

International Conference on Sensing, Diagnostics, Prognostics, and Control (SDPC 2017)
Shanghai Aircraft Customer Service Co. Ltd., Shanghai, China
August 16-18, 2017

CONFERENCE PROGRAM

Wednesday 8/16/2017	WEDNESDAY SESSIONS	
7:30 - 17:30	Registration (Hotel Lobby)	
7.30-9:00	Breakfast (Hotel Cafeteria)	
	Building No. 2, First Floor, Lobby	Building No. 1, Second Floor, Room: 205
	INDUSTRY EXHIBITION Sponsorship Chairs: Dr. Shaowei Chen, Dr. Zhipeng Feng	WORKSHOP GAS TURBINE COMPONENT LIFE PREDICTION AND LIFE CYCLE MANAGEMENT Dr. Avisekh Banerjee, Life Prediction Technologies Inc., Canada Workshop Chair: Dr. IL Yong Kim
13:00-15:00	Beijing Aerospace Measurement & Control Technology Co., Ltd. (北京航天测控技术有限公司) Shanghai Pukka Network Technology Co., Ltd. (上海帕科网络科技有限公司) CETC Avionics Co., Ltd. (中电科航空电子有限公司) Aerospace Data Integration Center of China Aerospace Science & Industry Corp. (中国航天科工集团公司空间数据服务中心)	Section I: Introduction - Component Damage Modes and Reliability Section II: Design Life Prediction and Modeling Techniques Section III: Damage Tolerance and ENSIP
15:00-15:30	Afternoon Break	
15:30-17:30	Hongkong Qinda Technology Group (香港勤达科技集团) Chinese Journal of Aeronautics (Elsevier) Shanghai Pinxun Instruments & Equipment Co., Ltd. (上海频询仪器设备有限公司) IEEE Reliability Society	Section IV: Emerging Prognostics (Predictive Maintenance) Technologies Section V: Demonstration of XactLIFE-GT PHM for predictive maintenance
18:00-20:00	Welcome Reception (Hotel Cafeteria)	

Thursday 8/17/2017	THURSDAY SESSIONS	
7:30 - 17:30	Registration (Hotel Lobby)	
7:30 - 9:00	Breakfast (Hotel Cafeteria)	
	Conference Opening (Building No. 2, Auditorium) Dr. He Ren - Acting Chief Engineer, Shanghai Aircraft Customer Service Co., Ltd.; Arrangements Chair, SDPC 2017, China	
9:00 - 9:30	Conference Overview Dr. Jie Peter Liu - General Chair, SDPC 2017; Associate Professor, Carleton University, Canada	

	Speech of Welcome Senior Executives, Commercial Aircraft Corporation of China Ltd. (COMAC), China					
	Greeting Remarks Qun Bai, Vice President, Chongqing Technology and Business University, China					
9:30 - 10:30	Keynote - 1 (Keynote Chair: Dr. Zhike Peng) Simulation Methods for the Assessment of Reliability of Structural and Mechanical Systems Dr. Carlos Guedes Soares - Editor in Chief, Reliability Engineering and System Safety; Distinguished Professor, University of Lisbon, Portugal					
	Keynote - 2 (Keynote Chair: Dr. Zhike Peng) Prognostics-Based Qualification for Electronics Components and Systems Dr. Michael Pecht - Chair Professor and Director, CALCE Electronic Products and Systems Center, University of Maryland, USA					
10:30 - 10:45	Morning Break					
10:45 - 11:45	Keynote - 3 (Keynote Chair: Dr. Chuan Li) Fly-by-Feel Autonomous Electric Vehicles Dr. Fu-Kuo Chang - Editor in Chief, Structural Health Monitoring; Professor, Stanford University, USA					
	Keynote - 4 (Keynote Chair: Dr. Chuan Li) Prognostics and Health Management (PHM) Technology of Civil Aircraft Dr. Qinghong Xu - Senior Executive of COMAC & President of Shanghai Aircraft Customer Services Co., Ltd., China					
11:45 - 12:00	Conference Attendees Photography					
12:00 - 14:00	Lunch (Hotel Cafeteria)					
	Building No. 1, Room: 205	Building No. 1, Room: 206	Building No. 1, Room: 207	Building No. 1, Room: 209	Building No. 1, Room: 211	Building No. 1, Room: 213
14:00 - 15:30	Paper Session I (Aircraft PHM/Maintenance) Chairs: Dr. Qiang Miao, Dr. Jaya Sil	Paper Session II (Gearbox Diagnostics) Chairs: Dr. Mariela Cerrada, Mr. Diego Cabrera	Paper Session III (Performance/Degradation Estimation) Chairs: Dr. Yuhua Cheng, Dr. Xuyun Fu	Paper Session IV (Machine Learning/System Optimization) Chairs: Dr. Janice Duan, Dr. Liansheng Liu	Paper Session V (Fault Detection/Classification) Chairs: Dr. Youmin Zhang, Dr. Rene Vinicio Sanchez	Tutorial 1: Performance Prediction of Nonlinear Degrading Systems Prof. Fai Ma, UC Berkeley, USA Moderator: Prof. Jie Peter Liu
	Paper #: 30 Paper #: 40	Paper #: 18 Paper #: 28	Paper #: 19 Paper #: 35	Paper #: 26 Paper #: 74	Paper #: 17 Paper #: 34	
	Paper #: 52 Paper #: 54	Paper #: 64 Paper #: 83	Paper #: 77 Paper #: 105	Paper #: 106 Paper #: 110	Paper #: 36 Paper #: 39	
	Paper #: 59 Paper #: 124	Paper #: 84 Paper #: 126	Paper #: 167 Paper #: 182	Paper #: 132 Paper #: 152	Paper #: 99 Paper #: 127	
15:30 - 16:00	Afternoon Break					
16:00 - 17:30	Poster Session I (Building No. 2, First Floor, Lobby) Poster Chairs: Dr. Janice Duan, Dr. Guigang Zhang					Tutorial 2: Intelligent Health Monitoring of Rotating Machines Prof. Nishchal K. Verma, IIT Kanpur, India Moderator: Prof. Jose Valente de Oliveira
	Paper #: 4, 9, 10, 16, 25, 31, 33, 38, 41, 50, 65, 67, 68, 69, 72, 73, 78, 79, 80, 81, 82, 86.					
17:30 - 18:00	Rapid Response Center and Flight Simulator Tour (Building No. 2, Lobby)					
18:00 - 20:30	Conference Banquet, Best Paper Awards Announcement and SDPC 2018 Announcement (Hotel Cafeteria)					

Friday 8/18/2017	FRIDAY SESSIONS					
7:30 - 17:00	Registration (Hotel Lobby)					
7:30 - 8:30	Breakfast (Hotel Cafeteria)					
	Building No. 1, Room: 205	Building No. 1, Room: 206	Building No. 1, Room: 207	Building No. 1, Room: 209	Building No. 1, Room: 211	Building No. 1, Room: 213
8:30 - 10:00	Paper Session VI (System Identification/Control) Chairs: Dr. Fangyi Wan, Dr. Qiang Han	Paper Session VII (Advanced Signal Analysis) Chairs: Dr. Li Wang, Dr. Yongqing Liu	Paper Session VIII (Maintenance Modeling/Planning) Chairs: Dr. Avisekh Banerjee, Dr. Guoliang Lu	Paper Session IX (Bearing System PHM) Chairs: Dr. Nishchal Verma, Dr. Yanxue Wang	Industry Sponsors Presentation	Tutorial 3: Gearbox Detection and Diagnosis Prof. Chris Mechefske, Queen's University, Canada Moderator: Prof. Steven Li
	Paper #: 119 Paper #: 137	Paper #: 93 Paper #: 147	Paper #: 85 Paper #: 113	Paper #: 15 Paper #: 20	北京航天测控技术有限公司	
	Paper #: 175 Paper #: 157	Paper #: 149 Paper #: 151	Paper #: 163 Paper #: 180	Paper #: 21 Paper #: 58	上海帕科网络科技有限公司	
	Paper #: 92 Paper #: 205	Paper #: 158 Paper #: 164	Paper #: 102 Paper #: 179	Paper #: 75 Paper #: 108	中电科航空电子有限公司	
10:00 - 10:30	Morning Break					
10:30 - 12:00	Poster Session II (Building No. 2, First Floor, Lobby) Poster Chairs: Dr. Guigang Zhang, Dr. Janice Duan				Industry Sponsors Presentation	Tutorial 4: Fault Diagnosis of Induction Motor Using Machine Learning Techniques Prof. Jaya Sil, Indian Institute of Engineering Science and Technology, India Moderator: Prof. Markus Timusk
	Paper #: 90, 94, 97, 103, 104, 107, 111, 112, 114, 115, 116, 118, 120, 121, 129, 130, 133, 134, 136.				中国航天科工集团公司空间数据 服务中心	
					香港勤达科技集团 Chinese Journal of Aeronautics (Elsevier)	
12:00 - 13:30	Lunch (Hotel Cafeteria)					
13:30 - 15:00	Paper Session X (Modeling and Simulation) Chairs: Dr. Aitor Garrido, Dr. Rui Guo	Paper Session XI (Modeling and Simulation) Chairs: Dr. Guigang Zhang, Dr. Lixiang Duan	Paper Session XII (Rotary Machinery PHM) Chairs: Dr. Wilson Wang, Dr. Datong Liu	Paper Session XIII (Intelligent Systems) Chairs: Dr. Wei Ding, Mr. Andreas Brandsaeter	Paper Session XIV (Reliability Evaluation) Chairs: Dr. Yixiang Huang, Dr. Shuo Chang	Tutorial 5: Medical Cyber- Physical Systems and Its Applications Prof. Wei Ding, Florida Polytechnic University, USA Moderator: Dr. Jian Wang
	Paper #: 60 Paper #: 71	Paper #: 47 Paper #: 61	Paper #: 29 Paper #: 43	Paper #: 48 Paper #: 88	Paper #: 91 Paper #: 101	
	Paper #: 89 Paper #: 100	Paper #: 96 Paper #: 145	Paper #: 44 Paper #: 128	Paper #: 131 Paper #: 135	Paper #: 125 Paper #: 138	
	Paper #: 117 Paper #: 139	Paper #: 166 Paper #: 169	Paper #: 140 Paper #: 170	Paper #: 154 Paper #: 160	Paper #: 141 Paper #: 161	
15:00 - 15:30	Afternoon Break					
	Poster Session III (Building No. 2, First Floor, Lobby) Poster Chairs: Dr. Janice Duan, Dr. Guigang Zhang					Panel Talk: Reliability Management for Service under Uncertain Environment Chair: Prof. Huchen Liu

15:30 - 17:00	Paper #: 142, 143, 146, 148, 150, 153, 155, 156, 162, 165, 171, 173, 176, 178, 201, 202, 203, 204, 206, 207, 208.	Panelists: Prof. Yuchang Mo, Zhejiang Normal University; Prof. Wengyan Song, Beihang University; Prof. Yang Liu, Shanghai U.
17:00	Conference Adjourn	