Workshop on Ultrasonics and Underwater Acoustics in Korea, 2012

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<th>Area of Topics:</th>
<th>Ultrasonics, Underwater Acoustics</th>
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<td>Date:</td>
<td>Aug. 27-28, 2012</td>
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<td>Venue:</td>
<td>Daeyeon Campus, Pukyong National University, Busan, Korea</td>
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(608-737) 599-1, Daeyeon 3-Dong, Nam-Gu. Busan, Korea

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Technical Program
(General talk 20 min. Invited talk 40 min.)

Monday, Aug 27

10 : 40 - 12 : 00

1. Focal range control of focused ultrasonic field by curvature changing of transducer
   Jungsoon Kim (Dept. of Media Eng., Tongmyong Univ.),
   Moojoon Kim, Kanglyeol Ha (Dept. of Phys., Pukyong National Univ.)

2. Dependence of ultrasonic frequency on glass scribing
   Chanshin Kang, Seho Kwon, Hojin Park, Younghan. Kim (Korea Sci. Acad. of KAIST),
   Jung-Hoon Moon (Suwon Sci, College), Shin Wook Kim (MJ Tech Inc.)

3. Sonoluminescence and bubble dynamics in viscous liquids
   Pak-Kon Choi, Takaaki Yamada, Yuuta Takeuchi (Dep. of phys., Meiji Univ.)

4. Characteristics of Machining time of Brittle Material
   Takuya Asami, Hikaru Miura (Nihon Univ.)

Lunch break

13 : 20 - 14 : 20

5. Airborne Ultrasound CW- and Pulsed-Doppler Systems for Biomedical
   Yasuhito Takeuchi
6. Determination Method of Acoustical Physical Constants and Their Temperature Coefficients of La₃Ta₀.₅Ga₅.₃Al₀.₂O₁₄ Single Crystal
   Yuji Ohashi (Tohoku Univ.), Tomoaki Karaki (Toyama Pref. Univ.), Hitoshi Yoshida (Tohoku Univ.),
   Tao Lv (Toyama Pref. Univ.), Mototaka Arakawa (Tohoku Univ.),
   Masatoshi Adachi (Toyama Pref. Univ.), Jun’ichi Kushibiki (Tohoku Univ.)

7. 3D-Simulation for temperature rise in tissue mimicking phantom with bone
   Nobuyuki Endoh, Takenobu Tsuchiya, Yu Sakuma, Shin Tanaka (Kanagawa Univ.)

   ______ Coffee break ______

   ______ 14:30 · 15:10 ______

8. The influence of bonding layer on the characteristic of piezoelectric polymer transducer
   Yonggang Cao, Moojoon Kim, Kang-Lyeol Ha (Pukyong National Univ.),
   Jungsoon Kim (Tongmyong Univ.)

9. Growth of ZnO Nanostructured Materials using Cylindrical Piezoelectric Vibrator
   Choonghwa Lee, Moojoon Kim, Kang-Lyeol Ha (Pukyong National Univ.),
   Jungsoon Kim (Tongmyong Univ.)

   ______ Coffee break ______

   ______ 15:30 · 16:10 ______

[ Invited Talk ]
10. Estimation of stability of acoustic reciprocal transmission in deep and coastal waters
    Hiroyuki Hachiya (Tokyo Inst. of Tech.)

   ______ Coffee break ______

   ______ 16:20 · 17:20 ______

11. Consideration about acoustic measuring method of bended steel pile under the ground in the earthquake
    Sayuri Matsumoto, Toshinari Tanaka, Taketsugu Hirabayashi, Munee Yoshie,
    Kageyoshi Katakura, Yoshiaki Kikuchi, Hideki Takahashi (Port and Airport Research Inst.)
12. Development of 4-D underwater acoustic imaging system
Sayuri Matsumoto, Kageyoshi Katakura, Mitsuhiko Nanri, Norihide Takeyama,
Takenobu Tsuchiya, Nobuyuki Endoh, Takatoshi Noguchi (Port and Airport Research Inst.)

13. Development of Non-contact Thickness Gauging Equipment for Underwater Steel Structure
Kazuhiro Shirai (Port and Airport Research Inst.)

Tuesday, Aug 28

14. Performance of Orthogonal Frequency Division Multiplexing in Highly Reverberant Water Tank
Woo Yang, Chulwon Seo, Jihyun Park, Kyu-Chil Park, Jong Rak Yoon
(Dept. of Information and Communication Engr.)

15. Measure of Effectiveness Analysis for Tracking based on Detection in SONAR system
Jung-Hong Cho, Jea Soo Kim (Korea Maritime Univ.), Seongil Kim (Agency for Defense Develop.)

Jinwook Kim, Seonghun Pyo, Yongrae Roh (Kyungpook National Univ.)

17. Bearing Error Estimation of in Inhomogeneous Ocean Applying the Three-Dimensional BELLHOP Propagation Model
Michael Porter, Jungsoo Park, Jooyoung Han (HLS Research Inc.),
Young-Nam Na (Agency for Defense Develop.)

18. A method of calculating time-varying characteristics based on sparse channel estimation for underwater acoustic communications
Hyeonsu Kim, Jongpil Seo, Gunwoo Park (Inha Univ.), Seongil Kim (Agency for defense depart.),
Jaehak Chung (Inha Univ.)

Lunch break

13:00 - 13:40

[ Invited Talk ]

19. Ultrasonic 2D Matrix Array Transducer for Volumetric Imaging in Real Time
Yongrae Roh (Kyungpook National Univ.)
20. Sound Detection Monitoring in the Transformer Oil Using by Fiber Optic Sagnac Loop
   Jongkil Lee (Andong National Univ.)

21. Fiber-Optic Ultrasonic Hydrophone Using Short Fabry-Perot Cavity with Multilayer Reflectors
    Kyung-Su Kim, Yosuke Mizuno, Kentaro Nakamura (Tokyo Institute of Tech.)

22. Hollow cylindrical titanium pipe cavitation sensor using hydrothermal synthesized lead zirconate
    titanate poly-crystalline film as piezoelectric element
    Shinichi Takeuchi, Michihisa Shiiba, Yuki Uemura (Toin Univ. of Yokohama),
    Takeyoshi Uchida, Tsuneo Kikuchi (AIST), Minoru Kurosawa (Tokyo Institute of Tech.)

23. Target strength pattern measurement of juvenile chum salmon (Oncorhynchus keta) in a tank by
    the controlled method
    Kouichi Sawada, Tomohiko Matsuura, Hideaki Aono, Akihiko Hashiba (FRA)

24. Simulation of Source Localization using Time Reversal Mirror in Shallow Water
    Bok Kyoung Choi, Byoung-Nam Kim, Seong Hyeon Kim,
    Bong-Chae Kim (Korea Inst. of Ocean Sci. and Tech.)

25. SVM based Classification Algorithm for Transient Signals under Ocean Background Noise
    Juho Kim, Tae-Hoon Bok, Jinho Bae, Dong-Guk Paeng, Chong Hyun Lee (Jeju National Univ.),
    Seongil Kim (Agency for Defense Develop.)

26. ROK-US Joint Acoustic Experiment at the East China Sea
    Seongil Kim (Agency for Defense Develop.)
Chairpersons of Organizing Committee

Ken'ya Hashimoto (Chiba Univ.)          Nobuyuki Endoh (Kanagawa Univ.)
Moo Joon Kim (Pukyong National Univ.)  Seongil Kim (Agency for Defense Development)

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For any questions related with the workshop please contact:

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