

# **Open Access in China: Potential & Strategies**

**9<sup>th</sup> Fiesole Collection  
Development Retreat  
Hong Kong April 2007**

**Corrie Marsh, HKUST**





HKUST as early leader in HK with first IR and digital library collections

# HKUST as Early Leader & Promoter of OA in Hong Kong SAR

Full international member of SPARC

Open DOAR & Scirus partner for repository indexing

Scholarly Communications Knowledge Bank



*Institutional Repositories: Preparing for the Future*  
Host of 1st International Conference on Developing IR 2004



HKUST collection of OA resources—IR conference to  
examine future 2004 at UST

## **Hong Kong Universities**

**University Grants Committee (UGC)  
Heads of Universities Committee (HUCOM) and  
Joint University Libraries Advisory Committee (JULAC)**

**SPARC –International Scholarly Communications  
Alliance (ISCA) global network organizations since 2002**

**NEW for 2007! Promotion of policy for publicly funded  
research to be submitted to open access repositories to  
facilitate scholarly communication and broader access.  
Administrative workshop planned-sponsored by HUCOM  
and Soros Foundation.**

Strong univ consortia OA support in HK

Original members of SPARC Global Network Orgs

New efforts in 2007 for OAR policy in Hong Kong

# Linking Hong Kong Digital Libraries

No.	Title	Library / Institution
41	HKU ExamBase	University of Hong Kong Libraries (HKUL)
42	HKU Scholars Hub	University of Hong Kong Libraries (HKUL)
43	HKUL e-Video	University of Hong Kong Libraries (HKUL)
44	HKUST Digital University Archives	Hong Kong University of Science and Technology (HKUST)
45	HKUST Electronic Theses Database	Hong Kong University of Science and Technology Library (HKUST)
46	HKUST Institutional Repository	Hong Kong University of Science and Technology Library (HKUST)
47	HKUST Library Exhibitions	Hong Kong University of Science and Technology Library (HKUST)
48	HKUST News Clippings Online	Hong Kong University of Science and Technology Library (HKUST)
49	Historical Laws of Hong Kong Online	University of Hong Kong Libraries (HKUL)
50	Hong Kong Academic Library Link (HKALL) 香港高校圖書館聯網 (港香網)	Joint University Librarians Advisory Committee (JULAC)
51	Hong Kong Architectural Publications Index 香港建築學期刊論文索引	Chinese University of Hong Kong Libraries (CUHK)
52	Hong Kong Digitization Project Initiatives (HKdipi)	Hong Kong Baptist University Library (HKBU)
53	Hong Kong Government Reports Online (1953-1941)	University of Hong Kong Libraries (HKUL)
54	Hong Kong Journals Online	University of Hong Kong Libraries (HKUL)
55	Hong Kong Libraries Gateway	Hong Kong Library Association (HKLA)
56	Hong Kong Library Science Database (HKLS)	Hong Kong Baptist University Library (HKBU)
57	Hong Kong Listed Company Papers Collection	University of Hong Kong Libraries (HKUL)

**Digital Projects**

**Cross Searching IRs in Hong Kong**

Search DSpace  
 This is an experimental system developed by the HKUST Library to demonstrate the features of harvesting and cross-searching the scholarly and research output from the Hong Kong USC funded institutions.

Search  
 Enter some text in the box below to search DSpace.

Institutions  
 Chinese University of Hong Kong  
 City University of Hong Kong  
 Hong Kong Baptist University

The 8 univ. have now created systems for linking our digital projects and IRs

# Hong Kong SAR Government

Hong Kong Professional Journals  
Available OA



The Hong Kong Journal of Psychiatry

 The Hong Kong Practitioner

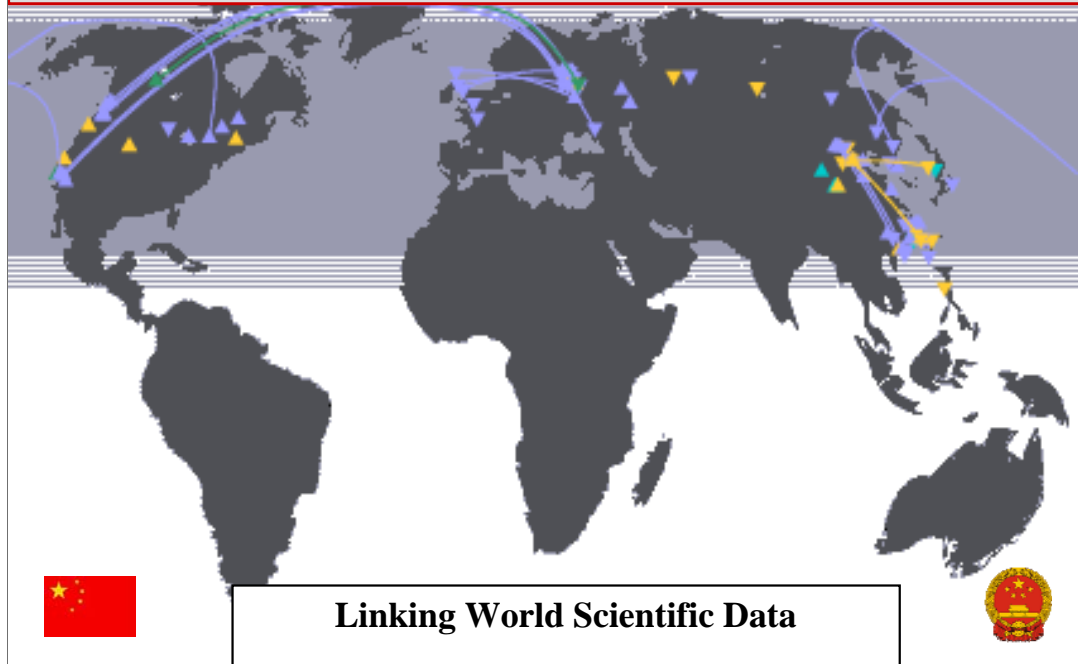


Latest News  
Hong Kong Cultural Heritage  
Digital Repository



In Hong Kong one can see the efforts of OA in the open availability of professional journals and  
In a recent news item the govt has received support for creation of a cultural heritage repository.

# OPEN ACCESS CHINA



Moving north to mainland China-While I realize the concerns about Internet censorship in Mainland, there are huge efforts in the govt to open and share scientific data with the world. I would like to provide an overview of some of these specific OA initiatives.



## Some Key Implementers & Supporters



**Dr. Xiaolin Zhang**  
Chinese Academy of  
Sciences Library  
Director (CAS)  
Meta-data for  
scientific objects and  
interoperability



**Kai Nan**  
Computer Network  
Information Center  
(CNIC), CAS  
E-Science project to  
launch by mid-2007

**Dr. Qiheng Hu**, Chinese Academy of  
Engineering, Assn for Science &  
Technology, and CAS  
“Open access is a necessity to promote  
capacity building in science and  
technology”

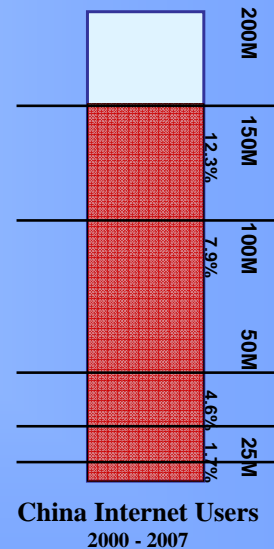


**Jinpei Chang**,  
Ministry of Science &  
Technology (MoST)  
“Strengthening China’s  
cooperation with  
developing nations for  
S&T”

These are some the implementers and influential supporters of OA in China and I will be referring to them and their organizations as we examine what has been developing in mainland China

## MILESTONES in China OA

- 2007** CAS plans for launch of e-Science Project with several test programs including geosciences and meteorology
- 2006** 20<sup>th</sup> International CODATA Conference, October  
*Global Information Commons for Science Initiative*  
Plans announced for e-Science Project of 100+ Institutes for data sharing
- 2005** International Conference on Strategies & Policies on Open Access to Scientific Information, June 2005  
National Library of China opens Digital Portal
- 2004** Workshop on Strategies for Preservation & OA for Scientific Data
- 2003** CAS President and NSFC Director sign Berlin Declaration
- 2002** Chinese delegation visits USNC
- 2000** US National Committees for CODATA & Chinese bilateral policy meetings



One can readily see the progress of China OA over the past 7 years as they moved from bilateral exchange into sponsoring workshops on strategy and policy and now creating new OA portals for data-sharing.

I thought it was also interesting to note the population of Internet users during the same period of time increased from 22.5m in 2000 and the estimates for 2007 are 163m.

## **Challenges for OA in China**

**--Zhang, LCAS 2005 on Policy Considerations**

### **❖ Lack of Incentives**

- **Scientists and Institutions base evaluation on high impact factor citations in established journals**
- **Need for new publishing models**

### **❖ Lack of Responsibility**

- **Funding**
- **Administrative support**

### **❖ Lack of Infrastructure**

- **Need for national STM information platform**
- **More....**

Dr. Zhang (Tjan(g)),

director of the Chinese Academy of Sciences Library and involved in worldwide OA initiatives, reviewed the challenges and solutions in Mainland China at the most recent CODATA conference in Beijing. These challenges are the same as those in other parts of the world: professional evaluation is based on high-impact journal publishing, as well as lack of funding and infrastructure.

Economist Intelligence Unit e-readiness rankings, 2006				
2006 e-readiness rank	2005 rank	Country	2006 e-readiness score (of 10)*	2005 score
1	1	Denmark	9.00	8.74
2	2	US	8.88	8.73
3	4	Switzerland	8.81	8.62
4	3	Sweden	8.74	8.64
5	5	UK	8.64	8.54
8	10	Australia	8.50	8.22
9	12	Canada	8.37	8.03
<b>10</b>	<b>6</b>	<b>Hong Kong</b>	<b>8.36</b>	<b>8.32</b>
12	12	Germany	8.34	8.03
13	11	Singapore	8.24	8.18
14	16	N. Zealand	8.19	7.82
18	18	South Korea	7.90	7.66
21	21	Japan	7.77	7.42
23	22	Taiwan	7.51	7.13
35	32	S. Africa	5.74	5.53
37	35	Malaysia	5.60	5.43
41	38	Brazil	5.29	5.07
46	46	S. Arabia	4.67	4.38
47	44	Thailand	4.63	4.56
52	52	Russia	4.30	3.98
53	49	India	4.25	4.17
56	51	Philippines	4.04	4.03
<b>57</b>	<b>54</b>	<b>China</b>	<b>4.02</b>	<b>3.85</b>
61	57	Ukraine	3.62	3.51
62	60	Indonesia	3.39	3.07
65	59	Iran	3.15	3.08
66	61	Vietnam	3.12	3.06
67	64	Pakistan	3.03	2.93

As a corollary, it is interesting to see on this report from the Economist that China still ranks very low in world rankings for “e-readiness” for development and commerce.

## **Recommendations for OA in China**

--Zhang, LCAS 2005 on Policy Considerations

### **❖ Incentives**

- IP rights options for authors
- New scientific evaluation systems
- Author incentives

### **❖ Responsibility**

- Funding support by collective payment systems
- Policy for OA preservation-require IR publishing
- Require publicly supported clearinghouse

### **❖ Infrastructure**

- Policy support for data-sharing structure
- National STM platform
- Facilitate promotion and training

Dr. Zhang further added his summary of solutions for advancing OA in China; including revising incentive systems, collective payment systems, central clearinghouse for IR, and a national STM platform to support the technical infrastructure.

## OA in China - Current Efforts National Scientific Data Master Network

- ❖ National Library of China Digital Portal 
- ❖ Web3 Development 
- ❖ Qi.ji.com - Chinese language and multi-disciplinary OAIP
- ❖ China Data Sharing Policy - MoST 
- ❖ Knowledge Grid – CNIC 
- ❖ CSTNet – CNST 
- ❖ SINDAP China – Global ePrints in SciTech Archive
- ❖ E-Science Project – 100 Institutes of CAS 
- ❖ China International Science & Technology Cooperation

This is a listing of some of the major OA programs and I would just like to scroll through a few screen shots of a few of these OA sites for you.

# National *Digital* Library of China

<http://www.nlc.gov.cn>



Since opening their digital portal, the National Library has also named themselves the National *Digital* Library of China!

# Chinese International Science & Technology Cooperation

<http://www.cistc.gov.cn/cistc>



The screenshot shows the CISTC website interface. At the top, there is a navigation menu with links: Home, News & Events, S&T World, Laws & Regulations, Embassies, and China ABC. The URL [www.cistc.gov.cn](http://www.cistc.gov.cn) is displayed in the top right corner. Below the navigation is a banner with the CISTC logo and the text "CHINA INTERNATIONAL SCIENCE AND TECHNOLOGY COOPERATION".

The search results section is titled "Search Result" and shows the following information:

- Keyword: data sharing
- Select Start Date: [ ]
- Select End Date: [ ]
- Search: [ ]
- Reset: [ ]

**Search Result**  
Total: 10 results Page: 1st page/1 page 15 results/page  
First Page | Previous Page | Next Page | Last Page

- Data Sharing Network Proceeds Smoothly for Health and Medical Sciences (2007-2-8)
- Earthquake Data Sharing Project Progresses Smoothly (2007-1-18)
- Seminar on Global Scientific Data Sharing and Application Held in Beijing (2006-11-10)
- China and US Involved in Policy Discussion on Data Sharing (2006-11-3)
- State Council pays attention to data sharing in meteorology (2006-2-22)
- Report meeting on scientific data sharing project standards (2005-7-29)
- Assignment documents signed for scientific data sharing (2005-7-28)
- Seminar on formulation of "Management Method for the Scientific Data Sharing Project" (2005-5-19)

CISTC is a good source for data-sharing project updates, worldwide science research, and China laws and regulations



# China National Science & Technology Library

<http://www.nstl.gov.cn/>

The screenshot shows the homepage of the National Science and Technology Library (NSTL). At the top, the logo 'NSTL' is displayed on the left, and the name '国家科技图书文献中心' (National Science and Technology Library) is centered. To the right, there are links for '网站地图' (Site Map), '帮助中心' (Help Center), and '我的NSTL' (My NSTL). Below the header is a navigation bar with links: '首页' (Home), '文献检索' (Literature Search), '全文文献' (Full-text Literature), '目录浏览' (Table of Contents), '目录查询' (Table of Contents Query), '热点门户' (Hotspots), '网络导航' (Network Navigation), '参考咨询' (Reference Services), '版权声明' (Copyright Statement), and '关于我们' (About Us).

The main content area features a large banner with the text '海量数据 迅速查询' (Massive Data, Quick Query) and an image of a computer mouse. Below the banner is a search box with the text '简单查询' (Simple Query) and '请输入检索词' (Please enter search terms). The search box includes radio buttons for '外文库' (Foreign Library) and '中文库' (Chinese Library), and a '检索' (Search) button.

On the left side, there is a '用户登录' (User Login) section with fields for '用户名' (Username) and '密码' (Password), and buttons for '确定' (OK) and '重填' (Reset). Below this are links for '忘记密码' (Forgot Password) and '新用户注册' (New User Registration). There are also buttons for '代查代借' (Proxy Search and Borrowing) and '用户热线' (User Hotline).

The 'NSTL动态' (NSTL News) section lists several items: '关于“2007中国科技情报与图书馆事业创新发展论坛”的征文通知' (Notice of the Essay Competition for the 2007 China Science and Technology Information and Library Industry Innovation and Development Forum), '调整代查代借费用的通知' (Notice of Adjustment of Proxy Search and Borrowing Fees), and 'NSTL网络服务系统教程' (NSTL Network Service System Tutorial).

The '文献检索' (Literature Search) section lists various categories: '全文提供' (Full-text Provision), '西文期刊' (Western Journals), '中文期刊' (Chinese Journals), '日文期刊' (Japanese Journals), '俄文期刊' (Russian Journals), '外文学位论文' (Foreign Master's Theses), '中文学位论文' (Chinese Master's Theses), and '国外科技报告' (Foreign Technical Reports).

The '全文文献' (Full-text Literature) section lists: '美国生态学会期刊' (Journal of the Ecological Society of America), '美国运筹学和管理学研究协会期刊' (Journal of the American Society for Management Science and Operations Research), and '美国冷泉港实验室' (Cold Spring Harbor Laboratory).

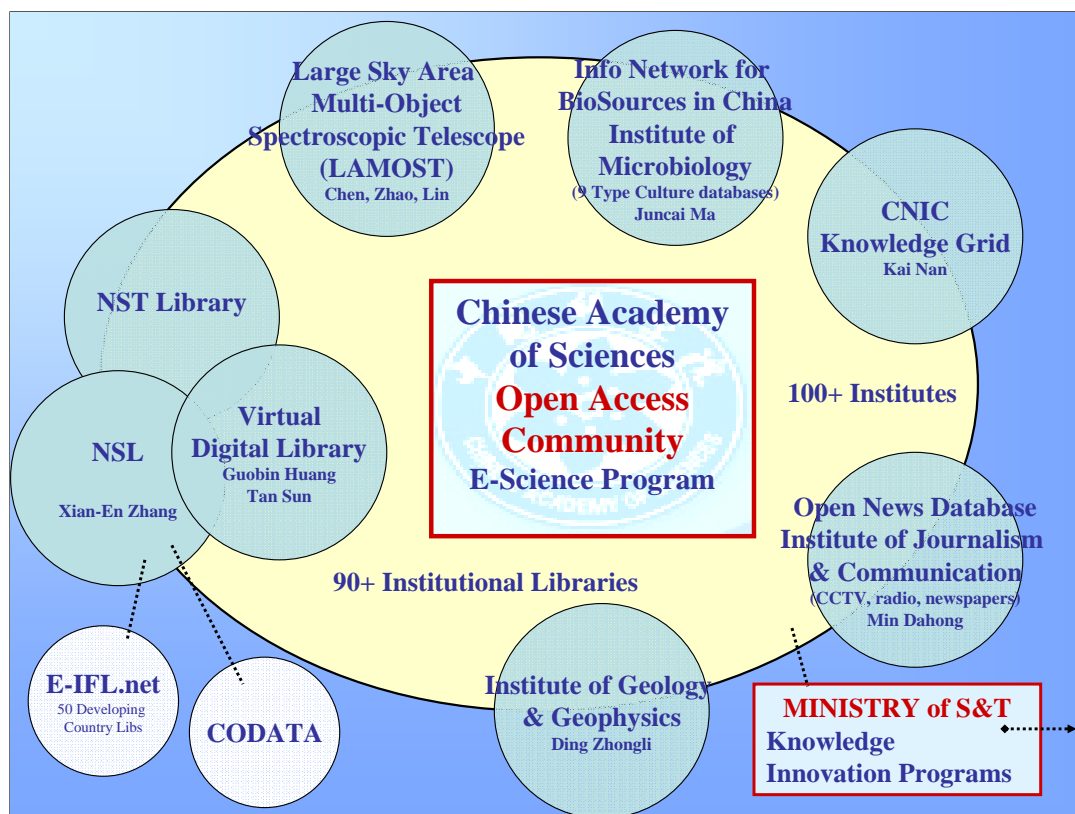
The '热点门户' (Hotspots) section lists: '海洋生物技术' (Marine Biotechnology), '可再生能源' (Renewable Energy), '水资源可持续利用' (Sustainable Use of Water Resources), and '节水农业' (Water-saving Agriculture).

On the right side, there are sections for '参考咨询' (Reference Services) with '实时咨询' (Real-time Consultation) and '非实时咨询' (Non-real-time Consultation), '网络导航' (Network Navigation) with '资源指南' (Resource Guide) and '分类导航' (Classification Navigation), and '预印本服务' (Preprint Services).

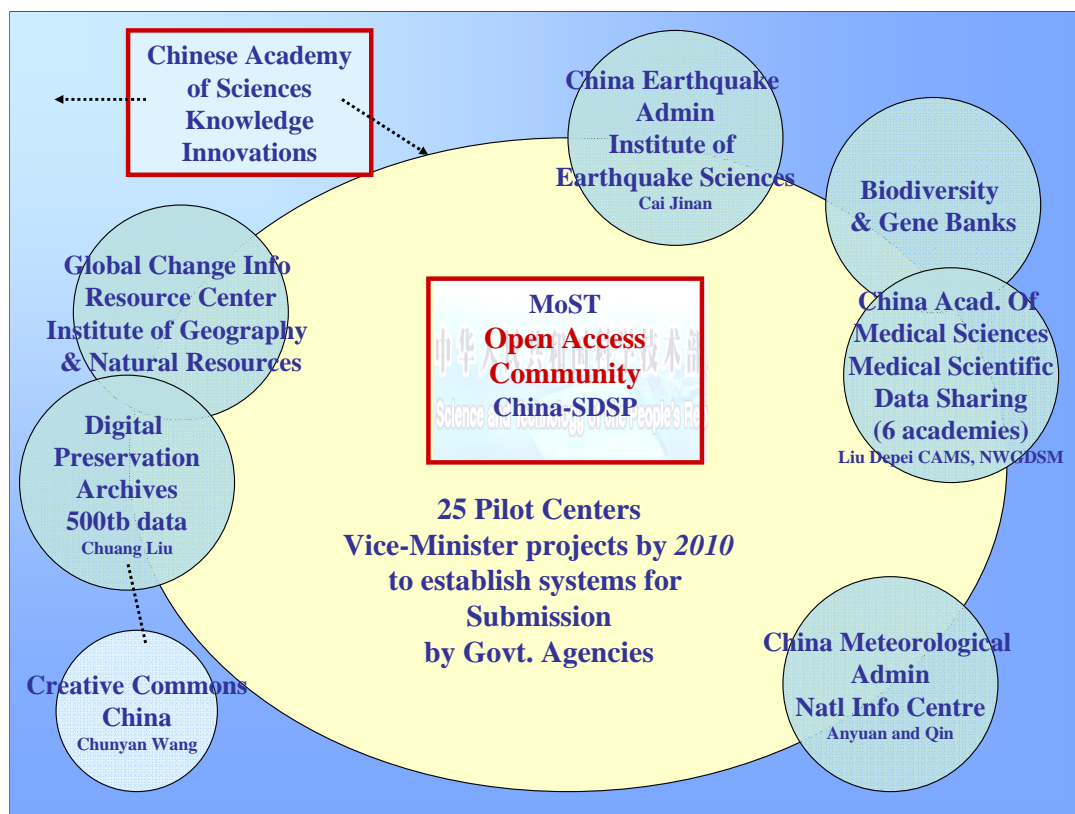
NSTL is a government funded virtual library created through the collaboration of major national level libraries and information research institutions.



CSTnet provides Technology network news and cooperative projects joining multiple institutions.



This drawing illustrates the Community of OA from the Chinese Academy of Sciences-Over 100 institutes and over 90 libraries; Dr. Zhang's efforts also extend to the e-IFL net of 50 developing countries digital collections and the CODATA efforts for worldwide sharing of scientific knowledge. I have included the contact names for some of the major scientific database systems if you have any interest. The intersection of the CAS and the Ministry of Science & Technology...



Leads to the SDSP efforts at MoST and the community of open, shared database systems..

In conclusion, we have Vice-Minister Chang's predictions for established systems by 2010.

*Thank you very much!*

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