

Workshop on

# Asian Forum for Accelerators & Detectors (AFAD-2012)

## **Scientific Programme**

Organised by :

**Variable Energy Cyclotron Centre**

Department of Atomic Energy

1/AF Bidhan Nagar, Kolkata-700064, India

<b>Programme : at a glance</b>			
<b>Feb. 6th 2012</b>			
<b>09:00-09:30</b>	<b>Registration</b>	Main Auditorium	
<b>9:30 to 11:30</b>	<b>Inaugural Session - Plenary -I</b>	Main Auditorium	
<b>11:30 to 12:00</b>	<b>High Tea</b>		
<b>12:00 to 13:30</b>	<b>Parallel Session - I</b>	WG-1 to WG-6 in different lecture halls **	
<b>13:30 to 15:00</b>	<b>Lunch</b>		
<b>15:00 to 16:30</b>	<b>Parallel Session - II</b>	WG-1 to WG-6 in different lecture halls **	
<b>16:30 to 17:00</b>	<b>Tea</b>		
<b>17:00 to 18:00</b>	<b>Parallel Session - III</b>	WG-1 to WG-6 in different lecture halls **	
<b>18:30 to 20:30</b>	<b>Workshop Dinner</b>		
<b>Feb. 7th 2012</b>			
<b>9:30 to 11:00</b>	<b>Parallel Session - IV</b>	WG-1 to WG-6 in different lecture halls **	
<b>11:00 to 11:30</b>	<b>Tea</b>		
<b>11:30 to 13:00</b>	<b>VECC campus tour for delegates</b>		
<b>13:00 to 14:30</b>	<b>Lunch</b>		
<b>14:30 to 17:00</b>	<b>Concluding Session - Plenary II</b>	Main Auditorium	
<b>17:00 to 17:30</b>	<b>Tea &amp; Sayonara</b>		
** Location of lecture halls is shown in the attached diagram			

## Accelerator & Its Related Technologies for Photon Science

Venue : VECC Main Building; Council Room - Ground Floor

<b>Feb. 6th 2012</b>			
<b>12:00 to 13:30</b>	<b>Parallel Session - I</b>		
	Session Chair :	J Urakawa	KEK
12:00-13:50	Image Guided and Dynamic Tumor Tracking Radiation Therapy System	Yuichiro Kamino	MHIL
13:50-13:30	Application of Compact Linac	Ryunosuke Kuroda	AIST
<b>15:00 to 16:30 Parallel Session - II</b>			
	Session Chair :	Sang Hoon Nam	PoSTech
15:00-15:20	RF source for Linac	Shigeki Fukuda	KEK
15:20-15:40	ILC RF source	Shigeki Fukuda	KEK
15:40-16:05	Overview of PAL XFEL Project	Heung Sik Kang	PoSTech
16:05-16:30	FEL Activity at RRCAT	K K Pant	RRCAT
<b>17:00 to 18:00 Parallel Session - III</b>			
	Session Chair :	Ching-Shiang	NSRRC
17:00-17:30	Progress Report of PLS-II Project	Sang Hoon Nam	PoSTech
17:30-18:00	Current status of Indus -2 and its utilization	S.K. Deb	RRCAT
<b>Feb. 7th 2012</b>			
<b>9:30 to 11:00</b>	<b>Parallel Session - IV</b>		
	Session Chair :	S.K. Deb	RRCAT
09:30-09:50	Ultra-Compact THz Light Source	Junji Urakawa	KEK
09:50-10:10	Compact Soft X-ray source	Junji Urakawa	KEK
10:10-11:35	The Plan of Advanced Insertion Devices for Taiwan Photon Source	Ching-Shiang Hwang	NSRRC
11:35-11:00	Superconducting insertion devices Superconducting insertion device fabricated in Budker INP	Dr. Nikolay Mezentsev	BINP
AIST	National Institute of Advanced Industrial Science &		
BINP	Budker Institute of Nuclear Physics		
KEK	High Energy Accelerator Research Organization, KEK		
MHIL	Mitsubishi Heavy Industries Limited		
NSRRC	National Synchrotron Radiation Research Center		
PoSTech	Pohang University of Science & Technology		
RRCAT	Raja Ramanna Centre for Advanced Technology		

## Accelerator & Its Related Technologies for Hadron (Neutron) Science

Venue : Administrative Building; Ajay Divetia Lecture Hall - 3rd floor

<b>Feb. 6th 2012</b>			
<b>12:00 to 13:30</b>	<b>Parallel Session - I</b>		
	Session Chair :	H. Shimizu	Nagoya University
12:00-12:30	Development Activities for LEHIPA at BARC as High Intensity Neutron Source	P.Singh	BARC
12:30-13:00	Status of RCNP	K.Hatanaka	RCNP
13:00-13:30	R&D Activities for Proton Accelerator-based Indian Spallation Neutron Source	S.C.Joshi	RRCAT
<b>15:00 to 16:30 Parallel Session - II</b>			
	Session Chair :	P. Singh	BARC
15:00-15:30	R&D of a High Intensity Muon Source at Osaka University - MuSIC project -	Y. Kuno	Osaka University
15:30-16:00	High Current Injector Development Activities at IUAC	R. Mehta	IUAC
16:00-16:30	RIKEN Small-scale Accelerator-based Neutron Source for Industrial Application	Y. Yamagata	RIKEN
<b>17:00-18:00 Parallel Session - III</b>			
	Session Chair	Y. Yamagata	RIKEN
17:00-17:30	Hokkaido University Neutron Source and Resent Researches	K. Kino	Hokkaido University
17:30-18:00	Operation of Superconducting Linac & commissioning of the Last Module at IUAC	S. Ghosh	IUAC
18:00-18:30	Cyclotrons at VECC	C. Mallick	VECC
<b>Feb. 7th 2012</b>			
<b>9:30 to 11:00</b>	<b>Parallel Session - IV</b>		
	Session Chair :	Kichiji Hatanaka	RCNP
09:30-10:00	Measurements of Neutron-Capture Cross Sections at J-PARC/MLF/ANNRI2	A. Kimura	JAEA
10:00-10:30	Nuclear and Fundamental Neutron Physics in Korea and a Vision for Regional Collaboration	G.N. Kim	KNU
10:30-11:00	Development of D+T Neutron Generator at BARC	A. Sinha	BARC
BARC	Bhabha Atomic Research Centre		
IUAC	Inter-University Accelerator Centre		
JAEA	Japan Atomic Energy Agency		
KEK	High Energy Accelerator Research Organization, KEK		
KNU	Kyongpook National University		
RIKEN	Advance Manufacturing Metrology Laboratory, RIKEN		
RCNP	Research Centre for Nuclear Physics, Osaka University		
RRCAT	Raja Ramanna Centre for Advanced Technology		
VECC	Variable Energy Cyclotron Centre		

<b>Detector Technology Development</b>			
<b>Venue : VECC Main Building; Room # 202 - 2nd floor</b>			
<b>Feb. 6th 2012</b>			
<b>12:00 to 13:30</b>	<b>Parallel Session - I</b>		
12:00-12:15	Detector activities at KEK	J. Haba	KEK
12:15-12:30	Detector Development at VECC	S. Chattopadhyay	VECC
12:30-13:00	MPGD Activity in Japan	A. Ochi	Kobe University
13:00-13:30	RPC for BES-III and Dayabay	J. Xhang	IHEP
<b>15:00 to 16:30</b>	<b>Parallel Session - II</b>		
15:00-15:30	RPC for INO Detectors	D. Samuel	TIFR
15:30-16:00	Experience for long time operation of Belle	Yusuke Yusa	Niigata University
16:00-16:30	MRPC Detector for STAR experiment	A. Banerjee	VECC
<b>17:00 to 18:00</b>	<b>Parallel Session - III</b>		
17:00-17:30	MRPC R&D for End Cap TOF upgrade on BESIII	Sen Qian	IHEP
17:30-18:00	MPGD Neutron Detectors in Japan	S. Uno	KEK
<b>Feb. 7th 2012</b>			
<b>9:30 to 11:00</b>	<b>Parallel Session - IV</b>		
09:30-10:00	GEM Detector Development for CBM Experiment	A.K. Dubey	VECC
10:00-10:30	Detectors for investigating Fusion & Fission Dynamics	A. Jhingan	IUAC
10:30-11:00	Charged particle array for Super Conducting Cyclotron in India	C. Bhattacharya	VECC
IHEP	Institute of High Energy Physics		
IUAC	Inter-University Accelerator Centre		
KEK	High Energy Accelerator Research Organization, KEK		
TIFR	Tata Institute of Fundamental Research		
VECC	Variable Energy Cyclotron Centre		

## Accelerator & Its Related Technologies for Industrial & Medical Applications

Venue : SINP Auditorium Lecture Hall 2

<b>Feb. 6th 2012</b>			
<b>12:00 to 13:30</b>	<b>Parallel Session - I</b>		
	Session Chair :	D. Kanjilal	IUAC
12:00-12:10	Self Introduction of participants	D. Kanjilal (IUAC) & K. Takayama (KEK)	
12:10-12:40	BARC Program on Electron Accelerators Based Industrial Radiation Processing	K.C. Mittal	BARC
12:40-13:10	Applications of Accelerators in Food, Agriculture and Environment	A.K. Sharma	BARC
13:10-13:40	BNCT Project of Ibaraki Prefecture	H. Kobayashi	KEK
<b>15:00 to 16:30</b>	<b>Parallel Session - II</b>		
	Session Chair :	H. Kobayashi,	KEK
15:00-15:30	Medical radioisotope production programm in the forthcoming Medical Cyclotron Facility, Kolkata	Malay Kanti Das	BRIT
15:30-16:00	Present activities and future plan for industrial and agricultural applications of accelerators at RRCAT	Jishnu Dwivedi	RRCAT
16:00-16:30	Industrial irradiation facilities based on electron accelerators developed by BINP	Aleksandr Bryazgin	BINP
<b>17:00 to 18:00</b>	<b>Parallel Session - III</b>		
	Session Chair :	K.C. Mittal	BARC
17:00-17:30	Medical Applications of Accelerated Particles	R.K. Grover	DSCI
17:30-18:00	KEK Digital Accelerator and its applications	K. Takayama	KEK
<b>Feb. 7th 2012</b>			
<b>9:30 to 11:00</b>	<b>Parallel Session - IV</b>		
	Session Chair :	K. Takayama	KEK
09:30-10:00	Discussion towards Summary		
10:00-11:00			
BARC	Bhabha Atomic Research Centre		
BINP	Budker Institute of Nuclear Physics		
BRIT	Board of Radiation & Isotope Technology		
DSCI	Delhi State Cancer Institute		
IUAC	Inter-University Accelerator Centre		
KEK	High Energy Accelerator Research Organization, KEK		
RRCAT	Raja Ramanna Centre for Advanced Technology		

<b>Innovative Acceleration Techniques</b>			
<b>Venue : Raja Ramanna Research Schloar Wing; Discussion Room # 103 - 1st floor</b>			
<b>Feb. 6th 2012</b>			
12:00 to 13:30	Parallel Session - I		
	Session Chair :	H. Suk	GIST
12:00-12:45	Review of advanced accelerator concepts	P.A. Naik	RRCAT
12:45-13:30	Photonic accelerator and fiber laser development	K. Koyama	University of Tokyo
15:00 to 16:30	Parallel Session - II		
	Session Chair :	Liming Chen	IHEP
15:00-15:45	Laser-Plasma accelerator research in Korea	H. Suk	GIST
15:45-16:30	Laser-Plasma accelerator research in India	Anand Moorti	RRCAT
17:00 to 18:00	Parallel Session - III		
	Session Chair :	P.A. Naik	RRCAT
17:00-17:45	Particle Accelerators: The Next Generation	S.Krishnagopal	BARC
17:45-18:00			
<b>Feb. 7th 2012</b>			
9:30 to 11:00	Parallel Session - IV		
09:30-10:15			
10:15-11:00			
BARC	Bhabha Atomic Research Centre		
GIST	Gwangju Institute of Science & Technology		
IHEP	Institute of High Energy Physics		
RRCAT	Raja Ramanna Centre for Advanced Technology		

## Network & Computing

### Venue : SINP Auditorium Lecture Hall 1

<b>Feb. 6th 2012</b>			
<b>12:00 to 13:30</b>	<b>Parallel Session - I</b>		
	Session Chair :	M. Nozaki	KEK
12:00-12:10	Opening remarks	M. Nozaki	KEK
12:10-12:30	National Knowledge Network	P.S. Dhekne	BARC
12:30-12:50	Application of DAE Grid	B. S. Jagadeesh	BARC
12:50-13:10	Cyber infrastructure for High Energy Physics in Korea	Kihyeon Cho	KISTI
<b>15:00 to 16:30</b>	<b>Parallel Session - II</b>		
	Session Chair :	D. Sarkar	VECC
15:00-15:20	VECC	Sarbajit Pal	VECC
15:20-15:40	Grid computing activities at VECC	Tapas Samanta	VECC
15:40-16:00	Report from ICEPP/ Tokyo	Tomoaki Nakamura	University of Tokyo
16:00-16:20	Alice T2 status at Hiroshima	Toru Sugitate	Hiroshima University
<b>17:00 to 18:00</b>	<b>Parallel Session - III</b>		
	Session Chair :	P.S. Dhekne	BARC
17:00-17:20	Status and upgrade plan for CMS Tier2 centre at TIFR	Gobinda Majumder	TIFR
17:20-17:40	IUAC	E. T. Subramaniam	IUAC
17:40-18:00	Report from KEK	Takashi Sasaki	KEK
18:00-18:20	Report from Academia Sinica	Eric Yen	ASGC
<b>Feb. 7th 2012</b>			
<b>9:30 to 11:00</b>	<b>Parallel Session - IV</b>		
	Session Chair :	T. Nakamura	University of Tokyo
09:30-09:50	Mutual monitoring of bi-directional connectivity	Hiroyuki Matsunaga	KEK
09:50-10:10	Network and computing for Belle II	Takanori Hara	KEK
10:10-10:30	Belle II Physics Analysis Center in India	Gagan Mohanty	TIFR
10:30-10:50	Asia-PoP : A proposal of the high throughput data sharing testbed	Go Iwai	KEK
10:50-11:00	Discussion	ALL	
ASGC	Academia Sinica Grid Computing Centre		
BARC	Bhabha Atomic Research Centre		
IHEP	Institute of High Energy Physics		
IUAC	Inter-University Accelerator Centre		
KEK	High Energy Accelerator Research Organization, KEK		
KISTI	Korea Institute of Science and Technology Information		
TIFR	Tata Institute of Fundamental Research		
VECC	Variable Energy Cyclotron Centre		