Conference Opening



The 1st International Workshop on Future Intelligent deserT (FIT2011)

Yinchuan, Ningxia, P. R. China Aug 14th-16th,2011



Moderated by Dr./Prof. Xing XU, Vice President of Ningxia University

Welcome to Yinchuan

银川欢迎您



Malan Flower (马兰花), a symbol of happiness (幸福), is the official city flower of yinchuan to you!

Ningxia Univ. welcomes you too



Welcome to the FIT2011!

Agenda

- 1. Introduction of VIP Guest
- 2. Welcome addresses
- 3. Brief Introduction of FIT2011 Program

VIP Guest Introduction



Prof. Zheng Xiao-Jing(郑晓静), Academician of CAS(中科院院士), Vice-President of Lanzhou University, China (兰州大学副校长)



Prof. Daniel. E. Koditschek, IEEE Fellow (IEEE 院士), University of Pennsylvania, American.

美国宾夕法尼亚大学电子系主 任



Prof. Zheng Yuanfang (郑元芳), IEEE Fellow (IEEE 院士), Ohio State University, American (俄亥俄州立 大学前系主任)

VIP Guest Introduction (cont.)







Prof. Yu Jin-Zhong (余金中), Institute of semiconductor, Chinese Academy of Sciences, China 中科院半导体所,世界 知名硅半导体科学家 Prof. Dong Zhibao (董治宝), Cold and Arid Regions Environment and Engineering Research Institute, Chinese Academy of Sciences, China中科院寒早所(原沙漠所)国家首批千百人计划入选者,杰青获得者

Prof. Xu Zhengyuan (徐正元), National "Thousand Talents Program" (千人计划) Distinguished Professor, Tsinghua University, China 清华大学特聘教授,原美国加州大学终身教授

VIP Guest Introduction (cont.)



Prof. Su Yikai (苏翼凯), Associate Department Chair of Electronic Engineering, Shanghai Jiao Tong University, Distinguish Younger of NSFC, 上海交通大学, 杰青获得者, 上海曙光学者, 原美国bell实验室高级研究员



Prof. Xie LI(谢莉), Lanzhou University 兰州大学,博士

VIP Guest Introduction (cont.)



Mr. Wang Delin (王德林),
Director of Forestry Department of
Ningxia Province (自治区林业局局长), Famous Artist (知名书法家)



Prof. He Jianguo (何建国), President of Ningxia University (宁夏大学校长).

Welcome Address by



Prof. He Jianguo

President of Ningxia University.

Welcome Address by



Mr. Wang Delin
Director of Forestry Department of
Ningxia Province

Brief Introduction of FIT2011 Program



Xinwan LI,

Chair of FIT2011,

Dean of School of Physics & Electric Information Science, Ningxia Univ.

Prof. of Shanghai Jiaotong Univ.

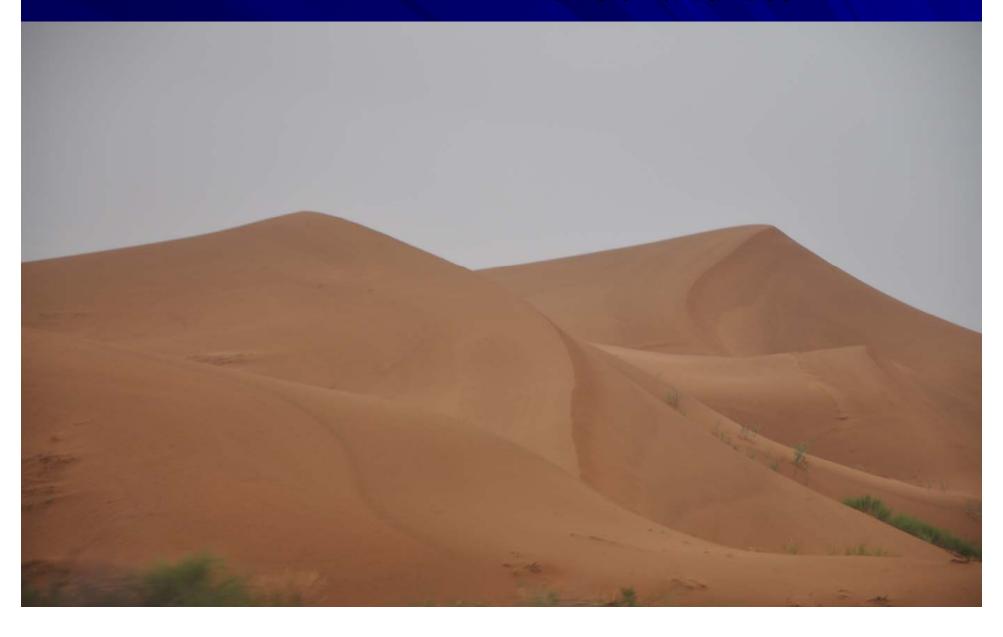
Contents of FIT2011 Program

- What and Why is Intelligent desert(智能沙漠)?
- How does intelligent desert work?
- Why FIT (未来智能沙漠)? How Future? Hundreds of years?
- It is the beginning to dream(梦想) the FIT via FIT2011. The main presentations of FIT2011:
 - ▶3 plenary sessions(8 Keynote speakers), 大会报告
 - ▶ 2 panel sessions, 自由讨论
 - ▶1 poster session, 张贴

Dust Storm(沙尘暴)



What Desert is!? (沙漠到底是什么!?)



How to understand it? (如何认识沙漠)

The kinds of information (信息) should be obtained from the desert:

- 1. Physics parameters (temperature, humidity, atmospheric pressure, wind velocity, static electricity, Refraction of light, absorption of sunlight, heat conduction, capacity of electricity, and capacity of heat, EM, crystal structure/elements of sand, etc.----electricity, magnetic, optics, mechanics, thermology), 物理参数,电、磁、光、力、热等
- 2. Bio-Chemical parameters (animal, vegetation, bacteria, birds, biotic index of air, etc.), 生物化学参数,

The feature of information should be: 信息的特征

- 1. Positions dependent, GPS technology applied; 与位置有关
- 2. Real time, no mater day or night; 时间变化的
- 3. Mobility, No matter Movable or static, 移动性
- 4. Lower cost, lower power, 低功耗、低价格

Collecting all kinds of desert Information is very important and a big challenge Job!

获取沙漠信息是极具挑战的工作!

How to collect it?(如何获取)

Sensor Network (传感网络) could be a solution!

- 1. Intelligent desert (智能沙漠) is to make the desert understandable (可认知), controllable (可治理控制), usable (可利用) via informatics (通过信息学);
- 2. Intelligent desert is to make the desert (e.g. sand storm) to become a resource for human being (变沙漠为一种人类的资源) via cooperation among different disciplines (通过学科交叉);

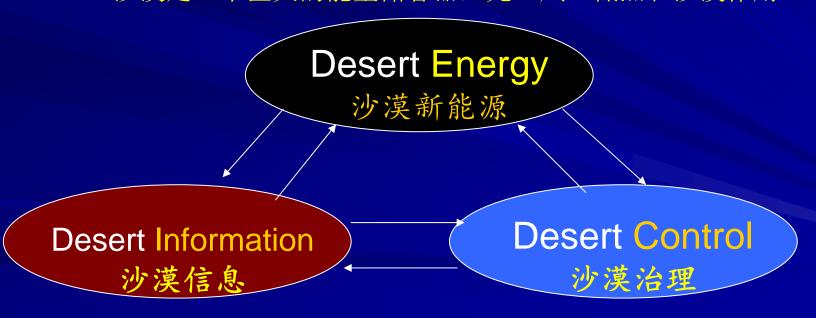
The theme of FIT2011 is "information sensing: the key to understand desert"

FIT2011主题是:信息感知是打开沙漠之门的钥匙!

The Aim of FIT2011 is to investigate the Triangle Relationships, but not limited to!

本次会议希望挖掘三者关系

Desert is a big capacity of energy from sunlight, wind, Geothermal energy 沙漠是一个巨大的能量储容器,光、风、低热和沙漠作用。



3 plenary sessions will cover

- 1. 3 talks based on sand/ desert (风沙动力学);
- 4 talks on informatics based on desert (沙漠信息感知);
- 3. 1 talk based on new desert power(沙漠新能源)

Interesting discussions for two panel sessions (有趣讨论)

- Future Intelligent Desert (I): Desert Sensing---Dynamical Reconstruction and Prediction of Sanddust Storm;(沙漠感知-沙尘暴动力学重构与预测),
 to know how it systematically(系统全面认识沙漠沙尘
 暴成因)
- Future Intelligent Desert (II): Desert Power Generation and Sand Self-healing Control (沙漠能产生与沙漠自愈性治理), TO make the power from desert and used for it too(取之沙漠用之沙漠)

3 plenary sessions(8 talks) +2 panel sessions+1poster session

9:00~10:00	Plenary Session I (Session Chairs: Yuanfang Zheng)
	9:00~9:30 Speaker 1: Xiao-Jing Zheng, Academician of CAS, Vice-President of Lanzhou Univ.
	9:30~10:00 Speaker 2: Daniel. E. Koditschek, IEEE Fellow, Prof. of Univ. of Pennsylvania
10:00~10:30	Coffee break(30 minutes)
10:30~12:00	Plenary Session II (Session Chair: Xiao-Jing Zheng)
	10:30~11:00 Speaker 1: Jing-Zhong Yu, Prof. of Institute of Semiconductor, CAS
	11:00~11:30 Speaker 2: Yikai Su, Associate Department Chair of Electronic engineering, Prof. of Shanghai Jiao Tong Univ.
	11:30~12:00 Speaker 3: Zhengyuan Xu, "Thousand Talents Program" Distinguished Professor of Tsinghua Univ.
12:00~14:30	Lunch
14:30~16:00	Plenary Session III (Session Chair: Daniel. E. Koditschek)
	14:30~15:00 Speaker 1: Yuanfang Zheng, IEEE Fellow, Prof. of Ohio State Univ.
	15:00~15:30 Speaker 2: Zhibao Dong, Prof. of Cold and Arid Regions Environmental and Engineering Research Institute, CAS
	15:30~16:00 Speaker 3: Li Xie, Vice-Professor of Lanzhou Univ.
16:00~16:30	Coffee break(30 minutes) Poster Session
16:30~17:30	Panel Session I (Session Chair: Xinwan Li)
	Future Intelligent Desert(I) Desert SensingDynamical Reconstruction and prediction of Sand-dust Storm
18:30~20:30	Banquet/ Sponsored by Ningxia University
	Tuesday, August 16, 2011(Shapotou Desert Research and Experiment Station, CAS)
	Panel Session II (Session Chair: Xu-Ming Wang)
	Future Intelligent Desert(II): Desert Power Generation and Sand Self-healing Control

Plenary Session I (Session Chairs: Yuanfang Zheng)

- 9:00~9:30 Speaker 1: Xiao-Jing Zheng, Academician of CAS, Vice-President of Lanzhou Univ.
- 2. 9:30~10:00 Speaker 2: Daniel. E. Koditschek, IEEE Fellow, Prof. of Univ. of Pennsylvania

Plenary Session II(Session Chair: Xiao-Jing Zheng)

- 1. 10:30~11:00 Speaker 1: Jing-Zhong Yu, Prof. of Institute of Semiconductor, CAS
- 2. 11:00~11:30 Speaker 2: Yikai Su, Associate Department Chair of Electronic engineering, Prof. of Shanghai Jiao Tong Univ.
- 11:30~12:00 Speaker 3: Zhengyuan Xu, "Thousand Talents Program" Distinguished Professor of Tsinghua Univ.

Plenary Session ∭(Session Chair: Daniel. E. Koditschek)

- 1. 14:30~15:00 Speaker 1: Yuanfang Zheng, IEEE Fellow, Prof. of Ohio State Univ.
- 2. 15:00~15:30 Speaker 2: Zhibao Dong, Prof. of Cold and Arid Regions Environmental and Engineering Research Institute, CAS
- 3. 15:30~16:00 Speaker 3: Li Xie, Vice-Professor of Lanzhou Univ.

Panel Session I(Session Chair: Xinwan Li)

16:30~17:30 Future Intelligent Desert(I) Desert Sensing---Dynamical Reconstruction and prediction of Sanddust Storm

Panel Session II (Session Chair: Xu-Ming Wang)

- Future Intelligent Desert(II): Desert Power Generation and Sand Self-healing Control
 - Tuesday, August 16, 2011(Shapotou Desert Research and Experiment Station, CAS),

END of FIT2011 Conference Opening

THANK YOU!

Take a Photo
All attendees should go to the square in front gate of the Lobby. 请到宾馆大堂门前广场照相

Acknowledge

This conference was support by Ningxia Univ. Shanghai jiaotong Univ, 973 project (ID: 2011CB301700) NSFC project (ID:60877012), **IEEE communication society** shanghai chapter!