

Conference on
HIGH TEMPERATURE STRUCTURAL MATERIALS 2020
Feb 3-5, 2020
Faculty Hall, Indian Institute of Science, Bangalore

FEB 3RD, MONDAY		
08:30	REGISTRATION	
09:15	INAUGURATION	
<i>SESSION A SESSION CHAIR: Prof. SATYAM SUWAS</i>		
09:30	Dr. S. TARAFDER (NML)	FATIGUE & FRACTURE BEHAVIOUR OF PRESSURE BOUNDARY MATERIALS
10:15	Dr. DHEEPA SRINIVASAN (P&W)	GAS TURBINE COMPONENT LIFING
10:45	TEA/COFFEE	
11:15	Dr. SWATI BISWAS (GTRE)	MECHANICAL BEHAVIOUR OF DIRECTIONALLY SOLIDIFIED Ni BASED SUPERALLOY IN GAS TURBINE ENGINE APPLICATION
12:00	Prof. S. MAKINENI (IISc)	INTERACTION OF DEFECTS AND SOLUTES IN CREEP DEFORMED SUPERALLOYS
12:30	LUNCH (AT THE MAIN GUEST HOUSE LAWNS)	
<i>SESSION B SESSION CHAIR: Prof. T.A. ABINANDANAN</i>		
14:00	Prof. VIKRAM JAYARAM (IISc)	MECHANICAL RELIABILITY IN HIGH TEMPERATURE COATINGS
14:45	Prof. PRATIK RAY (IIT-RPR)	EFFECT OF AlN SUBSTITUTIONS ON THE OXIDATION BEHAVIOR OF ZrB ₂ -SiC COMPOSITES
15:05	Mr. SHOBIT SINGH (IISc)	A POSSIBLE EXPLANATION FOR HARPER-DORN CREEP
15:25	TEA/COFFEE	
15:45	Dr. B.V.A PATNAIK (GTRE)	IMPORTANT ASPECTS OF LIFE ASSESSMENT, DAMAGE MODELLING AND PROGNOSTICS OF GT CRITICAL PARTS.
16:30	Dr. VANI SHANKAR (IGCAR)	HIGH TEMPERATURE CYCLIC DEFORMATION IN NUCLEAR POWER PLANT MATERIALS
17:15	Mr. SUBHAM MRIDHA (IISc)	MULTISCALE MODELING OF VACANCY SEGREGATION AND CLUSTERING AT GRAIN BOUNDARIES
17:35	HIGH TEA & POSTER SESSION* (EXHIBITION HALL)	

DINNER AT 730 PM (AT THE MAIN GUEST HOUSE LAWNS)

FEB 4th		
SESSION C SESSION CHAIR: Dr. VANI SHANKAR		
09:30	Prof. ATUL CHOKSHI (IISc)	CREEP IN NANOCRYSTALS
10:15	Mr. VINEESH K.P (NIT, CALICUT)	EFFECT OF TENSILE AND CREEP PROPERTIES ON MANUFACTURING RESIDUAL STRESSES OF RAILWAY WHEELS
10:35	TEA/COFFEE	
11:00	Dr. S.V. RAMANAMURTHY (GTRE)	ROLE OF ADVANCE MATERIALS AND PROCESSES FOR ADVANCED HIGH THRUST TO WEIGHT RATIO ENGINES
11:45	Dr. RAGU KANNUSAMY (GARRETT)	CHALLENGES IN THE DEVELOPMENT OF MATERIAL CONSTITUTIVE MODEL AND TMF LIFE MODELS FOR TURBOCHARGERS FOR VERY HIGH TEMPERATURE APPLICATIONS
12:30	PHOTO-SESSION (MAIN BUILDING COURTYARD), LUNCH (MAIN GUEST HOUSE LAWNS)	
SESSION D SESSION CHAIR: Prof. RAVI SANKARA KOTTADA		
14:00	Mr. SYED IDREES AFZAL JALALI (IISc)	HIGH THROUGHOUT CREEP TESTING ON CANTILEVERS USING DIGITAL IMAGE CORRELATION
14:45	Mr. PRIYA GOEL (IISc)	MODELLING OF NON-STEADY STATE CREEP BEHAVIOR USING CANTILEVER IN BENDING
15:05	TEA/COFFEE	
15:30	Dr. G. V. PRASAD REDDY (IGCAR)	CREEP AND CREEP-FATIGUE INTERACTION BEHAVIOUR OF 316LN SS: ROLE OF NITROGEN CONTENT
16:15	Dr. VIKAS KUMAR SAXENA (DMRL)	TBA
17:00	Dr. KAUSTAV BARAT (NAL)	DIFFERENTIAL RATE BASED LIFING METHODOLOGIES FOR CREEP FATIGUE INTERACTION
17:20	Mr. RAJESH KUMAR RAI (IISc)	LOW CYCLE FATIGUE BEHAVIOR OF A POLYCRYSTALLINE NI-BASE SUPERALLOY: DAMAGE MICRO-MECHANISMS

CONFERENCE DINNER (AT HOTEL BANGALORE INTERNATIONAL)

FEB 5th		
SESSION E		SESSION CHAIR: Prof. SUBODH KUMAR
09:30	Prof. RAVI SANKAR KOTTADA (IIT-M)	CREEP OF RARE-EARTH-FREE CAST Mg-BASED ALLOYS
10:15	Prof. S. KARTHIKEYAN (IISc)	MODELING BURST AND CONTAINMENT IN AUTOMOBILE TURBOCHARGERS
10:45	TEA/COFFEE	
11:05	PROF. SASWATA BHATTACHARYA (IIT-H)	EVOLUTION AND SCALING BEHAVIOR OF INTERFACIAL DISLOCATION NETWORK DURING CREEP OF PRECIPITATION STRENGTHENED ALLOYS
11:50	Mr. SHAILENDRA KUMAR VERMA (IISc)	MODELING SIZE MISFIT AND MODULUS STRENGTHENING IN Co-BASE SUPERALLOYS.
12:10	Mr. BHALCHANDRA BHADAK (IISc)	PREDICTION OF EQUILIBRIUM SHAPES OF THE PRECIPITATE DUE TO COHERENCY STRESSES USING PHASE-FIELD TECHNIQUE
12:30	LUNCH (MAIN GUEST HOUSE LAWNS)	
SESSION F		SESSION CHAIR: Dr. PAVAN KUMAR
14:00	Prof. DIPANKAR BANERJEE (IISc)	EFFECT OF TEMPERATURE AND STRAIN RATE ON SOLUTE-DISLOCATION INTERACTIONS IN IMI-834
14:45	Dr. N.T.N.B KOUNDINYA (IIT-M)	SERRATED FLOW IN HAYNES-188
15:05	TEA/COFFEE	
15:30	Prof. RAJESH KORLA (IIT-H)	DESIGN OF HIGH ENTROPY ALLOYS FOR HIGH TEMPERATURE APPLICATIONS
16:15	DR. K.V. VAMSI (UCSB)	TAILORING MULTI-PRINCIPAL ELEMENT (MPE) ALLOY COMPOSITIONS BASED ON COMPETING DEFORMATION MECHANISMS
16:45	Ms. B. DIVYA SRI (IISc)	CREEP DEFORMATION OF Ni-BASED CONCENTRATED SOLID SOLUTION ALLOYS
17:05	Mr. R.J. VIKRAM (IISc)	HIGH TEMPERATURE MECHANICAL BEHAVIOR OF AM EUTECTIC HIGH ENTROPY ALLOYS
17:25	CLOSING AND VOTE OF THANKS	

HIGH TEA (EXHIBITION HALL)

LIST OF POSTER PRESENTERS

1. SAZID KHAN (IISc)
2. ANANYA TRIPATHI (IISc)
3. SABARI RAJAN S (IIT-M)
4. ABHINAV KUMAR KARNATI (IIT-M)
5. PRASHANT HUMNABAD (SIR MVIT)
6. KOTLA SAIRAM GOUD (IIT-H)
7. K. REVANNA (GEC, CHAMARAJANAGAR)
8. ESAKKIRAJA. N (IISc)
9. SOUMYA BANDYOPADHYAY (IIT-H)
10. TUSHAR JOGI (IIT-H)
11. KISHORE M (GARRETT)
12. AHMED SANIN (IISc)
13. FAIZAN HIZARI (IISc)
14. MANU S. MOHAN (IISc)
15. ANBUKKARASI R (IISc)
16. APARAJITA PRAMANIK (IISc)
17. JICHIL MAJHI (NITR)