

| Floor Plan |



Organizing Booth

- A** KOMAC/KAERI **B** PAL/POSTECH **C** RISP/IBS **D** KAFAT

Industrial Exhibition Booth

- | | |
|---------------------------------------|---|
| 1 Hanmac Corporation | 6 VITZRO NEXTECH |
| 2 Saram International Co., Ltd | 7 SUNGSAN Electronics & Communications Co., LTD |
| 3 RAON USERS ASSOCIATION | 8 JM BROADCAST |
| 4 KR TECH | 9 AUTO TECH KOREA INC. |
| 5 DAWONSYS | 10 The Future-based Accelerator Technology Experts Training Organization (ATE) |

The 24th International Conference on Accelerators and Beam Utilizations

ICABU 2022

November 9-11, 2022, Gyeongju HICO, Korea



Scientific Program of ICABU2022

▶ November 9 (WED)	
13:00~	Registration Start of post Posters
13:30-13:50	[Opening Session] Opening & Welcome Address, Photo Taking #1
13:50-14:30	[PT-1] Kyung Tae Ko (KBSI) Overview of 4GSR-Multipurpose Synchrotron Radiation Construction Project
14:30-15:10	[PT-2] Seunghwan Shin (Korea University) Ongoing Projects and Issues of 4th generation Storage Ring
15:10-15:30	[IT-1] Gao-Yu Hsiung (National Synchrotron Radiation Research Center, Taiwan) Vacuum Design and Technical Development for the Taiwan Photon Source toward the Future Light Source
15:30-15:50	Coffee Break
15:50-16:10	[IT-2] Moses Chung (UNIST) Overview of fusion-like neutron sources based on high-intensity linear accelerators
16:10-16:30	[CT-2] Young Seok Hwang (KOMAC/KAERI) Accelerator Facilities at KOMAC for Advanced Applications
16:30-16:50	[CT-3] Nguyen Duy Quang (Kyungpook Nat'l Univ.) Proton response of a 1.5-inch trans-stilbene scintillator for lunar surface fast neutron investigation
16:50-17:10	[CT-1] Manish Kumar (PAL) Structural phase transition and electronic structure of epitaxial VO ₂ thin films prepared on a-Al ₂ O ₃ substrate

▶ November 10 (THU)	
09:00-09:40	[PT-3] Yongjoong Lee (Oak Ridge Nat'l Lab.) Technology Challenges in High Power Spallation Targets Development
09:40-10:00	[CT-6] Jong-Won Kim (IBS) Commissioning results of a 70 MeV proton cyclotron system of IBS
10:00-10:20	Coffee Break
10:20-11:00	[PT-4] Bjoern Keune (RI Research Instruments GmbH) RF-cavities - State of the art for the synchrotrons of the future
11:00-11:20	[CT-4] Alexei Sytov (INFN) Crystal-based positron source for future lepton colliders
11:20-11:40	[CT-5] Holger Holtermann (BEVATECH) Technical Design of an IH-type buncher for KoBRA at RAON
11:40-12:00	[CT-10] Yoo Lim Cheon (KFE) Space-charge-driven halo formations and their mitigation via beam spinning in high-intensity linear accelerators
12:00-13:30	Lunch
13:30-14:10	[PT-5] Stefan Facsko (HZDR) Ion beam modification and ion beam analysis in current materials research
14:10-14:30	[IT-4] Seong-Tae Han (KERI) Accelerator and Beam Related Technologies of the Electrophysics Research Center with the Korea Electrotechnology Research Institute
14:30-14:50	[CT-7] Yaowaluk Tariwong (Nakhon Pathom Rajabhat Univ.) Luminescence, optical, compositional and structural investigations of natural ruby
14:50-15:00	Coffee Break
15:00-15:40	[PT-6] Ji-Ho Jang (IBS) Initial Beam Commissioning Results of RAON Linac
15:40-16:00	[CT-8] Kevin Insik Hahn (IBS) Detector and device developments for RI nuclear physics by CENS
16:00-16:20	[CT-11] Alexei Sytov (INFN) Future DESY II Booster Synchrotron proof-of-principle experiment for a crystal-based extraction of electrons
16:20-16:30	Coffee Break
16:30-16:50	[CT-12] Jaeman Son (SNUH) SNUH Project Status and Heavy Ion Therapy System
16:50-17:10	[CT-13] Jaeseok Yang (Nat'l Cancer Center) Experience of the operation and maintenance of the Proton Therapy System in National Cancer Center, Korea
17:10-17:30	[CT-14] Yong-Seok Lee (PAL) Preliminary design of RF system for Korea 4GSR
17:30-17:50	[CT-9] Byungsik Hong (Korea University) Current status of LAMPS at RAON
17:50-18:00	Coffee Break
18:00-21:00	Banquet [ATE Tutorial] (20:00-22:00) Tutorial for FEL Simulation: Myunghoon Cho (PAL)

▶ KOPUA 2022 Session: November 10 (THU)	
10:20-10:30	[Opening Address] Prof. Kyung-Soo Nam (KOPUA/Dongguk Univ.) Dr. Jae-Sang Lee (KOMAC/KAERI)
10:30-11:30	[KOPUA Session 1] [KT-1] Prof. Jong-Ki. Kim (Daegu Catholic Univ.) Medical application of proton stimulation therapy [KT-2] Prof. Eun-Ho Kim (Daegu Catholic Univ.) Tumor-treating fields as a Proton beam-Sensitizer for Glioblastoma Therapy [KT-3] Prof. Bo-Keun. Ha (Chonnam Nat'l Univ.) Plant mutation breeding using the proton-beam irradiation in Korea
	11:30-12:00 KOPUA General Meeting 12:00-12:10 KOPUA 2022 Group Photo Taking 12:10-13:30 Lunch
13:30-14:00	[KOPUA Poster Session]
14:00-15:20	[KOPUA Session 2] [KT-4] Prof. Sunghwan Kim (Cheongju Univ.) Energy Calibration of Particle Dosimeter on the Moon using High Energy Proton Beams [KT-5] Prof. Jakrapong Kaewkhao (Nakhon Pathom Rajabhat University, Thailand) Dy ³⁺ -doped Na ₂ O-Gd ₂ O ₃ -Al ₂ O ₃ -P ₂ O ₅ glass scintillator: X-rays and proton responses [KT-6] Prof. In-Kwon Yoo (Pusan Nat'l Univ.) A detector research & development using the KOMAC [KT-7] Prof. Yu-Seok Kim (Dongguk Univ.) Introduction of CO ₂ . Produced from Fossil Fuel to Analyze Radiocarbon Dating Using AMS in Dongguk University
	15:20-15:40 Coffee break
15:40-16:40	[KOPUA Session 3] [KT-8] Prof. Sangjoon Ahn (UNIST) Compatibility demonstration of centrally shielded burnable absorber imbedded UO ₂ -U ₃ Si ₂ fuel for soluble-boron-free i-SMR development [KT-9] Dr. Sung-Jae Chang (ETRI) Mechanisms of Device Degradation Induced by Proton Irradiation in the GaN-based MIS-HEMTs [KT-10] Dr. Jongkuk Kim (KIMS) Stabilization of FCVAS Based Hybrid Coating System for Deposition of tetrahedral amorphous Carbon(ta-C) Films and its Applications
	16:40-16:50 Closing Address 16:50-18:00 Executive Meeting

▶ November 11 (FRI)	
09:00-09:40	[IT-3] Nigel Orr (LPC-Caen) High-Energy Radioactive Beams and Systems beyond the Neutron Dripline
09:40-10:00	[IT-5] Gi Jeong Chun (SNUH) Recent update in peptide receptor-targeted radionuclide therapy in Korea : as a theranostics approach
10:00-10:20	[CT-15] Wasu Cheewasukhanont (Nakhon Pathom Rajabhat Univ.) Investigation of Luminescence & Radiation Shielding Properties via the Borosilicate Glass System for Multi-Function Applications
10:20-11:00	Coffee Break
11:00-12:30	[FR-1] Pilsoo Lee (KOMAC) Facility Report: KOMAC in 2022 [FR-2] Chang-Bum Kim (PAL) Status of PLS-II and PAL-XFEL [FR-3] Seung-Woo Hong (RISE/IBS) Overview and Status of RAON
	12:30-13:30 Lunch
13:30-14:30	Poster Session (Author Attendance is Mandatory)
14:30-15:30	Best Poster Presentation
	Facilities Tour (KOMAC/PAL)