

TECHNICAL PROGRAM - SYMPHOS 2013

Monday, May 6th 2013

9:00 am - 7:00 pm	Reception and Registration of the participants	Visits to the OCP facilities (Jorfastar & Khourigga)
9:00 am - 1:00 pm / 3:00 pm - 5:00 pm Coffee break at 10:45 am - 11:15 am	ROOM OUARZAZATE Short course 1: ICM versus JORC guidelines, 43-101 regulation for mineral resources and reserves estimation Dr Daniel Gagnon , Ing. (General Manager – Mining Group, Met-Chem Canada Inc.) and Schadrac Ibrango , Ph.D., P.Geo. (Senior Geologist, Met-Chem Canada Inc.) – <u>Course language: French</u>	
	ROOM TARROUDANT Short course 2: Techniques de flottation des minerais phosphatés Professeur Mohammed El Asri , Faculté des Sciences et Techniques Fès - <u>Course language: French</u>	
	ROOM DRAA Short course 3: The direct use of reactive phosphate rocks in crop production Mr Abderrahim Nassir and Limamoulaye Cisse (OCP) Sri Rochayati and Husnain Husnain (ISRI) - <u>Course language: English</u>	
	ROOM LOUNGE ART Short course 4: HSE in design Mr. Rachid M'Hamdi , Chef de department HSE in Design et M. Zakaria Rachdad , ingénieur senior au department HSE in design à Jacobs Engineering S.A. <u>Course language: French</u>	
1:00 pm – 3:00 pm	LUNCH	

Tuesday, May 7th 2013

9:00 am - 7:00 pm	Reception and Registration of the participants	B to B meetings
9:00 am - 1:00 pm / 3:00 pm - 5:00 pm Coffee break at 10:45 am - 11:15 am	COURSES	
	ROOM TARROUDANT Short course 5: Technologies de Désselement des Eaux de mer et des Eaux Saumâtres : Aspects Techniques, Energétiques et Exploitation M. Azzedine Elmidaoui , Professeur (Président de la Société Marocaine des Membranes et de Désselement, Université Ibn Tofail, Kénitra, Maroc) - <u>Course language: French</u>	
	ROOM ZAGORA Short course 6: Mining and Sustainable Management Mr Rachid Hakkou , Professor at Cadi Ayyad University, Mr Mostafa Benzaazoua , Professor UQAT, Canada, <u>Course language: French</u>	
	ROOM OUARZAZATE Short course 7: Modélisation et simulation des procédés de transformation des phosphates Pr. Tjani Bounahmidi - <u>Course language: French</u>	
	ROOM DRAA Short course 8: 4 R Nutrient Stewardship for improved nutrient use efficiency A. Johnston, M. ElGharous, S. Zingore and H. Boulal (IPNI) - <u>Course language: English</u>	
ROOM LOUNGE ART Short course 9: Process transformation in production, safety, and sustainability through information technology Dr Sean Dussereault Associate Professor - University of Arizona - USA - <u>Course Language : English</u>		
CONFERENCES		
9:00 am - 9:45 am	ROOM ROYALE Conference 1 : Innovate - Yes you can Pr. Jamal Chaouki , Principal Chair Holder NSERC - Total Group Director of Biofineray Center Chemical Eng. Dept Ecole Polytechnique de Montréal	
9:45 am - 10:45 am	ROOM ROYALE Conference 2 "Innovation" : Implementation of Innovation Management - Lessons Learned Huub Rutten , VP Research and Application Development, Co-Founder, Sopheon	
10:45 am - 11:00 am	Coffee break	
11:00 am - 12:30 am	ROOM ROYALE Conference 3 "ELSEVIER™" : How to Get Published in a Research Journal Dean Eastbury , Executive Publisher Chemical Engineering: Minerals & Separation - Elsevier, Oxford, UK "	
1:00 pm – 3:00 pm	LUNCH	
3:00 pm - 3:45 pm	ROOM ROYALE Conference 4: The AUDACITY TO INNOVATION LOTFI EL-GHANDOURI , CEO Creative Society Group	
3:45 pm - 4:30 pm	ROOM ROYALE Conference 5: LA CONFIANCE UN FONDEMENT DE L'INNOVATION Youssef Gaboune , Associate Director MENA, Oxford Leadership Academy Founder, Ethical Leaders™ & How Humans Work™	

Wednesday, May 8th 2013

9 am - 7 pm		Reception and Registration of the participants			
10 am -12am		Chairman : Mr Fouad LAROUI – Amsterdam University, NETHERLANDS			
		ROOM SAFRAN OPENING CEREMONY welcoming remarks from • The President of SYMPHOS & EVP Operations, OCP			
		ROOM SAFRAN Plenary Conference 1: L'Innovation, concepts, enseignements et pratiques M. Elmar Mock Président CREAOLIC, (Co-créateur de Swatch) Suisse.			
		Exhibition area inauguration			
12 pm – 2 pm		LUNCH			
2 pm - 3:30 pm	MINING	Chairman : Mr Amit ROY - President and CEO of the international Fertilizer Development Center, USA Co-Chairman : Mr Houssaine BOUHIAOUI – Directeur Site de Khouribga, OCP - Maroc			
		ROOM SAFRAN Plenary Conference 2: Innovation and technology, Engines for the Future of Mining: DIGITAL CONDELCO'S case Mr.Silva Marco Orellana Chief Information Officer Cdt, Codelco, Chile			
		ROOM SAFRAN Keynote 1: Mining of Phosphate: Review of mining methods and equipment used in phosphate mines around the world. Mr. Daniel Gagnon P. General Manager – Mining group – Met-Chem, Canada			
		ROOM SAFRAN Keynote 2: Comprehensive Recovery and Sustainable Development of Phosphate Resource Mr. Patrick Zhang Ph.D. Research Director – Beneficiation & Mining			
		Débat du panel avec la salle (15 mins)			
3:30 pm - 4 pm		Coffee break			
	Workshop 1: Innovation in Mining Industry	Workshop 2: Phosphogypse management	Thematic session 1: Mining, extraction	Thematic session 2: Sulfuric Acid	Thematic session 3: Sustainable development
	Room Atlantique Chairperson Mr. Jamal Chaouki, EPM - Montréal, Canada Secretary M. Abdellah MAHSOUN, Responsable Axe Merah-Beni Idir, OCP SA M. Moulay ZEMMARI, Responsable Projet engrais, OCP	Room ATLAS Chairperson M. Nadim FULEIHAN, President Radaman Associates USA Secretary M. Abdelhak KABBABI, Responsable Environnement OCP M. Ahmed Fouad BAHBOUHI, DIRECTEUR AMELIORATION PROCESSUS ET MOYENS, OCP SA	Room: Salle SAFRAN Chairperson M. Silva Marco ORELLANA, Chief Information Officer Cdt, Codelco, Chile Co-Chairperson M. EL KASSI, Directeur site Gantour, OCP	Room: ARGAN Chairperson Ms. Kathy HAYWARD, Publisher, Sulfuric acid Today Co-Chairperson M. Ahmed HANINE, Directeur études & développement chimie, OCP	Room: Romarin Chairperson : M. Rachid HAKKOU, Professeur Université Kadi Ayyad, Maroc Co-Chairperson
4:00 pm - 4:20 pm	Failure has to be acceptable, Mr. Jamal Chaouki , EPM - Montréal, Canada	The Phosphogypsum Dilemma : Closure Vs beneficial Use Mr. Nadim Fuleihan, Ashraf H.Riad ARDAMAN & Associates, Inc., a Tetra Tech Company, USA	Méthodes d'extraction des phosphates à l'OCP : Une histoire de ruptures et défis pour la R&D Mr. Mansour Asri , OCP SA, Maroc	Spray Injectors within Large Capacity Molten Sulfur Combustion Spray Efficacy: Fluid-Structure Interaction Study Mrs. Kathleen Brown , Wojciech Kalata, and Rudolf Schick, Spraying Systems Co., USA	Waste valorization in phosphate industry: taking profit from the existing technologies. M. Abdelhak Kabbabi , OCP SA, Maroc, & Mme Hind Baddag, ECOVAL. HOLCIM Group, Maroc

B to B meetings

B to B meetings

Exhibition area visit

Exhibition area visit

4:20 pm - 4:40 pm	Le processus d'innovation : son articulation et son pilotage. M. Antoine Dubedout , Mines Nancy France	Beneficiation of Phosphogypsum within sulfur concrete: valorization potential and reuse horizons. M. Mohamed Choura , M. Mohamed Gouider. Sfax University, Tunisia	Recent advances precision surface mining techniques, Mr. Stephan Oppelaar , Mr Jim Hutchins. Vermeer EMEA, The Netherlands.	Modélisation et développement d'un code de calcul pour la simulation de convertisseurs SO2/SO3 Mr. Belkacem Abdous , Lhachmi Khamar, Omari Lhoussaine. OCP SA, Maroc	Lead and Cadmium removal from aqueous solution using an industrial by-product gypsum. Mr. Mohamed Rail , Doan Pham Minh, Francisco Javier Escudero Sanz, Ange Nzihou, Ecole des Mines d'Albi-Carmaux, France
4:40 pm - 5:00 pm	Integratged Innovation Performance (the overall Sopheon value proposition) M. Michel Delifer , SOPHEON, USA	Debates	ETF Haulage Trucks – Advanced Maintenance Systems. Mr. Eddy De Jongh , ETF European Truck Factory GmbH, Germany	H2S Emission Control by Converting to NaHS Mrs. Safaa IbnChazala , Salaheddine Albustami, Allal Khoudir, Abdessamad Nasri JESA, Maroc	Phosphates Limestone Wastes Drains to Increase pH and Remove Dissolved Metals from Acidic Mine Drainage. Mr. Rachid Hakkou , O. Ouakibi, S. Loqman and M. Benzaazoua LCME, Université Cadi Ayyad Marrakech Maroc
5:00 pm - 5:20 pm	Debates	Recommandations and conclusion	Integrated Support Centres – the future of Dragline fleet monitoring, Mr. Mark Conolly , MineWare Pty Ltd. Austria	Optimization of SO2 Scrubber using CFD Modeling Mr. Rudolf Schick, Kathleen Brown , Wojciech Kalata, Spraying Systems Co., USA	Le Management environnemental lors des réalisations des projets industriels : Cas du programme industriel de développement du Groupe OCP Rachid M'Hamdi , Zakaria Rachchad; Raja Al Echcheikh Jacobs Engineering S.A, Maroc
5:20 pm - 5:40 pm	Recommandations and conclusion		Dragline Retrofit for AC Motion Power. Mr. Michael Casson , Flanders, USA	Polishing Filters, The answer to the increasing need for cleaner sulphur Mr. Jeroen Bouwman , Twin Filter, The Netherlands	Integrated Asset management - An Investment in Sustainability. Mr. Ken Henderson , Georg Pahlenkemper, Olaf Kraska ThssyenKrupp Resource Technologies, Germany
5:40pm-5-50pm			Monitoring of mine induced geotechnical hazards: a review of methods, technologies and future directions. Mr Pascal Bigarre , INERIS, France	Conception, réalisation et mise en service d'une « DUCT VALVE » à l'atelier sulfurique de Pakistan Maroc Phosphore Ouadie Senhaje OCP SA, Maroc	The Latest Generation Of The Electronic System Mr Sami Kara , William R. Adamson, William J. Reisz, Davey Bickford S.A.S, France
5:50 pm - 6:00 pm			Dust control management in the mining environment MM. Stefan Van Zweel, Louis Ledoux, Dust-A-Side, Centurion, South Africa	Nettoyage et neutralisation des bacs de stockage de l'acide sulfurique par un système à jet automatique EL Bahraoui Abdellah et Arhnaje Elmostafa KIMA, Maroc	
6:00 pm - 6:20 pm					
8:00 PM	DINNER COCKTAIL				
8:00 PM	SYMPHOS TV: INNOVATION (Panel discussion on webstreaming) animators: MM Fouad Laroui - Elmar Mock - Dessureault - Jamal Chaouki - Antoine Dubedout				

B to B meetings

Exhibition area visit

Thursday, May 9th 2013

Chairman : Mr David FUNG - Chairman and CEO. ACDEG Group. Canada
Co-Chairman : Mr Jamal Chaouki – Director of Biorefinery Center Chemical Eng. Dept.E Montréal - CANADA

8:30 am - 10:00 am	WATER, ENERGY & SUSTAINABLE DEVELOPMENT	ROOM SAFRAN Plenary Conference 3: Lessons in sustainability from the mining industry Mr Robin Batterham Kernot Professor of Engineering & former Group Chief Scientist of Rio Tinto and President of the Australian Academy of Technological Sciences and Engineering. The University of Melbourne AUSTRALIA		ROOM ARGAN Novelty show 2 : WIRTGEN "Technologies in Surface Mining" M. Andreas Marquardt, WIRTGEN GmbH M. Amine Lahrichi, Société Marocaine de Distribution de Matériel	
		ROOM SAFRAN Keynote 3: Building a Business Case for Sustainability Mr. James Weigand President, DuPont Sustainable Solutions - USA			
		ROOM SAFRAN Keynote 4: Numerical Simulation and High Performance Computing in some industrial applications - Examples in Oil and Gas Industry Mr Philippe Ricoux Directeur IT, Modeling and Numerical Processing, Scientific division; Total SA - France			
Débat du panel avec la salle (15min)					
10:00 am - 10:30 am		Coffee break		SYMPHOS TV WIRTGEN	
	Workshop 3: Sustainable Mine	Workshop 4: Smart Mine & Automation	Thematic session 4: Desalination technologies	Thematic session 5: Phosphoric acid production	Thematic session 6: Geology
	Room ATLANTIQUE Chairperson M. Soufiane EL KASSI, Directeur site Gantour, OCP SECRETARY M. Youssef DAAFI, Ingénieur R&D - OCP M. Abdelkader ALOUANI, Directeur logistique et projets d'amélioration, OCP SA	Room ATLAS Chairperson Mr. Orellana Silva Marco, Chief Information Officer Cdt& Chief Information Security Officer - CODELCO, Chile Secretary M. Hicham KABBAJ, Testing & Innovation Director – OCP M. Mansour ASRI, Maitre de Recherche- OCP	Room Argan Chairperson Mme Myriam BALABAN, Secretary General European Desalination Society Co-Chairperson M. Azeddinne El MIDAOUI, Doyen Faculté des sciences Kénitra - Maroc	Room Safran Chairperson M. Marc COLLIN, Managing Director Prayon Technologies Belgium Co-Chairperson M. Brahim MOUFID, Directeur ODI, OCP	Room Romarin Chairperson M. Patrice CHRISTMANN , Deputy Director of BRGM's Corporate Strategy Directorate, BRGM - France Co-Chairperson M. Essaid JOURANI, Responsable Recherche géologique et minière, OCP SA
10:30 am - 10:50 am	L'émergence de l'après mine en France, retour d'expérience pour une mine durable <u>Mr. Jean-Luc Foucher</u> BRGM, France	Optimum Fleet Recommendation Komtrax plus <u>Mr. Nicola Roussau</u> KOMATSU France	Intake and Brine Discharge in SWRO Desalination : Two Case Studies <u>Mr. Miguel Sanz</u> , Sophie Bertrand Degremont, Spain	The Use of Automatic Controls in a Phosphoric Acid Reactor <u>Mr. Astley Vaughn</u> Dr Phosphate, USA	Reconnaissance géologique des phosphates du Maroc <u>Mr. M'barek Amaghzaz</u> , Es-said Jourani, OCP SA, Maroc
10:50pm-11:10pm	La mine durable, rôle de la modélisation numérique dans l'aide à la décision – Exemples de cas industriels <u>Mr. Ahmed Hosni</u> Geoderis, France	Case studies of the success and remaining challenges of automation. <u>Dr. Sean D. Dessureault</u> The University of Arizona Tucson, USA	Current and Future Technologies for Enhanced Desalination Facilities Mr. Abdelkader Gaid, <u>Jérôme Leparc</u> , Philippe Bréant Veolia Water Technical Direction, France	New effective method to reduce sulfates in phosphoric acid NISSAN PROCESS <u>Ahmed Mahrou, A BEN EL BOU - M LOUHZ</u> OCP SA, Maroc	La géologie et la planification minière des gisements de phosphate. <u>Mr. Youssef Daafi</u> , Ahmed Chakir, Essaid Jourani, Sidi Mohammed Ouabba OCP SA, Maroc
11:10 am - 11:30 am	Rôle de l'expertise minière <u>Mr. Christophe Didier</u> INERIS, France	Operational excellence in the management of industrial processes <u>Jean Luc Tworek</u> Rockwell, France / USA	The pretreatment in the reverse osmosis plant <u>Manuel Rubio Visiers</u> AEDyR, Spain	Mersen mixers : An innovative design combining process optimization and energy efficiency <u>Mr. Erik Loiseau</u> MERSEN Brignais, France	Gisements de phosphate d'Afrique de l'Ouest : analogies géologiques et pré-enrichissement naturel des phosphates éocènes de Taïba-Tobène (Sénégal) et Salloukhé-Farim (Guinée Bissau) <u>Mr. Jean-Pierre Prian</u> BRGM, The French Geological Survey, France

B to B meetings

Exhibition area visit

11:30 am-11:50am	Debates	Lighting Up GNSS Blackspots Thanks To The Leica Jigsaw Positioning System Mr C.R. Keenan Leica Geosystems Mining Division, Australia	Optimizing Process Designs with Energy Recovery Devices Mr. Borja Blanco Energy Recovery Inc., USA	From lab to plant: first industrial experience of the new high efficiency dihydrate hemihydrate process (DA-HF) for phosphoric acid production Mr.Tibaut Theys , Ms Dorina Fati, Mr Olivier Schrevens, Ms Agata Tarnowska, Ms Monika Zienkiewicz Prayon & Grupo AZOTY, Belgique	Gestion des risques post-miniers : Opération "Scanning mouvement de terrain". Mr. Frédéric Poulard , INERIS, France	B to B meetings	Exhibition area visit
11:50 am - 12:10 pm	Recommendations and conclusion	Debates	Advanced pretreatments in large desalination plants Mr. Manuel Fariñas Iglesias, Presented by Mr. Mohamed Sebbane Acciona Agua, Spain	Filtration technologies in phosphoric acid plants. Mr Mohamed Belghiti Alaoui , OCP SA, Maroc	Minéralogie des formes siliceuses de la série phosphatée des Oulad Abdoun (Maroc) Mr. Hamid EL Haddi , Benbouziane Abdelmajid, Mouflih Mustapha, Jourani Es-said & Amaghazaz M'barek Faculté des Sciences Ben M'Sik, Maroc	B to B meetings	
11:15am - 11:30 am	Recommendations and conclusion			Optimization for Tilting Pan Filters Mr.Scott Yeo , Metalcraft Service of Tampa, USA	Geological modelling and estimation techniques of phosphate deposits. Mr. Schadrac Ibrango Met-Chem Canada Inc, Canada	B to B meetings	
12 pm – 2 pm	LUNCH						
2 pm - 3:30 pm	MATERIALS & NEW PRODUCTS	Chairman : Mr. Robin BATERHAM - Kernot Professor of Engineering & former Group Chief Scientist of Rio Tinto and President of the Australian Academy of Technological Sciences and Engineering Co-Chairman : Mr Patrick ZHANG – Ph.D. Research Director – Beneficiation & Mining – FIPR - USA			ROOM ROMARIN Novelty show 3: DuPont "Welcome speech", M. Thierry Marin "Advanced Technologies, know-how and equipments for the Sulfuric Acid production", Mr Giovanni Marchesi , Sales Manager, MECS/DuPont - Italy - Q&A session	B to B meetings	Exhibition area visit
		ROOM SAFRAN Plenary Conference 4: A forward look into rare earth Supply and demand: a role for sedimentary phosphate deposits? Mr. Patrice Christmann Deputy Director of BRGM's Corporate strategy directorat. BRGM, France					
		ROOM SAFRAN Keynote 5: Processus Innovation, son articulation et son pilotage Mr. Antoine Dubedout Président PROPENERG et responsable de la chaire "Ingénierie et innovation". Ecole des Mines de Nancy, France					
		ROOM SAFRAN Keynote 6: Energy Storage Opportunities in Morocco Mr. Ilias Belharouak Materials Scientist Energy storage Expert - Argonne National Laboratory. USA					
		Débat du panel avec la salle (15mins)					
3:30 pm - 4:00 pm		Coffee break		SYMPHOS TV DuPont			
	Workshop 5: Desalination	Workshop 6: Phosphoric acid process manufacture	Thematic session 7: Environment	Thematic session 8: OCP Industrial Management	Thematic session 9: Phosphate beneficiation		
	Room ATLANTIQUE CHAIRPERSON M. Azeddine EL MIDAOU, Doyen FS Kénitra - Maroc SECRETART M. Abdeljalil BOURRAS, Chef de projet Dessalement OCP, SA Mme Khaoula KHALESS, Chargé de recherches OCP	Room ATLAS CHAIRPERSON M. Abdelali KOSSIR, Directeur R&D – OCP SA SECRETARY M. Mohammed BELGHITI, Chef de projet ACP, OCP	Room Argan Chairperson M. François DEMARCQ, Directeur Général délégué, BRGM France Co-Chairperson M. Mostafa BENZAAZOUA, Professor, chair holder, University of Quebec A.T. Research Institute in mining and environment	Room Safran Chairperson M. Pascale CROSET Co-Chairperson M. El Mar MOCK, Président CREAHCOLIC, Suisse	Room Romarin Chairperson M. Mohammed El ASRI, Professeur FST Fès Maroc Co-Chairperson M. Chakour MOUNTASSIR, Maître de recherche OCP SA	B to B meetings	
4:00 pm - 4:20 pm	SCALE2000 – Logiciel de modélisation des processus thermocinétiques de formation de l'encrassement dans les unités de dessalement M. Mohamed Azaroual BRGM, France	Phosphoric Acid Production Processes Developed by Prayon Mr. Collin , Benoît Van Massenhove PRAYON S.A, Belgique	Globalization of Phosphogypsum Regulations Mr. Nadim Fuleihan Ardaman & Associates - USA	OPS-OCP Production System MM. Hassan Chadli & Amine Louali OCP SA, Maroc	Le développement des procédés et des techniques d'enrichissement et de traitement des phosphates à l'OCP. Un chemin vers l'excellence pour assurer l'exploitation rationnelle et équilibrée des gisements de phosphates. Cas du Site de Khouribga. Mr. Alouani Abdelkader, Znibar Ahmed , OCP SA, Maroc	B to B	Exhibition

4:20 pm - 4:40 pm	New Tendencies in Reverse Osmosis plants <u>Mr. Antonio Casañas</u> DOW, Spain	Isothermal Phosphoric Acid Process <u>Richard D Harrison</u> PegasusTSI, USA	Utilisation des phosphates marocains dans la dépollution des eaux contenant le Cadmium <u>Mrs. Hind Yaacoubi</u> , O. Zidani, M, Moufih, M.Gourai, S. Sebt FS Ben M'sick, Maroc	OCP industrial Program-Management & innovation in complex industrial program <u>Hicham KABBAJ</u> OCP SA, Maroc	New technology for disagglomeration and slurring of Florida phosphate matrix <u>Mr. Hagen Müller</u> Haver Engineering, Germany	meetings area visit
4:40 pm - 5:00 pm	TORAY Membrane Product Presentation <u>Haci Özgencil</u> , TORAY, Turquie	Optimal Recirculation Rates in Phosphoric Acid Production <u>James Byrd</u> Jacobs Engineering SA, USA	Effect of chemical and thermal treatment on the pollution and geotechnical properties of dredged sediment <u>Mr. Jocelyn Ramarosan</u> , M Dia, A. Nzihou, R.Zentar, N.E. Abriak, G. Depelsenaire, A. Germeau Université de Toulouse, Mines Albi, France	Transformation du Management HSE à OCP <u>Mr Ahmed foud Bahbouhi</u> OCP SA, Maroc	Synergistic effects of environmentally friendly collectors in pre-concentration step of double float process on sedimentary phosphate ore <u>Mr. Klaus-Ulrich Pedain</u> , J.-C. Bezuidenhout, G. Lipowsky Clariant Produkte GmbH, Germany	
5:00 pm - 5:20 pm	Innovations in the inhibition and cleaning of reverse osmosis membrane scaling and fouling <u>Stephen P.Chesters</u> Presented by: <u>Mr Stephane Jarrige</u> Genesys International Ltd., United Kingdom	Debates	Apatitic calcium phosphate based heavy-metal accumulator: treatment of gas phase pollutions <u>Mr. Ange Nzihou</u> , Mohamed Kemiha, Doan Pham Minh, Nathalie Lyczko, Patrick Sharrock Presented by : <u>Mr Doan Pham Minh</u> Université de Toulouse, Mines Albi, France	OPM- Innovation in managing production units <u>Adil Bachiri</u> OCP SA, Maroc	Procédés de la flottation des phosphates carbonatés et silico-carbonatés: Etat de l'art et perspectives <u>Mr. My Brahim JOUTI</u> , Chakour Mountassir, Hafid Zouhair et Etahiri Abderahman OCP SA, Maroc	
5:20 pm - 5:50 pm	Debates	Recommandations and conclusion	Hydroxyapatite and Alizarin sulfonate ARS modeling interactions for textile dyes removal from wastewaters <u>Mr. Mohammed Oimar Mecherrri</u> Université de Tizi-Ouzou, Algérie	The Ecosystem Initiative of OCP Group <u>Mr Hicham EL HABTI</u> OCP SA, Maroc	Innovative RTS Technology for Dry beneficiation on phosphate <u>Mr. Daniel TAO</u> , Ahmed Sobhy, University of Kentucky, USA	
5:50 pm - 6:10 pm	Recommandations and conclusion		Calcium phosphate sorbent for environmental application <u>Mrs. Nathalie Lyczko</u> Université de Toulouse, Mines Albi, France	OCP Advanced phosphates training <u>Mr Robert Beauchemin</u> , SNC-Lavalin <u>Mr Amine Louali</u> , OCP SA, Maroc	Triboelectric belt separator for beneficiation of minerals <u>Mr. Herve Guicherd</u> , Stephen Gasiorowski, James D. Bittner, Frank J. Hrach Separation Technologies, USA	
6:10 pm -6:30 pm			Composite material with calcium sulfate and calcium phosphate for heavy metals retention <u>Mr. Patrick Sharrock</u> Université de Toulouse, Mines Albi, France			
<p>SYMPHOS TV 2 : Société VERMEER: <u>Mr. Stephan Oppelaar</u>, <u>Mr Amine Lahrichi</u>, Vermeer EMEA, The Netherlands. SYMPHOS TV 3 : <u>Mr Amit ROY</u> - President and CEO of the international Fertilizer Development Center, USA SYMPHOS TV 4 : <u>Huub Rutten</u>, VP Research and Application Development, Co-Founder, Sopheon SYMPHOS TV 5 : <u>Mr.Silva Marco Orellana</u> Chief Information Officer Cdt, Codelco, Chile</p>						
8:00 PM		GALA DINNER				

Friday, May 10th 2013

8:30 am - 10:00 am	CHEMICALS	Chairman : <u>Mr Jamal CHAOUKI</u> , Professeur Ecole Polytechnique Montral - Canada Co-Chairman : <u>M. Philippe RICOUX</u> , Directeur IT, Modeling and Numerical Processing, Scientific division Total , France	ROOM ARGAN Novelty show 4: KOMATSU & STOKVIS "Optimum fleet recommendation" <u>M. Nicolas Rousseau</u> , European fleet manager, KOMATSU Europe "KOMTRAX/PLUS (smart mining management system)" <u>M. Thomas Harsk</u> , Area Manager, KOMATSU Mining Germany GmbH "OCP STOKVIS skills program " <u>M. Chakib Benelkhadir</u> , Directeur General, STOKVIS NORD AFRIQUE
		ROOM SAFRAN Plenary Conference 5: Rapid growth and evolution of the global chemical industry, Impacts on the Phosphate Industry <u>M. David FUNG</u> , Chairman and CEO. ACDEG Group. Canada	
		ROOM SAFRAN Keynote 8: From mine to speciality advanced materials, future challenges and potential innovations for the phosphate industry <u>M. Fabrice RENARD</u> Chief Innovation Officer. Prayon, Belgique	
		ROOM SAFRAN Keynote 7: Performance Phosphate Products Brand Reveal <u>Mhamed IBNABDELJALIL</u> , EVP & Chief Commercial Officer, OCP, MOROCCO, presented by : <u>Ms Imane BELRHITI</u> , Market Analyst, OCP SA	

10:00 am - 10:30 am		Coffee break			SYMPHOS TV KOMATSU & STOKVIS : Mr Chakib Belkhadir, Directeur General,	
	Workshop 7: Fluoride valorisation	Workshop 8: Phosphoric acid filtration technologies	Thematic session 10: Agronomy and fertilization	Thematic session 11: Industrial Management	Thematic session 12: Materials & corrosion	
	Room ATLANTIC	Room ATLAS	Room Safran	Room Argan	Room Romarin	
	<p>CHAIRPERSON M. fabrice RENARD, Chief Innovation Officer, Prayon BELGIUM</p> <p>SECRETARY M. Fayçal BENAMEUR, Responsable Développement Nouveaux Produits, Pôle commercial - OCP SA</p> <p>M. Lhousaine OMARI, Chargé de recherches OCP</p>	<p>CHAIRPERSON M. Marten Walters,</p> <p>SECRETARY M. Hamid MAZOUZ, Chargé de recherches OCP SA</p>	<p>Chairperson Terry ROBERTS, President IPNI – USA</p> <p>Co-Chairperson Abderahim NASSIR, Agronome en chef – Pôle commercial, OCP SA</p>	<p>Chairperson M. Jamal CHAOUKI, Professeur Ecole Polytechnique Montral - Canada</p> <p>Co-Chairperson M. Philippe RICOUX, Directeur IT, Modeling and Numerical Processing, Scientific division Total , France</p>	<p>Chairperson M. Antoine POURBAIX, Directeur CEBELCOR, Belgique</p> <p>Co-Chairperson M. Rachid BOULIF, Maître de recherche Principal, OCP SA</p>	
10:30 am - 10:50 am	<p>Fluoride and Silica products from Pond Water and FSA</p> <p>Mr. Astley Vaughn Dr Phosphate, USA</p>	<p>Technologie de filtration de profile (filter basculant et TDI)</p> <p>Mr. Erik Desmet, Profile, Belgique</p>	<p>Responsiveness of different potato varieties (Solanum tuberosum) to phosphorus application</p> <p>Mr. Khalid DAOUI, A. Benbouaza, and E.H. Achbani, Institut National de la Recherche Agronomique, Maroc</p>	<p>On-Line XRF Analysis of Phosphate Materials at Various Stages of Processing</p> <p>Miss. Jelena Hasikova BALTIC SCIENTIFIC INSTRUMENTS, Latvia</p>	<p>Corrosion et abrasion dans l'industrie des phosphates: problèmes et solutions</p> <p>Ms. Nawal Semlali, R.Boulif, A. Kossir OCP SA, Maroc</p>	
10:50pm -11:10pm	<p>Economic aspects of utilizing fluosilicic acid as raw material for the manufacture of hydrofluoric acid and aluminium fluoride</p> <p>Mr. Alain Drevetton AD Process Strategies Sarl, Switzerland</p>	<p>Phosphoric Acid Filtration</p> <p>Gabriel Ghiringhelli, FLSmidth Milano Srl, Italy</p>	<p>Etude du mélange phosphogypse/phosphate naturel pour application en agriculture</p> <p>Mrs. Khadija Saja, M.Ouammou, J. C. Benezet, A. EL Kanit, E. Le-Cadre Barthelemy, P.Hinsinguer Université HASSAN II à Casablanca, Maroc</p>	<p>Potentiels de développement et d'usage des SNCC dans les Unités de Fabrication d'Acide Phosphorique et des Fertilisants</p> <p>Expérience de Jorf Lasfar, OCP</p> <p>Mr. Mounsiif Ehlali & El Asri Said OCP SA, Maroc</p>	<p>Mersen heat exchangers: Innovations that guarantee reliability, lifespan and energy efficiency</p> <p>Mr. Laurent Trably, Mersen Chemical equipment Activity, France</p>	
11:10 am - 11:40 am	<p>FSA Neutralization with Calcium Compounds</p> <p>Mr. Salah Albustami, Stephen W. Hilakosa Jacobs engineering, USA</p>	<p>Aoustin™ Table Filter, the Logical solution for Filtration of Phosphoric acid</p> <p>Mr Florent Bouquet RPA PROCESS, France</p>	<p>4R Nutrient Stewardship for Improved Nutrient Use Efficiency</p> <p>Mr. Adrian Johnston International Plant Nutrition Institute, IPNI, Canada</p>	<p>Gestion et prévention des risques.</p> <p>Mr. Thierry VerdeL Ecole des Mines - Université de Lorraine France</p>	<p>Use of Stainless Steels in the Industry: Recent and Future Developments</p> <p>Mrs. Pauline Boillot, Jérôme Peultier Industeel, ArcelorMittal Global R&D, France</p>	
11:40 am - 12:00 am	<p>Debates</p>	<p>Debates</p>	<p>Deficiency and management options for phosphorus in maize production in East and southern Africa</p> <p>Mr. Shamie Zingore, Boaz Waswa International Plant Nutrition Institute, Kenya</p>	<p>Optimizing Value Extraction from Turnarounds</p> <p>Mr. Nicolas Lepeu DuPont Sustainable Solutions - France</p>	<p>Metallic Evaporator in Sanicro28 for 54% Phosphoric Acid</p> <p>Mr. EL KAYAR Khaled, Mr. Perrot Vincent Sandvik Materials Technology, E.A.U & ACM Company, France</p>	
12:00 am - 12:20am	<p>Recommendations and conclusion</p>	<p>Recommendations and conclusion</p>	<p>Teractiv Cacao as a new fertilizer based reactive phosphate rock for cocoa productivity in Côte d'Ivoire: A participatory approach to update fertilization recommendation</p> <p>Mr. Louis. K Koko, CNRA, Côte d'Ivoire</p>	<p>ThyssenKrupp Plant technologies & services for Phosphate ore processing</p> <p>Mr. Luc Rudowski ThyssenKrupp Resource Technologies, France</p>	<p>Experience with two high-alloyed super austenitic stainless steels in the phosphoric acid industry – Alloy 31 and Alloy 31 Plus</p> <p>Nicholas Houle, Helena Alves Outokumpu VDM GmbH, Germany</p>	
12:20 am - 12:40 am			<p>Improvement of soil fertility and crop production through direct application of rock phosphate on maize in Indonesia</p> <p>Mrs. Husnain Husnain, Nuryani , Sri Rochayati, A. Nassir ISRI: Indonesian Soil Research Institute, Indonesia</p>	<p>Project Management Procedures Needed to Design the Newest Four Phosphoric Acid Evaporators in North America</p> <p>Mr. Richard D. Harrison Pegasus TSI, USA</p>	<p>Experience with Nicrofer 3127 HMo – ALLOY 31(UNS8031)</p> <p>Abdelhak MOUSTAQSSA OCP SA, Maroc</p>	
12:40 am - 13:00 am			<p>Efficacy of two Moroccan Sulphur-enriched fertilizers on tea and some important staple crops in smallholder farming in Kenya</p> <p>Mr. Esther .W Gikonyo, Cisse, L, Kamau, D.N, Mangale N, Mumbua A. and Kibunja, C Kenya agricultural research institute, Kenya</p>	<p>Phosphate Processing Using the Latest Sensor based Sorting Technology</p> <p>Mr Michele Bergmann, Presented by Markus Dehler Tomra Sorting GmbH, Germany</p>	<p>Rightrax Système de Monitoring de la Corrosion</p> <p>Mr. Kamal Sahaimi, GE Energy- Sensing & Inspection Technologies, France</p>	

B to B meetings

Exhibition area visit

B to B meetings

Exhibition area visit

13:00 am - 13:20 pm																					
12 pm – 2 pm	LUNCH																				
2 pm - 3:30pm	FERTILIZERS	Chairman : Mr Fouad Laroui – Amsterdam University, NETHERLANDS Co-Chairman : Mr Amit ROY - President and CEO of the international Fertilizer Development Center, USA						ROOM ROMARIN Novelty show 5: DuPont - MECS "Welcome speech", M. Thierry Marin "Alloy Equipment in Sulfuric Acid Acid Production - Solution for Efficient, Reliable and Safe operations", <u>Pascal du Bois d'Enghien</u> , Alloy Specialist, MECS/Dupont - Morocco. - Q&A session						B to B meetings	Exhibition area visit						
		ROOM SAFRAN Plenary Conference 6: A New food equation <u>Mr. Mohamed Ait KADI</u> President of the General Council of Agricultural Development, Morocco																			
		ROOM SAFRAN Keynote 9: Nutritive solutions : Innovative fertilizers to help growers meet global food challenge <u>Mrs. Valerie Renard</u> , PRAYON, Belgique																			
		ROOM SAFRAN Keynote 10: Cadmium and Phosphorous Fertilizers : The Issues and the Science <u>Mr. Terry ROBERTS</u> Président - International Plant Nutrition Institute (IPNI), USA																			
Débat du panel avec la salle (15mins)												B to B meetings	Exhibition area visit								
3:30 pm - 4 pm	Coffee break						SYMPHOS TV DuPont - MECS														
	Workshop 9: Flotation	Workshop 10: Fouling in phosphoric acid	Thematic session 13: Fertilizer Manufacture		Thematic session 14: Energy and water		Thematic session 15: Phosphate based materials		B to B meetings	Exhibition area visit											
	Room ATLANTIC CHAIRPERSON M. Daniel TAO, Professor, University of Kentucky, USA SECRETARY M. Chakour MOUNTASSIR, Maitre de recherche OCP SA	Room ATLAS CHAIRPERSON M. EL BAHRAOUI, Directeur Général KIMIA, Maroc SECRETARY M. Said EL ASRI, Chef de Projet OCP SA M. Kacem ABDOUS, Maitre de recherche OCP SA	Room Argan Chairperson M. David IVELL, Director of Process Technology, JESA, USA Co-Chairperson : M. EL ABID Amrani Badreddine, OCP SA.		Room Romarin Chairperson M. Tijani BOUNAHMIDI, Professeur EMI, Maroc Co-Chairperson M. Abdeljalil BOURRAS, Project manager for desalination, OCP SA		Room Draa & Lounge Art Chairperson Mr Mostafa Benzaazoua, Professor UQAT, Canada Co-Chairperson M. Rachid HAKKOU, Ph. D. Professeur, Université Cadi Ayyad, Maroc														
4:00 pm - 4:20 pm	Nouveau mécanisme de flottation – Float Force MM. <u>Luis Rudolphy</u> and <u>A. Khamsine</u> OUTOTEC, Germany	Modélisation et compréhension des problèmes d'encrassement lors de la fabrication d'acide phosphorique. <u>MM. AMALHAY, KHAMAR, AZAROUAL</u> OCP SA - BRGM, Maroc/France	Indirect Plate Heat Exchangers offer long term operating performance <u>Mr. Neville Jordison</u> , Jean Marc Reichling Solex Thermal Science, Canada		Optimizing Energy Efficiency: An Imperative for Improved Business Performance <u>Mr. Chris Smith</u> DuPont Sustainable Solutions - USA		Effects of temperature and clay content on microstructure and ceramic properties of phosphate sludge-clay blends <u>Mr. Mohamed Loutou</u> , M.Hajjaji, M.Mansori, R.Hakkou, C. Favotto, M.Benzaazoua, N.Semlal, K.Morsli FSSM, Université Cadi Ayyad, Maroc		B to B meetings	Exhibition area visit											
4:20 pm - 4:40 pm	Process and Flotation Cell Design Considerations For Phosphate Applications <u>MM. Asa Weber</u> and <u>JC SERBON</u> FLSMIDTH, USA/France	Amélioration de la performance de la concentration d'acide phosphorique par la réduction du phénomène d'encrassement <u>Mr. Hamid MAZOUZ</u> OCP SA, Maroc	Dynamic Operator Training Simulators for Sulphuric Acid, Phosphoric Acid, and DAP Production Units <u>Sergio Joao</u> , Coral Siminovich SNC-Lavalin, Canada		Uranium, the hidden treasure in phosphates <u>Mr. Ewald Schnug</u> , Mr.Nils Haneklaus Technical University Braunschweig, Germany		Comprehension of the phenomena involved in the recovery of uranium from phosphate by D2EHPA/TOPO system and development of new cationic extractants. <u>Mr. Denis Beltrami</u> , A. Chagnes, H.Mokhtari, B. Courtaud, G.Cote. ENSCP, France														

4:40 pm - 5:00 pm	Grade Recovery prediction of an Operating Plant using Flotation Model & Operating conditions MM. Venkoba Rao , B; Kumar Velan. H and Ramesh Mahadevan, DELKOR GLOBAL INDIA	Scale controlling chemical additives for phosphoric acid production plants Mr. John CARR Cytec Industries, Inc., USA	Scale-up and On-Line Monitoring of Gas-Solid Systems Using Advanced and Non-Invasive Measurement Techniques Mr. Aldahhan Muthanna University of Science & Technology, Rolla USA	The recovery of Uranium from Phosphoric Acid, the Third Time Around Mr. Astley Vaughn , Regis Stana Dr Phosphate, USA	Phosphate glasses as a new energy density dielectric materials Mr. Lahcen Bih , M. Azrour, A. El Bouari, M. Amalhay, H. Mossadik, B. Belhorma, M.P.F. Graça, M.A. Valente FST-Errachidia, Maroc	things
5:00 pm - 5:20 pm	Debates	Utilisation de la technique des radiotraceurs pour l'évaluation et la localisation des problèmes d'encrassement dans les unités de fabrication d'acide phosphorique. MM. OMARI & ALAMI OCP / CNESTEN, Maroc	The Evolution of Screening Systems for Optimum Granular fertilizer Product Quality Mr. David Ivell, Van T. Nguyen Jacobs engineering, USA	Novel Technique for Fert Phosphoric Acid Purification with Simultaneous Recovery of Uranium Mr. Rohit Sanghani Kamorphos, India	Phosphate Glass Optical Fibers for Electro-optical Applications Mr. M. Rioux , Ledemi, Y; Viens, J.F; Gravel, J.F., Lessard, F.; Messaddeq, Y. Laval University, Canada	
5:20 pm - 5:40 pm	Recommandations and conclusion	Debates	Solar to Ammonia - via Proton's Nfuel units Mr. Lucas Laumans , Anish Patil, Hans Vrijenhoef Proton venture, The Netherlands	Comprehension of synergistic mechanisms for uranium extraction from phosphate ores Mrs. Olivia Pecheur , D. Guillaumont, S. Dourdain, F. Testard, H. Mokhtari CEA, France	Electro-chemical phosphate sensor Mr. C.O Normandeau ; Viens, J.F.; Messaddeq. Laval University, Canada	
5:40 pm - 6:00 pm	Recommandations and conclusion	Recommandations and conclusion	A Thermodynamic Model for the NH ₄ ⁺ , K ⁺ // H ₂ PO ₄ ⁻ , H ₂ P ₂ O ₇ ²⁻ , NO ₃ ⁻ , Cl ⁻ - H ₂ O System Mr. Patrice Chartrand , Frédéric Gemme and Christian Robelin CRCT, Ecole Polytechnique, Canada	Utilisation du procédé membranaire pour la purification d'acide phosphorique Mrs. Khaoula Khaless , Abdelali Kossir OCP SA, Maroc		
6:00 pm - 6:10 pm			DAP from low grade phosphate, an economically viable process Frédéric Sauvage & Svet Valkov SNC-Lavalin, Belgium			
6:10 pm - 6:20 pm						
8:00 PM	SYMPHOS TV 7 : INNOVATION (Panel discussion on webstreaming) : Mr Robin Batterham Kernot Professor of Engineering & former Group Chief Scientist of Rio Tinto and President of the Australian Academy of Technological Sciences and Engineering. The University of Melbourne AUSTRALIA					
7:00 pm - 8:00 pm	Closing Ceremony Closing Speech of Mr. AMALHAY Directeur des Programmes SYMPHOS, OCP SA.					