

Introduction to Sponsoring Companies

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RISP/ Institute for Basic Science
January 30, 2018



Types of Business in the perspective of accelerators

Distributor



Component Manufacturer



JUNG-WOO ENE Co., Ltd.
LNG Engineering & Equipment



Major Component Manufacturer



Major System Manufacturer



1.

CEO	HYO-SIK, KIM		
TEL	+82-31-625-1300	FAX	+82-31-625-1303
E-mail	vision@visionplus21.kr	Website	www.visionplus21.kr
Address	#702 Soehyun Plaza, 13, Soehyun-ro, 180 Beon-gil, Brandang-gu, Seongnam-si, Kyunggi-do, 13590 Korea		

Company Introduction

VISIONPLUS is a distributor specializing in imported accelerator related components such as, high voltage power supplies, RF power supplies, circulators, dummy loads, ion sources and other products which have proven performance in overseas markets.

➤ Manufacturer

- 1) AFT microwave GmbH have been doing business with focusing ferrite-based microwave components such as circulator, dummy load, thin film etc.
- 2) DREEBIT GmbH offers everything from turn-key products and facilities up to research and development services related to charged particle beams.
- 3) IDX co., Ltd. deals in DC / Pulse/ Microwave/ Superconducting electromagnet Power Supplies.
- 4) iseg Spezialelektronik GmbH provides wide range of High Voltage Power Supplies.



Established in 1991 as Newport Distributor

CEO/President : Jin Ho. Lee

Address : 66, Munji-ro 299beon-gil, Yuseong-gu,
Daejeon, Republic of Korea

Employees : 19 (as of 2018)

Distributorship of:

- Newport CVC, Instruments
- Oriel, ILX Instruments
- New Focus Motion
- nPoint, Alio
- Hinds, OZ optics

Located in Daejeon, Korea

- Big Research Market
 - KAIST, ETRI, KRISS ...
- Geographical Advantage



3.

Cryogenic Components

- Cryogenic Control & Shut-off Valves
- Quench Relief Valves & Current Leads
- Single & Multi-Line Johnston Couplings
- Check valves and associated products
- Focusing on cryogenic temperatures **below 100 K**
- Optimized design for **low operating cost**
- Suitable to operate in **high magnetic field** and **ionizing radiation**
- **Long maintenance intervals** and **simple service requirements**
- More than **40 years of experience**

Liquefaction of gases

Gas distribution systems

Gas recirculation systems

Hydrogen infrastructure

Space infrastructure

Plasma & fusion research



Certified according
ISO 9001

Certified according
PED

Certified according
ATEX/IECEx

Please visit us
at our website:
www.weka-ag.ch



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CH-8344 Bäretswil · Switzerland
Phone +41 43 833 43 43
Fax +41 43 833 43 49
info@weka-ag.ch · www.weka-ag.ch



4.



ASK Corporation
APPLIED SCIENCE KOREA CORPORATION

ASK Corporation is specialized in the field of Cryogenic, Magnetics and Vacuum in universities, governmental R&D institutes, industrial laboratories and others.

Lake Shore Cryotronics, Inc.

www.lakeshore.com

Cryogenic Temperature Sensor Input Modules / Monitors



The ideal companion to

Cernox®
The most accurate thin film sensor for use in magnetic and radiation environments



Model 240 Series Temperature modules

For precision remote monitoring of sensors used in large-scale cryogenic facilities down to 1 K, Lake Shore offers multi-input modules for reliable real-time monitoring over PLC-based networks.



Temperature Controllers, Monitors, and

Cryomagnetics, Inc.

www.cryomagnetics.com

Superconducting Magnets and Systems

Cryogen Free Systems

Recondensing Systems

Liquid Helium Cooled System

Additional Cryogenic components available



5. SY SCIENCE CO.

Company : SY Science Co.
Establishment : Feb. 22. 2016
President : Sungyong, Jang
Address : #223, 74 Mallijae-ro, Mapo-gu, Seoul, Korea
Website : www.syscience.co.kr
Products : UHV Vacuum Equipment / Vacuum Dry Pump
Surface Analysis System / UHV Manipulator
Thermal Desorption Spectroscopy(TDS) System



R-DEC Co, Japan
TDS: Thermal Desorption Spectroscopy



Kashiyama
Vacuum Solutions



RHEED

RHEED: Reflection High-Energy Electron Diffraction



NeoDry Pump



Dry Force Unit

6.



Company		TOKO VALEX CO., LTD.
Establishment		February First 1957
President		Tatsuya Yokoyama
Address		Head Office and Factory, Tokyo Office : 4-2-17, Matsushima, Edogawa-ku, Tokyo
		Fukushima Factory : 93-239, Sainokami, Taki, Tono-machi, Iwaki-City, Fukushima
		Osaka Branch : Nakatsu Park Building, 1-12-3, Nakatsu, Kita-ku, Osaka
Employees		54 people as of 2018
Capital		30 million yen
Sales		Approx. 1.2 billion yen
Major Production Capacity	Model	Globe, Bellows, Angle, Tank foot, Diaphragm, Butterfly valves Actuators, Accessories, Other special valves.
	Output	Monthly MAX. 750 units
	Nominal dia.	Globe valve MAX. 400A
	Cv value	Globe valve 0.0001 - 2560
	Pressure	Vacuum - 44MPa
	Temp.	-268 - +800°C
	Material	FC250, FCD450, SCPH2, SCS13A, SCS14A, SCS16A, SCS19A Titanium, Hastelloy(B,C), Monel, Nickel, Tantalum, Zirconium, Double-layer stainless steel Resin (PVC, PTFE, PFA, PVDF, ETFE, etc.) / Ceramics (Al ₂ O ₃ , POR, etc.) Other various kinds of materials are available.



Tokyo Head Office / Factory



Fukushima Factory



Osaka Branch



Fuel Gas System

JUNGWOO ENE's

Double wall pipe ■

Vacuum Insulated (Bunkering)Pipe ■

Gas Valve Unit ■

Ventilation System ■

Cryogenic HP Pump ■

HP Heat Exchanger ■

Crogenic System

JUNGWOO ENE's

Vacuum Insulated Valve ■

Vacuum Insulated Pipe ■

Vacuum Insulated Bayonet Coupling ■

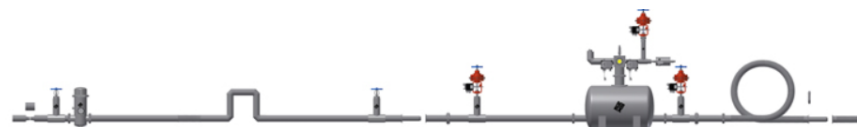
Vacuum Insulated Filter ■

Cryogenic Separator ■

Super Insulation Film ■

Cryogenic Pump ■

Cryogenic Valve ■



Cryogenic vacuum insulated valve and control valve is insulated valve with vacuum insulated jacket, and it is produced from design to minimize heat loss.

Control valve is Normal - Close type and controlled by Diaphragm actuator to close the spring. In case of operation failure of actuator, valve is used safely for automatically closing.

It can be installed vertically and horizontally and the valve and seat can be separated.

Manual and automatic type can be dual use.

품질향상과 원가절감을 통한 고객만족

Quality and customer satisfaction through cost reduction

8. MIRHO

Company

MIRHO Corporation

CEO

Kim, Samdeuk (金杉得)

Establishment

2000. 12. 27

Employees

26

Capital

1 billion KRW (2018)

Revenue

5.2 billion KRW(2017)

Website

www.mirho.co.kr

Headquarter

17, Dongtansandan 2-gil, Dongtan-myeon, Hwaseong-si, Gyeonggi-do, Korea

CHINA Branch

Room 401, Building 8, Double Silver International City, No.1210 Dongfang Dadao, Wuzhong District, Suzhou, Jiangsu, China. 215124

Business

- **QWR/HWR Tuner (IBS)**
- **Pneumatic Tuner Test Module(IBM)**
- **X-band Linearizer Mover (PAL 4) , Solenoid Mover System (PAL 4)**
- **Inter Undulator LVDT Controller (PAL 4)**
- **Micro Alignment Stage (X,Y,Theta) & (X,Y,Theta & Z)**
- **LCM (Light Communication Module)**
- **G-AiD (Digital DentalCAD/CAM Milling Machine)**
- **Display(LCD, OLED) Optical Inspection Light System**



9.

Specialized in Vacuum components,
Manufacturing, Distributing, A/S etc.

www.nextroninc.com
Vacuum Components & Systems

InstruTech Vacuum Gauges



Electrical Feedthrough & Viewport



Deposition Controller & Monitor



Vacuum Systems



MFC, MFM & Controller

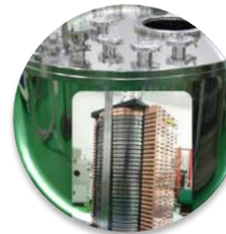


10. SuNAM

Establishment	2004. 11. 17., for commercialization of 2G HTS wire*
CEO	Seung-Hyun Moon
Registered Capital	\$6M
No. of Employees	39 (7 Ph.Ds)
H.Q.	Anseong, Korea
Website	www.i-sunam.com www.coatedconductor.com
Current Production Capacity	~ 60 km / month (4 mm > 150 A)
Core Technology	2G HTS manufacturing technology based on RCE-DR process. NI**- base ultra high field magnet technology



Headquarter in Anseong

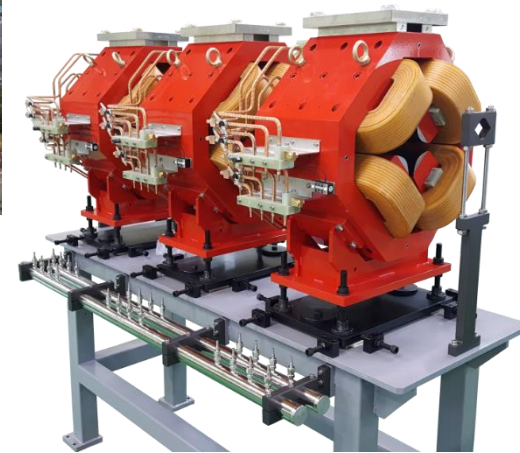


- **Global Top 3 2G HTS wire manufacturer**
- **5 MA/cm² 2G HTS wire performance**
- **26.4 T world's best 2G HTS Magnet development**
- **18T Magnet supplying to AXION pj.**
- **Superconducting Linear Synchronous Motor development with KRRI**
- **KEPCO S-cable pj. with LS C&S**
- **Commercial SFCL pj. with AMAT**

- **2G HTS wire: 2nd Generation High Temperature Superconducting Wire**
- **** NI : No Insulation**

11. KR TECH

- ✓ Heavy ion accelerator magnet
- ✓ Particle accelerator magnet
- ✓ Cyclotron magnet
- ✓ Science magnet



- 1995. 12 Established the **KR TECH**
- 2000. 4 Atomic Energy R&D project KCCH
- 2002. 1 Chosen as a Venture Company
- 2002. 2 Chosen as a Promising Company
- 2004. 4 Taken out **ISO9001**
- 2004. 12 Chosen as a **INNO-BIZ company**
- 2005. 6 Taken out **ISO14001**
- 2006. 9 Selected as Professional Parts.Material Company o, Daegu
- 2011. 9 Exported USD 1.5million to Toshiba, Japan as a Chubu Synchrotron.
- 2013. 10 Exported Cyclotron magnet to Batan Institute ,Indonesia
- 2013. 12 Exported Synchrotron magnet to Toshiba(46sets), Japan as a Ganagawa Cancer Center
- 2014. 11 Relocating a new head office building and Factory to Innopolis Daegu of Medical Innovation Foundation in Daegu
- 2016. 2 Exported Superconducting magnet, USD 0.5million to KEK , Japan
- 2016. 11 Exported Medical Quadrupole,Steering magnet(56sets) to Kobe Children Hospital
- 2017. 2 Exported Medical Quadrupole, Dipole magnet to Taiwan
- 2018. 1 Exported Medical Heavy ion accelerator magnet(106sets) to Yamagata University

12. **VITZRO** TECH

Company Name	VITZROTECH CO.,LTD
Establishment	Jan 30, 1968
CEO	Rhee, Byong ho
Address	327, Byeolmang-ro, Danwon-gu, Ansan Gyeonggi-do, 15603, Korea
Website	www.vitzrotech.com
Sales	210 million USD (2017)
Employees	411
Business Scope	<ul style="list-style-type: none">▪ Accelerator System▪ Nuclear Fusion▪ Plasma System▪ Vacuum System▪ Aerospace▪ Electrical Power



Headquarter



Seoul Office

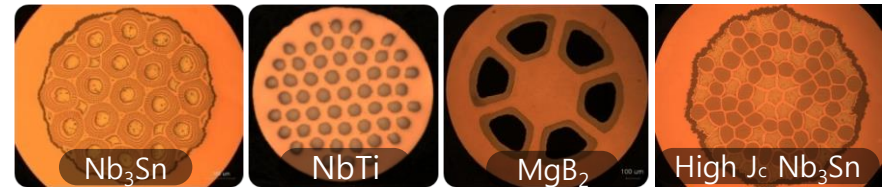
13. KISWIRE Advanced Technology Ltd.

- KAT is a 100% owned company subsidiary of KISWIRE group
- KAT is a Leading company in Korea for LTS wire industry and also has a technology of Super-conducting & Cryogenic applications such as MRI magnet, Cryomodule.

HISTORY OF KAT

- **1998** : Start R&D of Nb₃Sn Superconducting(SC) wire (Kiswire R&D Center)
- **2004** : Foundation of KAT (Kiswire Advanced Technology)
- **2006** : Supply Nb₃Sn SC wire to **KSTAR** (PF Coil)
- **2009** : Supply of Nb₃Sn for **ITER** (TF, CS Coil, 2009~2016)
- **2010** : Start R&D of SC MRI magnet (whole body 1.5T & 3.0T)
- **2014** : Start R&D project of NbTi and MgB₂ wire funding by Korean Government
- **2015** : Supply **1.5T MRI magnet** to **TLC, China** (KAT NbTi wire applied)
- **2016** : R&D contract with **CERN** for **High J_c Nb₃Sn wire** (2017~2020)
- **2017** : Supply **HWR B Cryomodule prototype** for **RAON**
Supply **1.5T MRI magnet** to **Domestic Company**

Superconducting Wires



Superconducting & Cryogenic Applications



14. HANMI TECHWIN

COMPANY HANMI TECHWIN CO., LTD.

PRESIDENT Mr. Eun-Ho Kim

ESTABLISHMENT Sep. 1966

ADDRESS 45, Gongdan 1-daero 195 beon-gil,
Siheung-si, Gyeonggi-do, Korea

TEL +82-31-498-9270

HOMEPAGE www.hanmitw.com

TURNOVER 20 Billion KRW, 2016

EMPLOYEES 125

CORE BUSINESS

- PARTICLE ACCELERATOR MAGNET
- MEDICAL MAGNET
- INDUSTRIAL MAGNET
- BRAKE & CABLE REEL
- RESISTOR

PRODUCTS



Company	Dawonsys Co., Ltd.
Establish - ment	Jan 09, 1996 (Sep, 2010 KOSDAQ Listing)
CEO/ President	Park, Sun Soon Ph.D
Address	Headquarter : Ansan-si, Gyeonggi-do Gimcheon factory : 447, Gimcheon-si, Gyeongbuk-do
Capital	12.1 billion KRW (2018)
Revenue (Sales)	72.5 billion KRW, 2016 / 110 billion KRW, 2017
Employee s	360 (as of 2018)

Core Business

- Accelerator system (PAL 3, 4 Generation Business)
- Nuclear Fusion (KSTAR & ITER P/S)
- Plasma system (Plasma cleaning equip. & P/S)
- Railway rolling stock and EMU car
- Induction Heating system
- Industrial Power supply Etc.



Headquarter



Gimcheon factory

16. Best Cyclotrons



Introducing...Best Cyclotron & Best Particle Therapy Systems from TeamBest® Companies!

Best Cyclotron Systems provides 15/20/25/30/35/70 MeV Proton Cyclotrons as well as 35 & 70 MeV Multi-Particle (Alpha, Deuterons & Protons) Cyclotrons

- Currents from 100uA to 1000uA (or higher) depending on the particle beam
- Best 20u and 30u are fully upgradeable on site



Installation of Best 70 MeV Cyclotron at Italian National Laboratories (INFN), Legnaro, IT

Cyclotron	Energy (MeV)	Isotopes Produced
Best 15	15	^{18}F , $^{99\text{m}}\text{Tc}$, ^{11}C , ^{13}N , ^{15}O , ^{64}Cu , ^{67}Ga , ^{124}I , ^{103}Pd
Best 20u/25	20, 25–15	Best 15 + ^{123}I , ^{111}In , $^{68}\text{Ge}/^{68}\text{Ga}$
Best 30u (Upgradeable)	30	Best 15 + ^{123}I , ^{111}In , $^{68}\text{Ge}/^{68}\text{Ga}$
Best 35	35–15	Greater production of Best 15, 20u/25 isotopes plus ^{201}Tl , $^{81}\text{Rb}/^{81}\text{Kr}$
Best 70	70–35	$^{82}\text{Sr}/^{82}\text{Rb}$, ^{123}I , ^{67}Cu , ^{81}Kr + research

17.

POSCOICT, IT Total Service & Engineering



Foundation : 1989

Capital : USD 70 million

Revenue : USD 889 million

Credit rating : A2+ (stable)

Smart IT

- ITO
 - Consulting
 - System integration
- Infra
- Security
 - Cloud
 - VDI/ECM
- BigData
- SWP

Smart Factory

- Atomation
 - Product
 - Facility
 - Energy
 - Logistics
 - Safety
- SCM/MES
- Virtual Factory

Smart Energy

- Newrenewable
- EVC Infra
- Microgrid
- DR/EMS
- PS & Control
 - Nuclear Fusion
 - Accelerator

Clean Environment

- Air Treatment
 - DeSOx & DeNOx
 - Electrostatic precipitator
- Water Treatment
- Biomass
 - Domestic
 - Industrial

Smart City

- Airport Infra
 - BHS
 - Communication
 - Navigational Safety
- Railway
 - System Engineering
 - Electric & Machinery
- Traffic Management
 - ETCS/TCS
 - Information guide

18.

한국핵융합·가속기기술진흥협회
Korea Association for Fusion Energy and Accelerator Technology

Introduction

Name | Korea Association for Fusion Energy and Accelerator Technology (KAFAT)

Basis of establishment | The legislation on a non-profit corporation's establishment and management

Location | Room 511, NFRI, 169-148, Gwahak-ro, Yuseong-gu, Daejeon, 34133, Republic of Korea

Representative | Jae-in Shin, Sc.D. (former KAERI, NFRl president)

Purpose of Establishment

- [1] to improve technological capability of fusion energy and accelerator industries in Korea and to support their further overseas expansion
- [2] to gather and realize ideas throughout the related industries, to perform all related business, and to collect and distribute knowledge, technology and market information
- [3] to contribute to developing national economy through promotion of mutual cooperation between the members and national competitiveness

Main Activities

- [1] to investigate, collect and distribute domestic and foreign information and data related to fusion energy and accelerators
- [2] to cultivate and train manpower for development of the fusion energy and accelerator industry and capability expansion
- [3] to transfer technology home and abroad and provide technology consulting in fusion energy and accelerators

Members

산업체 회원

Industry Members



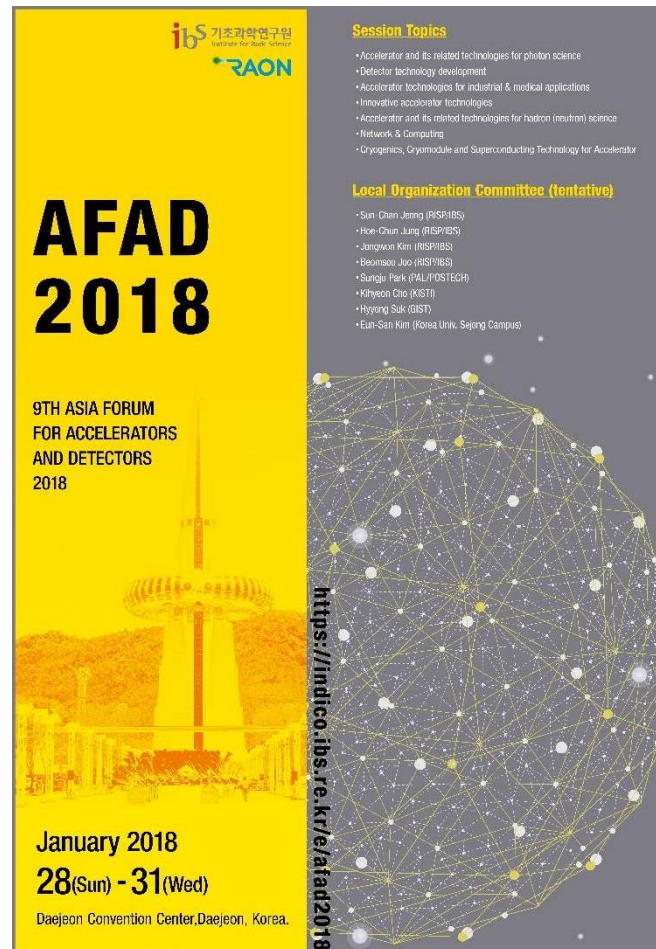
공공기관 회원

Research Institute Members



Many Thanks for all the Sponsoring Companies.

This Forum is possible with your Supports!

The poster is divided into two main vertical sections. The left section has a yellow background and features the text 'AFAD 2018' in large, bold, black letters. Below this, it says '9TH ASIA FORUM FOR ACCELERATORS AND DETECTORS 2018'. At the bottom of this section is a stylized illustration of a particle accelerator structure. The right section has a dark grey background and contains 'Session Topics' and 'Local Organization Committee (tentative)' lists. A large, intricate geometric pattern of interconnected dots and lines is on the right side. A URL is printed vertically between the two sections.

AFAD 2018

9TH ASIA FORUM
FOR ACCELERATORS
AND DETECTORS
2018

January 2018
28(Sun) - 31(Wed)
Daejeon Convention Center, Daejeon, Korea.

<https://indico.ibs.re.kr/afad2018>

Session Topics

- Accelerator and its related technologies for photon science
- Detector technology development
- Accelerator technologies for industrial & medical applications
- Innovative accelerator technologies
- Accelerator and its related technologies for hadron (neutron) science
- Network & Computing
- Cryogenics, Cryomodule and Superconducting Technology for Accelerator

Local Organization Committee (tentative)

- Sun Chen Jeong (RISPIBS)
- Hoe-Chun Jung (RISPIBS)
- Jongheon Kim (RISPIBS)
- Beomsu Joo (RISPIBS)
- Sungu Park (PALPOSTECH)
- Kihyeon Cho (KISTI)
- Hyung Suk (GIST)
- Eun-Sin Kim (Korea Univ. Sejong Campus)