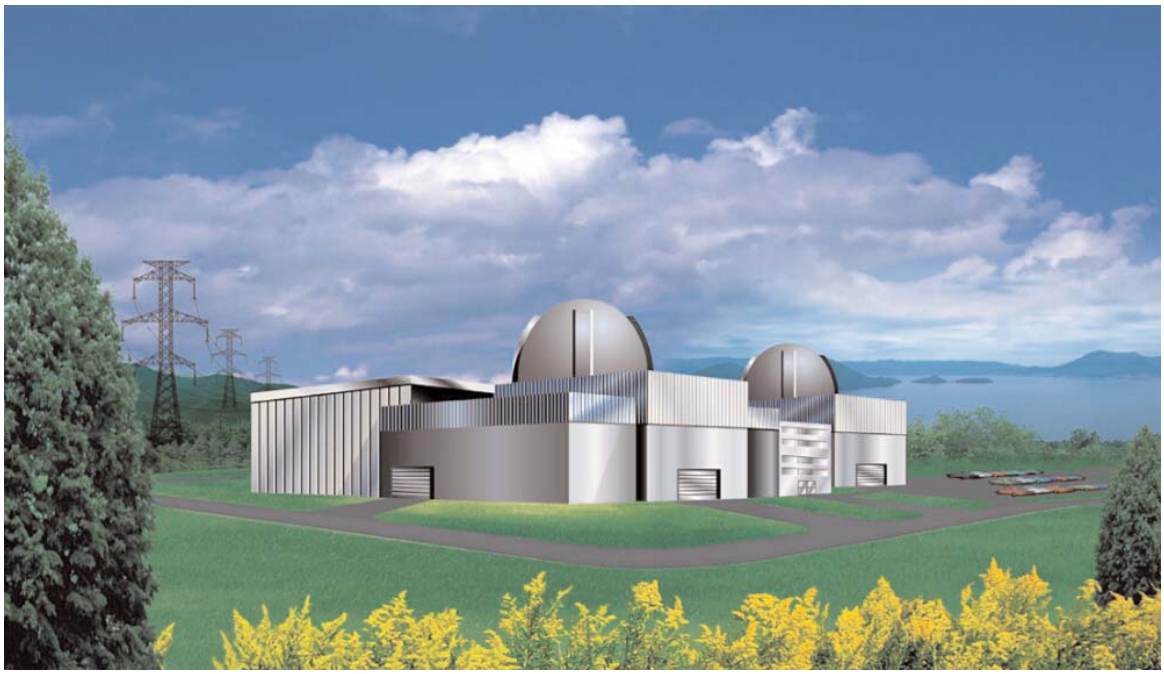
Final Program

PVP 2008

2008 Pressure Vessels & Piping Conference

"Nuclear Power Plant Renaissance; Change in Paradigm"



July 27–31, 2008
Marriott on Magnificent Mile
Chicago, Illinois USA

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SESSION TITLES BY SESSION BLOCK

Sessions are arranged in Session Blocks in the format 'X.VZ", where: 'X' indicates the Day, "V" indicates the Session Block, and "Z" indicates the Conference Session Room. Conference Session Rooms are as follows: A = Chicago Ballroom A; B = Chicago Ballroom B; C = Chicago Ballroom C; D = Chicago Ballroom D; E = Chicago Ballroom E; F = Chicago Ballroom F; G = Chicago Ballroom G; H = Chicago Ballroom H; J = Cook; K = Denver; L = Dupage; M = Houston; N = Kane; O = Los Angeles; P = McHenry; Q = Miami; R = Chicago Ballroom Foyer; S = Chicago Ballroom A/B/C/D/E; TC1 = Old Town; TC2 = River North; TC3 = Printers Row; TC4 = Lakeview; TC5 = Kansas City; TC6 = Scottsdale; TC7 = Wrigleyville; TC8 = Streeterville; TC9 = Halsted; TCA = Water Tower; TCB = O'Hare. The TC designations are the Technical Committee session references.

SUNDAY, JULY 27, 2008

Block 0.1: Sunday, July 27 (9:00 am – 11:30 am)

0.1D (TW-2-1) ANSYS WORKSHOP: RAPID STRUCTURAL ANALYSIS FOR PRESSURE VESSEL DESIGN

Block 0.2: Sunday, July 27 (1:00 pm – 3:30 pm)

0.2D (TW-2-2) ANSYS WORKSHOP: MODELING FLUID STRUCTURE INTERACTION

Block 0.3: Sunday, July 27 (4:00 pm – 6:00 pm)

0.3E (TW-1-1) SPECIAL TUTORIAL: THE ENGINEER IN THE WITNESS CHAIR

MONDAY, JULY 28, 2008

Block 1.1: Monday, July 28 (8:30 am – 10:15 am)

1.1F (MF-2-1) APPLICATIONS OF FRACTURE MECHANICS IN FAILURE ASSESSMENT—1
1.1G (MF-5-1) WELDING, RESIDUAL STRESS 1
1.1H (MF-7-1) FITNESS FOR SERVICE AND FAILURE ASSESSMENT
1.1J (CS-12-1) RECENT DEVELOPEMENTS IN EUROPEAN CODES AND STANDARDS—1
1.1K (FSI-3-1) PARTICLE-BASED SIMULATION APPROACHES
1.1L (DA-12-1) ELEVATED TEMPERATURE DESIGN
1.1M (OAC-4-1) THERMAL—1
1.1N (CS-4-1) ENVIRONMENTAL FATIGUE AND FRACTURE TOUGHNESS—I
1.1O (MF-8-1) MATERIALS FOR NUCLEAR REACTOR APPLICATIONS
1.1P (CT-2-1) DESIGN AND ANALYSIS OF BFJ-I
1.1Q (DA-9-1) THERMAL STRESSES IN PIPING AND VESSELS
1.1R (MF-21-1) NDE DEMONSTRATION FORUM—PART 1

Block 1.2: Monday, July 28 (10:30 am – 12:15 pm)

1.2R (MF-21-2) NDE DEMONSTRATION FORUM—PART 2
1.2S PVP OPENING CEREMONY AND PLENARY SESSION

Block 1.3: Monday, July 28 (2:00 pm – 3:45 pm)

1.3A (DA-3-2) DESIGN AND ANALYSIS OF COMPONENTS
1.3B (FSI-2-1) THERMAL-HYDRAULIC PHENOMENA AND INTERACTIONS WITH VESSELS, PIPING, AND COMPONENTS
1.3C (OAC-6-1) LNG SERVICE EXPERIENCES
1.3D (DA-4-1) REACTOR PRESSURE VESSEL—1
1.3E (TW-1-2) TECHNICAL TUTORIAL—IA: RECENT DEVELOPMENTS IN ANALYSIS AND DESIGN OF PIPING FOR SEISMIC LOADS
1.3F (MF-2-2) APPLICATIONS OF FRACTURE MECHANICS IN FAILURE ASSESSMENT—2
1.3G (MF-5-2) WELDING, RESIDUAL STRESS 2
1.3H (MF-15-1) ELEVATED FRACTURE I
1.3J (CS-11-1) FRACTURE AND FATIGUE FLAW ASSESSMENT OF JAPANESE WES 2805 RULE
1.3K (NDE-2-1) RECENT TECHNOLOGIES FOR DAMAGE EVALUATION
1.3L (CS-6-1) EMERGING CODES AND STANDARDS
1.3M (OAC-8-1) AGING MANAGEMENT AND LIFE EXTENSION I
1.3N (CS-4-2) ENVIRONMENTAL FATIGUE AND FRACTURE TOUGHNESS—II
1.3O (MF-8-2) MATERIALS DATA COLLABORATION AND USE FOR NUCLEAR REACTOR DEVELOPMENT I
1.3P (CT-2-2) DESIGN AND ANALYSIS OF BFJ-II
1.3Q (DA-2-1) DESIGN AND ANALYSIS OF PRESSURE VESSELS, HEAT EXCHANGERS AND COMPONENTS—1
1.3R (MF-21-3) NDE DEMONSTRATION FORUM—PART 3

Block 1.4: Monday, July 28 (4:00 pm – 5:45 pm)

1.4A (DA-3-3) DESIGN AND ANALYSIS OF COMPONENTS
1.4B (FSI-2-3) THERMAL-HYDRAULIC PHENOMENA AND INTERACTIONS WITH VESSELS, PIPING, AND COMPONENTS
1.4C (OAC-2-1) QUALIFICATION-MATERIAL-TESTING AND INTEGRITY
1.4D (DA-4-2) REACTOR PRESSURE VESSEL—2
1.4E (TW-1-3) TECHNICAL TUTORIAL—IB: RECENT DEVELOPMENTS IN ANALYSIS AND DESIGN OF PIPING FOR SEISMIC LOADS
1.4F (MF-2-3) APPLICATIONS OF FRACTURE MECHANICS IN FAILURE ASSESSMENT—3
1.4G (MF-5-3) WELDING, RESIDUAL STRESS 3
1.4H (FSI-4-1) FORUM ON FLUID TRANSIENTS, PAPERS
1.4J (CS-11-2) DESIGN, INSPECTION AND INTEGRITY EVALUATION IN JAPANESE AND KOREAN CODES
1.4K (NDE-2-2) NEW NDE APPLICATIONS I
1.4L (CS-2-1) STRUCTURAL INTEGRITY OF PRESSURE COMPONENTS
1.4M (OAC-7-1) CONTINUED SAFE OPERATION OF PIPING AND PIPING SUPPORTS

1.4N (MF-10-1) ENVIRONMENTAL FATIGUE AND FRACTURE TOUGHNESS
1.4O (MF-8-3) MATERIALS DATA COLLABORATION AND USE FOR NUCLEAR REACTOR DEVELOPMENT II
1.4P (CT-2-3) HIGH TEMPERATURE ANALYSIS OF BFJ
1.4Q (DA-2-2) DESIGN AND ANALYSIS OF PRESSURE VESSELS, HEAT EXCHANGERS AND COMPONENTS—2
1.4R (MF-21-4) NDE DEMONSTRATION FORUM—PART 4

TUESDAY, JULY 29, 2009

Block 2.1: Tuesday, July 29 (8:30 am – 10:15 am)

2.1E (NDE-3-1) SPENCER H. BUSH MEMORIAL LECTURE
2.1F (MF-16-1) STRUCTURAL INTEGRITY OF PIPELINES AND PRESSURE VESSELS—1
2.1G (MF-5-4) WELDING, RESIDUAL STRESS 4
2.1H (FSI-5-1) FLUID STRUCTURE INTERACTION AND SLOSHING: GENERAL INTERACTION
2.1J (CS-7-1) ASME CODE SECTION XI ACTIVITIES—1
2.1K (SPC-1-1) STUDENT PAPER COMPETITION 1-BS/MS LEVEL
2.1L (CS-3-1) FATIGUE ISSUES IN PRESSURE VESSELS—I
2.1M (OAC-4-3) STRUCTURAL—ANALYSIS
2.1N (DA-4-3) REACTOR PRESSURE VESSEL—3
2.1O (MF-17-1) SMALL-SCALE AND MINIATURE MECHANICAL TESTING
2.1P (HP-1-1) DESIGN & ANALYSIS
2.1Q (CT-4-1) ASSEMBLY OF BOLTED JOINTS I
2.1R (CT-16-1) PVP SOFTWARE DEMONSTRATION FORUM—PART 1

Block 2.2: Tuesday, July 29 (10:30 am – 12:15 pm)

2.2A (DA-3-4) DESIGN AND ANALYSIS OF PIPING AND PIPING COMPONENTS
2.2B (FSI-3-2) FLUID FLOW AND FLEXIBLE CONFINEMENTS
2.2C (OAC-6-2) FFS ASSESSMENT APPLICATION
2.2D (DA-4-4) REACTOR PRESSURE VESSEL—4
2.2E (NDE-6-1) BS + 30 : THE NEW PARADIGM FOR ENGINEERING LICENSURE IN THE US
2.2F (MF-2-4) APPLICATIONS OF FRACTURE MECHANICS IN FAILURE ASSESSMENT—4
2.2G (MF-5-5) WELDING, RESIDUAL STRESS 5
2.2H (MF-4-1) MATERIALS FOR HYDROGEN SERVICE—I
2.2J (CS-7-2) ASME CODE SECTION XI ACTIVITIES—2
2.2K (SPC-1-2) STUDENT PAPER COMPETITION 2-PH.D. LEVEL
2.2L (CS-3-2) FATIGUE ISSUES IN PRESSURE VESSEL DESIGN—II
2.2M (OAC-8-2) AGING MANAGEMENT AND LIFE EXTENSION II
2.2N (SE-11-1) FORUM ON SEISMIC DESIGN OF PIPING SYSTEMS FOR THE YEAR 2010
2.2O (MF-11-1) MANAGEMENT FOR WALL THINNING CAUSED BY FLOW ACCELERATED CORROSION
2.2P (HP-2-1) NEW AND EMERGING METHODS OF APPLICATION & ADVANCEMENT IN HIGH PRESSURE
2.2Q (CT-4-2) ASSEMBLY OF BOLTED JOINTS II
2.2R (CT-16-2) PVP SOFTWARE DEMONSTRATION FORUM—PART 2

Block 2.3: Tuesday, July 29 (2:00 pm – 3:45 pm)

2.3A (DA-7-1) COMPOSITE MATERIALS AND STRUCTURES
2.3B (FSI-3-3) FLUID FLOW AROUND SLENDER STRUCTURES
2.3C (OAC-6-3) REPAIR STRATEGY—1
2.3D (DA-4-5) ASSESSMENT OF COMPONENTS—1
2.3E (TW-1-4) TECHNICAL TUTORIAL—IIA: APPLICATIONS OF THE ASME CODE TO RADIOACTIVE MATERIALS PACKAGING
2.3F (MF-2-5) APPLICATIONS OF FRACTURE MECHANICS—5: FLAW EVALUATION USING THE MASTER CURVE
2.3G (MF-5-6) WELDING, RESIDUAL STRESS 6
2.3H (MF-4-2) MATERIALS FOR HYDROGEN SERVICE—II
2.3J (CS-7-3) ASME CODE SECTION XI ACTIVITIES—3
2.3K (SPC-1-3) STUDENT PAPER COMPETITION 3-PH.D. LEVEL
2.3L (CS-19-1) ASSESSMENT OF CONSTRAINT CONDITIONS IN ISO/DIS PROCEDURE AND FITNET PROCEDURE
2.3M (OAC-4-4) DEVELOPMENT AND USE ISSUES
2.3N (SE-1-1) SEISMIC EVALUATION OF SYSTEMS, STRUCTURES AND COMPONENTS
2.3O (MF-14-1) SCC INTEGRITY 1—IMPLICATION OF WOLF CREEK CRACKING
2.3P (HP-3-1) FE METHODOLOGY IN MATERIAL DEVELOPMENT
2.3Q (CT-4-3) STATUS REPORT—IMPROVEMENTS TO ASME PCC-1-2000—GUIDELINES FOR PRESSURE BOUNDARY BOLTED FLANGE JOINT ASSEMBLY
2.3R (CT-16-3) PVP SOFTWARE DEMONSTRATION FORUM—PART 3

Block 2.4: Tuesday, July 29 (4:00 pm – 5:45 pm)

2.4A (DA-7-2) COMPOSITE MATERIALS AND STRUCTURES
2.4B (FSI-3-4) TUBE BUNDLE VIBRATION
2.4C (OAC-3-1) MONITORING, DIAGNOSTIC AND INSPECTIONS
2.4D (DA-4-6) ASSESSMENT OF COMPONENTS—2
2.4E (TW-1-5) TECHNICAL TUTORIAL—IIB: APPLICATIONS OF THE ASME CODE TO RADIOACTIVE MATERIALS PACKAGING
2.4F (MF-2-6) APPLICATIONS OF FRACTURE MECHANICS IN FAILURE ASSESSMENT—6
2.4G (MF-15-2) ELEVATED FRACTURE II
2.4H (MF-12-1) MECHANISTIC MATERIALS MODELING INCLUDING LOCAL APPROACHES 1
2.4J (CS-8-1) RECENT DEVELOPMENTS IN ASME CODES AND STANDARDS
2.4K (CS-10-1) RECENT DEVELOPMENT OF PRESSURE EQUIPMENT STANDARD IN CHINA—I
2.4L (CS-19-2) ASSESSMENT OF CONSTRAINT INCORPORATING WITH RESIDUAL STRESS AND STRENGTH MISMATCH
2.4M (OAC-1-1) FAILURE ASSESSMENTS OF CRACKS
2.4N (SE-12-1) SEISMIC BEHAVIOUR OF STORAGE TANKS AND

ASSOCIATED EQUIPMENT

2.4O (MF-6-1) EUROPEAN PROGRAMS IN STRUCTURAL INTEGRITY—I

2.4P (HP-4-1) FATIGUE, FRACTURE AND LIFE PREDICTION

2.4Q (CT-11-2) COMPUTATIONAL MODELS FOR ELASTIC-PLASTIC FEA 2

2.4R (CT-16-4) PVP SOFTWARE DEMONSTRATION FORUM—PART 4

WEDNESDAY, JULY 30, 2008

Block 3.1: Wednesday, July 30 (8:30 am – 10:15 am)

3.1E (DA-4-9) FATIGUE—1

3.1F (FSI-4-2) FORUM ON FLUID TRANSIENTS

3.1G (MF-5-7) WELDING, RESIDUAL STRESS 7

3.1H (MF-12-2) MECHANISTIC MATERIALS MODELING INCLUDING LOCAL APPROACHES 2

3.1J (CS-12-2) RECENT DEVELOPMENTS IN EUROPEAN CODES AND STANDARDS—2

3.1K (NDE-4-1) CURRENT EFFORTS IN THE LICENSE RENEWAL AND LIFE EXTENSION AREAS

3.1L (CS-5-1) INTERACTION AND MODELING FOR MULTIPLE FLAWS (1)

3.1M (OAC-8-3) AGING MANAGEMENT AND LIFE EXTENSION III

3.1N (SE-5-1) STRUCTURAL DYNAMICS (LINEAR AND NONLINEAR)

3.1O (MF-6-2) EUROPEAN PROGRAMS IN STRUCTURAL INTEGRITY—II

3.1P (HP-5-1) PAPER/PANEL SESSION ON DESIGN AND ANALYSIS OF IMPULSIVELY LOADED VESSELS

3.1Q (CT-5-1) THREADED FASTENERS

Block 3.2: Wednesday, July 30 (10:30 am – 12:15 pm)

3.2E (DA-19-1) STATUS OF NEW NUCLEAR PLANT CONSTRUCTION PROJECTS IN USA

3.2F (MF-16-2) STRUCTURAL INTEGRITY OF PIPELINES AND PRESSURE VESSELS—2

3.2G (MF-5-8) WELDING, RESIDUAL STRESS 8

3.2H (MF-12-3) MECHANISTIC MATERIALS MODELING INCLUDING LOCAL APPROACHES 3

3.2J (CS-15-1) API 579/ASME CODE FITNESS-FOR-SERVICE ACTIVITIES

3.2K (CS-10-2) RECENT DEVELOPMENT IN NEW ENERGY PRESSURE EQUIPMENT IN CHINA—I

3.2L (CS-5-2) INTERACTION AND MODELING FOR MULTIPLE FLAWS (2)

3.2M (OAC-1-5) COUNTERFEIT/SUBSTANDARD INDUSTRIAL PARTS AND MATERIALS, AND THEIR IMPACT ON SAFETY AND RELIABILITY

3.2N (SE-6-1) SEISMIC ASSESSMENT OF LIFELINE SYSTEMS

3.2O (MF-14-2) SCC INTEGRITY 2

3.2P (HP-5-2) PANEL SESSION ON IMPULSIVELY LOADED VESSELS

3.2Q (CT-5-2) LOOSENING OF FASTENERS

THURSDAY, JULY 31, 2008

Block 4.1: Thursday, July 31 (8:30 am – 10:15 am)

4.1E (TW-1-6) TECHNICAL TUTORIAL—IIIA: AUTOMATED ULTRASONIC TESTING VS. RADIOGRAPHY (AUT VS. RT)

4.1F (MF-11-2) STRUCTURAL INTEGRITY FOR PIPES WITH WALL THINNING CAUSED BY FAC

4.1G (MF-5-9) WELDING, RESIDUAL STRESS 9

4.1H (MF-13-1) ASSESSMENT OF MULTIPLE AND COMPLEX FLAWS

4.1J (CS-16-1) RATCHETTING ISSUES IN PRESSURE VESSEL DESIGN

4.1K (FSI-3-5) TURBOMACHINERY

4.1L (CS-9-1) PIPING DESIGN, STRENGTH AND WALL THINNING IN KOREAN AND JAPANESE CODES

4.1M (OAC-9-1) REGULATORY AND CODE CONSIDERATIONS FOR TRANSPORTATION AND STORAGE OF RADIOACTIVE MATERIALS

4.1N (SE-9-1) EXPERIMENTAL AND ANALYTICAL STUDIES IN SYSTEMS INTERACTION I

4.1O (MF-20-1) INTEGRATION OF ROBUST DESIGN METHODOLOGY WITH NDE AND WEB-BASED MONITORING

4.1P (CT-3-1) LEAK TIGHTNESS OF BOLTED JOINTS

4.1Q (CT-12-1) NEW AND EMERGING METHODS OF ANALYSIS AND APPLICATIONS

Block 4.2: Thursday, July 31 (10:30 am – 12:15 pm)

4.2A (DA-6-1) STRESS CLASSIFICATION AND DESIGN-BY-ANALYSIS METHODOLOGIES

4.2B (FSI-6-1) IMPACT AND PENETRATION

4.2C (OAC-6-4) REPAIR STRATEGY—2

4.2D (DA-14-1) DESIGN & STRESS ANALYSIS OF PVP FLANGES

4.2E (TW-1-7) TECHNICAL TUTORIAL—IIIB: AUTOMATED ULTRASONIC TESTING VS. RADIOGRAPHY (AUT VS. RT)

4.2F (MF-16-3) STRUCTURAL INTEGRITY OF PIPELINES AND PRESSURE VESSELS—3

4.2G (MF-5-10) WELDING, RESIDUAL STRESS 10

4.2H (MF-9-1) GRAPHITE TECHNOLOGY FOR NUCLEAR POWER APPLICATIONS

4.2J (CS-12-3) RECENT DEVELOPMENTS IN EUROPEAN CODES AND STANDARDS-3

4.2K (FSI-3-6) SHOCK WAVE APPLICATIONS

4.2L (CS-9-2) PROBABILISTIC ASSESSMENT FOR DEGRADED PIPING FOR KOREAN AND JAPANESE CODES

4.2M (OAC-4-5) THERMAL—2

4.2N (SE-9-2) EXPERIMENTAL AND ANALYTICAL STUDIES IN SYSTEMS INTERACTION II

4.2O (MF-20-2) INTEGRATION OF FRACTURE MECHANICS, FATIGUE MECHANICS, AND NDE

4.2P (DA-4-10) FATIGUE—2

4.2Q (CT-11-1) COMPUTATIONAL MODELS FOR ELASTIC-PLASTIC FEA 1

Block 4.3: Thursday, July 31 (2:00 pm – 3:45 pm)

4.3A (DA-11-1) VIBRATION, EXPERIMENTAL TECHNIQUES AND COMPUTATIONAL FLUID DYNAMICS IN PRESSURE VESSEL DESIGN
4.3B (FSI-6-2) BLAST AND MEASUREMENTS
4.3C (OAC-5-1) PUMPS AND VALVES
4.3D (DA-14-2) DESIGN & ANALYSIS OF BOLTED CONNECTIONS
4.3E (DA-5-1) INELASTIC AND NONLINEAR ANALYSIS
4.3F (MF-19-1) LEAK BEFORE BREAK ASSESSMENTS
4.3G (MF-5-11) WELDING, RESIDUAL STRESS 11
4.3J (CS-13-1) HIGH TEMPERATURE CODES AND STANDARDS
4.3K (FSI-3-7) APPLICATIONS IN PRESSURE VESSEL AND PIPING
4.3L (CS-10-3) RECENT DEVELOPMENT OF PRESSURE EQUIPMENT STANDARD IN CHINA—II
4.3M (OAC-4-8) DESIGN AND FABRICATION ISSUES
4.3N (SE-7-1) SEISMIC ISOLATION
4.3O (MF-20-3) CONTINUOUS WEB-BASED NDE MONITORING AND PVP FAILURE EVENT DATABASES
4.3P (NDE-2-3) NEW NDE APPLICATIONS II

Block 4.4: Thursday, July 31 (4:00 pm – 5:45 pm)

4.4B (FSI-5-2) FLUID STRUCTURE INTERACTION AND SLOSHING: SLOSHING AND STRUCTURAL BEHAVIOR
4.4C (OAC-8-4) AGING MANAGEMENT AND LIFE EXTENSION IV
4.4J (CS-14-1) DEVELOPMENT, MODELING AND APPLICATION OF ELEVATED TEMPERATURE MATERIALS
4.4K (FSI-3-8) MULTIPHYSICS
4.4L (CS-10-4) RECENT DEVELOPMENT IN NEW ENERGY PRESSURE EQUIPMENT IN CHINA—II
4.4M (OAC-1-2) RISK ASSESSMENT OF PIPELINE SYSTEMS
4.4N (SE-3-1) SEISMIC ISOLATION AND PASSIVE VIBRATION CONTROL
4.4P (NDE-5-1) COKE DRUM INSPECTION

PVP2008-61409: CRACK INITIATION PROCESS FOR SEMI-CIRCULAR NOTCHED PLATE IN CREEP-FATIGUE TEST AT ELEVATED TEMPERATURE
O. Watanabe, B. Bubphachot, University of Tsukuba, Tsukuba, Ibaraki, Japan; N. Kawasaki, Japan Atomic Energy Agency, Ibaraki, Japan; N. Kasahara, University of Tokyo, Tokyo, Japan

SESSION 1.1M (OAC-4-1)

Monday, July 28, 8:30 am – 10:15 am, Houston, 5th Floor

THERMAL—1
Sponsored by: Operations, Applications, and Components Committee

Developed by: M. R. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

Chair: M. R. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

Co-Chair: S. Hensel, Savannah River National Lab, Aiken, SC, USA
PVP2008-61009: TEMPERATURE PREDICTION IN 3013 CONTAINERS IN K-AREA MATERIAL STORAGE (KAMS) FACILITY USING REGRESSION METHODS
N. Gupta, Washington Savannah River Co, Aiken, SC, USA
PVP2008-61015: COMPARISON OF RESPONSE OF 9977 TEST PACKAGES TO ANALYTICAL RESULTS
A. C. Smith, A. Wu, Savannah River National Laboratory, Aiken, SC, USA
PVP2008-61582: CFD SIMULATIONS OF AN 8X8 ROD ARRAY INSIDE OF AN INSOTHERMAL ENCLOSURE FILLED WITH A RARIFIED GAS
P. Araya, Miles Greiner, University of Nevada, Reno, Reno, NV, USA
PVP2008-61765: DEVELOPMENT OF TESTING METHODOLOGIES FOR ONSITE RADIOACTIVE MATERIAL STORAGE CONTAINERS
M. R. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

SESSION 1.1N (CS-4-1)

Monday, July 28, 8:30 am – 10:15 am, Kane, 3rd Floor

ENVIRONMENTAL FATIGUE AND FRACTURE TOUGHNESS—I
Sponsored by: Codes & Standards and Materials and Fabrication Committees

Developed by: H. Mehta, GE Hitachi Nuclear, Sunol, CA, USA; M. Higuchi, IHI Technology Service, Yokohama, Japan; D. Scarth, Kinectrics, Toronto, ON, Canada; R. C. Cipolla, Aptech Engineering Services, Inc., Sunnyvale, CA, USA

Chair: D. Jones, Bechtel Bettis, Inc, West Mifflin, PA, USA

Co-Chair: H.S. Mehta
PVP2008-61087: COMPARISON OF ENVIRONMENTAL FATIGUE EVALUATION METHODS IN LWR WATER
M. Higuchi, IHI Technology Service, Yokohama, Japan
PVP2008-61137: THE STRESS CORROSION CRACKING BEHAVIOR OF ALLOYS 690 AND 152 WELD IN A PWR ENVIRONMENT
B. Alexandreanu, O. K. Chopra, W. J. Shack, Argonne National Laboratory, Argonne, IL, USA
PVP2008-61693: DR. SUMIO YUKAWA—A GREAT SOURCE OF KNOWLEDGE (Presentation Only)
M. Prager, WRC PVRC and MPC, New York, NY, USA; H. Mehta, GE Hitachi Nuclear, Sunol, CA, USA
PVP2008-61911: STATUS ON FRENCH FATIGUE ANALYSIS RULES
C. Faidy, EDF—SEPTEN, Villeurbanne, France

SESSION 1.1O (MF-8-1)

Monday, July 28, 8:30 am – 10:15 am, Los Angeles, 5th Floor

MATERIALS FOR NUCLEAR REACTOR APPLICATIONS
Sponsored by: Materials and Fabrications

Developed by: W. Ren, Oak Ridge National Laboratory, Oak Ridge, TN, USA

Chair: B. Corwin, Oak Ridge National Laboratory, Oak Ridge, TN, USA

Co-Chair: R. Swindeman, Cromtech, Oak Ridge, TN, USA
PVP2008-61004: PRELIMINARY CONSIDERATIONS OF GRADE 91 FOR GEN IV NUCLEAR REACTOR APPLICATION
W. Ren, Oak Ridge National Laboratory, Oak Ridge, TN, USA
PVP2008-61128: TREATMENT OF HIGH TEMPERATURE TENSILE DATA FOR ALLOY 617 AND ALLOY 230
T.-L. Sham, Oak Ridge National Laboratory, Oak Ridge, TN, USA; D. R. Eno, K. P. Jensen, Lockheed Martin Corp, Schenectady, NY, USA
PVP2008-61129: A UNIFIED VIEW OF ENGINEERING CREEP PARAMETERS
D. R. Eno, G. A. Young, Lockheed Martin Corporation, Schenectady, NY, USA; T.-L. Sham, Oak Ridge National Laboratory, Oak Ridge, TN, USA
PVP2008-61706: FRACTURE BEHAVIOR OF DISSIMILAR JOINTS BY FRICTION JOINING AT ELEVATED TEMPERATURES
M. Yamazaki, National Institute for Materials Science, Tokyo, Japan; T. Watanabe, H. Hongo, National Institute for Materials Science, Tsukuba-shi, Ibaraki, Japan

SESSION 1.1P (CT-2-1)

Monday, July 28, 8:30 am – 10:15 am, McHenry, 3rd Floor

DESIGN AND ANALYSIS OF BFJ—I
Sponsored by: Computer Technology Committee

Developed by: H. Bouzid, Ecole de Technologie Superieure, Montreal, QC, Canada; H. Kockelmann, University of Stuttgart, Stuttgart, BW, Germany

Chair: H. Bouzid, Ecole de Technologie Superieure, Montreal, QC, Canada

Co-Chair: H. Kockelmann, University of Stuttgart, Stuttgart, BW, Germany
PVP2008-61184: DEVELOPMENT OF A NEW METHOD FOR "FULL FACE" GASKETED BOLTED FLANGE CONNECTIONS BASED ON EUROPEAN STANDARD EN1591
H. Lejeune, CETIM, Nantes, France
PVP2008-61335: DESIGN OF FLOATING TYPE BOLTED FLANGE CONNECTIONS WITH GRP FLANGES
H. Kockelmann, E. Roos, University of Stuttgart, Stuttgart, BW, Germany; H. Kurz, MPA Stuttgart, Stuttgart, Germany
PVP2008-61414: THE EFFECT OF CLAMPING FORCE AND MATERIAL PROPERTIES ON THE TIGHTNESS PERFORMANCE A FLEXIBLE BOX-SHAPED FLANGE BOLTED JOINT

R. Kurosawa, Yokogawa Electric Corporation, Koufu, Yamanashi, Japan; T. Sawa, Y. Tatsumi, Hiroshima University, Higashihiroshima, Hiroshima, Japan; S. Nagata, Toyo Engineering Corporation, Narashino, Japan

PVP2008-61952: EFFECT OF HOBT TEST PARAMETERS ON EXPANDED PTFE GASKETS (Presentation Only)

W. Lee, Inertech, Inc., Monterey Park, CA, USA; H. Bouzid, Ecole de Technologie Superieure, Montreal, QC, Canada; J. Huang, Inertech Inc., Monterey Park, CA, USA

SESSION 1.1Q (DA-9-1)

Monday, July 28, 8:30 am – 10:15 am, Miami, 5th Floor

THERMAL STRESSES IN PIPING AND VESSELS
Sponsored by: Design and Analysis Committee

Developed by: A. Segall, The Pennsylvania State University, University Park, PA, USA

Chair: S. Iyer, Atomic Energy of Canada Limited, Mississauga, ON, Canada

Co-Chair: J. McCabe

PVP2008-61174: FATIGUE AND CRACK GROWTH ANALYSIS OF A THICK INSTRUMENTATION RING SUBJECTED TO THERMAL FATIGUE CYCLING

R. S. Piehler, T. Damiani, Bechtel Bettis, Inc., West Mifflin, PA, USA

PVP2008-61225: SPECTRA THERMAL FATIGUE TESTS UNDER FREQUENCY CONTROLLED FLUID TEMPERATURE VARIATION—SUPERPOSED SINUSOIDAL TEMPERATURE FLUCTUATION TESTS

N. Kawasaki, S. Kobayashi, S. Hasebe, Japan Atomic Energy Agency, Ibaraki, Japan; H. Takasho, Joyo Industries Ltd, Ibaraki, Ibaraki, Japan; N. Kasahara, University of Tokyo, Tokyo, Japan

PVP2008-61824: THOUGHTS ON THE DECONVOLUTION OF THERMAL—AND STRESS-STATES FROM TRANSIENT HISTORIES

A. Segall, The Pennsylvania State University, University Park, PA, USA

PVP2008-61853: THERMAL FATIGUE CYCLIC-DOWN SHOCKS ON 316L MODEL PIPE COMPONENTS

E. Paffumi, K. F. Nilsson, N. Taylor, EU DG JRC IE, Petten, Netherlands

PVP2008-61885: INNOVATIVE STRESS ANALYSIS METHOD FOR PERFORATED FLAT AND THICK PLATES

F. Billon, Comex Nucleaire, Marseille, Bouche du Rhône, France

SESSION 1.1R (MF-21-1)

Monday, July 28, 8:30 am – 10:15 am, Chicago Ballroom Foyer, 5th Floor

NDE DEMONSTRATION FORUM—PART 1
Sponsored by: PVP Senate, Materials and Fabrication Technical Committee and ASME NDE Engineering Division

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Block 1.2: Monday, July 28 (10:30 am – 12:15 pm)

SESSION 1.2R (MF-21-2)

Monday, July 28, 10:30 am – 12:15 pm, Chicago Ballroom Foyer, 5th Floor

NDE DEMONSTRATION FORUM—PART 2
Sponsored by: PVP Senate, Materials and Fabrication Technical Committee and ASME NDE Engineering Division

SESSION 1.2S

Monday, July 28, 10:30 am – 12:15 pm, Chicago Ballroom A/B/C/D/E, 5th Floor

PVP2008 OPENING CEREMONY AND PLENARY SESSION
Sponsored by: The PVP Division Conference Committee

Chair: A.A. Dermenjian, Sargent & Lundy, LLC, Chicago, IL, USA

Co-Chair: L. H. Geraets, Suez Nuclear Activities, Brussels, Belgium

WELCOME AND OPENING REMARKS

S. Y. Zamrik, The Pennsylvania State University, University Park, PA, USA

NEW REACTOR LICENSING: DESIGN REVIEWS AND ENGINEERING ISSUES

L. A. Dudes, Nuclear Regulatory Commission

PLANNING FOR SUCCESS: REASONED EXPECTATIONS FOR THE NEW NUCLEAR PLANT CONSTRUCTION

A. R. Pietrangelo, Nuclear Energy Institute

Block 1.3: Monday, July 28 (2:00 pm – 3:45 am)

SESSION 1.3A (DA-3-2)

Monday, July 28, 2:00 pm – 3:45 pm, Chicago Ballroom A, 5th Floor

DESIGN AND ANALYSIS OF PIPING COMPONENTS
Sponsored by: Design and Analysis Committee

Developed by: S. Iyer, Atomic Energy of Canada Limited, Mississauga, ON, Canada

Chair: J. McCabe

Co-Chair: C. Basavaraju, USNRC, Rockville, MD, USA

PVP2008-61172: ASME III DESIGN CODE ASSESSMENT OF A NUCLEAR POWER STATION FUELLING MACHINE COOLING SYSTEM PIPEWORK

J. Shi, Serco, Gloucester, United Kingdom

PVP2008-61549: NUMERICAL ANALYSES OF SURGE LINE PIPING TO ASSESS THERMAL STRATIFICATION PHENOMENON

S.-W. Woo, S.-B. Choi, Y.-S. Chang, J.-B. Choi, Y.-J. Kim, Sungkyunkwan University, Suwon, Gyeonggi-do, Korea (Republic); J. H. Lee, J.-S. Kim, H.-D. Chung, Korea Institute of Nuclear Safety, Daejeon, Korea (Republic)

PVP2008-61636: LOAD AND RESISTANCE FACTOR DESIGN FOR NUCLEAR PIPES: BENEFITS AND CHALLENGES

K. Avrithi, University of Maryland, College Park, MD, USA

PVP2008-61642: DEVELOPMENT AND VALIDATION OF ANALYSIS METHOD FOR SIMULATING RESIDUAL STRESSES IN DISSIMILAR METAL PIPE BUTT WELDS

D. E. Killian, S. Mahmoud, AREVA NP Inc, Lynchburg, VA, USA

Developed by: A. Kalnins, Lehigh University, Bethlehem, PA, USA

Chair: G. Karcher

Co-Chair: A. M. P. De Jesus, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal

PVP2008-61397: TWICE-YIELD METHOD FOR ASSESSMENT OF FATIGUE CAUSED BY FAST THERMAL TRANSIENT ACCORDING TO 2007 SECTION VIII-DIVISION 2 OF ASME B&PV CODE
A. Kalnins, Lehigh University, Bethlehem, PA, USA

PVP2008-61871: EXPERIMENTAL EVALUATION OF THE MARKL FATIGUE METHODS AND ASME PIPING STRESS INTENSIFICATION FACTORS
C. Hinnant, T. Paulin, Paulin Research Group, Houston, TX, USA

PVP2008-61897: THE AREVA INTEGRATED AND SUSTAINABLE CONCEPT OF FATIGUE DESIGN, MONITORING AND RE-ASSESSMENT
J. Rudolph, AREVA NP GmbH, Erlangen, Germany

PVP2008-61541: FATIGUE ANALYSIS ROUND ROBIN OF NOZZLE-TO-PLATE JUNCTURE; RESULTS OF ANALYTIC-TEST COMPARISON
D. Jones, Bechtel Bettis, Inc, West Mifflin, PA, USA; S. A. Adams, Lockheed Martin; KAPL, Inc., Schenectady, NY, USA

SESSION 2.1M (OAC-4-3)

Tuesday, July 29, 8:30 am – 10:15 am, Houston, 5th Floor

STRUCTURAL—ANALYSIS
Sponsored by: Operations, Applications, and Components Committee

Developed by: M. R. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

Chair: S. Snow, Idaho National Laboratory, Idaho Falls, ID, USA

Co-Chair: Miles Greiner, University of Nevada, Reno, Reno, NV, USA

PVP2008-61135: FINITE ELEMENT MESH CONSIDERATIONS FOR REDUCED INTEGRATION ELEMENTS
G. S. Bjorkman, Jr., J. M. Piotter, Nuclear Regulatory Commission, Rockville, MD, USA

PVP2008-61553: ANALYTICAL AND NUMERICAL EVALUATION OF THE IMPACT LIMITERS DESIGN OF A RESEARCH REACTORS SPENT FUEL TRANSPORTATION PACKAGE HALF SCALE MODEL UNDER 9 M DROP TESTS
M. M. Neto, C. A. J. Miranda, G. Fainer, Instituto de Pesquisas Energeticas e Nucleares IPEN-CNEN/SP, Sao Paulo, SP, Brazil; R. P. Mourao, Centro de Desenvolvimento da Tecnologia Nuclear CDTN-CNEN/MG, Belo Horizonte, SP, Brazil

PVP2008-61564: DYNAMIC ANALYSIS OF HANFORD UNIRRADIATED FUEL PACKAGE SUBJECTED TO SEQUENTIAL LATERAL LOADS IN HYPOTHETICAL ACCIDENT CONDITIONS
A. Wu, J. Gorczyca, D. Leduc, J. L. England, Savannah River National Laboratory, Aiken, SC, USA

PVP2008-61360: UNCERTAINTY OF PRELOADS IN CLOSURE BOLTS FOR TRANSPORTATION CASKS FOR HAZARDOUS MATERIALS
V. Shah, Argonne National Laboratory, Argonne, IL, USA

SESSION 2.1N (DA-4-3)

Tuesday, July 29, 8:30 am – 10:15 am, Kane, 3rd Floor

REACTOR PRESSURE VESSEL—3
Sponsored by: Design and Analysis Committee

Developed by: D. Moinereau, Electricité de France—EDF R&D—Département MMC, Moret-sur-Loing, France

Chair: D. Siegele, Fraunhofer Institut für Werkstoffmechanik, Freiburg, Germany

Co-Chair: S. Bugat

PVP2008-61232: DEMONSTRATION OF WPS BENEFIT WITH LARGE SCALE TESTS—THE BATMAN TEST SERIES
S. Chapuliot, L. Ferry, T. Yuritzinn, CEA, Gif-sur-Yvette, France; D. Moinereau, A. Dahl, Electricité de France—EDF R&D—Département MMC, Moret-sur-Loing, France; P. Gilles, AREVA NP, Paris la Défense, France, France

PVP2008-61392: THE INCLUSION OF INNER SURFACE BREAKING FLAWS IN PROBABILISTIC FRACTURE MECHANICS ANALYSES OF REACTOR VESSELS SUBJECTED TO PLANNED NORMAL COOLDOWN TRANSIENTS
T. Dickson, Oak Ridge National Lab, Oak Ridge, TN, USA; M. Kirk, USA Nuclear Regulatory Commission, Rockville, MD, USA

PVP2008-61483: LARGE SCALE FRACTURE MECHANICS TESTING
M. Brumovsky, Nuclear Research Institute Rez plc, Rez, Czech Republic

PVP2008-61809: APPLICATION OF THE BEREMIN MODEL FOR EVIDENCING THE WARM PRESTRESS EFFECT IN AN IRRADIATED REACTOR PRESSURE VESSEL CONTAINING A SEMI-ELLIPTICAL SUBCLAD DEFECT UNDER SMALL AND LARGE LOCA CONDITIONS
P. Gilles, AREVA NP, Paris la Défense, France, France; J. Devaux, ESI France, Lyon, France; J. P. Izard, AREVA NP, Paris La Défense, France

SESSION 2.1O (MF-17-1)

Tuesday, July 29, 8:30 am – 10:15 am, Los Angeles, 5th Floor

SMALL-SCALE AND MINIATURE MECHANICAL TESTING

Developed by: A. Motarjemi, Det Norske Veritas (DNV) Ltd, London, United Kingdom

Chair: A. Motarjemi, Det Norske Veritas (DNV) Ltd, London, United Kingdom

Co-Chair: K. Hasegawa, JNES, Tokyo, Japan

PVP2008-61044: EFFECT OF DYNAMIC LOADING RATES ON CLEAVAGE FRACTURE TOUGHNESS PROPERTIES OF STEELS
R. Moskovic, Magnox North, Bristol, United Kingdom; J. A. Joyce, US Naval Academy, Department of Mechanical Engineering, Annapolis, MD, USA

PVP2008-61252: APPLICATION OF NONDESTRUCTIVE INSTRUMENTED INDENTATION TECHNIQUE IN SMALL-SCALE TESTING OF PRESSURE VESSEL AND PIPING SYSTEMS
K.-W. Lee, K.-H. Kim, D. Kwon, Seoul National University, Seoul, Korea (Republic); K.-H. Kim, Frontics Inc., Seoul, Korea (Republic); Y.-H. Choi, H.-D. Chung, Korea Institute of Nuclear Safety, Daejeon, Korea (Republic)

ASME CODE SECTION XI ACTIVITIES—3
Sponsored by: Codes and Standards Committee

Developed by: D. Scarth, Kinectrics, Toronto, ON, Canada; R. C. Cipolla, Aptech Engineering Services, Inc., Sunnyvale, CA, USA

Chair: D. Scarth, Kinectrics, Toronto, ON, Canada

Co-Chair: R. C. Cipolla, Aptech Engineering Services, Inc., Sunnyvale, CA, USA

PVP2008-61514: STRUCTURAL EVALUATION OF DEGRADED CONTAINMENT PENETRATION SLEEVES
D. J. Vasquez, A. J. Smith, K. K. Dwivedy, Dominion Resources Services, Inc., Glen Allen, VA, USA

PVP2008-61803: TECHNICAL BASIS FOR USING A MASTER CURVE IN LIEW OF THE CODE KIc CURVE IN ASME BOILER & PRESSURE VESSEL CODE
K. Yoon, AREVA NP Inc., Chantilly, VA, USA; J. Merkle, Oak Ridge National Laboratory, Oak Ridge, TN, USA

SESSION 2.3K (SPC-1-3)

Tuesday, July 29, 2:00 pm – 3:45 pm, Lakeview, 2nd Floor

STUDENT PAPER COMPETITION 3—PH.D. LEVEL
Sponsored by: PVP Senate

Developed by: M. K. Au-Yang, Independent Consultant, Lynchburg, VA, USA; I. Kisisel, Sargent & Lundy LLC, Chicago, IL, USA

Chair: M. K. Au-Yang, Independent Consultant, Lynchburg, VA, USA

Co-Chair: J. Todd, Penn State University, State College, PA, USA

PVP2008-61079: EFFECT OF ULTRASONIC IMPACT TREATMENT ON THE STRESS CORROSION CRACKING OF 304 STAINLESS STEEL WELDED JOINTS
G. Ma, X. Ling, Nanjing University of Technology, Nanjing, Jiangsu, China

PVP2008-61109: PROBABILISTIC FRACTURE MECHANICS USING FRACTAL FINITE ELEMENT METHOD
R. M. Reddy, B. N. Rao, IIT Madras, Chennai, India

PVP2008-61577: STRAIN RATE DEPENDENCE AND SHORT-TERM RELAXATION BEHAVIOR OF A THERMOSET POLYMER AT ELEVATED TEMPERATURE: EXPERIMENT AND MODELING
A. J. W. McClung, M. Ruggles-Wrenn, Air Force Institute of Technology, Wright-Patterson Air Force Base, OH, USA

PVP2008-61724: A MODEL FOR PREDICTING TEMPERATURE OF ELECTROFUSION JOINTS FOR POLYETHYLENE PIPES
J. Shi, J. Zheng, Zhejiang University, Hangzhou, Zhejiang, China; W. Guo, Zhejiang Inspection Center of Special Equipment, Hangzhou, Zhejiang, China

SESSION 2.3L (CS-19-1)

Tuesday, July 29, 2:00 pm – 3:45 pm, Dupage, 3rd Floor

ASSESSMENT OF CONSTRAINT CONDITIONS IN ISO/DIS PROCEDURE AND FITNET PROCEDURE
Sponsored by: Codes and Standards Committee

Developed by: F. Minami, Osaka University, Suita, Osaka, Japan; M. Kocak, GKSS Research Center, Geesthacht, Germany

Chair: F. Minami, Osaka University, Suita, Osaka, Japan

Co-Chair: S. Cicero González, University of Cantabria, Santander, Cantabria, Spain

PVP2008-61076: STANDARDIZATION OF CTOD TOUGHNESS CORRECTION FOR CONSTRAINT LOSS IN STEEL COMPONENTS
F. Minami, M. Ohata, Osaka University, Suita, Osaka, Japan

PVP2008-61142: EQUIVALENT CTOD RATIO â FOR CORRECTION OF CTOD FOR CONSTRAINT LOSS
M. Ohata, F. Minami, Osaka University, Suita, Osaka, Japan

PVP2008-61680: RELATIONSHIP BETWEEN WEIBULL PARAMETER AND FRACTURE TOUGHNESS OF STRUCTURAL STEELS
T. Handa, JFE Steel Corporation, Chiba, Japan; M. Ohata, F. Minami, Osaka University, Suita, Osaka, Japan

PVP2008-61631: APPLICATION OF EQUIVALENT CTOD RATIO TO FRACTURE ASSESSMENT OF STRUCTURAL COMPONENTS
S. Igi, JFE Steel Corporation, Chiba, Japan; M. Ohata, F. Minami, Osaka University, Suita, Osaka, Japan

PVP2008-61367: FITNET FFS METHODOLOGIES FOR THE ASSESSMENT OF LOW CONSTRAINT CONDITIONS: OVERVIEW, CONTENTS AND NEW CONTRIBUTIONS
S. C. González, F. Gutiérrez-Solana, University of Cantabria, Santander, Cantabria, Spain; M. Kocak, GKSS Research Center, Geesthacht, Germany

SESSION 2.3M (OAC-4-4)

Tuesday, July 29, 2:00 pm – 3:45 pm, Houston, 5th Floor

DEVELOPMENT AND USE ISSUES
Sponsored by: Operations, Applications, and Components Committee

Developed by: M. R. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

Chair: A. C. Smith, Savannah River National Lab, Aiken, SC, USA

Co-Chair: C. Bajwa, US Nuclear Regulatory Commission, Rockville, MD, USA

PVP2008-61215: IMPACT TESTING OF STAINLESS STEEL MATERIAL AT COLD TEMPERATURES
S. Snow, D. K. Morton, R. Blandford, Idaho National Laboratory, Idaho Falls, ID, USA

PVP2008-61269: EFFECT OF CHEMISTRY VARIATIONS OF WROUGHT N06022 PLATES ON THE REPASSIVATION POTENTIAL IN 1 M NaCl AT 90°C
K. G. Mon, Areva FS, Las Vegas, NV, NV, USA; R. B. Rebak, GE Global Research Center, Schenectady, NY, USA

PVP2008-61272: LONG-TERM ENVIRONMENTAL DEGRADATION OF ZIRCONIUM ALLOYS IN CONTACT WITH SPENT NUCLEAR FUEL—A REVIEW
R. B. Rebak, GE Global Research Center, Schenectady, NY, USA

PVP2008-61877: HEADSPACE GAS EVALUATION OF WELDED PLUTONIUM STORAGE CONTAINERS
B. Hardy, M. Arnold, S. Hensel, Savannah River National Lab, Aiken, SC, USA

PVP2008-61091: NONLINEAR CYCLING ANALYSIS OF PIPE BENDS WITH INITIAL OVALITY
D. Vlaicu, Ontario Power Generation, Pickering, ON, Canada
PVP2008-61323: RATCHETING OF INCONEL 718 AT 649C UNDER AXIAL/TORSIONAL LOADING
K. S. Kim, H. S. Kim, Pohang University of Science and Technology, Pohang, Korea (Republic)
PVP2008-61628: ON THE INTERACTION OF THERMAL MEMBRANE AND THERMAL BENDING STRESS IN SHAKEDOWN ANALYSIS
W. Reinhardt, Atomic Energy of Canada Limited, Mississauga, ON, Canada
PVP2008-61641: THE ELASTIC MODULUS ADJUSTMENT PROCEDURE (EMAP) FOR SHAKEDOWN ANALYSIS
R. Adibi-Asl, W. Reinhardt, Atomic Energy of Canada Limited, Mississauga, ON, Canada
PVP2008-61921: ELASTIC CORE CONCEPT IN SHAKEDOWN ANALYSIS
J. Porowski, T. O'Donnell, O'Donnell Consulting Engineers, Inc., Bethel Park, PA, USA

SESSION 4.1K (FSI-3-5)

Thursday, July 31, 8:30 am – 10:15 am, Denver, 5th Floor

TURBOMACHINERY
Sponsored by: Fluid-Structure Interaction Technical Committee

Developed by: J.-F. Sigrist, DCNS Propulsion, Nantes, France; M. Fischer, Technical Consultant, München, Germany

Chair: J.-F. Sigrist, DCNS Propulsion, Nantes, France

Co-Chair: M. Fischer, Technical Consultant, München, Germany
PVP2008-61276: COMPUTATIONAL INVESTIGATION OF DIFFERENT TURBULENT MODELS WHEN PREDICTING AIRFLOW IN AN ENCLOSURE
X. Wang, Polytech' Lille, Villeneuve d'ascq, France; H. Naji, Université des Sciences et Technologies de Lille, Villeneuve d'ascq, France; A. Mezrhab, Laboratoire de Mécanique & Energétique, Oujda, Morocco
PVP2008-61274: APPLICATION OF AEROELASTIC METHODS IN COMPRESSOR CASCADE CONFIGURATIONS USING COMMERCIAL CODE COUPLING
S. Schrape, A. Kühhorn, J. Nipkau, B. Beirow, Brandenburg University of Technology, Cottbus, Brandenburg, Germany
PVP2008-61126: COUPLED THERMAL-MULTIPHASE FLOW ANALYSIS IN QUENCHING PROCESSES FOR RESIDUAL STRESS OPTIMIZATION IN COMPRESSOR AND TURBINE DISKS
M. Springmann, A. Kühhorn, BTU Cottbus, Cottbus, Germany

SESSION 4.1L (CS-9-1)

Thursday, July 31, 8:30 am – 10:15 am, Dupage, 3rd Floor

PIPING DESIGN, STRENGTH AND WALL THINNING IN KOREAN AND JAPANESE CODES
Sponsored by: Codes and Standards Committee

Developed by: Y.-W. Park, Korea Institute of Nuclear Safety, Daejeon, Korea (Republic); K. Hasegawa, JNES, Tokyo, Japan

Chair: Y.-J. Kim, Korea University, Seoul, Korea (Republic)

Co-Chair: R. O. McGill, Structural Integrity Associates, San Jose, CA, USA
PVP2008-61581: EVALUATION OF REPRESENTATIVE PIPING SYSTEMS DESIGNED BY IMPLICIT FATIGUE CONCEPT
S.-B. Choi, S.-H. Kim, Y.-S. Chang, J.-B. Choi, Y.-J. Kim, Sungkyunkwan University, Suwon, Gyeonggi-do, Korea (Republic); J. H. Lee, J.-S. Kim, H.-D. Chung, Korea Institute of Nuclear Safety, Daejeon, Korea (Republic)
PVP2008-61426: FRACTURE ASSESSMENT FOR WELDMENT OF PIPING FOR BWR REACTOR INTERNAL WITH CIRCUMFERENTIAL THROUGH WALL CRACK
M. Itatani, N. Tanaka, Toshiba Corporation, Yokohama, Japan; Y. Kanazawa, Toshiba Corporation, Tokyo, Japan; C. Shitara, Y. Nakagawa, Tokyo Electric Power Company, Tokyo, Japan
PVP2008-61774: RECENT WORKS WITHIN KOREA ON DEVELOPING STRUCTURAL ACCEPTANCE CRITERIA FOR LOCAL WALL THINNING OF NUCLEAR PIPINGS (Presentation Only)
S. Lee, C.-Y. Park, Korea Electric Power Research Institute, Daejeon, Korea (Republic); Y.-J. Kim, Korea University, Seoul, Korea (Republic); J.-W. Kim, Chosun University, Gwangju, Korea (Republic); J. H. Park, Chungbuk National University, Cheongju, Chungbuk, Korea (Republic)
PVP2008-61791: ANALYSIS OF DATA ON PIPE WALL THINNING PHENOMENA BY FLUID FLOW IN PWR POWER PLANTS
K. Yamakami, E. Kaino, Mitsubishi Heavy Industries, Ltd, Takasago, Hyogo, Japan; S. Hirano, The Kansai Electric Power Co., Inc, Mikatagun, Fukui, Japan; T. Nakamura, The Kansai Electric Power Co., Inc, Osaka, Japan

SESSION 4.1M (OAC-9-1)

Thursday, July 31, 8:30 am – 10:15 am, Houston, 5th Floor

REGULATORY AND CODE CONSIDERATIONS FOR TRANSPORTATION AND STORAGE OF RADIOACTIVE MATERIALS
Sponsored by: Operations, Applications, and Components Committee

Developed by: C. Bajwa, US Nuclear Regulatory Commission, Rockville, MD, USA

Chair: C. Bajwa, US Nuclear Regulatory Commission, Rockville, MD, USA

Co-Chair: M. Greiner, University of Nevada, Reno, Reno, NV, USA
PVP2008-61572: A PROPOSED METHODOLOGY FOR STRAIN-BASED FAILURE CRITERIA
A. Wu, Savannah River National Laboratory, Aiken, SC, USA
PVP2008-61241: CERTIFICATION OF THE NAC-LWT CASK FOR SHIPMENT OF SODIUM DEBRIS BED EXPERIMENTS
Y. Liu, V. Shah, R. R. Fabian, Argonne National Laboratory, Argonne, IL, USA; J. Shuler, Department of Energy, Washington, DC, DC, USA
PVP2008-61728: STRAIN-BASED ACCEPTANCE CRITERIA FOR INELASTIC ANALYSIS
D. J. Ammerman, Sandia National Laboratories, Albuquerque, NM, USA; G. S. Bjorkman, Jr., Nuclear Regulatory Commission, Rockville, MD, USA
PVP2008-61593: A COMPARISON OF 10 CFR 71 AND THE IAEA TS-R-1 RADIOACTIVE MATERIAL TRANSPORTATION REGULATIONS

E. Easton, C. Bajwa, N. Osgood, US Nuclear Regulatory Commission, Rockville, MD, USA; R. B. Pope, Safe/Secure Transport of Radioactive Material, Waynesboro, PA, USA

SESSION 4.1N (SE-9-1)

Thursday, July 31, 8:30 am – 10:15 am, Kane, 3rd Floor

EXPERIMENTAL AND ANALYTICAL STUDIES IN SYSTEMS INTERACTION I
Sponsored by: Seismic Engineering Committee

Developed by: J. C. Chen, Lawrence Livermore National Laboratory, Livermore, CA, USA

Chair: J. Xu, US NRC, Rockville, MD, USA

Co-Chair: V. Matzen, North Carolina State University, Raleigh, NC, USA

PVP2008-61342: INELASTIC SEISMIC TEST OF THE SMALL BORE PIPING AND SUPPORT SYSTEM (PART 1: SEISMIC PROVING TEST OF THE SMALL BORE PIPING SYSTEM)
K. Tai, Mitsubishi Heavy Industries, Ltd., Kobe, Japan; M. Monde, Mitsubishi Heavy Industries, Ltd., Takasago City, Hyogo, Japan; E. Shirai, The Kansai Electric Power Co., Inc., Fukui, Japan

PVP2008-61351: INELASTIC SEISMIC TEST OF THE SMALL BORE PIPING AND SUPPORT SYSTEM (PART 2: SUPPORT ELEMENT TEST UNDER STATIC LOADING)
K. Tai, Mitsubishi Heavy Industries, Ltd., Kobe, Japan; H. Shimizu, Mitsubishi Heavy Industries, Ltd., Takasago City, Hyogo, Japan; E. Shirai, The Kansai Electric Power Co., Inc., Fukui, Japan

PVP2008-61841: EVALUATION OF SIMPLIFIED METHODS FOR ESTIMATING SHEAR CAPACITY USING JNES/NUPEC LOW-RISE CONCRETE SHEAR WALL CYCLIC TEST DATA
J. Nie, J. Braverman, C. Hofmayer, Brookhaven National Lab, Upton, NY, USA; S. A. Ali, USA Nuclear Regulatory Commission, Washington, DC, USA

PVP2008-61309: SEISMIC PERFORMANCE OF RAISED FLOOR SYSTEM BY SHAKE TABLE EXCITATIONS
W.-I. Liao, National Taipei University of Technology, Taipei, Taiwan; J.-F. Chai, National Center for Research on Earthquake Engineering, Taipei, Taiwan

SESSION 4.1O (MF-20-1)

Thursday, July 31, 8:30 am – 10:15 am, Los Angeles, 5th Floor

INTEGRATION OF ROBUST DESIGN METHODOLOGY WITH NDE
Sponsored by: PVP Materials and Fabrication Committee

Developed by: J. T. Fong, National Institute of Standards & Technology, Gaithersburg, MD, USA; O. F. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA; P.-S. Lam, Savannah River National Laboratory, Aiken, SC, USA

Chair: P.-S. Lam, Savannah River National Laboratory, Aiken, SC, USA

Co-Chair: O. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA

PVP2008-61555: NDE AND FAILURE PREVENTION: PAST, PRESENT, AND FUTURE
O. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA

PVP2008-61596: THE NDE ENGINEERING DIVISION OF ASME—25 YEARS OF SUCCESS
W. Springer, University of Arkansas, Fayetteville, AR, USA; O. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA

PVP2008-61180: RELIABILITY ANALYSIS OF PRESSURE VESSELS IN LUBRICANT PROCESS UNIT FOR RISK BASED INSPECTION
C.-H. Chien, C.-H. Chen, National Sun Yat-Sen University, Kaohsiung, Taiwan

PVP2008-61602: ROBUST ENGINEERING DESIGN FOR FAILURE PREVENTION
J. T. Fong, J. J. Filliben, N. A. Heckert, R. deWit, National Institute of Standards & Technology, Gaithersburg, MD, USA; B. Bernstein, Illinois Institute of Technology, Chicago, IL, USA

PVP2008-61945: ROBUST DESIGN OF THE ARES I-X UPPER STAGE SIMULATOR FOR THE SPACE SHUTTLE REPLACEMENT (Presentation Only)
F. W. Brust, Jr., Engineering Mechanics Corp. of Columbus, Columbus, OH, USA

SESSION 4.1P (CT-3-1)

Thursday, July 31, 8:30 am – 10:15 am, McHenry, 3rd Floor

LEAK TIGHTNESS OF BOLTED JOINTS
Sponsored by: Computer Technology Committee

Developed by: T. Kobayashi, Numazu College of Technology, Numazu, Shizuoka, Japan; J. Payne, Jpac Inc, Long Valley, NJ, USA

Chair: W. Koves, UOP LLC., Des Plaines, IL, USA

Co-Chair: H. Kockelmann, University of Stuttgart, Stuttgart, BW, Germany

PVP2008-61213: NUMERICAL DETERMINATION OF THE SEALING PERFORMANCE OF A ROUGH CONTACT: REAL VERSUS SYNTHETIC FRACTAL SURFACES
C. Vallet, D. Lasseux, Laboratoire TREFLE-ENSAM, Talence, France; P. Sainsot, LaMCoS, Villeurbanne, France; H. Zahouani, ENISE, Saint Etienne, France

PVP2008-61465: CHARACTERIZATION OF SEALING BEHAVIOR OF GASKETS FOR THE LEAK RATE BASED DESIGN OF GASKETED BOLTED FLANGED CONNECTIONS
T. Kobayashi, Numazu College of Technology, Numazu, Shizuoka, Japan

PVP2008-61561: ON THE OPERATING TIGHTNESS OF B16.5 FLANGED JOINTS
J. Payne, Jpac Inc, Long Valley, NJ, USA

PVP2008-61214: VALVE PACKINGS SEATING STRESS
J. Veiga, L. Ascenco, C. Girão, C. Cipolatti, Teadit Industria e Comercio Ltda, Rio de Janeiro, RJ, Brazil; F. Castro, Copesul-Cia. Petroquimica do Sul, Triunfo, RS, Brazil

SESSION 4.1Q (CT-12-1)

Thursday, July 31, 8:30 am – 10:15 am, Miami, 5th Floor

NEW AND EMERGING METHODS OF ANALYSIS AND APPLICATIONS

Developed by: Y. H. Park, NMSU, Las Cruces, NM, USA

Chair: D. Metzger, AECL, Mississauga, ON, Canada

SESSION 4.2M (OAC-4-5)

Thursday, July 31, 10:30 am – 12:15 pm, Houston, 5th Floor

THERMAL—2
Sponsored by: Operations, Applications, and Components Committee

Developed by: M. R. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

Chair: J. G. Arbital, Y-12 National Security Complex, Oak Ridge, TN, USA

Co-Chair: C. G. May, Savannah River National Laboratory, Aiken, SC, USA

PVP2008-61591: EVALUATION OF THERMAL CONDUCTIVITY OF INSTALLED-IN-PLACE POLYURETHANE FOAM INSULATION BY EXPERIMENT AND ANALYSIS
A. C. Smith, N. Gupta, K. R. Eberl, B. Hardy, Savannah River National Laboratory, Aiken, SC, USA

PVP2008-61600: MEASUREMENT AND UNCERTAINTY OF HEAT FLUX TO A RAIL-CASK SIZE PIPE CALORIMETER IN A POOL FIRE
M. A. Kramer, M. A. del Valle, M. Greiner, University of Nevada, Reno, Reno, NV, USA

PVP2008-61563: RISK PERSPECTIVES ON RAIL TRANSPORT OF SPENT NUCLEAR FUEL
C. Bajwa, E. Easton, US Nuclear Regulatory Commission, Rockville, MD, USA

PVP2008-61568: POTENTIAL EFFECTS OF RECENT ROAD TRANSPORTATION ACCIDENTS ON RADIOACTIVE MATERIAL SHIPMENTS
C. Bajwa, E. Easton, R. Shewmaker, US Nuclear Regulatory Commission, Rockville, MD, USA; D. Dunn, Southwest Research Institute, San Antonio, TX, USA

SESSION 4.2N (SE-9-2)

Thursday, July 31, 10:30 am – 12:15 pm, Kane, 3rd Floor

EXPERIMENTAL AND ANALYTICAL STUDIES IN SYSTEMS INTERACTION II
Sponsored by: Seismic Engineering Comittee

Developed by: J. C. Chen, Lawrence Livermore National Laboratory, Livermore, CA, USA

Chair: J. C. Chen, Lawrence Livermore National Laboratory, Livermore, CA, USA

Co-Chair: K. Tai, Mitsubishi Heavy Industries, Ltd., Kobe, Japan

PVP2008-61556: TIME-DOMAIN NONLINEAR SSI ANALYSIS OF FOUNDATION SLIDING USING FREQUENCY-DEPENDENT FOUNDATION IMPEDANCE DERIVED FROM SASSI
M. Tabatabaie, SC Solutions, Oakland, CA, USA; T. Ballard, SC Solutions, Sunnyvale, CA, USA

PVP2008-61352: INELASTIC SEISMIC TEST OF THE SMALL BORE PIPING AND SUPPORT SYSTEM (PART 3: SIMULATION ANALYSIS FOR THE PIPING SEISMIC TEST)
K. Tai, Mitsubishi Heavy Industries, Ltd., Kobe, Japan; E. Shirai, The Kansai Electric Power Co., Inc., Fukui, Japan

PVP2008-61278: AN APPROACH FOR ASSESSING STRUCTURAL UPLIFTING USING BLAST MOTIONS
J. Nie, C. Hofmayer, Brookhaven National Lab, Upton, NY, USA; J. Xu, US NRC, Rockville, MD, USA; S. A. Ali, USA Nuclear Regulatory Commission, Washington, DC, USA

PVP2008-61881: NONLINEAR SEISMIC CORRELATION ANALYSIS OF THE JNES/NUPEC LARGE-SCALE PIPING SYSTEM TESTS
J. Nie, G. DeGrassi, C. Hofmayer, Brookhaven National Laboratory, Upton, NY, USA; S. A. Ali, USA Nuclear Regulatory Commission, Washington, DC, USA

SESSION 4.2O (MF-20-2)

Thursday, July 31, 10:30 am – 12:15 pm, Los Angeles, 5th Floor

INTEGRATION OF FRACTURE MECHANICS, FATIGUE MECHANICS, AND NDE
Sponsored by: PVP Materials and Fabrication Committee

Developed by: J. T. Fong, National Institute of Standards & Technology, Gaithersburg, MD, USA; O. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA; P.-S. Lam, Savannah River National Laboratory, Aiken, SC, USA

Chair: J. T. Fong, Drexel University, Philadelphia, PA, USA

Co-Chair: O. F. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA

PVP2008-61249: FRACTURE MECHANICS AND NDE: THE KEY TO FAILURE PREVENTION
G. Egan, APTECH Engineering Services Inc, Sunnyvale, CA, USA

PVP2008-61612: A WEB-BASED DATA ANALYSIS METHODOLOGY FOR ESTIMATING RELIABILITY OF WELD FLAW DETECTION, LOCATION AND SIZING
J. T. Fong, J. J. Filliben, N. A. Heckert, National Institute of Standards & Technology, Gaithersburg, MD, USA; O. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA

PVP2008-61565: UNCEERTAINTY ESTIMATE OF CHARPY USING A 7-FACTOR 8-RUN DESIGN OF EXPERIMENT
C. Interrante, Consultant, Bethesda, MD, USA; J. T. Fong, J. J. Filliben, N. A. Heckert, National Institute of Standards & Technology, Gaithersburg, MD, USA

PVP2008-61584: A NEW APPROACH TO ASSESSING THE RELIABILITY OF APPLYING LABORATORY FRACTURE TOUGHNESS TEST DATA TO FULL-SCALE STRUCTURES
Y. Chao, University of South Carolina, Columbia, SC, USA; J. T. Fong, Drexel University, Philadelphia, PA, USA; P.-S. Lam, Savannah River National Laboratory, Aiken, SC, USA

SESSION 4.2P (DA-4-10)

Thursday, July 31, 10:30 am – 12:15 pm, McHenry, 3rd Floor

FATIGUE—2
Sponsored by: Design and Analysis Committee

Developed by: J.-M. Stephan, EDF R&D, Moret-sur-Loing, France

Chair: J. A. Le Duff, AREVA NP, Paris La Defense, Ile de France, France

Co-Chair: S. Chattopadhyay, The Pennsylvania State University, DuBois, PA, USA

Machinery Research Institute, Hefei, Anhui, China

PVP2008-61448: NONDESTRUCTIVE INSPECTION OF PRESSURE-BEARING EQUIPMENT IN CHINA

R. Yuan, X. Chen, W. Guan, Hefei General Machinery Research Institute, Hefei, Anhui, China

PVP2008-61743: NONDESTRUCTIVE TESTING TECHNIQUE FOR ATMOSPHERIC STORAGE TANKS

S. Ding, F. Liu, Y. Xu, X. Guo, Zhejiang Provincial Special Equipment Inspection and Research Institute, Hangzhou, Hangzhou, China

SESSION 4.3M (OAC-4-8)

Thursday, July 31, 2:00 pm – 3:45 pm, Houston, 5th Floor

DESIGN AND FABRICATION ISSUES

Sponsored by: Operations, Applications, and Components Committee

Developed by: M. R. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

Chair: C. G. May, Savannah River National Laboratory, Aiken, SC, USA

Co-Chair: M. Feldman, Oak Ridge National Laboratory, Knoxville, TN, USA

PVP2008-61125: MODEL 9975 SHIPPING PACKAGE FABRICATION PROBLEMS AND SOLUTIONS

C. G. May, A. C. Smith, Savannah River National Laboratory, Aiken, SC, USA

PVP2008-61216: THE DEPARTMENT OF ENERGY REPLACEMENT FOR THE 110-GALLON SPECIFICATION 6M SHIPPING CONTAINER FOR RADIOACTIVE CONTENTS

J. G. Arbital, Y-12 National Security Complex, Oak Ridge, TN, USA; P. T. Mann, U.S. Department of Energy, Albuquerque, NM, USA

PVP2008-61425: RECENT DEVELOPMENT OF CODE CASE ON USE OF DUCTILE CAST IRON FOR TRANSPORT AND STORAGE CASK FOR SPENT NUCLEAR FUEL

T. Arai, Central Research Institute of Electric Power Industry, Yokosuka-shi, Kanagawa-ken, Japan; T. Saegeusa, Central Research Institute of Electric Power Industry, Abiko, Chiba-ken, Japan; R. Hueggenberg, GNS Gesellschaft, Essen, Germany

PVP2008-61543: FOAM DENSITY SENSITIVITY STUDY FOR THE 9977 PACKAGE USING FINITE ELEMENT ANALYSIS

J. Gorczyca, A. Wu, Savannah River National Laboratory, Aiken, SC, USA

SESSION 4.3N (SE-7-1)

Thursday, July 31, 2:00 pm – 3:45 pm, Kane, 3rd Floor

SEISMIC ISOLATION

Sponsored by: Seismic Engineering Committee

Developed by: C.-S. Tsai, Department of Civil Engineering, Feng Chia University, Taichung, Taiwan

Chair: C.-S. Tsai, Department of Civil Engineering, Feng Chia University, Taichung, Taiwan

Co-Chair: M. E. Nitzel, M. E. Nitzel Engineering Services, Nampa, ID, USA

PVP2008-61043: DEVELOPMENT OF PASSIVE CONTROLLED STRUCTURE ASSEMBLED WITH L-TYPE DIAPHRAGM

T. Chiba, NAPRA, Yokohama-shi, Japan; T. Mikoshiba, C. Minowa, NIED, Tukuba-shi, Japan; T. Sato, Ideal Brain Inc., Tokyo, Japan; M. Terai, Fukuyama University, Fukuyama-shi, Japan; Y. Hiyama, Sumikei-Nikkei Engineering Co. Ltd., Tokyo, Japan

PVP2008-61099: INSTITUTIONAL EFFICIENCY OF COMMONHOLD INDUSTRIAL PARKS

J.-W. Lin, S. Chen, L.-S. Yang, M.-J. Lai, Feng Chia University, Taichung, Taiwan

PVP2008-61431: STUDY ON REDUCING RELATIVE DISPLACEMENT OF SEISMIC ISOLATOR

H. Tanaka, Fukui University Graduate School, Fukui City, Japan

PVP2008-61072: SHAKING TABLE TESTS OF STATIC DYNAMICS INTERCHANGEABLE—BALL PENDULUM SYSTEM FOR MOTION SENSITIVE EQUIPMENT

C.-S. Tsai, W.-S. Chen, C.-P. Tsou, C.-T. Yang, Feng Chia University, Taichung, Taiwan

PVP2008-61344: APPLICATIONS OF MULTIPLE TRENCH FRICTION PENDULUM SYSTEM TO SEISMIC MITIGATION OF STRUCTURES

C.-S. Tsai, W.-S. Chen, Y.-C. Lin, C.-C. Chen, Feng Chia University, Taichung, Taiwan

SESSION 4.3O (MF-20-3)

Thursday, July 31, 2:00 pm – 3:45 pm, Los Angeles, 5th Floor

CONTINUOUS WEB-BASED NDE MONITORING AND PVP FAILURE EVENT DATABASES

Sponsored by: PVP Materials & Fabrication Committee

Developed by: J. T. Fong, National Institute of Standards & Technology, Gaithersburg, MD, USA; O. F. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA; P.-S. Lam, Savannah River National Laboratory, Aiken, SC, USA

Chair: O. F. Hedden, Codes and Standards Consulting, Fort Worth, TX, USA

Co-Chair: Y. J. Chao

PVP2008-61574: CONTINUOUS NDE MONITORING VIA WEB TECHNOLOGY

P. Marcal, MPAVE Corp, Julian, CA, USA; J. T. Fong, Drexel University, Philadelphia, PA, USA

PVP2008-61914: CHARACTERISTICS OF DAMAGE & DEGRADATION MECHANISMS IN NUCLEAR POWER PLANT PIPING SYSTEMS

B. Lydell, Scandpower Risk Management, Inc., Houston, TX, USA

PVP2008-61242: A QUANTITATIVE APPROACH TO RISK-BASED INSPECTION METHODOLOGY OF MAIN STEAM AND HOT REHEAT PIPING SYSTEMS

M. Cohn, Aptech Engineering Services, Sunnyvale, CA, USA; J. T. Fong, National Institute of Standards & Technology, Gaithersburg, MD, USA; P. Besuner, Aptech Engineering Services, Sunnyvale, CA, USA

PVP2008-61552: THE ROLE OF FAILURE DATA IN PLANT AGING MANAGEMENT AND LIFE EXTENSION

A. Chockie, Chockie Group International, Inc., Seattle, WA, USA; F. Gregor, LCM Technology, LC, Tarpon Springs, FL, USA

PVP2008-61607: STRUCTURAL AGING MONITORING VIA WEB-BASED NONDESTRUCTIVE EVALUATION TECHNOLOGY