MACHINE LEARNING AND FINITE ELEMENT ANALYSIS	Symp15-W3-2	6/14/23 17:00	20	Symposium 15: Advanced Computational Methods in Fracture
Gaurav Singh	Indian Institute of Technology Delhi, New Delhi, India	SINGULAR INTEGRAL EQUATION FOR SOLVING COHESIVE CRACK PROBLEM FOR INITIALLY RIGID TRACTION-SEPARATION RELATION	Symp15-W3-3	6/14/23 17:20	20	Symposium 15: Advanced Computational Methods in Fracture
Xiqiao Feng	Tsinghua University, Beijing, China	BIOCHEMOMECHANICAL FRACTURE MECHANICS MODEL FOR DORSAL CLOSURE IN DROSOPHILA EMBRYOGENESIS	Symp15-W3-4	6/14/23 17:40	20	Symposium 15: Advanced Computational Methods in Fracture
Hiroshi Okada	Tokyo University of Science, Noda, Japan	REDEFINED J-INTEGRAL AND J-INTEGRAL RANGE DELTA-J AS FINITE STRAIN ELASTIC-PLASTIC CRACK PARAMETERS [Keynote]	Symp15-Th1-1	6/15/23 10:30	30	Symposium 15: Advanced Computational Methods in Fracture
Kevin Schmitz	University of Kassel, Germany	THE VIRTUAL ELEMENT METHOD FOR EFFICIENT CRACK TIP LOADING ANALYSIS AND CRACK GROWTH SIMULATION	Symp15-Th1-2	6/15/23 11:00	20	Symposium 15: Advanced Computational Methods in Fracture
Roman Kushnir	National Academy of Sciences of Ukraine, Lviv, Ukraine	3D FRACTURE MECHANICS ANALYSIS OF THERMOMAGNETOELECTROELASTIC ANISOTROPIC SOLIDS ACCOUNTING FOR CRACK FACE CONTACT WITH FRICTION	Symp15-Th1-3	6/15/23 11:20	20	Symposium 15: Advanced Computational Methods in Fracture
Florian Garnadt	Technical University of Darmstadt, Germany	CYCLIC EFFECTIVE NEAR-FIELD LOADING BASED ON THE DOMAIN INTEGRAL METHOD	Symp15-Th1-4	6/15/23 11:40	20	Symposium 15: Advanced Computational Methods in Fracture
Pattabhi Budarapu	Indian Institute of Technoloby Bhubaneswar, India	MULTIPHYSICS ANALYSIS OF PHOTOVOLTAIC SOLAR CELLS [Keynote]	Symp15-Th1-5	6/15/23 12:00	30	Symposium 15: Advanced Computational Methods in Fracture
Harry Millwater	University of Texas at San Antonio, United States of America	DEVELOPMENT AND APPLICATION OF THE HYPERCOMPLEX FINITE ELEMENT METHOD FOR LINEAR AND NONLINEAR ENERGY RELEASE RATE CALCULATIONS [Keynote]	Symp15-Th2-1	6/15/23 14:00	30	Symposium 15: Advanced Computational Methods in Fracture
Yitzchak Yifrach	Braude College of Engineering, Karmiel, Israel	FINITE ELEMENT MODELING FOR PREDICTING OPTIMAL HOLE PROFILE IN A FINITE SQUARE PLATE OF HETEROGENEOUS BRITTLE MATERIAL (WC+CO) UNDER UNIAXIAL COMPRESSION OR UNIAXIAL DISPLACEMENT	Symp15-Th2-2	6/15/23 14:30	20	Symposium 15: Advanced Computational Methods in Fracture
Igor Gribanov	Memorial University of Newfoundland, Mount Pearl, NL, Canada	FINITE ELEMENT SIMULATION OF CRACK PROPAGATION IN BRITTLE PLATES	Symp15-Th2-3	6/15/23 14:50	20	Symposium 15: Advanced Computational Methods in Fracture
Yiran Li	Tianjin University, Tianjin, China	MECHANICAL MODEL OF SLIDING FRICTION AND THE STUDY OF THE ONSET OF SLIDING FRICTION	Symp15-Th2-4	6/15/23 15:10	20	Symposium 15: Advanced Computational Methods in Fracture
Kedar Kirane	Stony Brook University, Stony Brook, New York, United States of America	ROLE OF LOCALIZATION LIMITERS AND LENGTH-SCALES IN MESH OBJECTIVE DYNAMIC FRACTURE MODELING	Symp15-Th2-5	6/15/23 15:30	20	Symposium 15: Advanced Computational Methods in Fracture
Mark James	Howmet Aerospace Inc., Cleveland, Ohio, United States of America	A TEST METHOD TO MEASURE THE EFFECTS OF RESIDUAL STRESS DURING AN FCG TEST	Symp16-M3-1	6/12/23 16:30	30	Symposium 16: Residual Stress in Fatigue and Fracture
Michael Hill	University of California, Davis, United States of America	ACCOUNTING FOR RESIDUAL STRESS IN FATIGUE CRACK GROWTH RATE TESTS: VALIDATION OF RESIDUAL STRESS INTENSITY FACTOR MEASUREMENTS	Symp16-M3-2	6/12/23 17:00	30	Symposium 16: Residual Stress in Fatigue and Fracture

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Casey Gales	John Deere, Dubuque, IA, United States of America	RELAXATION OF RESIDUAL STRESS IN WELDED PLATES DURING LONG LIFE FATIGUE LOADING	Symp16-M3-3	6/12/23 17:30	30	Symposium 16: Residual Stress in Fatigue and Fracture
Dale Ball	Lockheed Martin Aeronautics Co., Fort Worth, Texas, United States of America	UNCERTAINTY QUANTIFICATION IN RESIDUAL STRESS AFFECTED FATIGUE CRACK GROWTH LIFE	Symp16-Tu1-1	6/13/23 10:30	30	Symposium 16: Residual Stress in Fatigue and Fracture
Robert Pilarczyk	Hill Engineering, LLC, Rancho Cordova, California, United States of America	CHARACTERIZING THE PHYSICS OF TAPER-LOK FASTENER HOLES TO SUPPORT B-1 SUSTAINMENT	Symp16-Tu1-2	6/13/23 11:00	30	Symposium 16: Residual Stress in Fatigue and Fracture
Moad Fatmi	Univeristy of Technology of Troyes, France	RESIDUAL STRESS RELAXATION IN INCONEL718 COLD EXPANDED HOLE UNDER LOADING AT ELEVATED TEMPERATURE	Symp16-Tu1-3	6/13/23 11:30	30	Symposium 16: Residual Stress in Fatigue and Fracture
Motoaki Hayama	Graduate School of Keio University, Yokohama, Kanagawa, Japan	FATIGUE LIMIT PREDICTION OF AISI4140 STEEL WITH COMPRESSIVE RESIDUAL STRESS CONSIDERING THE LOCAL YIELDING OF COMPRESSIVE RESIDUAL STRESS LAYER	Symp16-Tu1-4	6/13/23 12:00	30	Symposium 16: Residual Stress in Fatigue and Fracture
Michael Benson	U.S. Nuclear Regulatory Commission, Washington, DC, United States of America	VALIDATION OF WELD RESIDUAL STRESS FINITE ELEMENT PREDICTIONS FOR USE IN NUCLEAR REGULATORY APPLICATIONS	Symp16-Tu2-1	6/13/23 14:00	25	Symposium 16: Residual Stress in Fatigue and Fracture
Simon Mckendrey	University of Bristol, United Kingdom of Great Britain and Northern Ireland	FATIGUE CRACK GROWTH IN ELECTRON BEAM WELDMENTS	Symp16-Tu2-2	6/13/23 14:25	25	Symposium 16: Residual Stress in Fatigue and Fracture
Le Wang	National University of Singapore	DETERMINATION OF WELDING RESIDUAL STRESSES IN TUBULAR JOINTS WITH MULTI-PASS WELDS	Symp16-Tu2-3	6/13/23 14:50	25	Symposium 16: Residual Stress in Fatigue and Fracture
Jim Lua	Global Engineering and Materials, Inc., Princeton, New Jersey, United States of America	FATIGUE PERFORMANCE ASSESSMENT OF A QUENCHED ALUMINUM COMPONENT WITH PROCESS INDUCED RESIDUAL AT DIFFERENT DIPPING ANGLES	Symp16-Tu2-4	6/13/23 15:15	25	Symposium 16: Residual Stress in Fatigue and Fracture
Bud Brust	Engineering Mechanics Corporation of Columbus, Ohio, United States of America	STUDIES OF CRACK GROWTH AND FRACTURE DRIVEN BY WELD RESIDUAL STRESS FIELDS	Symp16-Tu2-5	6/13/23 15:40	25	Symposium 16: Residual Stress in Fatigue and Fracture
Zheng-Ming Huang	Tongji University, Shanghai, China	INTERFACE CRACK OR DELAMINATION: WHEN & WHERE TO INITIATE? HOW TO PROPAGATE & HOW BIG AREA TO ATTAIN?	Symp17-W2-1	6/14/23 14:00	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Huifang Liu	University of Oxford, United Kingdom of Great Britain and Northern Ireland	EXPERIMENTAL AND NUMERICAL STUDY ON THE DELAMINATION BEHAVIOUR OF INTERLEAVED COMPOSITES WITH AUTOMATED TAPE LAYING	Symp17-W2-2	6/14/23 14:20	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Joseph Gunst	Auburn University, Auburn, Alabama, United States of America	EFFECT OF PROCESS-INDUCED DEFECTS ON MODE I BEHAVIOR OF PMCS: RANDOM DEFECTS VS. CONTROLLED DEFECTS	Symp17-W2-3	6/14/23 14:40	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Federico Accornero	Politecnico di Torino, Italy	SCALE EFFECTS IN THE POST-CRACKING BEHAVIOUR OF CNT-EPOXY COMPOSITES: PREDICTING CRACK JUMPS AND DUCTILE-TO-BRITTLE TRANSITIONS	Symp17-W2-4	6/14/23 15:00	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Julkarnyne M Habibur Rahman	Auburn University, Auburn, Alabama, United States of America	THERMAL BEHAVIOR DURING FRACTURE OF HYBRID EPOXY/CNT/GNP COMPOSITES	Symp17-W2-5	6/14/23 15:20	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Akash Deep	Indian Institute of Technology, Delhi, India	DETECTION OF MODE I INTERLAMINAR CRACK IN CNF DOPED GFRP LAMINATES USING ELECTRICAL IMPEDANCE TOMOGRAPHY	Symp17-W2-6	6/14/23 15:40	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Naresh Datla	IIT Delhi, Hauz Khas, New Delhi, India	DELAMINATION RESISTANCE IN RANDOM AND ALIGNED CNF-GFRP MULTISCALE STRUCTURAL COMPOSITES [Keynote]	Symp17-W3-1	6/14/23 16:30	30	Symposium 17: "Damage, Fracture, and Fatigue of Composites"

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Gabriel Riedl	Johannes Kepler University, Linz, Upper Austria, Austria	NOVEL SERR-CONTROLLED ENVIRONMENTAL FATIGUE TEST METHODOLOGY FOR ADHESIVE-BONDED LAMINATES	Symp17-W3-2	6/14/23 17:00	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Nilesh Vishe	The University of Alabama, Tuscaloosa, United States of America	HEALING OF LAMINATED COMPOSITES AFTER STATIC AND FATIGUE DELAMINATION	Symp17-W3-3	6/14/23 17:20	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Álvaro Mena-Alonso	University of Burgos, Spain	INFLUENCE OF THE RANDOMNESS OF FIBER DISTRIBUTION ON THE DISPERSION OF FATIGUE RESPONSE IN STEEL FIBER REINFORCED CONCRETE USING MICRO-COMPUTED TOMOGRAPHY	Symp17-W3-4	6/14/23 17:40	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Nithinkumar Manoharan	Auburn University, Auburn, Alabama, United States of America	FATIGUE CHARACTERIZATION OF ADHESIVELY-BONDED GFRP JOINTS VIA SELF-HEATING	Symp17-Th2-1	6/15/23 14:00	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Luiz Carlos De Almeida	University of Campinas, Campinas, SP, Brazil	FAILURE MECHANISMS OF STEEL FIBERS EMBEDDED IN HSFRSCC	Symp17-Th2-2	6/15/23 14:20	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Bineet Kumar	Indian Institute of Technology Roorkee, India	AN ANALYTICAL APPROACH FOR THE FRACTURE CHARACTERIZATION IN CONCRETE UNDER CYCLIC LOADING CONDITION	Symp17-Th2-3	6/15/23 14:40	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
D.G. Thakur	Defence Institute of Advanced Technology, Pune, Maharashtra, India	THE EFFECT OF FIBER ORIENTATION AND INFILL PATTERN ON FLEXURAL STRENGTH OF ADDITIVELY MANUFACTURED COMPOSITE SPECIMEN	Symp17-Th2-4	6/15/23 15:00	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Rohit Madke	Indian Institute of Technology Roorkee, Uttarakhand, India	FRACTURE AND FATIGUE STUDIES ON META-SANDWICH AUXETIC CORE	Symp17-Th2-5	6/15/23 15:20	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Alexander Kipnis	S.P. Timoshenko Institute of Mechanics of the National Academy of Science of Ukraine, Kyiv	ON THE LIMIT EQUILIBRIUM OF SMALL-SCALE INTERFACIAL SHEAR CRACKS AT THE CORNER POINT OF THE INTERFACE OF A PIECEWISE HOMOGENEOUS COMPOSITE	Symp17-Th2-6	6/15/23 15:40	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Johannes Wiener	Montanuniversitaet Leoben, 8700 Leoben, Styria, Austria	ON THE DESIGN OF CRACK-ARRESTING LAYERS IN POLYPROPYLENE BASED MULTILAYER COMPOSITES	Symp17-Th3-1	6/15/23 16:30	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Ignatius Ebo-Quansah	Egypt-Japan University of Science and Technology, Alexandria, Egypt	TAGUCHI BASED – FUZZY METHOD OPTIMIZATION OF PROPOSED ULTRA-HIGH STRENGTH STEEL /UHMWPE HELMET UNDER VARIABLE IMPACTOR CONDITIONS.	Symp17-Th3-2	6/15/23 16:50	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Suhasini Gururaja	Auburn University, Auburn, Alabama, United States of America	PROGRESSIVE DAMAGE IN CMC MINICOMPOSITES WITH THICK INTERPHASES UNDER TENSILE LOADING [Keynote]	Symp17-Th3-3	6/15/23 17:10	30	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Sushrut Karmarkar	Purdue University, West Lafayette, Indiana, United States of America	NON-DESTRUCTIVE EVALUATION OF DEFECTS IN COMPOSITE BI-MATERIAL STRUCTURES AND ESTIMATION OF FRACTURE FRONT USING DATA DRIVEN TERAHERTZ TIME DOMAIN ANALYSIS	Symp17-Th3-4	6/15/23 17:40	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Silpa Soman Pazhankave	Arizona State University, Tempe, United States of America	SIZE EFFECTS OF COMPOSITE CEMENT AND FUNCTIONALIZED PLASTIC BEAMS: TOWARDS INCREASED DUCTILITY AND ENERGY ABSORPTION	Symp17-F1-1	6/16/23 10:30	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Roberta Massabo	University of Genova, Italy	DEBOND FRACTURE AND KINKING IN MULTILAYER SYSTEMS: THEORETICAL SOLUTIONS AND PRACTICAL APPLICATIONS	Symp17-F1-2	6/16/23 10:50	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Kai Liu	The Univeristy of Oxford, United Kingdom of Great Britain and Northern Ireland	EFFECTS OF TEMPERATURE ON FIBER TENSION FRACTURE TOUGHNESS OF COMPOSITE LAMINATES AT HIGH LOADING RATE	Symp17-F1-3	6/16/23 11:10	20	Symposium 17: "Damage, Fracture, and Fatigue of Composites"
Gary Was	University of Michigan, Ann Arbor, United States of America	MECHANISTIC UNDERSTANDING OF IRRADIATION ASSISTED STRESS CORROSION CRACKING [Keynote]	Symp18-Th1-1	6/15/23 10:30	40	Symposium 18: Mechanical Behavior in Nuclear Materials

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Mustafa Subasic	KTH Royal Institute of Technology, Stockholm, Sweden	CORROSION FATIGUE OF HOLLOW SPECIMENS IN SIMULATED LWR WATER ENVIRONMENT	Symp18-Th1-2	6/15/23 11:10	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Shiyu Suzuki	Japan Aerospace Exploration Agency (JAXA), Mitaka-shi, Tokyo, Japan	EFFECT OF TENSION HOLD IN CREEP-FATIGUE CRACK PROPAGATION IN NI-BASE SUPERALLOYS: TRANSITION FROM CRACK RETARDATION TO ACCELERATION	Symp18-Th1-3	6/15/23 11:30	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Sarah Blust	University of Virginia, Charlottesville, United States of America	EVALUATING THE SENSITIVITIES OF AISCC SUSCEPTIBILITY IN STAINLESS-STEEL NUCLEAR WASTE STORAGE CANISTERS FOR DEVELOPMENT OF A LIFETIME PREDICTION MODEL	Symp18-Th1-4	6/15/23 11:50	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Peter Hosemann	University of California Berkeley, United States of America	MATERIALS PROPERTY CHANGES AFTER IRRADIATION EVLAUATED USING SMALL SCALE MECHANICAL TESTING. [Keynote]	Symp18-Th2-1	6/15/23 14:00	40	Symposium 18: Mechanical Behavior in Nuclear Materials
Eirini Galliopoulou	University of Bristol, United Kingdom of Great Britain and Northern Ireland	HIGH TEMPERATURE CREEP CAVITATION IMAGING AND ANALYSIS IN 9%CR 1%MO P91 STEELS	Symp18-Th2-2	6/15/23 14:40	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Hugh Dorward	University of Bristol, United Kingdom of Great Britain and Northern Ireland	PREDICTING THE MACROSCOPIC CYCLIC BEHAVIOUR OF POLYCRYSTALLINE STEELS BASED ON MATERIAL MICROSTRUCTURE VIA SURROGATE MODELLING	Symp18-Th2-3	6/15/23 15:00	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Dong Liu	University of Bristol, United Kingdom of Great Britain and Northern Ireland	IN SITU X-RAY TOMOGRAPHY IMAGING OF CRACK INITATION AND PROPAGATION IN NUCLEAR GRAPHITE AT 1000°C [Keynote]	Symp18-Th3-1	6/15/23 16:30	30	Symposium 18: Mechanical Behavior in Nuclear Materials
Cainã Bemfica	Université Paris-Saclay, CEA, Service de Recherches Métallurgiques Appliquées, Gif-sur-Yvette, Île-de-France, France	BRITTLE FRACTURE MECHANISMS OF THREE MODEL LOW ALLOY STEELS CHEMICALLY REPRESENTATIVE OF A MACROSEGREGATED FORGING	Symp18-Th3-2	6/15/23 17:00	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Joshua Pribe	National Institute of Aerospace, Hampton, Virgnia, United States of America	TRANSIENT CREEP-FATIGUE CRACK GROWTH IN CREEP-DUCTILE AND CREEP-BRITTLE MATERIALS: APPLICATION TO ALLOY 617 AND ALLOY 718	Symp18-Th3-3	6/15/23 17:20	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Mahmoud Mostafavi	Univeristy of Bristol, United Kingdom of Great Britain and Northern Ireland	IN-SILICO QUALIFICATION OF MATERIALS [Keynote]	Symp18-F1-1	6/16/23 10:30	40	Symposium 18: Mechanical Behavior in Nuclear Materials
Yong Gyun Shin	Kyung Hee University, Korea (Republic of)	INTEGRITY EVALUATION OF SPENT NUCLEAR FUEL CLADDING IN USE OF MACHINE LEARNED EMBRITTLED PROPERTIES	Symp18-F1-2	6/16/23 11:10	20	Symposium 18: Mechanical Behavior in Nuclear Materials
B.N. Rao	Indian Institute of Technology , Madras, Chennai, India	CRITICAL CRACK SIZE OF A PROTOTYPE PIPE BEND UNDER CYCLIC LOADING	Symp18-F1-3	6/16/23 11:30	20	Symposium 18: Mechanical Behavior in Nuclear Materials
Donato Firrao	Politecnico di Torino, Italy	FATIGUE FRACTURE ASSESSMENT OF HIGH CARBON STEEL COMPONENTS	Symp19-M1-1	6/12/23 10:30	20	Symposium 19: Failure Analysis and Prevention
Laurent Ponson	Tortoise, Paris, France	STATISTICAL FRACTOGRAPHY: THE MISSING LINK BETWEEN FRACTURE MECHANICS AND FAILURE ANALYSIS	Symp19-M1-2	6/12/23 10:50	20	Symposium 19: Failure Analysis and Prevention
Matthew Fox	National Transportation Safety Board, Washington, DC, United States of America	NTSB ACCIDENT INVESTIGATIONS INVOLVING FATIGUE FRACTURES INITIATING FROM SUBSURFACE DEFECTS	Symp19-M1-3	6/12/23 11:10	20	Symposium 19: Failure Analysis and Prevention
Ronald Parrington	Engineering Systems Inc. (ESi), Plymouth, Minnesota, United States of America	TESTING AND ANALYSIS TO UNDERSTAND AND PREVENT JET FIGHTER MID-FLIGHT ACRYLIC CANOPY FAILURES	Symp19-M1-4	6/12/23 11:30	20	Symposium 19: Failure Analysis and Prevention

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Hadj Meliani Mohammed	Hadj Meliani Mohammed, Chlef, Algeria	STUDY OF NEW GREEN INHIBITOR FOR PROTECTION AGAINST CORROSION IN PIPE STEEL TRANSPORTATION	Symp19-M2-1	6/12/23 14:00	20	Symposium 19: Failure Analysis and Prevention
Erik M Mueller	National Transportation Safety Board, Washington, DC, United States of America	INVESTIGATION AND REMEDIATION OF A COMPLEX FAILURE OF A HIGH-STRENGTH STEEL FAN MIDSHAFT FROM A GENX ENGINE	Symp19-M2-2	6/12/23 14:20	20	Symposium 19: Failure Analysis and Prevention
Pierre Dupont	UMONS - Faculté Polytechnique de MONS (FPMs), DOUR, Belgium	A NEW ORIGINAL SCHEME FOR PREVENTING NOWADAYS MODERN MACHINE DESIGN FAILURES	Symp19-M2-3	6/12/23 14:40	20	Symposium 19: Failure Analysis and Prevention
Mohammed Naziru Issahaq	Exponent Inc., Atlanta, Georgia, United States of America	MUZZLELOADER FAILURE ANALYSES	Symp19-M2-4	6/12/23 15:00	20	Symposium 19: Failure Analysis and Prevention
Pierre Dupont	UMONS - Faculté polytechnique de MONS (FPMs), DOUR, Belgium	ON THE GHISLENGHIEN'S DISASTER, BELGIUM, JULY 2004 : A DRAMATIC PIPELINE'S (S) ... CRA ... (TCH) ... CK ?!	Symp19-M2-5	6/12/23 15:20	20	Symposium 19: Failure Analysis and Prevention
Ian Perrin	Triaxis Power Consulting LLC, Iron Station, United States of America	COMPONENT INTEGRITY IMPLICATIONS FROM CREEP DAMAGE TOLERANCE AND FRACTURE CHARACTERISTICS OF CREEP STRENGTH ENHANCED FERRITIC STEELS	Symp20-M2-1	6/12/23 14:00	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Ashok Saxena	University of Arkansas, Marietta, United States of America	A PHENOMENOLOGICAL MODEL FOR CREEP CRACK GROWTH BEHAVIOR IN FERRITIC STEELS	Symp20-M2-2	6/12/23 14:20	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Go Ozeki	Teikyo Univerisity, Tokyo, Japan	MEASUREMENT METHOD OF CYCLE SEQUENTIAL CHARACTERISTICS OF STRESS REDUCTION UNDER STRAIN-CONTROLLED CREEP-FATIGUE CONDITIONS USING CIRCULAR SHARP NOTCHED ROUND BAR SPECIMEN	Symp20-M2-3	6/12/23 14:40	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Raheeg Ragab	University Of Nottingham, United Kingdom of Great Britain and Northern Ireland	ON THE CYCLIC SOFTENING AND RATCHETING BEHAVIOUR OF A CSEF GAS TURBINE ROTOR STEEL AT 600 C	Symp20-M2-4	6/12/23 15:00	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Alex Jennion	University of Virginia, Charlottesville, United States of America	CONTRIBUTIONS OF OXIDATION AND CREEP TO HIGH TEMPERATURE FATIGUE CRACK SUSCEPTIBILITY IN WASPALOY	Symp20-M2-5	6/12/23 15:20	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Richard Neu	Georgia Institute of Technology, Atlanta, Georgia, United States of America	LCF AND TMF OF SINGLE-CRYSTAL AND DIRECTIONALLY-SOLIDIFIED NI-BASE SUPERALLOYS PREDICTED USING A PROBABILISTIC PHYSICS-GUIDED NEURAL NETWORK	Symp20-M2-6	6/12/23 15:40	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Emilio Martinez-Paneda	Imperial College London, United Kingdom of Great Britain and Northern Ireland	COMPUTATIONAL PREDICTIONS OF HYDROGEN ASSISTED FRACTURES [Keynote]	Symp20-M3-1	6/12/23 16:30	25	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Shane Finneran	DNV, Dublin, Ohio, United States of America	REPURPOSING EXISTING NATURAL GAS PIPELINES FOR HYDROGEN SERVICE	Symp20-M3-2	6/12/23 16:55	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Ramgopal Thodla	DNV, Dublin, Ohio, United States of America	FATIGUE CRACK GROWTH RATE OF VINTAGE PIPELINE STEELS IN GASEOUS HYDROGEN - EFFECT OF FREQUENCY AND □K	Symp20-M3-3	6/12/23 17:15	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments
Nils-Erik Sanhen	Hamburg University of Technology, Hamburg, Germany	FATIGUE LIFE PREDICTION OF WELDED JOINTS AT SUB-ZERO TEMPERATURES USING MODIFIED PARIS-ERDOGAN PARAMETERS	Symp20-M3-4	6/12/23 17:35	20	Symposium 20: Materials Data in Assessment of Components Operating in Extreme Environments

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Hung-Jue Sue	Texas A&M University, College Station, TX, United States of America	ROLE OF INTERFACE ON FRACTURE BEHAVIOR OF POLYMER NANOCOMPOSITES [Keynote]	Symp21-M1-1	6/12/23 10:30	40	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Nathan Mcmullen	Case Western Reserve University, Cleveland, Ohio, United States of America	FRACTURE OF UN-NOTCHED BIAXIALLY COLD ROLLED HIGH DENSITY POLYETHYLENE IN TENSION	Symp21-M1-2	6/12/23 11:10	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Guillaume De Luca	Sorbonne Université & Tortoise, Paris, France	POLYMERIC MATERIALS TOUGHNESS MEASUREMENT BY STATISTICAL FRACTOGRAPHY	Symp21-M1-3	6/12/23 11:30	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Zoltan Major	Johannes Kepler University Linz, Austria	FRACTURE AND FATIGUE OF SELECTIVE LASER SINTERED POLYMERIC LATTICE STRUCTURES	Symp21-M1-4	6/12/23 11:50	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Christoph Waly	Montanuniversitaet Leoben, Leoben, Austria	INVESTIGATION OF THE CRACK DEFLECTION/PENETRATION PROBLEM IN EXTRUSION-BASED ADDITIVELY MANUFACTURED POLYMERIC MATERIALS	Symp21-M1-5	6/12/23 12:10	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Lucien Laiarinandrasana	Centre for Material Sciences - Mines Paris - PSL University, Evry Cedex, France	THERMAL AND VOID VOLUME FRACTION PROFILES IN 3D FOR A DENT SPECIMEN OF NEAT AND GLASS OF SYNTACTIC POLYPROPYLENE MATERIALS	Symp21-M2-1	6/12/23 14:00	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Sumit Khatri	Texas A&M University, College Station, Texas, United States of America	FEM MODELING ON SCRATCH BEHAVIOR OF MICRO-PATTERNED POLYMER SURFACE	Symp21-M2-2	6/12/23 14:20	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Vincent Fournier	ENSAM - I2M, Bordeaux, France	FULL PMMA KINETIC LAW OF FRACTURE: FROM QUASI-STATIC TO DYNAMIC REGIME	Symp21-M2-3	6/12/23 14:40	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Md Shafiqul Islam	Blekinge Institute of Technology, Karlskrona, Sweden	MEASUREMENT AND FE-MODELING OF THE EFFECTS OF STRESS TRIAXIALITY ON THE NECK INITIATION AND FAILURE OF HIGH-DENSITY POLYETHYLENE	Symp21-M2-4	6/12/23 15:00	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Maxime Wetta	Arts et Metiers Institute of Technology, Université de Bordeaux, CNRS, INRAE, INP, I2M, HESAM Université, Talence, France	DISK-SHAPED COMPACT TENSION & COMPACT TENSION TESTS ON QUASI-BRITTLE THICK CELLULAR STRUCTURAL ADHESIVE: EXPERIMENTAL AND NUMERICAL ANALYSES	Symp21-M2-5	6/12/23 15:20	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Cristian Ovalle	Mines Paris, PSL University, Centre for Material Sciences (MAT), UMR7633 CNRS, 91003 Evry, France	DUCTILE FAILURE OF A PLASTICIZED POLYVINYLCHLORIDE DURING AIR BAG DEPLOYMENT	Symp21-M2-6	6/12/23 15:40	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
John Bassani	University of Pennsylvania, Philadelphia, Pennsylvania, United States of America	RUPTURE OF HYDROGELS	Symp21-M3-1	6/12/23 16:30	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Tobias Gehling	Polymer Competence Center Leoben, Austria	THE IMPACT OF CURING TIME AND MOLD TEMPERATURE ON THE FATIGUE BEHAVIOR OF NITRILE BUTADIENE RUBBER	Symp21-Tu1-1	6/13/23 10:30	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Paul Freudenthaler	Johannes Kepler University, Linz, Austria	ENVIRONMENTAL STRESS CRACKING RESISTANCE (ESCR) OF RECYCLED PP (RPP) FROM AND FOR YOGURT CUPS	Symp21-Tu1-2	6/13/23 10:50	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Mahavir Singh	Purdue University, West Lafayette, United States of America	STRUCTURAL STUDY OF AP-HTPB COMPOSITE UNDER IMPACT LOADING	Symp21-Tu1-3	6/13/23 11:10	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Norman Osa-Uwagboe	Loughborough University, Loughborough, United Kingdom of Great Britain and Northern Ireland	SEAWATER DEGRADATION IN POLYMER-BASED COMPOSITE SANDWICH STRUCTURES.	Symp21-Tu1-4	6/13/23 11:30	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Alicia Salazar	Universidad Rey Juan Carlos, Móstoles, Madrid, Spain	INFLUENCE OF AGEING ON THE STRUCTURAL INTEGRITY OF CARBOXYL-TERMINATED POLYBATUDIENE SOLID ROCKET PROPELLANT	Symp21-Tu1-5	6/13/23 11:50	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Wei Li	Beijing Institute of Technology, Beijing, China	IN-SITU EXPERIMENTAL INVESTIGATION OF FATIGUE CRACK PROPAGATION MECHANISMS IN POLYMER ELECTROLYTE MEMBRANE OF FUEL CELL UNDER OVERLOADING EFFECT	Symp21-Tu1-6	6/13/23 12:10	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Paul J. Freudenthaler	Johannes Kepler University Linz, Linz, Austria	INFLUENCE OF TEMPERATURE AND TESTING MEDIA ON FATIGUE CRACK GROWTH PERFORMANCE OF POLYETHYLENE TESTED VIA CRACKED ROUND BAR SPECIMEN [Keynote]	Symp21-Tu2-1	6/13/23 14:00	40	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Hengxi Chen	Texas A&M University, College Station, TX, United States of America	REACTIVE TELECHELIC POLYETHERIMIDE TOUGHENED TETRAFUNCTIONAL EPOXY	Symp21-Tu2-2	6/13/23 14:40	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Francesco Baldi	University of Brescia, Italy	FRACTURE CHARACTERIZATION OF DUCTILE POLYMERS: RECENT APPLICATIONS OF THE LOAD SEPARATION CRITERION	Symp21-Tu2-3	6/13/23 15:00	20	Symposium 21: Fracture in Polymer-based Materials: Structure-Property Relationships
Kevin Jacob	IIT Bombay, Mumbai, India	FRACTURE BEHAVIOUR OF HPT PROCESSED MARAGING STEEL 250 [Poster]	Post23-TuP-1	6/13/23 18:00	60	Poster Session
Nilesh Vishe	The University of Alabama, Tuscaloosa, United States of America	IN-SITU HEALING OF STATIC AND FATIGUE CRACK IN THERMOSET FIBER-REINFORCED COMPOSITES I [Poster]	Post23-TuP-2	6/13/23 18:00	60	Poster Session
Sankha Subhra Aditya	The University of Alabama, Tuscaloosa, United States of America	APPLICATION OF CONCURRENT ATOMISTIC-CONTINUUM COUPLING TO STUDY FRACTURE IN POLYMER NANOCOMPOSITES [Poster]	Post23-TuP-3	6/13/23 18:00	60	Poster Session
Shenghu Ding	Ningxia University, Yinchuan, China	STUDY ON THERMOMAGNETIC COUPLING FRACTURE OF HIGH TEMPERATURE SUPERCONDUCTOR MULTILAYER STRUCTURES [Poster]	Post23-TuP-4	6/13/23 18:00	60	Poster Session
Vigneshwaran Radhakrishnan	Texas A&M University, College Station, Texas, United States of America	THREE-DIMENSIONAL SIMULATIONS OF DUCTILE FRACTURE UNDER ARBITRARY LOADINGS [Poster]	Post23-TuP-5	6/13/23 18:00	60	Poster Session
Michael Zimnoch	UNC Charlotte, Concord, North Carolina, United States of America	EFFECTS OF SERVICE AGE ON THERMAL-MECHANICAL FATIGUE OF A 2.25CR-1MO STEAM HEADER [Poster]	Post23-TuP-6	6/13/23 18:00	60	Poster Session
Karl Michael Kraemer	Technical University Darmstadt, Darmstadt, Germany	CRACK GROWTH UNDER THERMO-MECHANICAL FATIGUE IN NICKEL CAST ALLOYS [Poster]	Post23-TuP-7	6/13/23 18:00	60	Poster Session
Sahil Wajid	Texas A&M University, College Station, Texas, United States of America	A HYBRID MODEL OF DUCTILE FAILURE ACCOUNTING FOR STRAIN HARDENING [Poster]	Post23-TuP-8	6/13/23 18:00	60	Poster Session
Mohamed Akram Mechter	Polytechnique Montreal, Québec, Canada	FLOWFORMING TO IMPROVE THE FATIGUE LIFE OF IMPLANTS? [Poster]	Post23-TuP-9	6/13/23 18:00	60	Poster Session
Mahavir Singh	Purdue University, West Lafayette, Indiana, United States of America	FULL FIELD MEASUREMENT OF SHOCK COMPRESSION DEFORMATION ACROSS THE CRYSTAL BINDER INTERFACE USING TIME RESOLVED RAMAN SPECTROSCOPY [Poster]	Post23-TuP-10	6/13/23 18:00	60	Poster Session

ICF15 - Session Time and Length Information for All Talks and Posters

(Sorted by Symposium Number)

Presenting Author	Presenter Affiliation	Title	Session	Talk Date and Time	Length (minutes)	Symposium Number & Title
Benjamin Elbrecht	Clemson University, Clemson, South Carolina, United States of America	GRAIN BOUNDARY SLIDING AND INTRAGRANULAR SLIP MEASUREMENT IN-SITU DURING CREEP [Poster]	Post23-TuP-11	6/13/23 18:00	60	Poster Session
Aditya Jhunjhunwala	University of California Davis, United States of America	SIMULATING FRACTURE AND POST-FRACTURE RESPONSE OF WELDED COLUMN SPLICES [Poster]	Post23-TuP-12	6/13/23 18:00	60	Poster Session
Joshua Herrington	Texas A&M University, College Station, TX, United States of America	AN INVESTIGATION OF LODE EFFECTS ON DUCTILE FRACTURE [Poster]	Post23-TuP-13	6/13/23 18:00	60	Poster Session
Pharindra Pathak	Auburn University, Auburn, Alabama, United States of America	RAPID FATIGUE CHARACTERIZATION OF ADDITIVELY MANUFACTURED POLYMER COMPOSITES USING INFRARED THERMOGRAPHY. [Poster]	Post23-TuP-14	6/13/23 18:00	60	Poster Session
Huajian Gao	Nanyang Technological University, Singapore	STRONG AND TOUGH FIBROUS HYDROGELS REINFORCED BY MULTISCALE HIERARCHICAL STRUCTURES WITH MULTIMECHANISMS [Poster]	Post23-TuP-15	6/13/23 18:00	60	Poster Session
Abigail Eaton	University of Arkansas, Fayetteville, United States of America	FRACTURE PROPERTIES OF MULTIDIMENSIONAL CARBON-BASED MATERIALS [Poster]	Post23-TuP-16	6/13/23 18:00	60	Poster Session
Lihe Qian	Yanshan University, Qinhuangdao, Hebei province, China	UNUSUAL STRESS SERRATIONS AND PLC BANDS IN HIGH MANGANESE AUSTENITIC FE-MN-C TWIP STEEL [Poster]	Post23-TuP-17	6/13/23 18:00	60	Poster Session
Sheng Sun	Shanghai University, Shanghai, China	OPTIMIZATION OF NANOPOROUS METALLIC ACTUATORS BY COMBINING MULTISCALE CALCULATIONS AND MACHINE LEARNING [Poster]	Post23-TuP-18	6/13/23 18:00	60	Poster Session
Shengwang Hao	Yanshan University, Qinhuangdao, Hebei Province, China	COMPETITION BETWEEN NECKING AND PRE-CUT PROPAGATION IN FRACTURE OF HIGH-DENSITY POLYETHYLENE REVEALED BY TIME COURSES OF STRAINS [Poster]	Post23-TuP-19	6/13/23 18:00	60	Poster Session
Shengwang Hao	Yanshan University, Qinhuangdao, Hebei Province, China	TRANS-SCALE PROPERITES OF PRECURSORY ACCELERATING DEFORMATION IN CATASTROPHIC FAILURE OF UNIAXIALLY COMPRESSED SANDSTONES [Poster]	Post23-TuP-20	6/13/23 18:00	60	Poster Session
Avinaya Tripathi	Arizona State University, Tempe, United States of America	INFLUENCE OF PRINT PARAMETERS ON FRACTURE RESPONSE OF PLAIN AND FIBER-REINFORCED 3D-PRINTED BEAMS [Poster]	Post23-TuP-21	6/13/23 18:00	60	Poster Session
Filipe Da Rocha Chaves	ENS Paris-Saclay, Paris, France	AN INTEGRATED APPROACH TO DIGITAL IMAGE CORRELATION APPLIED TO A NOVEL THREE ACTUATORS FRETTING FATIGUE RIG [Poster]	Post23-TuP-22	6/13/23 18:00	60	Poster Session
David Cook	University of California Berkeley, United States of America	FRACTURE OF MULTI-PRINCIPAL ELEMENT ALLOYS [Poster]	Post23-TuP-23	6/13/23 18:00	60	Poster Session
Elnaz Haddadi	University of North Carolina at Charlotte, United States of America	FRACTURE PROPERTIES OF TETRAGRAPHENE UNDER MIXED MODE LOADING [Poster]	Post23-TuP-24	6/13/23 18:00	60	Poster Session