
Project Title Characterizing and Optimizing Process Dynamics in Complex Industrial Systems Using Radiotracer and Sealed Source Techniques
Oracle Project Number 2060997
Objectives To enhance the regional capability in using innovative radiotracers and sealed source techniques for investigation of complex industrial systems

General Project Data

Field(s) (18) Radioisotopes and radiation technology for industrial, health-care and environmental applications
Project Achievements Title: Characterizing and Optimizing Process Dynamics in Complex Industrial Systems Using Radiotracer and Sealed Source Techniques
Objective: To enhance the regional capability in using innovative radiotracers and sealed source techniques for investigation of complex industrial systems

Project Background:

Complex industrial processes (particularly multi-phase systems) are encountered in many industrial and environmental systems. The fluid dynamics of multiphase systems is very complicated and it is often difficult to predict important process parameters such as pressure drop, flow rate, phase holdup, mass transfer, phase distributions and mixing characteristics. Optimization of industrial processes is essential not only for efficient, safe and sustainable industrial operation, but also to save material, energy, protect the environment and reduce plant shutdown time thus leading to high economic benefits – hence leading to socio-economic development of the society. Characterization of the process dynamics in any such system is pre-requisite for process optimization and trouble-shooting. With advancements in technology, the new industrial systems are becoming more and more complicated. Due to harsh industrial conditions (high temperature/pressure, toxicity) it is often not possible to open such systems for investigations. It is always preferred to do on-line measurements because off-line investigations are highly un-economical. Therefore, safety, economic and environmental concerns demand for on-line process investigations. Conventional techniques cannot cope with this situation because mostly these are applicable off-line. Further, process engineers prefer to visualize the process for its diagnosis and optimization but industrial processes taking place inside opaque industrial systems make it impossible. The conventional means of process visualization are CFD models which are based on mathematical equations used for simulations and hence need verification. Radiotracer and sealed source technology-based applications provide state of the art techniques that possess the ability to see through opaque industrial systems and can be applied on-line in harsh industrial conditions providing unique opportunity to visualize the process in real time. New emerging and advanced technologies based on radiotracers and sealed source applications (like gamma Computed Tomography (CT)/Single Photon Emission Computer Tomography (SPECT), Computer Aided Radioactive Particle Tracking (CARPT), Radiotracer Residence Time Distribution (RTD) analysis in combination with Computational Fluid Dynamics (CFD) simulations, can play an important role for on-line process visualization, optimization & trouble-shooting & process design & scale-up purposes. Development of new tracers for better and wider applicability in harsh industrial conditions is required not only for sustainability of existing applications but also for investigating complex multiphase processes. Automation and improvements in instrumentation & hardware such as tracer injection systems, detectors & data acquisition systems are required for safer and reliable applications. Utilization of radionuclide generators for on-site production of radiotracers for industrial applications are important to overcome non-availability of radiotracers especially for those member states that do not have nuclear reactors and radiotracer production facilities. Most of the industries are common in RCA member states and the problems faced by these industries are also common. Therefore it is a common need of the region to work together to address these issues for the benefit of the whole region. Further, the proposed project is in line with common national priorities and development needs of all the participating member states (hence enjoying government commitment) and fulfils RCA criteria/IAEA central criterion for regional projects and has a great potential for regional cooperation and successful implementation.

Project Outputs: In order to fulfil the above objective, this project supported eleven expert missions and three regional training courses. The activities supported the development of human resource capacities and skills in the areas of radiotracer methodology and technology as applied to industry and environment, as well as for gamma scanning of industrial process columns. In addition, the activities provided training on radiotracer applications in multi-phase reactors, with an emphasis on hands-on radiotracer & CFD methodology for data generation, processing and interpretation, as well as on potential applications of the radiotracers in petroleum, chemical & water treatment plants. The project also supported activities on Single Photon Emission Computed Tomography and Industrial Radioactive Particle

Tracking (RPT) and SPECT for Multi-phase Process Investigation. Two e-learning systems on radiotracers and sealed sources industrial applications have been developed and used for training and certification of more than 20 people from more than 10 MSs in Africa. A consultants meeting has also been held in Morocco during the Tracer 7 conference on Tracers and tracing methods for the development of specific protocols which will be distributed to MSs.

Project Outcomes: Due to the training provided, member states developed enhanced capacities for the application of advanced nuclear techniques for industrial process characterization and visualization.

ACC Sector		Project Status	Completed on 2016-06-28
Original Funding	Core	1st Year Of Approval	2012
Estimated Duration	3 year(s)		

IAEA Personnel

Programme Management Officer	LEE, Ho Seung	NAFA	Asia and the Pacific Section 1
Section Head	ACUNA, Oscar E.		Asia and the Pacific Section 1
Technical Officer(s)	BRISSET, Patrick Dominique		Radioisotope Products and Radiation Technology Section

Recipient Institutes and Counterpart(s)

Australia	ANSTO Australian Nuclear Science and Technology Organisation; (EASEY, John Frederick)
Bangladesh	Bangladesh Atomic Energy Commission (BAEC); Bangladesh Atomic Energy Commission (BAEC); Atomic Energy Centre (AECD); (ISLAM, Md. Ashraful)
Bangladesh	Bangladesh Atomic Energy Commission (BAEC); Atomic Energy Research Establishment (AERE); Institute of Nuclear Science and Technology (INST); (RAHMAN, Md. Safiur)
China	China National Nuclear Corp. CNNC; China Institute of Atomic Energy (CIAE); Department of Isotopes; (GAO, Xiang)
India	Department of Atomic Energy (DAE); Department of Atomic Energy (DAE); Bhabha Atomic Research Centre (BARC); (PANT, Harish Jagat)
Indonesia	National Nuclear Energy Agency -BATAN; Centre for Application of Isotopes and Radiation Technology (PATIR); (., Sugiharto)
Malaysia	Malaysian Nuclear Agency; (ABDULLAH, Jaafar Bin)
Mongolia	Mongolian University for Science and Technology; (TSEVEEN, Erkhembayar Kholidog)
Nepal	Ministry of Environment, Science and Technology - Nepal; (PRADHAN, Pramoda)
New Zealand	Penguin Scientific and Medical Ltd.; (BARTLE, Colin Murray)
Pakistan	Pakistan Atomic Energy Commission (PAEC); Pakistan Institute of Nuclear Science and Technology (PINSTECH); (UD-DIN, Ghiyas)
Philippines	Philippine Nuclear Research Institute (PNRI); (AQUINO, Denis De La Cruz)
Republic of Korea	Korea Atomic Energy Research Institute KAERI - DAEJEON; RCA Regional Office; (HWANG, Soo Youn)
Republic of Korea	Korea Atomic Energy Research Institute KAERI - DAEJEON; (JUNG, Sung-Hee)
Sri Lanka	Ceylon Petroleum Corporation; (WEERASEKERA, Charicananda)
Thailand	Thailand Institute of Nuclear Technology (TINT) - Ongkarak Nuclear Research Center; (SAENGCHANTR, Dhanaj)
Viet Nam	Vietnam Atomic Energy Commission VAEI; Centre for Applications of Nuclear Technique in Industry (CANTI); (NGUYEN HUU, Quang)

Current Year Financial Status

[illegible]

Financial Approvals

Core Approvals

Year	Experts	Meetings/Workshops	Fellowships	Scientific Visits	Training Courses	HR Total	Equipment	Subcontracts	Miscellaneous	PR Total	Total Approval
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	4,355.00	45,000.00	0.00	0.00	45,000.00	94,355.00	0.00	10,000.00	0.00	10,000.00	104,355.00
2013	4,455.00	45,000.00	0.00	0.00	90,000.00	139,455.00	0.00	10,000.00	0.00	10,000.00	149,455.00

Footnote Approvals

Year	Experts	Meetings/Workshops	Fellowships	Scientific Visits	Training Courses	HR Total	Equipment	Subcontracts	Miscellaneous	PR Total	Total Approval
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Experts

Task	Task title/Participant Name	Nationality	Candidate approached	Submitted:s Accepted:a	Withdrawn:w Rejected:r	Start Date	End Date	Duration (days)	
01	home based assignment for preparation of training material on MOnTe Carlo Simulation for CT, CARPT, SPECT								Field: 8J
	Mission 01 JD Submitted: 2012-09-13								
	Duty Station : Daejeon(ROK)								
	KIM, Jong-Bum	ROK	2012-10-03			2012-11-05	2012-11-30	25	
02	training on column scanning								Field: 8J
	Mission 01 JD Submitted: 2012-09-12								
	Duty Station : Quezon City(PHI)								
	CHUE INTA, Siripone	THA	2012-09-24	2012-10-09a		2012-11-26	2012-11-30	4	
04	Expert Mission for Training on SPECT (Single Photon Emission Computed Tomography)								Field: 8J
	Mission 01 JD Submitted: 2013-08-14								
	Duty Station : Jakarta(INS)								
	KIM, Jong-Bum	ROK				2013-10-21	2013-10-25	4	
05	HBA for the preparation of draft protocols for the production of gaseous tracers and Gold in chloride solution								Field: 8J
	Mission 01 JD Submitted: 2014-05-21								
	Duty Station : Da Lat City(VIE)								
	NGUYEN HUU, Quang	VIE				2014-06-23	2014-06-29	6	
06	EM8 task 3.1.2 HBA for the preparation of drfat protocols for blockage/builup detection in pipeline								Field: 8J

Task	Task title/Participant Name	Nationality	Candidate approached	Submitted:s Accepted:a	Withdrawn:w Rejected:r	Start Date	End Date	Duration (days)	
07	Mission 01 JD Submitted: 2014-05-21 Duty Station : Kajang Selangor(MAL) ABDULLAH, Jaafar Bin MAL					2014-06-23	2014-06-29	6	Field: 8J
	HBA for the preparation of protocols on radioactive particle tracking								
08	Mission 01 JD Submitted: 2014-02-25 Duty Station : Mumbai(IND) PANT, Harish Jagat IND					2014-08-01	2014-08-11	10	Field: 18
	HBA for preparation of E-learning modules								
	Mission 01 JD Submitted: 2014-07-24 Duty Station : Bydgoszcz(POL) MALEK, Massoud CAN					2014-08-09	2014-10-15	67	

Meetings/Workshops

Task	Task title/Participant Name	Nationality	Candidate approached	Submitted:s Accepted:a	Withdrawn:w Rejected:r	Start Date	End Date	Duration (days)	
9001	IAEA/RCA Project Planning Meeting								Field: 3M
	Mission 01 JD Submitted: 2012-05-31 Duty Station : Jeju City(ROK)								
	ABDULLAH, Jaafar Bin MAL					2012-07-16	2012-07-20	4	
	BRISSET, Patrick Dominique FRA					2012-07-16	2012-07-20	4	
	LEE, Ho Seung					2012-07-16	2012-07-20	4	
	GAO, Xiang CPR					2012-07-16	2012-07-20	4	
	SEREETER, Lodoisamba MON					2012-07-16	2012-07-20	4	
	JUNG, Sung-Hee ROK					2012-07-16	2012-07-20	4	
	MUSA, Wibisono Wahyu INS					2012-07-16	2012-07-20	4	
	KHAN, Iqbal Hussain PAK					2012-07-16	2012-07-20	4	
	AQUINO, Denis De La Cruz PHI					2012-07-16	2012-07-20	4	
	BARTLE, Colin Murray NZE					2012-07-16	2012-07-20	4	
	SAENGCHANTR, Dhanaj THA					2012-07-16	2012-07-20	4	
	KYAW, Su Su MYA					2012-07-16	2012-07-20	4	
	NGUYEN HUU, Quang VIE					2012-07-16	2012-07-20	4	
	PANT, Harish Jagat IND					2012-07-16	2012-07-20	4	
9002	IAEA/RCA Regional Meeting on RTD-CFD for Radiotracer Applications in Multi-Phase Reactors								Field: 18
	Mission 01 JD Submitted: 2013-06-06 Duty Station : Xian(CPR) PARK, Jang Guen ROK					2013-08-19	2013-08-23	4	

Task	Task title/Participant Name	Nationality	Candidate approached	Submitted:s Accepted:a	Withdrawn:w Rejected:r	Start Date	End Date	Duration (days)
						2013-08-19	2013-08-23	4
	YANG, Li Fang	CPR				2013-08-19	2013-08-23	4
	CHINTALA, Tirupathi Naidu	IND				2013-08-19	2013-08-23	4
	TUN, Khin Pa Pa					2013-08-19	2013-08-23	4
	DAHING, Lahasen	MAL				2013-08-19	2013-08-23	4
	ROY, Shantanu	IND	2013-07-24	2013-07-24s		2013-08-19	2013-08-23	4
	PAN, Qun	CPR				2013-08-19	2013-08-23	4
	MALLILLIN, Janice Peñaflor	PHI				2013-08-19	2013-08-23	4
	TO, Ba Cuong	VIE				2013-08-19	2013-08-23	4
	SAENGCHANTR, Dhanaj	THA				2013-08-19	2013-08-23	4
	TSEVEEN, Erkhembayar	MON				2013-08-19	2013-08-23	4
	Kholidog							
	WANG, Luwei	CPR				2013-08-19	2013-08-23	4
	YUSOFF, Nazrul Hizam	MAL				2013-08-19	2013-08-23	4
	MOE PHYU HLAING, .	MYA				2013-08-19	2013-08-23	4
	ISLAM, Md. Ashraful	BGD	2013-08-02	2013-08-02s		2013-08-19	2013-08-23	4
	TSEVEEN, Altangerel	MON				2013-08-19	2013-08-23	4
	SHAH, Ajmal	PAK				2013-08-19	2013-08-23	4
	BINDAR, Yazid	INS				2013-08-19	2013-08-23	4
	VO, Thi Ngoc Cam	VIE				2013-08-19	2013-08-23	4
	UD-DIN, Ghiyas	PAK				2013-08-19	2013-08-23	4
	SHARMA, Vijay Kumar	IND				2013-08-19	2013-08-23	4
	CHOWDHURY, Md. Faruque	BGD				2013-08-19	2013-08-23	4
	Hossain							
	SRISATIT, Somyot	THA				2013-08-19	2013-08-23	4
	., Sugiharto	INS				2013-08-19	2013-08-23	4
	GAO, Xiang	CPR				2013-08-19	2013-08-23	4
	MOON, Jinho	ROK				2013-08-19	2013-08-23	4
	WEERASEKERA,	SRL				2013-08-19	2013-08-23	4
	Charicananda							
9003	Mid-term coordination meeting of RAS1012 project							Field: 8J
	Mission 01 JD Submitted: 2014-04-24							
	Duty Station : Bali(INS)							
	., Sugiharto	INS				2014-05-26	2014-05-30	4
	WEERASEKERA,	SRL				2014-05-26	2014-05-30	4
	Charicananda							
	BRISSET, Patrick Dominique	FRA				2014-05-26	2014-05-30	4

Task	Task title/Participant Name	Nationality	Candidate approached	Submitted:s Accepted:a	Withdrawn:w Rejected:r	Start Date	End Date	Duration (days)	
9004	ABDULLAH, Jaafar Bin	MAL				2014-05-26	2014-05-30	4	
	JUNG, Sung-Hee	ROK				2014-05-26	2014-05-30	4	
	GAO, Xiang	CPR				2014-05-26	2014-05-30	4	
	ISLAM, Md. Ashraful	BGD				2014-05-26	2014-05-30	4	
	MOE PHYU HLAING, .	MYA				2014-05-26	2014-05-30	4	
	TSEVEEN, Erkhembayar Kholidog	MON				2014-05-26	2014-05-30	4	
	AQUINO, Denis De La Cruz	PHI				2014-05-26	2014-05-30	4	
	KHAN, Iqbal Hussain	PAK				2014-05-26	2014-05-30	4	
	MASHBAT, Narantuya	MON				2014-05-26	2014-05-30	4	
	NGUYEN HUU, Quang	VIE				2014-05-26	2014-05-30	4	
	SAENGCHANTR, Dhanaj	THA				2014-05-26	2014-05-30	4	
	PANT, Harish Jagat	IND				2014-05-26	2014-05-30	4	
	Expert Group to participate in 7th Intl Radiotracer Conference and prepare Protocols on selected techniques for QA/QC								Field: 18
	Mission 01 JD Submitted: 2014-09-03								
	Duty Station : Marrakech(MOR)								
	PANT, Harish Jagat	IND				2014-10-13	2014-10-17	4	
						2014-10-13	2014-10-17	4	
	NGUYEN HUU, Quang	VIE				2014-10-13	2014-10-17	4	
	SAENGCHANTR, Dhanaj	THA			2014-09-16w				
	TSEVEEN, Erkhembayar Kholidog	MON				2014-10-13	2014-10-15	2	
	AQUINO, Denis De La Cruz	PHI			2014-09-23w				
	JUNG, Sung-Hee	ROK				2014-10-13	2014-10-15	2	
	MOE PHYU HLAING, .	MYA				2014-10-13	2014-10-15	2	
	GAO, Xiang	CPR				2014-10-13	2014-10-15	2	
	UD-DIN, Ghiyas	PAK				2014-10-13	2014-10-17	4	
	ABDULLAH, Jaafar Bin	MAL			2014-10-02w				
	BRISSET, Patrick Dominique	FRA				2014-10-13	2014-10-17	4	
	., Sugiharto	INS				2014-10-13	2014-10-15	2	

Fellowships

No	Name	Nominated	Awarded:a Non-awarded:n Withdrawn:w	Host Country	Type	Proposed:p Accepted:a Rejected:r	Anticipated Start Date	Start Date	End Date	Proposed Duration
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Scientific Visits

No	Name	Nominated	Awarded:a Non-awarded:n Withdrawn:w	Host Country	Type	Proposed:p Accepted:a Rejected:r	Anticipated Start Date	Start Date	End Date	Proposed Duration
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Training Courses

TC #001	IAEA/RCA Regional Training Course on Monte Carlo Simulations for CT, RPT, SPECT and Design of Radiotracer Experiments		
Objective:	To demonstrate and train participants in using Monte Carlo Simulations for Industrial Process Gamma Tomography (IPGT) Radioactive Particle Tracking (RPT), Industrial Single Photon Emission Computerized Tomography (InSPECT) and the design of Radiotracer (RTD) experiment.		
Start Date:	2012-12-03	End Date:	2012-12-07
Course Type:	Regional		
Field:	8A Isotope Hydrology and Applications of Isotopes and Radiation in Industry		
APC Code:	I Radioisotope Production and Radiation Technology		
Language:	ENGLISH		
Estimated participants:	2	Number of Participants:	21
No of selected candidates:	20	Number of lecturers:	0
Implementation Officer	MAALOUF, Claudette	Course Director	JUNG, Sung-Hee

Host Country Information

Host country	Host institute	Start Date	End Date
Republic of Korea	Korea Atomic Energy Research Institute KAERI - DAEJEON	2012/12/03	2012/12/07

Lecturers

Name	Nationality	Sponsor	Start Date	End Date	Travel Free	Salary Free	Perdiem Free
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Regular Participants

Nomination country	Name	Nationality	Sex	Sponsor	Start Date	End Date	Travel Free	Stipend Free
Viet Nam	DANG NGUYEN, The Duy				2012/12/03	2012/12/07		
Bangladesh	AKTER, SHIRIN	BGD	F		2012/12/03	2012/12/07		
Bangladesh	MOHAMMAD TAREQ, Abu Rayhan	BGD	M		2012/12/03	2012/12/07		
China	CHENG, Baiqing	CPR	M		2012/12/03	2012/12/07		
China	YANG, Li Fang	CPR	F		2012/12/03	2012/12/07		
India	GOSWAMI, Sunil	IND	M		2012/12/03	2012/12/07		
Indonesia	AZMI, Bayu	INS	M		2012/12/03	2012/12/07		
Indonesia	MUSA, Wibisono Wahyu	INS			2012/12/03	2012/12/07		
Malaysia	MOHD YUNOS, Mohd Amirul Syafiq	MAL			2012/12/03	2012/12/07		
Mongolia	DAMDINSUREN, Bolortuya	MON	F		2012/12/03	2012/12/07		

Myanmar	KHAING NYUNT MYAING	MYA	F	2012/12/03	2012/12/07
Myanmar	PHYU PHYU AUNG MYINT	MYA	F	2012/12/03	2012/12/07
Pakistan	MALIK, Fariha	PAK	F	2012/12/03	2012/12/07
Pakistan	UD-DIN, Ghiyas	PAK		2012/12/03	2012/12/07
Philippines	AQUINO, Denis De La Cruz	PHI	M	2012/12/03	2012/12/07
Philippines	MALLILLIN, Janice Peñaflor	PHI	F	2012/12/03	2012/12/07
Sri Lanka	GAMAGE, Chandralal Ranjith Kumara	SRL	M	2012/12/03	2012/12/07
Thailand	SAENGCHANTR, Dhanaj	THA		2012/12/03	2012/12/07
Thailand	SOMBOON, Rassame	THA	M	2012/12/03	2012/12/07
Viet Nam	PHAM VAN, Dao	VIE	M	2012/12/03	2012/12/07

TC #002 Regional Training Course on Industrial Process Single Photon Emission Computed Tomography

Objective:	To introduce the principles of Industrial Process Gamma Emission Computed Tomography; methods of image reconstruction and practice in use of the equipment for scanning a phantom.				
Start Date:	2013-03-11	End Date:	2013-03-15		
Course Type:	Regional				
Field:	18				
APC Code:	I Radioisotope Production and Radiation Technology				
Language:	ENGLISH				
Estimated participants:	2	Number of Participants:	27		
No of selected candidates:	25	Number of lecturers:	1		
Implementation Officer	MAALOUF, Claudette	Course Director	NGUYEN HUU, Quang		

Host Country Information

Host country	Host institute	Start Date	End Date
Viet Nam	Centre for Applications of Nuclear Technique in Industry (CANTI)	2013/03/11	2013/03/15

Lecturers

Name	Nationality	Sponsor	Start Date	End Date	Travel Free	Salary Free	Perdiem Free
KIM, Jong-Bum	ROK		2013/03/11	2013/03/15			

Regular Participants

Nomination country	Name	Nationality	Sex	Sponsor	Start Date	End Date	Travel Free	Stipend Free
Bangladesh	ALAM, MD SAIFUL	BGD	M		2013/03/11	2013/03/15		
Bangladesh	ISLAM, Md. Ashraful	BGD	M		2013/03/11	2013/03/15		
China	YANG, Guogui	CPR	M		2013/03/11	2013/03/15		
China	ZHAI, Lina	CPR	F		2013/03/11	2013/03/15		
India	BISWAL, Jayashree	IND	F		2013/03/11	2013/03/15		
India	PARIHAR, Prashant Udaysinh	IND	M		2013/03/11	2013/03/15		

Indonesia	MUSA, Wibisono Wahyu	INS		2013/03/11	2013/03/15
Indonesia	RAMADHANY, Harun Al Rasyid	INS	M	2013/03/11	2013/03/15
Malaysia	MOHD YUNOS, Mohd Amirul Syafiq	MAL		2013/03/11	2013/03/15
Malaysia	YAHYA, Roslan	MAL	M	2013/03/11	2013/03/15
Myanmar	AUNG, Naing Nyi Nyi	MYA	M	2013/03/11	2013/03/15
Myanmar	PHYO, Kyaw Sein	MYA	M	2013/03/11	2013/03/15
Pakistan	GUL, Samar	PAK	M	2013/03/11	2013/03/15
Pakistan	UD-DIN, Ghiyas	PAK		2013/03/11	2013/03/15
Philippines	MALLILLIN, Janice Peñaflor	PHI	F	2013/03/11	2013/03/15
Republic of Korea	MOON, Jinho	ROK		2013/03/11	2013/03/15
Republic of Korea	PARK, Jang Guen	ROK	M	2013/03/11	2013/03/15
Thailand	SAENGCHANTR, Dhanaj	THA		2013/03/11	2013/03/15
Thailand	SRISATIT, Somyot	THA	M	2013/03/11	2013/03/15

Local Participants

Name	Nationality	Sex	Start Date	End Date
HAI, Trinh Dinh	VIE	M	2013/03/11	2013/03/15
MAI CONG, Thanh	VIE	M	2013/03/11	2013/03/15
PHAM, Hoai Phuong	VIE	M	2013/03/11	2013/03/15
VIEN, Do Trong	VIE	M	2013/03/11	2013/03/15
XUAN, Nguyen Minh	VIE	M	2013/03/11	2013/03/15

TC #003

Objective: The course will provide specific training in the basic theory and applications on radiation technologies for process investigation by RPT and SPECT methods.

Start Date: 2014-04-14 End Date: 2014-04-18

Course Type: Regional

Field: 8J Radiation Technologies and Tracer Techniques for Industrial Processes

APC Code: I Radioisotope Production and Radiation Technology

Language: ENGLISH

Estimated participants: 15

Number of Participants: 30

No of selected candidates: 23

Number of lecturers: 2

Implementation Officer: MAALOUF, Claudette

Implementation Clerk/Assistant: STEEPHEN-MADHAVAPPALLIL, Gladis

Course Director: ABDULLAH, Jaafar Bin

Host Country Information

Host country	Host institute	Start Date	End Date
Malaysia	Division of Industrial Technology	2014/04/14	2014/04/18

Lecturers

Name	Nationality	Sponsor	Start Date	End Date	Travel Free	Salary Free	Perdiem Free
KIM, Jong-Bum	ROK		2014/04/14	2014/04/18			

ROY, Shantanu IND 2014/04/15 2014/04/18

Regular Participants

Nomination country	Name	Nationality	Sex	Sponsor	Start Date	End Date	Travel Free	Stipend Free
Bangladesh	HABIB, MD AHASANUL	BGD	M		2014/04/14	2014/04/18		
China	GAO, Xiang	CPR	M		2014/04/14	2014/04/18		
India	BHOWMICK, Sandip	IND	M		2014/04/14	2014/04/18		
India	PATEL, Ajey Kumar	IND	M		2014/04/14	2014/04/18		
Indonesia	MUSA, Wibisono Wahyu	INS			2014/04/14	2014/04/18		
Indonesia	SUDARMAJI, Arief	INS	M		2014/04/14	2014/04/18		
Mongolia	TSEVEEN, Erkhembayar Kholidog	MON	M		2014/04/14	2014/04/18		
Myanmar	LWIN, Khin Ye	MYA	F		2014/04/14	2014/04/18		
Myanmar	WIN, Maw Maw	MYA	F		2014/04/14	2014/04/18		
Pakistan	GUL, Samar	PAK	M		2014/04/14	2014/04/18		
Pakistan	KHAN, Muhammad Sarwar	PAK	M		2014/04/14	2014/04/18		
Philippines	MALLILLIN, Janice Peñaflor	PHI	F		2014/04/14	2014/04/18		
Republic of Korea	MOON, Jinho	ROK			2014/04/14	2014/04/18		
Sri Lanka	ABEYWICKRAMA BATAGODAGE, Chamintha Jayani	SRL	F		2014/04/14	2014/04/18		
Sri Lanka	GAMAGE, Chandralal Ranjith Kumara	SRL	M		2014/04/14	2014/04/18		
Thailand	AKARANATE, Akara	THA	M		2014/04/14	2014/04/18		
Thailand	PRASITSURT, Jitdilok	THA	M		2014/04/14	2014/04/18		
Viet Nam	MAI CONG, Thanh	VIE	M		2014/04/14	2014/04/18		
Viet Nam	PHAM VAN, Dao	VIE	M		2014/04/14	2014/04/18		

Local Participants

Name	Nationality	Sex	Start Date	End Date
ABDUL RAHMAN, Azrin	MAL	M	2014/04/14	2014/04/18
DAHING, Lahasen	MAL	M	2014/04/14	2014/04/18
ITHNIN, Hanafi	MAL	M	2014/04/14	2014/04/18

Equipment

WP	PO Num			Total Value	Order Date	Status	Vendor Name	Vendor Location	
Item	Quantity	Unit	Item Description					Planned Shipping Date	Actual Shipping Date

Sub-contracts

WP	PO Num			Total Value	Order Date	Status	Vendor Name	Vendor Location	
Item	Quantity	Unit	Item Description					Planned Shipping Date	Actual Shipping Date

	EMS-46179		2014/11/24	APPROVED	PANT, Mr Harish Jagat
1	2853	each	SupplierNumber:13442 PANT, MR.Harish Jagat Non Staff		
	EMS-47148		2014/12/15	APPROVED	ABDULLAH, Mr Jaafar Bin
1	2100	each	SupplierNumber:13564 ABDULLAH, MR.Jaafar Non Staff		
	EMS-19072		2012/10/01	APPROVED	CHUE INTA, Mr Siripone
1	3814	each	70405 CHUEINTA, Mr. Siripone Staff CHUE INTA, (Consultants and Experts-Fees and Honorarium)		
	EMS-46073		2014/11/20	APPROVED	PANT, Mr Harish Jagat
1	2853	each	SupplierNumber:13442 PANT, MR.Harish Jagat Non Staff		
	EMS-41078		2014/07/31	APPROVED	MALEK, Mr Massoud
1	6000	each	SupplierNumber:52912 MALEK, MR.. Massoud Non Staff		
	EMS-42503		2014/09/12	APPROVED	MALEK, Mr Massoud
1	6000	each	SupplierNumber:52912 MALEK, MR.. Massoud Non Staff		
	EMS-20594		2012/11/05	APPROVED	KIM, Mr Jong-Bum
1	7722	each	42261 KIM, Mr. Jong-bum Staff KIM, Jong- (Consultants and Experts-Fees and Honorarium)		
	EMS-31788		2013/10/10	APPROVED	KIM, Mr Jong-Bum
1	4161	each	SupplierNumber:13514 KIM, MR.. Jong-Bum Non Staff		
	EMS-31858		2013/10/11	APPROVED	KIM, Mr Jong-Bum
1	3000	each	SupplierNumber:13514 KIM, MR.. Jong-Bum Non Staff		
2	1161	each	SupplierNumber:13514 KIM, MR.. Jong-Bum Non Staff		
	EMS-46150		2014/11/21	APPROVED	PANT, Mr Harish Jagat
1	2853	each	SupplierNumber:13442 PANT, MR.Harish Jagat Non Staff		
	EMS-29301		2013/08/12	APPROVED	ROY, Mr Shantanu
1	3875	each	SupplierNumber:11858 ROY, Shantanu Non Staff		
	EMS-44009		2014/10/16	APPROVED	MALEK, Mr Massoud
1	7200	each	SupplierNumber:52912 MALEK, MR.Massoud Non Staff		
	EMS-55802		2015/09/03	APPROVED	United Nations Development Program

1 2857 each SupplierNumber:53732|NGUYEN, Mr. Huu Quang. |Non Staff

Training Courses

WP	PO Num			Total Value	Order Date	Status	Vendor Name	Vendor Location	
Item	Quantity	Unit	Item Description					Planned Shipping Date	Actual Shipping Date

	A1216326-1525EUR		2012/11/15	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	306.68	each	12TS16326 39210 CHENG, MR. BAIQING Beijing (CPR) - Daejeon (ROK) - Beijing		
2	306.68	each	12TS16326A 529116 YANG, MS. LIFANG Beijing (CPR) - Daejeon (ROK) - Beijing		
3	1209.53	each	12TS16326B 555126 CHINTALA, MR. TIRUPATHI NAIDU Hyderabad (IND) - Daejeon (ROK) - Hydera		
4	1014.87	each	12TS16326C 39212 GOSWAMI, MR. SUNIL Mumbai (IND) - Daejeon (ROK) - Mumbai (I		
5	644.47	each	12TS16326D 43983 AZMI, MR. BAYU Jakarta (INS) - Daejeon (ROK) - Jakarta		
6	644.47	each	12TS16326E 81026 WIBISONO, MR. WIBISONO Jakarta (INS) - Daejeon (ROK) - Jakarta		
7	782.37	each	12TS16326F 39209 MOHD YUNOS, MR. MOHD AMIRUL SYAFIQ Kajang (MAL) - Daejeon (ROK) - Kajang (M		
8	412.77	each	12TS16326G 32925 DAMDINSUREN, MS. BOLORTUYA Ulaanbaatar (MON) - Daejeon (ROK) - Ulaa		
9	963.29	each	12TS16326H 31724 KHAING NYUNT MYAING Nay Pyi Taw (MYA) - Daejeon (ROK) - Nay		
10	963.29	each	12TS16326I 16052 PHYU PHYU AUNG MYINT Nay Pyi Taw (MYA) - Daejeon (ROK) - Nay		
11	1498.29	each	12TS16326J 367075 MALIK, MS. FARIHA Islamabad (PAK) - Daejeon (ROK) - Islama		
12	1498.29	each	12TS16326K 12258 UD-DIN, MR. GHIYAS Islamabad (PAK) - Daejeon (ROK) - Islama		
13	701.11	each	12TS16326L 5737 AQUINO, MR. DENIS Quezon City (PHI) - Daejeon (ROK) - Quez		
14	701.11	each	12TS16326M 36521 MALLILLIN, MS. JANICE Quezon City (PHI) - Daejeon (ROK) - Quez		
15	741.92	each	12TS16326N 31727 GAMAGE, MR. CHANDRALAL RANJITH KUMARA Kelaniya (SRL) - Daejeon (ROK) - Kelaniy		
16	578.26	each	12TS16326O 534113 RASSAME, MR. SOMBOON Bangkok (THA) - Daejeon (ROK) - Bangkok		
17	578.26	each	12TS16326P 39207 SAENGCHANTR, MR. DHANAJ Bangkok (THA) - Daejeon (ROK) - Bangkok		
18	817.72	each	12TS16326Q 39219 DANG NGUYEN, MR. THE DUY Dalat (VIE) - Daejeon (ROK) - Dalat (VIE		
19	817.72	each	12TS16326R 43985 PHAM VAN, MR. DAO Dalat (VIE) - Daejeon (ROK) - Dalat (VIE		

	A1302616-1525EUR		2013/02/06	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	2463.44	each	13TS02616 614348 ALAM, MR. MD. SAIFUL Dhaka (BGD) - Dalat (VIE) - Dhaka (BGD)		
2	2463.44	each	13TS02616A 18511 ISLAM, MR. MD. ASHRAFUL Dhaka (BGD) - Dalat (VIE) - Dhaka (BGD)		
3	1234.14	each	13TS02616B 36520 YANG, MR. GUOGUI Beijing (CPR) - Dalat (VIE) - Beijing (C		
4	1234.14	each	13TS02616C 614417 ZHAI, MS. LINA Beijing (CPR) - Dalat (VIE) - Beijing (C		
5	879.65	each	13TS02616D 614388 BISWAL, MS. JAYASHREE Mumbai (IND) - Dalat (VIE) - Mumbai (IND		
6	1321.34	each	13TS02616E 615316 PARIHAR, MR. PRASHANT UDAYSINH Greater Noida (IND) - Dalat (VIE) - Grea		
7	1125.21	each	13TS02616F 614409 RAMADHANY, MR. HARUN AL RASYID Jakarta Selatan (INS) - Dalat (VIE) - Ja		
8	1125.21	each	13TS02616G 81026 WIBISONO, MR. WIBISONO Jakarta (INS) - Dalat (VIE) - Jakarta (I		
9	436.61	each	13TS02616H 39209 MOHD YUNOS, MR. MOHD AMIRUL SYAFIQ Kajang (MAL) - Dalat (VIE) - Kajang (MAL		
10	436.61	each	13TS02616I 45241 YAHYA, MR. ROSLAN Kajang (MAL) - Dalat (VIE) - Kajang (MAL		
11	1330.08	each	13TS02616J 45256 PHYO, MR. KYAW SEIN Nay Pyi Taw (MYA) - Dalat (VIE) - Nay Py		

12	1330.08	each	13TS02616K 44055 NAING NYI NYI AUNG Nay Pyi Taw (MYA) - Dalat (VIE) - Nay Py
13	1311.89	each	13TS02616L 15499 BULOS, MS. ADELINA Quezon City (PHI) - Dalat (VIE) - Quezon
14	1311.89	each	13TS02616M 36521 MALLILLIN, MS. JANICE Quezon City (PHI) - Dalat (VIE) - Quezon
15	789.65	each	13TS02616N 39208 MOON, MR. JINHO Daejeon (ROK) - Dalat (VIE) - Daejeon (R
16	789.65	each	13TS02616O 614349 PARK, MR. JANG GUEN Daejeon (ROK) - Dalat (VIE) - Daejeon (R
17	406.28	each	13TS02616P 39207 SAENGCHANTR, MR. DHANAJ Bangkok (THA) - Dalat (VIE) - Bangkok (T
18	406.28	each	13TS02616Q 35250 SRISATIT, MR. SOMYOT Bangkok (THA) - Dalat (VIE) - Bangkok (T

A1303767-1525EUR			2013/02/15	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	1195.61	each	13TS03767 19409 GUL, MR. SAMAR Islamabad (PAK) - Dalat (VIE) - Islamaba		
2	1195.61	each	13TS03767A 12258 UD-DIN, MR. GHIYAS Islamabad (PAK) - Dalat (VIE) - Islamaba		

A1216490-1525EUR			2012/11/15	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	1562.09	each	12TS16490 43981 AKTER, MS. SHIRIN Dhaka (BGD) - Daejeon (ROK) - Dhaka (BGD		
2	1612.09	each	12TS16490A 34067 MOHAMMAD TAREQ, MR. ABU RAYHAN Dhaka (BGD) - Daejeon (ROK) - Dhaka (BGD		

A1302615-1525EUR			2013/02/05	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	776.16	each	13TS02615 16021 KIM, MR. JONG-BUM Daejeon (ROK) - Dalat (VIE) - Daejeon (R		

A1404749-1525EUR			2014/04/08	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	775.64	each	14TS04749 13606 ROY, MR SHANTANU New Delhi (IND) - Kajang (MAL) - New Del		

A1404862-1525EUR			2014/03/21	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	701.51	each	14TS04862 35256 HABIB, MR MD. AHASANUL Dhaka (BGD) - Kajang (MAL) - Dhaka (BGD)		
2	701	each	14TS04862A 838176 JOLLY, MS YEASMIN NAHAR Dhaka (BGD) - Kajang (MAL) - Dhaka (BGD)		
3	1250.89	each	14TS04862B 19542 GAO, MR XIANG Beijing (CPR) - Kajang (MAL) - Beijing (
4	1250.89	each	14TS04862C 721814 WANG, MR LUWEI Beijing (CPR) - Kajang (MAL) - Beijing (
5	711.61	each	14TS04862D 838173 BHOWMICK, MR SANDIP Trombay (IND) - Kajang (MAL) - Trombay (
6	749.67	each	14TS04862E 838174 PATEL, MR AJEY KUMAR Warangal (IND) - Kajang (MAL) - Warangal		
7	518.75	each	14TS04862F 838179 SUDARMAJI, MR ARIEF Depok (INS) - Kajang (MAL) - Depok (INS)		
8	518.41	each	14TS04862G 81026 WIBISONO, MR WIBISONO Jakarta (INS) - Kajang (MAL) - Jakarta (
9	1095.45	each	14TS04862H 721816 TSEVEEN, MR ERKHEMBAYAR KHOLIDOG Ulaanbaatar (MON) - Kajang (MAL) - Ulaan		
10	484.68	each	14TS04862I 454109 KHIN YE LWIN, MS Nay Pyi Taw (MYA) - Kajang (MAL) - Nay P		
11	484.68	each	14TS04862J 34045 MAW MAW WIN, MS Nay Pyi Taw (MYA) - Kajang (MAL) - Nay P		
12	1141.81	each	14TS04862K 19409 GUL, MR SAMAR Islamabad (PAK) - Kajang (MAL) - Islamab		
13	1141.81	each	14TS04862L 48750 KHAN, MR MUHAMMAD SARWAR Islamabad (PAK) - Kajang (MAL) - Islamab		
14	852.41	each	14TS04862M 15499 BULOS, MS ADELINA Quezon City (PHI) - Kajang (MAL) - Quezo		
15	852.41	each	14TS04862N 36521 MALLILLIN, MS JANICE Quezon City (PHI) - Kajang (MAL) - Quezo		
16	923.76	each	14TS04862O 39208 MOON, MR JINHO Daejeon (ROK) - Kajang (MAL) - Daejeon (

17	502.19	each	14TS04862P 834200 ABEYWICKRAMA BATAGODAGE, MS CHAMINTHA JAYANI Wellampitiya (SRL) - Kajang (MAL) - Well
18	502.19	each	14TS04862Q 31727 GAMAGE, MR CHANDRALAL RANJITH KUMARA Kelaniya (SRL) - Kajang (MAL) - Kelaniya
19	414.11	each	14TS04862R 838177 AKARANATE, MR AKARA Ongkharak (THA) - Kajang (MAL) - Ongkhar
20	822.75	each	14TS04862S 838178 PRASITSURT, MR JITDILOK Maptaphut (THA) - Kajang (MAL) - Maptaph
21	637.71	each	14TS04862T 627391 MAI CONG, MR THANH Da Lat (VIE) - Kajang (MAL) - Da Lat (VI
22	637.71	each	14TS04862U 43985 PHAM VAN, MR DAO Dalat (VIE) - Kajang (MAL) - Dalat (VIE)

A1404750-1525EUR				2014/04/01	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	923.76	each	14TS04750 16021 KIM, MR JONG-BUM Daejeon (ROK) - Kajang (MAL) - Daejeon (
A1404750-16021USD				2014/04/01	APPROVED	KIM, Mr Jong-Bum
1	3444	each	14TS04750A 16021 KIM, MR JONG-BUM Daejeon (ROK) - Kajang (MAL) - Daejeon (
CMS-21315				2012/11/15	APPROVED	Korea Atomic Energy Research Institute KAERI - DAEJEON
1	12600	each	13434 Korea Atomic Energy Research Institute KAERI - DAEJEON Non Staff			
2	2100	each	13434 Korea Atomic Energy Research Institute KAERI - DAEJEON Non Staff			
3	500	each	13434 Korea Atomic Energy Research Institute KAERI - DAEJEON Non Staff			
4	1500	each	13434 Korea Atomic Energy Research Institute KAERI - DAEJEON Non Staff			
CMS-37287				2014/03/31	APPROVED	United Nations Development Program
1	16800	each	SupplierNumber:1249 United Nations Development Program Non Staff			
2	2200	each	SupplierNumber:1249 United Nations Development Program Non Staff			
3	1000	each	SupplierNumber:1249 United Nations Development Program Non Staff			
4	5455	each	SupplierNumber:1249 United Nations Development Program Non Staff			
A1302615-16021USD				2013/02/05	APPROVED	KIM, Mr Jong-Bum
1	3369	each	13TS02615A 16021 KIM, MR. JONG-BUM Daejeon (ROK) - Dalat (VIE) - Daejeon (R			
CMS-23310				2013/02/06	APPROVED	Centre for Applications of Nuclear Technique in Industry (CANTI)
1	10095	each	8091 Centre for Applications of Nuclear Technique in Industry CANTI Non Staff			
2	1800	each	8091 Centre for Applications of Nuclear Technique in Industry CANTI Non Staff			
3	500	each	8091 Centre for Applications of Nuclear Technique in Industry CANTI Non Staff			
4	500	each	8091 Centre for Applications of Nuclear Technique in Industry CANTI Non Staff			
CMS-23496				2013/02/13	APPROVED	Centre for Applications of Nuclear Technique in Industry (CANTI)
1	1080	each	8091 Centre for Applications of Nuclear Technique in Industry CANTI Non Staff			
2	200	each	8091 Centre for Applications of Nuclear Technique in Industry CANTI Non Staff			

	A1404749-13606USD		2014/04/08	APPROVED	ROY, Mr Shantanu
1	2674	each	14TS04749A 13606 ROY, MR SHANTANU New Delhi (IND) - Kajang (MAL) - New Del		

Others

WP	PO Num		Total Value	Order Date	Status	Vendor Name	Vendor Location	
Item	Quantity	Unit	Item Description				Planed Shipping Date	Actual Shipping Date

	A1208800-1525EUR		2012/06/19	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	478.36	each	12ET08800 19542 GAO, MR. XIANG Beijing (CPR) - Jeju City (ROK) - Beijin		
2	1674.18	each	12ET08800A 15370 PANT, MR. HARISH JAGAT Mumbai (IND) - Jeju City (ROK) - Mumbai		
3	652.53	each	12ET08800B 16145 ABDULLAH, MR. JAAFAR Kajang (MAL) - Jeju City (ROK) - Kajang		
4	1480.41	each	12ET08800C 36511 SU SU KYAW Nay Pyi Taw (MYA) - Jeju City (ROK) - Na		
5	1682.17	each	12ET08800D 41989 BARTLE, MR. COLIN MURRAY Porirua (NZE) - Jeju City (ROK) - Poriru		
6	1873.73	each	12ET08800E 6427 KHAN, MR. IQBAL HUSSAIN Islamabad (PAK) - Jeju City (ROK) - Isla		
7	632.14	each	12ET08800F 5737 AQUINO, MR. DENIS Quezon City (PHI) - Jeju City (ROK) - Qu		
8	247.44	each	12ET08800G 18193 JUNG, MR. SUNG-HEE Daejeon (ROK) - Jeju City (ROK) - Daejeo		
9	989.54	each	12ET08800H 39207 SAENGCHANTR, MR. DHANAJ Chatuchak (THA) - Jeju City (ROK) - Chat		
10	976.04	each	12ET08800I 18891 NGUYEN HUU, MR. QUANG Dalat (VIE) - Jeju City (ROK) - Dalat (V		

	A1203644-1525EUR		2012/06/27	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	5804.01	each	12ET03644 41151 BRISSET, Patrick Dominique M. Vienna - Korea (ROK) - Vienna		

	A1208432-46997EUR		2012/06/29	APPROVED	LEE, Mr Ho Seung
1	866.98	each	12ET08432A 46997 LEE, Ho Seung Vienna - Jeju City (ROK) - Vienna		

	A1209179-1525EUR		2012/06/19	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	838.52	each	12ET09179 81026 WIBISONO, MR. WIBISONO Jakarta (INS) - Jeju City (ROK) - Jakart		
2	806.92	each	12ET09179A 20477 LODOYSAMBA, MR. SEREETER Ulaanbaatar (MON) - Jeju City (ROK) - UI		

	A1309803-1525EUR		2013/07/02	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	2039.35	each	13ET09803 555126 CHINTALA, MR. TIRUPATHI NAIDU Hyderabad (IND) - Xian (CPR) - Hyderabad		
2	2030.55	each	13ET09803A 721817 SHARMA, MR. VIJAY KUMAR Mumbai (IND) - Xian (CPR) - Mumbai (IND)		
3	1659.05	each	13ET09803B 721820 BINDAR, MR. YAZID Bandung (INS) - Xian (CPR) - Bandung (IN		
4	1659.05	each	13ET09803C 15510 SUGIHARTO Jakarta (INS) - Xian (CPR) - Jakarta (IN		
5	1546.16	each	13ET09803D 721812 DAHING, MR. LAHASEN Kajang (MAL) - Xian (CPR) - Kajang (MAL)		
6	1546.16	each	13ET09803E 721815 YUSOFF, MR. NAZRUL HIZAM Kajang (MAL) - Xian (CPR) - Kajang (MAL)		
7	1525.3	each	13ET09803F 721818 TSEVEEN, MR. ALTANGEREL Ulaanbaatar (MON) - Xian (CPR) - Ulaanba		
8	1525.3	each	13ET09803G 721816 TSEVEEN, MR. ERKHEMBAYAR KHOLIDOG Ulaanbaatar (MON) - Xian (CPR) - Ulaanba		

9	1136.86	each	13ET09803H 31863 HLAING, MS. MOE PHYU Nay Pyi Taw (MYA) - Xian (CPR) - Nay Pyi
10	1136.86	each	13ET09803I 39220 KHIN PA PA TUN Nay Pyi Taw (MYA) - Xian (CPR) - Nay Pyi
11	1072.3	each	13ET09803J 721819 SHAH, MR. AJMAL Islamabad (PAK) - Xian (CPR) - Islamabad
12	1072.3	each	13ET09803K 12258 UD-DIN, MR. GHIYAS Islamabad (PAK) - Xian (CPR) - Islamabad
13	900.05	each	13ET09803L 15499 BULOS, MS. ADELINA Quezon City (PHI) - Xian (CPR) - Quezon
14	900.05	each	13ET09803M 36521 MALLILLIN, MS. JANICE Quezon City (PHI) - Xian (CPR) - Quezon
15	465.65	each	13ET09803N 39208 MOON, MR JINHO Daejeon (ROK) - Xian (CPR) - Daejeon (RO
16	465.65	each	13ET09803O 614349 PARK, MR JANG GUEN Daejeon (ROK) - Xian (CPR) - Daejeon (RO
17	2472.68	each	13ET09803P 31721 WEERASEKERA, MR. CHARICANANDA Kelaniya (SRL) - Xian (CPR) - Kelaniya (
18	1084.93	each	13ET09803Q 39207 SAENGCHANTR, MR. DHANAJ Ongkharak (THA) - Xian (CPR) - Ongkharak
19	1084.93	each	13ET09803R 35250 SRISATIT, MR. SOMYOT Bangkok (THA) - Xian (CPR) - Bangkok (TH
20	1425.43	each	13ET09803S 36525 TO, MR BA CUONG Dalat (VIE) - Xian (CPR) - Dalat (VIE)
21	1425.43	each	13ET09803T 721821 VO, MS. THI NGOC CAM Dalat (VIE) - Xian (CPR) - Dalat (VIE)

A1404239-41151EUR			2014/04/11	APPROVED	BRISSET, Mr Patrick Dominique
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1	1190.1	each	14ET04239A 41151 BRISSET, Patrick Dominique M. Vienna - Bali (INS) - Vienna
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A1208432-1525EUR			2012/06/29	APPROVED	American Express Services Europe Limited, Niederlassung Wien
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1	5804.26	each	12ET08432 46997 LEE, Ho Seung Vienna - Jeju City (ROK) - Vienna
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A1203644-41151EUR			2012/06/27	APPROVED	BRISSET, Mr Patrick Dominique
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1	1015.91	each	12ET03644A 41151 BRISSET, Patrick Dominique M. Vienna - Korea (ROK) - Vienna
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A1214310-1525EUR			2012/10/02	APPROVED	American Express Services Europe Limited, Niederlassung Wien
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1	499.56	each	12ET14310 41981 CHUE INTA, MR. SIRIPONE Bangkok (THA) - Quezon City (PHI) - Bang
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A1407313-1525EUR			2014/05/14	APPROVED	American Express Services Europe Limited, Niederlassung Wien
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1	462.41	each	14ET07313 16145 ABDULLAH, MR JAAFAR Kajang (MAL) - Bali (INS) - Kajang (MAL)
2	975.69	each	14ET07313A 18511 ISLAM, MR MD. ASHRAFUL Dhaka (BGD) - Bali (INS) - Dhaka (BGD)
3	1103	each	14ET07313B 19542 GAO, MR XIANG Beijing (CPR) - Bali (INS) - Beijing (CP
4	1056.74	each	14ET07313C 15800 PANT, MR HARISH JAGAT Mumbai (IND) - Bali (INS) - Mumbai (IND)
5	1315.94	each	14ET07313D 846489 MASHBAT, NARANTUYA Ulaanbaatar (MON) - Bali (INS) - Ulaanba
6	1315.94	each	14ET07313E 721816 TSEVEEN, MR ERKHEMBAYAR KHOLIDOG Ulaanbaatar (MON) - Bali (INS) - Ulaanba
7	1922.8	each	14ET07313F 31863 HLAING, MS MOE PHYU Nay Pyi Taw (MYA) - Bali (INS) - Nay Pyi
8	1479.23	each	14ET07313G 6427 KHAN, MR IQBAL HUSSAIN Islamabad (PAK) - Bali (INS) - Islamabad
9	1279.17	each	14ET07313H 5737 AQUINO, MR DENIS Quezon City (PHI) - Bali (INS) - Quezon
10	1228.5	each	14ET07313I 18193 JUNG, MR SUNG-HEE Daejeon (ROK) - Bali (INS) - Daejeon (RO
11	819.54	each	14ET07313J 31721 WEERASEKERA, MR CHARICANANDA Kelaniya (SRL) - Bali (INS) - Kelaniya (
12	1324.46	each	14ET07313K 39207 SAENGCHANTR, MR DHANAJ Ongkharak (THA) - Bali (INS) - Ongkharak

13	1469.39	each	14ET07313L 715842 NGUYEN, MR. HUU QUANG(520844) Dalat City (VIE) - Bali (INS) - Dalat Ci
A1309801-1525EUR2013/07/09APPROVEDAmerican Express Services Europe Limited, Niederlassung Wien			
1	462.13	each	13ET09801 13606 ROY, MR. SHANTANU New Delhi (IND) - Xian (CPR) - New Delhi
A1413715-1525EUR2014/09/24APPROVEDAmerican Express Services Europe Limited, Niederlassung Wien			
1	2910.31	each	14ET13715 19542 GAO, MR XIANG Beijing (CPR) - Marrakech (MOR) - Beijin
2	2465.22	each	14ET13715A 15510 SUGIHARTO, MR SUGIHARTO Lebak Bulus (INS) - Marrakech (MOR) - Le
3	2481.45	each	14ET13715B 721816 TSEVEEN, MR ERKHEMBAYAR KHOLIDOG Ulaanbaatar (MON) - Marrakech (MOR) - UI
4	2389.77	each	14ET13715C 31863 HLAING, MS MOE PHYU Nay Pyi Taw (MYA) - Marrakech (MOR) - Na
A1312163-1525EUR2013/08/06APPROVEDAmerican Express Services Europe Limited, Niederlassung Wien			
1	498.7	each	13ET12163 31681 CHOWDHURY, MR. MD. FARUQUE HOSSAIN Dhaka (BGD) - Xian (CPR) - Dhaka (BGD)
2	498.7	each	13ET12163A 18511 ISLAM, MR. MD. ASHRAFUL Dhaka (BGD) - Xian (CPR) - Dhaka (BGD)
EMS-280302013/07/01APPROVEDUnited Nations Development Program			
1	1480	each	SupplierNumber:30061 SAENGCHANTR, Dhanaj Non Staff
2	1480	each	SupplierNumber:26248 SRISATIT, Somyot Non Staff
EMS-280322013/07/01APPROVEDUnited Nations Development Program			
1	1640	each	SupplierNumber:27405 TO, Ba Cuong Non Staff
2	1640	each	SupplierNumber:54395 VO, Thi Ngoc Cam Non Staff
EMS-280342013/07/01APPROVEDUnited Nations Development Program			
1	1480	each	SupplierNumber:23690 WEERASEKERA, Charicananda Non Staff
EMS-157672012/06/21APPROVEDUnited Nations Development Program			
1	1210	each	9589 AQUINO, Mr. Denis Staff AQUINO, De (Duty Travel Non Staff for TC Projects)
EMS-157702012/06/21APPROVEDUnited Nations Development Program			
1	1360	each	10007 KHAN, Mr. Iqbal Hussain Staff KHAN, Iqba (Duty Travel Non Staff for TC Projects)
EMS-385742014/05/13APPROVEDUnited Nations Development Program			
1	1882	each	SupplierNumber:30061 SAENGCHANTR, MR.. Dhanaj Non Staff
EMS-157722012/06/21APPROVEDUnited Nations Development Program			
1	1210	each	70325 NGUYEN HUU, Mr. Quang Staff NGUYEN HUU (Duty Travel Non Staff for TC Projects)

	EMS-28026		2013/07/01	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:13593 BULOS, Adelina Non Staff		
2	1480	each	SupplierNumber:27401 MALLILLIN, Janice Non Staff		
	EMS-28029		2013/07/01	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:23800 Ms HLAING, Moe Phyu Non Staff		
2	1480	each	SupplierNumber:30075 KHIN PA PA TUN, Non Staff		
	EMS-28031		2013/07/01	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:54393 SHAH, Ajmal Non Staff		
2	1480	each	SupplierNumber:11293 UD-DIN, Ghiyas Non Staff		
	EMS-15776		2012/06/21	APPROVED	United Nations Development Program
1	1210	each	584151 WIBISONO, Mr. Wibisono Staff WIBISONO, (Duty Travel Non Staff for TC Projects)		
	EMS-28025		2013/07/01	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:54394 BINDAR, Yazid Non Staff		
2	1480	each	SupplierNumber:13457 SUGIHARTO, Sugiharto Non Staff		
	EMS-28028		2013/07/01	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:54386 DAHING, Lahasen Non Staff		
2	1480	each	SupplierNumber:54389 YUSOFF, Nazrul Hizam Non Staff		
	EMS-29118		2013/08/05	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:23668 CHOWDHURY, Md. Faruque Hossain Non Staff		
2	1480	each	SupplierNumber:16664 ISLAM, Md. Ashraful Non Staff		
	EMS-28063		2013/07/02	APPROVED	PARK, Mr Jang Guen
1	1480	each	SupplierNumber:49141 PARK, Jang Guen Non Staff		
	EMS-38566		2014/05/13	APPROVED	United Nations Development Program
1	1882	each	SupplierNumber:8590 AQUINO, MR.. Denis Non Staff		
	EMS-38571		2014/05/13	APPROVED	United Nations Development Program
1	1882	each	SupplierNumber:63613 MASHBAT, . Narantuya Non Staff		
2	1882	each	SupplierNumber:54390 TSEVEEN, MR.. Erkhembayar Kholidog Non Staff		
	EMS-38575		2014/05/13	APPROVED	United Nations Development Program

1	1882	each	SupplierNumber:23690 WEERASEKERA, MR.. Charicananda Non Staff		
	EMS-43081		2014/09/25	APPROVED	GAO, Mr Xiang
1	995	each	SupplierNumber:16134 GAO, MR.. Xiang Non Staff		
	A1413716-1525EUR		2014/09/24	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	2052.74	each	14ET13716 15800 PANT, MR HARISH JAGAT Mumbai (IND) - Marrakech (MOR) - Mumbai		
2	1358.39	each	14ET13716A 16145 ABDULLAH, MR JAAFAR Kajang (MAL) - Marrakech (MOR) - Kajang		
3	1775.67	each	14ET13716B 12258 UD-DIN, MR GHIYAS Islamabad (PAK) - Marrakech (MOR) - Isla		
4	1596.74	each	14ET13716C 715842 NGUYEN, MR HUU Q. Dalat City (VIE) - Marrakech (MOR) - Dal		
	EMS-38572		2014/05/13	APPROVED	United Nations Development Program
1	1882	each	SupplierNumber:53732 NGUYEN, MR.. Huu Quang Non Staff		
	EMS-43088		2014/09/25	APPROVED	PANT, Mr Harish Jagat
1	103171	each	SupplierNumber:13442 PANT, MR.. Harish Jagat Non Staff		
	EMS-15766		2012/06/21	APPROVED	United Nations Development Program
1	1210	each	42311 ABDULLAH, Mr. Jaafar Staff ABDULLAH, (Duty Travel Non Staff for TC Projects)		
	EMS-15773		2012/06/21	APPROVED	United Nations Development Program
1	1210	each	42189 PANT, Mr. Harish Jagat Staff PANT, Hari (Duty Travel Non Staff for TC Projects)		
	EMS-15775		2012/06/21	APPROVED	United Nations Development Program
1	1210	each	499316 SU SU KYAW Staff SU SU KYAW (Duty Travel Non Staff for TC Projects)		
	EMS-38570		2014/05/13	APPROVED	United Nations Development Program
1	1882	each	SupplierNumber:9008 KHAN, MR.. Iqbal Hussain Non Staff		
	EMS-38573		2014/05/13	APPROVED	United Nations Development Program
1	1882	each	SupplierNumber:13442 PANT, MR.. Harish Jagat Non Staff		
	EMS-43078		2014/09/25	APPROVED	United Nations Development Program
1	1311	each	SupplierNumber:13457 SUGIHARTO, MR.. Sugiharto Non Staff		
	EMS-38567		2014/05/13	APPROVED	United Nations Development Program
1	1882	each	SupplierNumber:16134 GAO, MR.. Xiang Non Staff		

	A1313760-1525EUR		2013/10/11	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	624.79	each	13ET13760 16021 KIM, MR. JONG-BUM Daejeon (ROK) - Jakarta (INS) - Daejeon		
	EMS-43080		2014/09/25	APPROVED	United Nations Development Program
1	1311	each	SupplierNumber:23800 HLAING, MS.. Moe Phyu Non Staff		
	EMS-43131		2014/09/26	APPROVED	ABDULLAH, Mr Jaafar Bin
1	1705	each	SupplierNumber:13564 ABDULLAH, MR.. Jaafar Non Staff		
	A1412593-41151EUR		2014/09/26	APPROVED	BRISSET, Mr Patrick Dominique
1	1126.36	each	14ET12593A 41151 BRISSET, Patrick Dominique M. Vienna - Marrakech (MOR) - Vienna		
	A1412593-1525EUR		2014/09/26	APPROVED	American Express Services Europe Limited, Niederlassung Wien
1	1290.52	each	14ET12593 41151 BRISSET, Patrick Dominique M. Vienna - Marrakech (MOR) - Vienna		
	EMS-15771		2012/06/21	APPROVED	United Nations Development Program
1	1210	each	70922 LODOYSAMBA, Mr. Sereeter Staff LODOYSAMBA (Duty Travel Non Staff for TC Projects)		
	EMS-15814		2012/06/22	APPROVED	Hanaro Center
1	1912	each	7699 Hanaro Center Non Staff Mission Mi (Operating Expenses Other)		
	EMS-28027		2013/07/01	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:47249 CHINTALA, Tirupathi Naidu Non Staff		
2	1480	each			
	EMS-28033		2013/07/01	APPROVED	United Nations Development Program
1	1480	each	SupplierNumber:54392 TSEVEEN, Altangerel Non Staff		
2	1480	each			
	EMS-28064		2013/07/02	APPROVED	MOON, Mr Jinho
1	1480	each	SupplierNumber:30062 MOON, Jinho Non Staff		
	EMS-27846		2013/06/24	APPROVED	United Nations Development Program
1	7756	each	SupplierNumber:1249 United Nations Development Program Non Staff		
	EMS-38565		2014/05/13	APPROVED	United Nations Development Program
1	1882	each	SupplierNumber:13564 ABDULLAH, MR.. Jaafar Non Staff		

1	EMS-38569	1882	each	2014/05/13	APPROVED	United Nations Development Program
				SupplierNumber:16664 ISLAM, MR.. Md. Ashraful Non Staff		
1	EMS-43161	3551	each	2014/09/26	APPROVED	JIN, Mr Joon Ha
				SupplierNumber:34160 JIN, MR.. Joon-Ha Non Staff		
1	EMS-43162	1705	each	2014/09/26	APPROVED	NGUYEN HUU, Mr Quang
				SupplierNumber:53732 NGUYEN, MR.. Huu Q. Non Staff		
1	EMS-38568	1882	each	2014/05/13	APPROVED	United Nations Development Program
				SupplierNumber:23800 HLAING, MS.. Moe Phyu Non Staff		
1	EMS-38736	3984	each	2014/05/16	APPROVED	United Nations Development Program
				SupplierNumber:1249 United Nations Development Program Non Staff		
1	EMS-43079	1311	each	2014/09/25	APPROVED	United Nations Development Program
				SupplierNumber:54390 TSEVEEN, MR.. Erkhembayar Kholidog Non Staff		
1	EMS-43177	1705	each	2014/09/26	APPROVED	United Nations Development Program
				SupplierNumber:62448 GHIYAS-UD-DIN, MR.. Non Staff		
1	A1404239-1525EUR	4359	each	2014/04/11	APPROVED	American Express Services Europe Limited, Niederlassung Wien
				14ET04239 41151 BRISSET, Patrick Dominique M. Vienna - Bali (INS) - Vienna		
1	EMS-15769	1210	each	2012/06/21	APPROVED	United Nations Development Program
				70482 GAO, Mr. Xiang Staff GAO, Xiang (Duty Travel Non Staff for TC Projects)		
1	EMS-15774	1210	each	2012/06/21	APPROVED	United Nations Development Program
				507237 SAENGCHANTR, Mr. Dhanaj Staff SAENGCHANT (Duty Travel Non Staff for TC Projects)		
1	EMS-15856	1210	each	2012/06/25	APPROVED	BARTLE, Mr Colin Murray
				516653 BARTLE, Mr. Colin Murray Staff BARTLE, Co (Duty Travel Non Staff for TC Projects)		
1	EMS-16158	1912	each	2012/07/03	APPROVED	Korea Atomic Energy Research Institute KAERI - DAEJEON
				13434 Korea Atomic Energy Research Institute KAERI - DAEJEON Non Staff Mission Mi (Operating Expenses Other)		
1	EMS-38604	1882	each	2014/05/14	APPROVED	JUNG, Mr Sung-Hee
				SupplierNumber:16217 JUNG, MR.. Sung-Hee Non Staff		

EMS-43077					2014/09/25	APPROVED	JUNG, Mr Sung-Hee
1	3157	each	SupplierNumber:16217 JUNG, MR.. Sung-Hee Non Staff				
EMS-43359					2014/10/01	APPROVED	JIN, Mr Joon Ha
1	2695	each	SupplierNumber:34160 JIN, MR.Joon-Ha Non Staff				