

2011 Petroleum and Chemical Industry Conference Europe Conference Proceedings

(PCIC EUROPE 2011)

**Rome, Italy
7 – 9 June 2011**



**IEEE Catalog Number: CFP1121C-PRT
ISBN: 978-1-4577-0021-7**

TABLE OF CONTENTS

Lighting, Light Sources, Economics and Safety	1
<i>M. Cole, K. Martin</i>	
Quantative “ATEX” Risk Assessment: An Alternative Method For (Parts Of) Rotating Equipment	7
<i>P. Pieters, R. Perbal</i>	
Gas Turbine and Generator Controls: A User Prospective	15
<i>S. Al-Majed, T. Kakimoto</i>	
Myths About Pre-Start Purging-Ventilation And Pressurization In Motors Of Zone 2: Do You Really Need Them? Use EX nA Motors Safely	21
<i>B. Mistry, G. Hombourger, E. Massey</i>	
Alarm & Paging Acoustic Regulations And Practicality	29
<i>B. Cadmus, H. Forschner</i>	
Dynamic Positioning Power Plant System Reliability And Design	40
<i>K. Garg, L. Weingarh, S. Shah</i>	
Simultaneous Faults On The 11 KV System Of An Offshore FPSO Vessel	50
<i>D. Haas, F. Painter II, M. Wilkinson</i>	
What To Do If You Are Afraid Of The Dark?	60
<i>P. Angays</i>	
Fixed Or Withdrawable Switchgear: Withdrawable Switchgear, Past Or Future?	71
<i>M. Imming, H. Engbersen</i>	
Common Sources Of Arc Flash Hazard In Industrial Power Systems	77
<i>J. Vrielink, H. Picard, W. Witteman</i>	
International Standards On Explosive Atmospheres: Harmonization Is A Hard But Necessary Task	83
<i>E. Rangel Jr., C. Sanguedo</i>	
Control Of Subsea Motors On Multi-KM Cable Lengths By Variable Frequency Drives	87
<i>S. Demmig, J. Andrews, R. Klug</i>	
Optimized Design And Maintenance For Low Voltage MCCs: How To Improve The Performance Of A Low Voltage Motor Control Centre	97
<i>H. Meulenbroek, P. Freeman, A. Muileboom, J. Verstraten</i>	
The Role Of Standards In Predicting Trace Heating Sheath Temperatures	103
<i>B. Johnson, R. Hulett, R. Pomme</i>	
Yemen LNG – Starter/Helper Application Of VSI + Induction Motors For 4 LNG Compressor Lines (2 LNG Trains)	112
<i>P. Lecuyer, B. Martinot, E. Meyer, E. Thibaut</i>	
All-electrical FPSO Scheme with Variable Speed Drive Systems	119
<i>P. Pandele, E. Thibaut, E. Meyer</i>	
How And Why, Using Iec 61850 Protocol Should Help The Global Management Of An Electrical Control System	130
<i>P. Auscher, B. Leforgeais</i>	
Fire-Rated Circuit Integrity Cables For The Petroleum Industry Compliant To API, IEEE, And IEC Standards	139
<i>A. Maldonado</i>	
Solid State LED Lighting Technology For Hazardous Environments; Lowering Total Cost Of Ownership While Improving Safety, Quality Of Light And Reliability	149
<i>J. Peck, G. Ashburner, M. Schratz</i>	
Influence Of Design, Manufacturing & Installation Practices On Rotor Vibrations Of Large Induction Motors Used In Petrochemical Industry	157
<i>S. Singhal, R. Mistry</i>	
Subsea Equipment And Applications, A New And Emerging Technology	167
<i>J. Flores, J. Burdick, R. Paes, E. Fidler</i>	
Switching Phenomena In Medium Voltage Systems – Good Engineering Practice On The Application Of Vacuum Circuit-Breakers And Contactors	175
<i>A. Mueller, D. Saemann</i>	
Inductive Shielded Superconducting Fault Current Limiter – A New Cost Effective Solution For Industrial Network Applications	184
<i>K. Bauml, U. Kaltenborn</i>	
IEC Switchgear & Controlgear – Internal Arc Withstand A Designer’s And User’s View	191
<i>T. Hazel, P. Freeman</i>	

Lightning, Grounding, And Protection For Control And Communications Systems: Re-Evaluated	203
<i>R. Durham, M. Durham</i>	
How The Smart Grid And Private Network Get A Chance To Communicate Together? The Integrated Circuit Breaker In Line With IEC 61850	214
<i>C. Saeli, C. Gatti, C. Gemme</i>	
Harmonization And Gaps Of Motors Efficiency Standards	220
<i>M. Lhenry, J. Maruszczyk, J. Korkeakoski</i>	
Sealing Requirements For Electrical Equipment Connecting To High Pressure Process Systems	226
<i>T. Driscoll, M. Cole, R. Leduc</i>	
Author Index	