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龍華科技大學 函

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受文者：國立暨南國際大學 擬辦：

發文日期：中華民國101年2月29日 一、將來文上傳本校公文系統，

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速別：最速件 專員王淑娟

密等及解密條件或保密期限：

助理教授兼
學術及推廣
服務組組長

戴榮賦

文陳閱後存。

組長林玉溪

代

組長林玉溪 決代
行為

附件：研討會議程及報名表 (ASINCO9_PROGRAM_001.PDF、第九屆亞洲核能結構完整性國際會議報名表.DOC，共2個電子檔案)

主旨：本校舉辦「第九屆亞洲核能結構完整性國際會議」，敬邀貴單位惠予派員參加，請 查照。

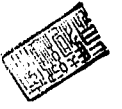
說明：

- 一、為促進核能技術交流，提升核能安全，本校邀請台灣、日本、韓國、美國、越南等國核能專家學者，訂於101年4月18日至20日假高雄金典大飯店舉辦核能設備結構完整性會議，會議議程如附件一。
- 二、會議報名表如附件二，有意參加者請於3月16日前向主辦單位登記。
- 三、本案聯絡人：葉慧慈小姐，電話：0936828262 或 (02)82093211轉5133、5132。

正本：全國各大專校院、清華大學工程與系統科學系、工業技術研究院材料與化工研究所、台灣電力股份有限公司核能技術處、台灣電力股份有限公司核能發電處、台灣電力股份有限公司核能安全處、台灣電力股份有限公司第一核能發電廠、台灣電力股份有限公司第二核能發電廠、台灣電力股份有限公司核能第三發電廠、台灣電力股份有限公司龍門電廠、台灣電力股份有限公司電力綜合研究所、行政院原子能委員會核能研究所、行政院原子能委員會放射性物料管理局、行政院原子能委員會核能管制處、行政院原子能委員會核能技術處、益鼎工程顧問公司、泰興工程顧問公司、本校工程學院、本校電資學院。

副本：本校工程技術研究所丁鯤教授

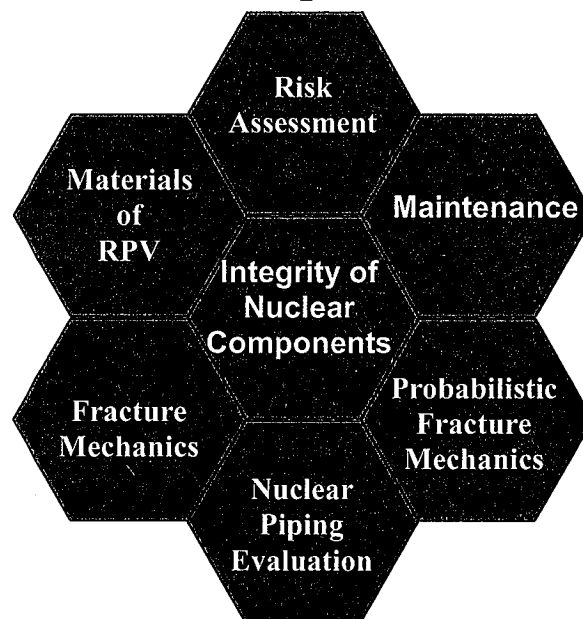
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ASINCO-9

The 9th International Conference
on the Asian Structural Integrity of Nuclear
COmponents



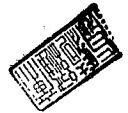
A Tribute to Memorial of the late Prof. Young-Jin Kim (1950-2011)

PROGRAM

April 18-20, 2012

The Splendor Kaohsiung, Taiwan, R.O.C.

Lunghwa University of Science and Technology, R.O.C.



WELCOMING ADDRESS

On behalf of Organizing Committee of ASINCO (The Asian Society for Integrity of Nuclear COmponents), we will warmly welcome you to participate in the 9th Asian International Symposium on the Structural Integrity of Nuclear Components to be held in **The Splendor Kaohsiung** at south of Taiwan from the 18th to 20th April, 2012. The series of International Symposium on the Structural Integrity of Nuclear Components began in Taejeon (Korea) in 1996, and was followed bi-annually in Tokyo (Japan) 1998, Taoyuan (Taiwan) 2000, Jeju (Korea) 2002, Kyoto (Japan) 2004, Kenting (Taiwan) 2006, Muju (Korea) 2008, . Awaji (Japan) 2010.

The objectives of the Symposium are to provide a forum for engineers, from Japan, Korea and Taiwan, engaged in structural integrity assessment of nuclear components to exchange the information for mutual benefit, to discuss how to implement the state-of-the-art technologies, and to promote future research work. This Symposium will feature about 34 lectures by guest speakers invited by the Organizing Committee. In keeping with the successful traditions established at previous symposiums, the scope is kept broad, covering various issues in design and analysis: materials of RPV, probabilistic fracture mechanics and risk assessments, fracture mechanics and life predictions, pipe thinning, computational mechanics and vibration analysis of components. Participation, however, will be open to public, including experts of regulatory bodies, utilities, research institutes and vendors. We wish to recommend you to take this opportunity to associate with your peers, exchange ideas, discuss new technologies and share knowledge critical to the future of the international nuclear industry.

Last year we lost our best colleague in this society Professor Young-Jin Kim who was the founder of ASINCO. So there will be A Tribute to Memorial of the late Prof. Young-Jin Kim (1950-2011) in this workshop.

The Organizing Committee is once again very pleased to welcome the exceptionally warm response from the international structural integrity community.

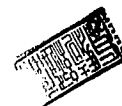
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ASINCO-9 Schedule

	April 18 th (Wednesday)	April 19 th (Thursday)	April 20 th (Friday)
08:30			Section IV: Fracture Mechanics of Nuclear Components
09:00		Opening Ceremony	
		A Tribute to Memorial of the late Prof. Young-Jin Kim (1950-2011)	
10:00		Special Issues for Fukushima accidents	
			Break
11:00			Section V: Welding Process and Materials
		Section I: Numerical Analysis for Fracture Problems in Nuclear Components	
12:00			Closing Meeting
		Lunch	
13:00	Registration		
14:00		Section II : Risk and Probabilistic Fracture Mechanics	
15:00			
		Break	
16:00			
17:00	Advisory Committee Meeting	Section III Structural Integrity Analysis of Nuclear Components	
18:00			
19:00			

PROGRAM



April 19, Thursday

9:00~9:10	OPENING CEREMONY
9:30~10:00	<i>A Tribute to Memorial of the late Prof. Young-Jin Kim (1950-2011)</i> <i>Chairman: Professor Masanori Kikuchi</i>
09:10-09:25	<i>A sketch of Prof. Kim's life</i> Dr. Y.H. Choi (KINS, Korea)
09:25-09:40	<i>Prof. Kim's contribution to structural integrity of nuclear components</i> Professor Y.S. Chang (Kyung Hee University, Korea)
09:40-09:50	<i>A memorial speech from Japan</i> Professor G. Yagawa (Toyo University, Japan)
09:50-10:00	<i>A memorial speech from Taiwan</i> Professor K. Ting (Lunghwa University of Science and Technology)
10:00-11:00	Special Issues for Fukushima accidents
10:00-10:20	<i>The latest investigation results of Fukushima's accident</i> N. Kasahara (University of Tokyo, Japan)
10:20-10:40	<i>The Strategy of Taiwan Industries related nuclear fields in the post-Fukushima accidents</i> L.H. Wang (Industrial Technology Research Institute, Taiwan)
10:40-11:00	<i>The seismic margin evaluations</i> T.M. Tseng (Stevenson & Associates, United States)
11:00-11:20	Coffee Break
11:20-12:20	Section I: Numerical Analysis for Fracture Problems in Nuclear Components
11:20-11:40	<i>Estimation of elastic-plastic fracture toughness by a numerical simulation based on a ductile crack initiation criterion</i> M.Kamaya (Institute of Nuclear Safety System, Inc., Japan)
11:40-12:00	<i>Finite element simulation for ductile fracture of cracked pipes</i> J.H. Kim, N.H.Kim, Y.J. Kim (Mechanical Engineering, Korea University, Korea)
12:00-12:20	<i>Elastic-plastic finite element analysis for reducer with a semi-elliptical internal circumferential surface crack</i> S.Y. Wu, Y.S. Du, B.J. Tsai, J.J. Chen (Institute of Nuclear Energy Research, Taiwan)
12:20-13:00	Lunch
13:00-15:20	Section II : Risk and Probabilistic Fracture Mechanics
13:00-13:20	<i>Review of PFM activities of Japanese research groups and collaborative works in Asian countries</i> Y. Kanto (Ibaraki University, Japan), K. Onizawa (Japan Atomic Energy Agency, Japan), S. Yoshimura (The University of Tokyo, Japan)
13:20-13:40	<i>A Probabilistic fracture mechanics analysis of BWR pressure vessels</i> W.F. Wu, H.L. Wei (National Taiwan University, Taiwan), J.S. You (National Taipei University of Education, Taiwan), C.C. Huang (Institute of Nuclear Energy Research, Taiwan)
13:40-14:00	<i>The benefit of probabilistic fracture analysis in shell welds inspection of boiling water reactor pressure vessel</i> H.C. Lin, C.C. Huang, H.W. Chou, B.Y. Chen, R.F. Liu (Institute of Nuclear Energy Research, Taiwan), T.L. Weng, H.J. Chang (Taiwan Power Company, Taiwan)
14:00-14:20	<i>Benchmark analysis on PFM analysis codes for aged nuclear reactor piping</i> K. Onizawa (Japan Atomic Energy Agency, Japan), H. Itoh (Japan Nuclear Energy Safety Organization, Japan), J. Katsuyama (Japan Atomic Energy Agency, Japan), Y. Li (Japan Nuclear Energy Safety Organization, Japan), Kazuya Osakabe (Mizuho Information & Research Institute, Japan), S. Yoshimura (The University of Tokyo, Japan)
14:20-14:40	<i>Failure probability assessment for boiling water reactor pressure vessel under low temperature over-pressure event</i> H. W. Chou, C.C. Huang, B.Y. Chen, H.C. Lin, R.F. Liu (Institute of Nuclear Energy Research, Taiwan), T.L. Weng, H.J. Chang (Taiwan Power Company, Taiwan).
14:40-15:00	<i>Reactor pressure vessel integrity assessment by probabilistic fracture mechanics – A plant specific analysis</i> B.Y. Chen, C.C. Huang, H.W. Chou, H.C. Lin, R.F. Liu (Institute of Nuclear Energy Research, Taiwan), T.L. Weng, H.J. Chang (Taiwan Power Company, Taiwan).
15:00-15:20	<i>Risk-Informed Developments for the Safety Related Valves of IST in Taiwan BWR and PWR Nuclear Power Plants</i> K.Ting (Lunghwa University of Science and Technology, Taiwan), Y.C. Li (Industrial Technology Research Institute, Taiwan), K.T. Chen (National Chunghsing University, Taiwan), F.T. Chien, C.C. Chen, G.D. Li (Taiwan Power Company, Taiwan)
15:20-15:30	Coffee Break
15:30-18:50	Section III Structural Integrity Analysis of Nuclear Components
15:30-15:50	<i>Study of design seismic forces for liquid storage tanks in Taiwan</i> J.D. Yau (Tamkang University, Taiwan), L.C. Hsu (Shin-Yue Engineering Consultants Co., Taiwan)

- 15:50-16:10 **Soil Structure Interaction Analysis of Condensate Storage Tank in a Nuclear Power Plant**
W.T. Lin, Y.C. Wu, C.C. Huang (Industrial Technology Research Institute, Taiwan)
- 16:10-16:30 **Rebuilding an Advanced Boiling Water Reactor Building Using a Lumped-Mass Stick Model**
Y.C. Chen, Y.C. Wu (Institute of Nuclear Energy Research, Taiwan)
- 16:30-16:50 **Containment Evaluation of MSF-Type Cask for Interim Storage and Transport of PWR Spent Fuel**
Y. Saito, J. Kishimoto, T. Matsuoka, H. Tamaki (Mitsubishi Heavy Industries, Ltd. Kobe Shipyard & Machinery Works) A. Kitada (Mitsubishi Heavy Industries, Ltd. Takasago R&D Center)
- 16:50-17:10 **Dynamic Analysis of Spent Fuel Storage Rack**
T.P. Tsai (Industrial Technology Research Institute, Taiwan), C.K. Wang (Taiwan Power Company, Taiwan)
- 17:10-17:30 **Assessment of the Interaction Effect between Tube and Support on the Burst Pressure**
H.S. Kim, K.O. Chang, H. K. Youm (Research Institute, KEPCO E&C, Korea), Y.S. Chang (Kyung Hee University)
- 17:30-17:50 **The effect of analysis model on the stress calculation for nozzle attached to pressure vessel under internal pressure loading**
M.S. Lu, J.S. Yu (Institute of Nuclear Energy Research, Taiwan)
- 17:50-18:10 **The Comparisons Between Six Different Turbulence Models And Experiments for Thermal Mixing Phenomenon in A T-Junction Piping**
C. J. Li, Y.H. Cheng, H.J. Chang, L.H. Wang (Industrial Technology Research Institute, Taiwan).
- 18:10-18:30 **Stress Analysis for a Screw of Fuel Channel Fastener**
S.R. Lin, J.S. Yu, C.S. Chang (Institute of Nuclear Energy Research, Taiwan)
- 18:30-18:50 **Investigation on Application of the Strain-Based Criteria to Safety Class 1 Nuclear Component**
J. S. Kim (Suncheon National University, Korea), J.S. Kim, Y.J. Kim (Korea University, Korea)

April 20, Friday

- 08:30~10:10 **Section IV: Fracture Mechanics of Nuclear Components**
- 08:30-08:50 **An Example of Flaw Evaluation for Stress Corrosion Cracking on Shroud Support of a BWR Plant and Related Issues for Future Code Development**
T. Terakado and K. Dozaki (The Japan Atomic Power Company, Japan)
- 08:50-09:10 **Net-Section-Collapse of Circumferentially Cracked Cylinders Subjected to Torsional Moment**
N. Miura, K. Hoshino (CRIEPI, Japan), Y. Li, H. Doi (JNES, Japan)
- 09:10-09:30 **Crack Opening Displacement Analysis for Thin-walled Pipes with a Circumferential Through-wall Crack Considering Creep Effects**
Jeong Soon Park, Young Hwan Choi (Korea Institute of Nuclear Safety, Korea)
- 09:30-09:50 **Developments of Online Monitoring System for Fatigue effects on Nozzles in the Nuclear Power Plant.**
Y.L. Tsai, C. Fong, L.H. Wang (Industrial Technology Research Institute, Taiwan), T.K. Yen (National TsingHua University)
- 09:50-10:10 **Stress Intensity Factors of A Non-Traction-Free Composite Wedge under Thermal Loading**
T.L. Kuo, C.W. Fan (Industrial Technology Research Institute, Taiwan), C.B. Hwu (National Cheng Kung University)
- 10:10-10:20 **Coffee Break**
- 10:20-12:00 **Section V: Welding Process and Materials**
- 10:20-10:40 **A study on the weld overlay residual stresses study for a feedwater nozzle dissimilar weld**
H. C. Lin, C.C. Huang, R.F. Liu and B.Y. Chen (Institute of Nuclear Energy Research, Taiwan)
- 10:40-11:00 **Methodology Comparisons on Residual Stress of Welding for Dissimilar Metal Nozzle Weld**
Y.L. Tsai (Industrial Technology Research Institute, Taiwan), T.W. Fan (Chung Hua University, Taiwan), H.J. Chang (Taiwan Power Company, Taiwan), L.H. Wang (Industrial Technology Research Institute, Taiwan)
- 11:00-11:20 **Structural Integrity Analysis for Weld Overlay on a BWR Feedwater Nozzle**
R.F. Liu, C.C. Huang (Institute of Nuclear Energy Research, Taiwan)
- 11:20-11:40 **Effect of Creep Constitutive Equation on Stress Mitigation Behavior of Low Alloy Steel Pipe During Post Weld Heat Treatment**
H. Takazawa, N. Yanagida (Hitachi, Ltd., Japan)
- 11:40-12:00 **Fatigue Crack Growth Rate Tests under PWR Environment for Type 347 Stainless Steel**
B.S. Lee, D. W. Kim, J.H. Yoon, K. D. Min (Korea Atomic Energy Research Institute), S.J. Kim (Hanyang University)
- 12:00-12:20 **Closing Meeting**





第九屆亞洲核能結構完整性國際會議

The 9th International Conference on the Asian Structural Integrity of Nuclear COmponents

ASINCO-9

時間：2012 年 4 月 18 日至 4 月 20 日

地點：高雄金典大飯店

龍華科技大學竭誠邀請您參加「第九屆亞洲核能結構完整性國際會議」(the 9th International Conference on the Asian Structural Integrity of Nuclear COmponents, 簡稱 ASINCO-9), 會議訂於 2012 年 4 月 18 日至 20 日於高雄金典大飯店舉行。本會議於 1996 年由韓國成均館大學金泳鎮教授(韓國機械工程學會副理事長)與日本東京大學矢川元基教授共同推動, 1996 年在韓國大津首先開始, 隨後台灣丁鯤博士與日本東京理科大学菊池正紀加入, 每兩年先後在日本東京(1998)、台灣核能研究所(2000)、韓國濟州島(2002)、日本京都(2004)、台灣墾丁(2006)、韓國 Muju(2008)、日本 Awaji island 舉行, 為推動核能設備結構完整性技術發展而努力。不幸韓國創始人金泳鎮教授於 2012 年年初病逝, 此次會議將滿懷感念追憶金教授。

本次會議將由台、日、韓、美、越南五個地區地核能設備結構力學專家參與, 進行核能設備結構完整性最新技術以及發展之交流, 以提升核能安全。本次會議共計有 30 篇論文(日本 7 篇、韓國 5 篇、台灣包括核能研究所、工研院材化所、台灣大學、淡江大學、龍華大學共 18 篇), 內容涵蓋反應器壓力槽材料、機率破裂力學與風險評估、管路覆銲探討、破裂力學與壽命評估、核能設備結構與耐震分析等。另邀請日本、台灣與美國專家就福島事件後有關核能結構之發展進行討論。希望國內核能界專家學者能共同參與, 交換經驗與心得, 達成技術與知識的共享, 為核能安全貢獻一份心力。

龍華科技大學敬邀

註冊費用：新台幣 4000 元(含論文集), 現場繳交, 發給收據。

會議期間欲住宿高雄金典大飯店, 雙人房雙人 3795 元、單人 3410 元(含稅及早餐), 有意者請於 3 月 16 日前向主辦單位登記。

諮詢專線：龍華科大【(02)82093211 轉 5132 或 5133, 行動電話 0936828262 葉慧慈小姐】

龍華科技大學第九屆亞洲核能結構完整性國際會議報名表

姓 名		聯絡電話	
服務單位		行動電話	
職稱		傳真	
通訊地址			
E-mail :			
住宿 高雄金典大飯店 (請打勾)	由主辦單位代訂 ☐ 是 ☐ 否 住宿時間：17 日晚 ☐ 18 日晚 ☐ 19 日晚 ☐ 20 日晚 ☐ 住宿：雙人 ☐ 單人 ☐		
用 餐	☐ 葷食 ☐ 素食		

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