

## Programme Schedule FFIA 2021

### DAY 1: 9 Nov 2021

<b>9:00 - 9:55am</b>	<b>Inaugural Function</b>	
<b>Technical Session 1</b>		<b>Chaired By: K.K. Ray</b>
<b>10:00-10:45am</b>	<b>Fatigue &amp; Fracture Behaviour of Improved High-Temperature Materials for the Indian Fast Breeder Reactor and Advanced Ultra Super Critical Power Plant Programmes</b>	<b>Dr. A. K. Badhuri</b> <i>Formerly-Director, Indira Gandhi Center for Atomic Research, Kalpakkam, India</i>
<b>11:00-11:45am</b>	<b>Structural Integrity of Defence Platforms — An Integrated Approach</b>	<b>Dr. Vikas Kumar Saxena</b> <i>Formerly -Director, Defence Metallurgical Research Laboratory, Hyderabad, India</i>
<b>12:00 - 2:00 pm</b>	<b>Lunch Break</b>	
<b>Technical Session 2</b>		<b>Chaired By: Sandip Ghosh Chowdhury</b>
<b>2:00-2:45pm</b>	<b>Fatigue &amp; Fracture Mechanics: Retrospective &amp; Prospective</b>	<b>Dr. N. Eswara Prasad</b> <i>Director, Defence Materials and Stores R&amp;D Establishment, Kanpur, India</i>
<b>3:00 - 3:45pm</b>	<b>Multi-Sensor Techniques to Study Fatigue Damage Progression in Structural Materials</b>	<b>Prof. Raghu V Prakash</b> <i>Indian Institute of Technology- Madras, Chennai, India</i>
<b>4:00-6:00pm</b>	<b>Tea Break</b>	
<b>Technical Session 3</b>		<b>Chaired By: S.Tarafder</b>
<b>6:00-6:45pm</b>	<b>Failure Mechanisms of Printed Circuit Heat Exchangers under High-Temperature Loading of Generation IV Nuclear Power Plants</b>	<b>Prof. Tasnim Hassan</b> <i>North Carolina State University, USA</i>
<b>7:00-7:45pm</b>	<b>Structural Integrity Issues in Designing Pressure Vessels for Storing Gaseous Hydrogen at Ultra-high Pressures</b>	<b>Prof Ashok Saxena</b> <i>University of Arkansas, USA</i>
<b>8:00-8:45pm</b>	<b>A New Two-Parameter Fatigue Crack Driving Force and its Application to FCG Analysis</b>	<b>Prof. Daniel Kujawski</b> <i>Western Michigan University, USA</i>
<b>End of Day 1 Programme</b>		

**DAY 2: 10 Nov 2021**

<b>Technical Session 4</b>		<b>Chaired By: Subir Bhaumik</b>
<b>9:30-10:15am</b>	<b>Emerging NDT Technologies for Asset Inspection Applications</b>	<b>Prof. K. Balasubramanian</b> <i>Indian Institute of Technology-Madras, Chennai, India</i>
<b>10:30-11:15am</b>	<b>An Improved Indentation Algorithm to Characterize Materials</b>	<b>Dr. J. Chattopadhyay</b> <i>Bhabha Atomic Research Centre, Mumbai, India</i>
<b>11:30-11:45am</b>	<b>Tea Break</b>	
<b>Technical Session 5</b>		<b>Chaired by : B.K. Dutta</b>
<b>11:45 - 12:30 pm</b>	<b>Unraveling the Cause of an Aircraft Accident</b>	<b>Dr. Subir Bhaumik</b> <i>National Aerospace Laboratories, Bengaluru, India</i>
<b>12:45-1:30pm</b>	<b>Damage Evolution During Fracture Processes</b>	<b>Dr. S. Tarafder</b> <i>National Metallurgical Laboratory, Jamshedpur, India</i>
<b>1:45-2:30pm</b>	<b>Lunch Break</b>	
<b>Technical Session 6</b>		<b>Chaired By: Bhanu Sankara Rao</b>
<b>2:30-3:15pm</b>	<b>Structural Integrity of 3D Printed Metals</b>	<b>Prof. U. Ramamurthy</b> <i>Nanyang Technological University, Singapore</i>
<b>3:30 - 4:15pm</b>	<b>Fracture and Fatigue issues with High Entropy and Allied Alloys</b>	<b>Prof. K.K. Ray</b> <i>Formerly -Prof, Indian Institute of Technology, Kharagpur, India</i>
<b>4:30 - 5:30pm</b>	<b>Tea Break</b>	
<b>Technical Session 7</b>		<b>Chaired By: J. Chattopadhyay</b>
<b>5:30 - 6:15pm</b>	<b>Evaluating Failure Mechanisms in Aeroengine and Turbine Blade and Disc Materials: Effects of Service Environment</b>	<b>Prof. Philippa Reed</b> <i>University of Southampton, UK</i>
<b>6:30 -7:15pm</b>	<b>Towards a New Fatigue Crack Growth Testing Practice That Accounts for Load History Effects</b>	<b>Dr. R. Sunder</b> <i>Instron-BiSS, Moscow, Russian Federation</i>
<b>7:30 - 8:15pm</b>	<b>Aging Aircraft Systems and Components: Physics of Damage and Failure</b>	<b>Dr. A. Kumar</b> <i>Tecsis Corporation, Ontario, Canada</i>
<b>End of Day 2 Programme</b>		

**DAY 3: 11 Nov 2021**

<b>Technical Session 8</b>		<b>Chaired By: Raghu V Prakash</b>
<b>9:30-10:15am</b>	<b>Strain Controlled LCF of Superalloy 263 for Consideration in AUSC Plants</b>	<b>Dr. Banu Sankara Rao</b> <i>University of Hyderabad, India</i>
<b>10:30-11:15am</b>	<b>Advances in Small-Punch-Test Methodology</b>	<b>Dr. B. K. Dutta</b> <i>Bhabha Atomic Research Center, Mumbai, India</i>
<b>11:30-11:45am</b>	<b>Tea Break</b>	
<b>11:45 - 12:30 pm</b>	<b>Fatigue and Damage Tolerance Evaluation of Airframe Materials</b>	<b>Dr. C. M. Manjunatha</b> <i>National Aerospace Laboratories, Bengaluru, India</i>
<b>12:45-1:30pm</b>	<b>Characterisation of Fracture Toughness of 20MnMoNi55 Steel in DBT Region Through Experiment and FE Simulation</b>	<b>Prof. Sanjib Acharyya</b> <i>Jadavpur University, Kolkata, India</i>
<b>1:45-4:00pm</b>	<b>Lunch Break</b>	
		<b>Chaired by: I. Chatteraj</b>
<b>4:00-5:00pm</b>	<b>Panel Discussion and Valedictory Session</b>	
<b>5:00 - 5:15pm</b>	<b>Vote of Thanks</b>	