

## ICRS Technical Program

### ICRS Workshop on Stress Analysis

Tuesday, 5 August

9:00 a.m.–5:00 p.m.

See description in Workshop section.

### ICRS-8 DIFFRACTION TECHNIQUES: SYNCHROTRONS—MACROBEAM AND HIGH ENERGY I Wednesday p.m. PIKES PEAK

Chairs: **J. Almer**, Argonne National Laboratory, Argonne, IL  
**M. Daymond**, Queen's University, Kingston, Ontario, Canada

- 1:30 S140 *INVITED*—IN-SITU SYNCHROTRON X-RAY TOMOGRAPHY STUDIES OF CREEP VOID EVOLUTION IN BRASS ALLOYS AND STEELS  
**A.R. Pyzalla, K. Dzieciol, A. Isaac, F. Sket, A. Borbely, G. Suathoff**, Max-Planck-Institut fuer Eisenforschung GmbH, Duesseldorf, Germany  
**T. Buslaps, M. Di Michiel**, ESRF, Grenoble, France
- 2:00 S37 STUDY OF COMPUTERIZED TOMOGRAPHY AND STRAIN MAPPING IN THE VICINITY OF CRACK TIP IN STEEL MATERIAL USING SYNCHROTRON WHITE X-RAY  
**J. Shibano, T. Arai, S. Miura, M. Kobayashi**, Kitami Institute of Technology, Kitami, Hokkaido, Japan  
**K. Kajiwara**, JASRI, Sayo-cho, Hyogo, Japan  
**K. Kiriya, T. Shobu**, JAEA, Sayo-cho, Hyogo, Japan  
**K. Suzuki**, Niigata Univ., Niigata, Niigata, Japan
- 2:20 S109 SIMULTANEOUS MEASUREMENT OF IMAGING AND STRAIN OF FATIGUE CRACK IN STEEL BARS USING HIGH-ENERGY SYNCHROTRON RADIATION  
**T. Shobu**, Japan Atomic Energy Agency, Sayo-gun, Hyogo, Japan  
**K. Tanaka**, Meijo University, Nogoya-shi, Aichi, Japan
- 2:40 S39 CHARACTERIZATION OF A NEW BONE RECONSTRUCTED AT THE INTERFACES WITH IMPLANTS  
**A. Benmarouane, A. Lodini**, UFR Sciences Exactes et Naturelles, LACM, Reims, France  
**T. Buslaps, V. Honkimaki**, ESRF, Grenoble, France  
**T. Hansen**, ILL, Grenoble, France
- 3:00 BREAK
- 3:30 S14 *INVITED*—MEASURING STRAIN IN AMORPHOUS SOLIDS BY HIGH-ENERGY X-RAY SCATTERING  
**T.C. Hufnagel**, Johns Hopkins University, Baltimore, MD
- 4:00 S28 ELASTIC-PLASTIC DEFORMATION OF A POLYCRYSTALLINE TITANIUM ALLOY STUDIED IN SITU BY ENERGY-DISPERSIVE SYNCHROTRON X-RAY DIFFRACTION  
**S.Y. Zhang, X. Song, A. Korsunsky**, University of Oxford, Oxford, United Kingdom
- 4:20 S80 RESIDUAL STRESS DETERMINATION IN SURFACE TREATED ALUMINA SAMPLES APPLYING BEAM LIMITING MASKS  
**T. Manns, B. Scholtes**, University of Kassel, Kassel, Germany  
**A. Rothkirch**, HASYLAB at DESY, Hamburg, Germany
- 4:40 S30 THE BAUSCHINGER EFFECT IN NANOFILAMENTARY Cu/Nb WIRES EVIDENCED BY IN-SITU TENSILE TESTS UNDER SYNCHROTRON RADIATION  
**L. Thilly, P.O. Renault, V. Vidal**, University of Poitiers, PHYMAT, Futuroscope, France  
**S. Van Petegem, H. Van Swygenhoven**, Paul Scherrer Institute, Villigen, Switzerland  
**F. Lecouturier**, LNCMP, Toulouse, France