## FNCA OPEN SEMINAR PROGRAM "APPLICATION OF RADIATION PROCESSING FOR SUSTAINABLE DEVELOPMENT" MALAYSIAN NUCLEAR AGENCY, BANGI 29 OCTOBER 2013

TIME	AGENDA
TIVIL	HOLNDA
09:00 - 09:30	Registration
9:30 – 10:15	Welcoming Remarks Chairperson: Dr. Muhd Noor MUHD YUNUS, DDG, Malaysian Nuclear Agency (FNCA Coordinator of Malaysia)
	Ms. Moe AOKI (Ministry of Education, Culture, Sports, Science and Technology (MEXT)
	Dr. Sueo MACHI (FNCA Coordinator of Japan)
	Opening Address Dato' Dr. Muhamad Lebai Juri, DG, Malaysian Nuclear Agency
	Group photography
10:15 – 10:45	Coffee break/Poster Session
10:45 – 11:15	World trends of industrial application of radiation processing for sustainable development and relevant FNCA activities Dr. Sueo MACHI (FNCA Coordinator of Japan, Fellow, JAEA)
11:15 – 11:45	Research and development on application of radiation processing in Malaysia Dr. Zulkafli Ghazali, Malaysian Nuclear Agency (Nuclear Malaysia)
11:45 – 12:15	Success stories of radiation processing application in Vietnam Dr. NGUYEN Quoc Hien (VINATOM)
12:15 – 12:45	Growing industrial application of radiation processing for industry in China Dr. Wu Guozhong, Shanghai Institute of Applied Physics
12:45 - 14:00	Lunch break
14:00 – 14:30	Research and development of radiation processing for industrial application in Japan Dr. Masao TAMADA (JAEA)
14:30 – 15:00	Current status and future plan of industrial application of radiation processing in Indonesia Ms.Tita Puspita Sari
15:00 – 15:30	Commercialization and Sustainable Development of Sago Hydrogel Eddie Lim/Dr. Kamaruddin Hashim, Rumbia Bio-Tech Sdn. Bhd.
15:30 – 17:00	Round Table Discussion:
	"Future Prospect and Challenges of Radiation Processing Application for Sustainable Development" Chair: Dr. Muhd Noor MUHD YUNUS, DDG, Nuclear Malaysia

Panel Members: Speakers of the above lectures
Points of discussion 1. Obstacles and challenges of the promotion of industrial application of radiation processing 2. How to use advantages of radiation processing for industrial applications 3. Promising areas of radiation processing application 4. How to strengthen linkage of research institutes and potential endusers of radiation processing 5. Challenges of radiation source technology in terms of cost and safety
Closing Open Seminar and Coffee Break

## FNCA WORKSHOP PROGRAM RADAITION PROCESSING OF NATURAL POLYMER MALAYSIAN NUCLEAR AGENCY, BANGI 30 OCTOBER – 1 NOVEMBER 2013

Day 2: Wednesday 30 October 2013		
Opening Session		
08:45 - 09:30	Welcome Speech	
00.15	Ms.Moe AOKI(MEXT, Japan)	
	Dr. Sueo MACHI, FNCA Coordinator of Japan	
	Opening Speech	
	Dr. Muhd Noor MUHD YUNUS, DDG, Nuclear Malaysia	
	Agenda Confirmation, Self-introductions of participants	
	Group Photo	
	Session 1 Overview of FNCA	
(	Chaired by: Dr. Phiriyatorn SUWANMALA(Thailand)	
09:30 - 10:00	FNCA Achievement and Ministerial Meeting in 2012-13	
	Dr. Sueo MACHI (FNCA Coordinator of Japan)	
10:00 - 10:30	Achievement and Challenges of Project on Radiation Processing of	
	Natural Polymers in 2012-13	
	Dr. Masao TAMADA (JAEA)	
10:30 - 10:45	Coffee break	
	ry Report on Production and Field Test of Plant Growth Promoter	
(.	PGP) or Elicitor Produced by Radiation Processing	
	(Presentation 10min + Q/A 5min)	
	Chaired by: NGUYEN Quoc Hien(Vietnam)	
10:45 – 11:00	Country Report: Bangladesh	
11:00 – 11:15	Country Report: China	
11:15 – 11:30	Country Report: Indonesia	
11:30 – 11:45	Country Report: Japan	
11:45 – 12:00	Country Report: Malaysia	
12:00 – 12:15	Country Report: Mongolia	
12:15 – 12:30	Country Report: Philippines	
12:30 – 13:45	Lunch break	
	ry Report on Production and Field Test of Plant Growth Promoter	
(PG)	P) or Elicitor Produced by Radiation Processing(Cont.)	
	(Presentation 10min + Q/A 5min)	
	Chaired by:Dr. Masao TAMADA(Japan)	
13:45- 14:00	Country Report: Thailand	
14:00 – 14:15	Country Report: Vietnam	
14:15 – 14:30	Country Report: Myanmar (IAEA/RCA)	
14:30 – 14:45	Country Report: Pakistan (IAEA/RCA)	
14:45 – 15:00	Coffee break	
	ion 3 Review of Performance Field Test Results of PGP	
	Chaired by: Dr.TSENDDAVAA Amartaivan(Mongolia)	
15:00 – 15:40	Lead speech:	
	1. Dr. Kamaruddin BIN HASHIM (Nuclear Malaysia)	

	2. Dr. NGUYEN Quoc Hien (VINATOM)			
15:40 – 16:40	Discussion points:			
10.10	(1) Guide line of production process of PGP			
	(2) Development and field test of PGP in each country in terms of plant			
	yields and disease resistance for different plants			
	(3) Work plan of the field test in 2013 to 2015			
Session 4 Prepara	ation of guideline PGP application for different crops including rice			
and chili				
	Chaired by: Dr.WU Guozhong(China)			
16:40 – 17:00	Lead speech: Dr. Naotsugu NAGASAWA (JAEA)			
17:00 - 17:30	Progress of each country for specific crops			
Day 3: Thursday 31 October 2013				
Session 5 Strategy for Commercial Application of PGP and Plan for 2013-2015				
	Chaired by: Dr.Lucille V.ABAD(Philippines)			
09:00 - 09:20	Lead speech: Dr. Kamaruddin BIN HASHIM (Nuclear Malaysia)			
	Note: Project work plan of 2013-15 should be proposed by the lead			
	speakers for discussion			
09:20 - 10:45	Discussion points:			
	(1) Challenges and tasks for commercial application such as			
	collaboration with agriculture sector			
	(2) Enhancement of demonstration field tests in cooperation with			
	agriculture experts			
	(3) Collaboration with FNCA bio-fertilizer group			
	(4) Obstacles for research and development			
10.45 11.00	(5) Project work plan of R/D on PGP in 2013-15			
10:45 – 11:00	Coffee Break			
Session 6 Countr	ry Report on Production and Application of Hydrogel Super Water			
	by Radiation Cross-linking and Grafting of Natural Polymers			
	(Presentation 10min + Q/A 5min)			
C	haired by: Dr. TSENDDAVAA Amartaivan(Mongolia)			
11:00 - 11:15	Country Report: Bangladesh			
11:15 – 11:30	Country Report: China			
11:30 – 11:45				
11:45 – 12:00	Country Report: Indonesia			
12:00 – 12:15	Country Report: Indonesia			
12:00 – 12:15	Country Report: Indonesia Country Report: Japan Country Report: Malaysia			
12:00 – 12:15 12:15 – 13:45	Country Report: Indonesia Country Report: Japan Country Report: Malaysia Lunch Break			
12:00 – 12:15 12:15 – 13:45 <b>Session 6 Countr</b>	Country Report: Indonesia Country Report: Japan Country Report: Malaysia  Lunch Break  ry Report on Production and Application of Hydrogel Super Water			
12:00 – 12:15 12:15 – 13:45 <b>Session 6 Countr</b>	Country Report: Indonesia Country Report: Japan Country Report: Malaysia Lunch Break ry Report on Production and Application of Hydrogel Super Water Radiation Cross-linking and Grafting of Natural Polymers (Cont.)			
12:00 – 12:15 12:15 – 13:45 Session 6 Countr Absorbent by F	Country Report: Indonesia Country Report: Japan Country Report: Malaysia  Lunch Break  ry Report on Production and Application of Hydrogel Super Water			
12:00 – 12:15 12:15 – 13:45 Session 6 Countr Absorbent by F	Country Report: Indonesia Country Report: Japan Country Report: Malaysia  Lunch Break  ry Report on Production and Application of Hydrogel Super Water Radiation Cross-linking and Grafting of Natural Polymers (Cont.)  (Presentation 10min + Q/A 5min)			
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15:15 – 15:30	Coffee break		
Session 7 Results of	Session 7 Results of Field Tests and Strategy for Commercial Application of SWA, and		
Work Plan in 2013-15			
	Chaired by: Ms. Salma SULTANA(Bangladesh)		
15:30 – 16:10	Lead Speech:		
	Ms. Tita Puspita Sari (BATAN)		
	Dr. Phiriyatorn SUWANMALA(TINT)		
	Note: Work plan of 2013-15 should be proposed by the lead speakers		
	for discussion		
16:10 – 17:30	Discussion:		
	Points of discussion:		
	(1) Guide line of producing SWA by crosslinking and grafting		
	(2) Enhancement of commercial application of SWA in collaboration		
	with agriculture sector		
	(3) Crop yields increase in drought area by using SWA		
	(4) Challenges and tasks approaching commercial application		
	(5) Project work plans in 2013 and 2015		
Day 4: Friday, 1	November 2013		
Session 8	Coordination of the FNCA Project with RCA/IAEA Project		
	on Radiation Processing		
	Chaired by: Ms. Tita PUSPITASARI(Indonesia)		
09:00 – 09:30	Lead speech on new RCA project on radiation processing:		
00.20 10.20	Dr. Kamaruddin BIN HASHIM		
09:30 – 10:30	Discussion on new RCA project on radiation processing, possible ways		
10.20 10.50	and means of cooperation		
10:30 – 10:50	Coffee Break		
10:30 – 10:50	Coffee Break Session 9 Conclusion and Summary Report		
10:30 – 10:50 10:50 – 11:45	Coffee Break		
10:50 – 11:45	Coffee Break Session 9 Conclusion and Summary Report Chaired by: Dr.Kamaruddin BIN HASHIM Discussion and agreement on the conclusion and summary report		
	Coffee Break  Session 9 Conclusion and Summary Report Chaired by: Dr.Kamaruddin BIN HASHIM Discussion and agreement on the conclusion and summary report  Closing Speeches		
10:50 – 11:45	Coffee Break Session 9 Conclusion and Summary Report Chaired by: Dr.Kamaruddin BIN HASHIM Discussion and agreement on the conclusion and summary report Closing Speeches Dr. Muhd Noor MUHD YUNUS, DDG, Nuclear Malaysia		
10:50 – 11:45	Coffee Break Session 9 Conclusion and Summary Report Chaired by: Dr.Kamaruddin BIN HASHIM Discussion and agreement on the conclusion and summary report Closing Speeches Dr. Muhd Noor MUHD YUNUS, DDG, Nuclear Malaysia Ms.Moe AOKI(MEXT, Japan)		
10:50 – 11:45	Coffee Break Session 9 Conclusion and Summary Report Chaired by: Dr.Kamaruddin BIN HASHIM Discussion and agreement on the conclusion and summary report Closing Speeches Dr. Muhd Noor MUHD YUNUS, DDG, Nuclear Malaysia		
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