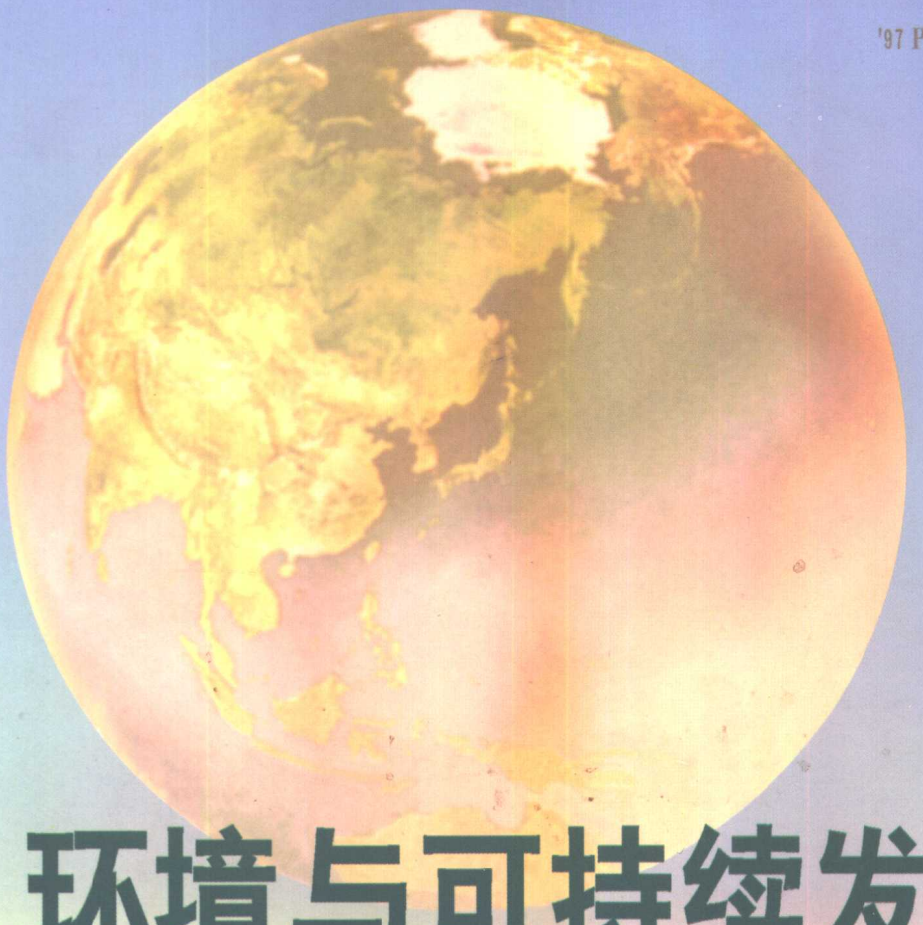
中日友好环境保护中心
1997年论文集

'97 Paper Collection of the Sino-Japan
Friendship Centre
for Environmental Protection



环境与可持续发展

ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

张 坤 主编
Chief Editor Zhang Kun

气象出版社

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Environment and Sustainable Development

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内 容 简 介

中日友好环境保护中心是国家环境保护总局直属的综合性研究、管理执行机构，是国家环境保护总局在科技、信息、政策研究方面的技术支持系统，同时也是实施国际环境技术合作和开展国际交流的窗口。本论文集汇集了中日友好环境保护中心1997年在各个领域的研究和工作成果，反映了该中心在环境科学研究及应用、环境政策研究、环境技术支持和管理服务等方面所取得的成绩。

本文集可供国内外同行进行学术交流，也可供环保科技、管理人员以及大专院校师生参考。

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《环境与可持续发展》编委会

前　言

中日友好环境保护中心(以下简称"中日中心")是利用日本政府无偿援助资金,中日两国政府合作建设的国家重点环境保护项目,于1996年5月5日建成投入使用。中日中心建筑面积34000平方米,建有科研实验楼、国际会议厅、专家招待所、学员宿舍、餐厅、动力能源楼等。中日中心拥有各种研究、实验设备3000余台件,有一流的环境分析测试仪器,收集处理环境信息的计算机系统,防治大气、水质、固体废弃物污染的模拟实验装置,开展宣传教育的音像制作设备。

中日中心是国家环境保护总局的综合性研究、管理执行机构,是实施国际环境技术合作和开展国际交流的窗口。下设五部一室一所,即环境信息部、环境战略和政策研究部、环境技术交流与公共教育部、开放实验室、公害防治技术部、环境监测技术部、国家环境保护总局标准样品研究所。前四个部门,又分别是国家环境保护总局信息中心、国家环境保护总局环境与经济政策研究中心、国家环境保护总局宣传教育中心和国家环境分析测试中心。另外,还有挂靠机构国家环境保护总局废物进口登记管理中心和中国环境管理体系认证机构认可委员会秘书处、中国认证人员国家注册委员会环境管理专业委员会秘书处。

中日中心职工人数随着业务扩展逐年增加,截至1997年止,有职工259人。其中,工程师以上的科技人员有147人,包括65名高级研究人员。

《环境与可持续发展(1997年论文集)》是中日中心1997年论文汇编,共收入论文95篇。论文分五个部分,即环境政策、全球环境、环境科技、环境管理及其他。

论文中,有国内外关注的环境政策和全球环境问题研究,如《联合国气候变化公约》京都会议的中国对案、合作解决亚洲地区城市环境问题、中国可持续发展的环境对策、环境与贸易关系等方面的课题研究,以及海洋、农业、林业、乡镇企业、环保产业等领域的环境经济政策研究。

论文中,有环境污染防治技术的研究,如城市垃圾处理、脱硫技术、纳米技术等课题研究;有分析测试技术研究,如大气酸雨中污染物,水中总氮、汞、铍以及固体废渣中污染物等的分析测试研究。

论文中,有环境标准样品的研制专题,如苯系物、二氧化硫、多环芳烃、铍等标准样品的制作研究。

论文中,有开展国际环境技术合作的经验探索,有环境管理、环境教育、环境宣传等方面的工作报告,以及环境与社会主义精神文明建设方面的课题研究。

本论文集反映了中日中心广大科技人员1997年为改善我国环境质量、开展国际环境技术合作所取得的成果,包含的研究内容广泛,有的课题研究达到了国内领先水平。

本论文集中未包括中日中心公害防治技术部、环境监测技术部的研究论文。

本论文集在编辑过程中,得到许多同志的热情支持与帮助,在此一并表示谢意。

由于时间仓促,还有一些论文未能编辑进本文集,而收录入该集的论文中有的也存在着不足之处,欢迎批评指正。

编者

1998.2.23

Preface

The Sino-Japan Friendship Center for Environmental Protection (hereinafter referred to as the "Sino-Japan Center") is a key national environmental project with the aid given by Japanese government and co-construction by the two governments. Put into use on May 5, 1996, the Sino-Japan Center has a research & lab building, an international convention hall, a guesthouse for experts , accommodations with a dinning hall for trainees, and a power and energy building with a total floor of 34 000m^2. The Sino-Japan Center is equipped with a variety of over 3 000 research and experiment facilities, including first-rate environmental monitoring and analysis equipment, computer system for collecting environmental information data, simulation experimental instruments for prevention and control of air , water and waste pollution, for making audio-video products for public education.

The Sino-Japan Center is an organization combining research, management and implementation which is directly affiliated to the National Environmental Protection Agency, China (NEPA). It serves as an excellent link for international exchange. The Center consists of five Departments, one Division and one Institute, i. e. Department of Environmental Information, Department of Environmental Strategy and Policy Research, Departmdent of Environmental Technology Exchange and Public Education, Open Laboratory, Department of Public Hazards Prevention and Control Technology, Department of Environmental Monitoring Technology, and Sampling Research Institute of NEPA. The first four departments listed above are in fact four divisions under NEPA-named respectively the Information Center, Policy Research Center for Environmental and Economy, Public Education Center and National Environmental Analysis and Monitoring Center affiliated to NEPA.

The number of staff has been increasing. Till the end of 1997, there were 259 employees, of which 147 are researchers with title above engineer including 65 senior researchers.

Environmental and Sustainable Development (Academic Paper Collection' 97) is a compilation of academic papers from Sino-Japan Center of 1997. It gathered 95 papers including five parts, i. e. Environmental Policy, Global Environment, Environmental Science and Technology, Environmental Management and others.

This Collection includes some hot issues like environmental policy research and global environment. It contains such contents as China's countermeasure to attend Kyoto Conference on Framework Convention on Climate Change, how to deal with urban environmental problems within Asia area, environmental policy for China's sustainable development and research on the relationship between environment and trade. It also refers to environmental economic policy research for such sectors as ocean, agriculture, forest, township and village enterprises and environmental protection industry .

Some papers reflect research results on pollution prevention and control technologies, e.

g. municipal solid waste disposal, desulfurization and millimicron technology, and analyzing and testing method for pollutants of acid rain, total nitrogen, mercury and beryllium in wastewater, and pollutants in solid waste.

Papers about preparation and research on environmental standard samples, such as benzene and its derivative, sulfur dioxide and beryllium, are also included in the Paper Collection .

The Paper Collection also contains such contents and experience exploitation for international cooperation of environmental technology, environmental management, environmental publicity and the relationship between environmental protection and the construction of socialist spiritual culture.

This Paper Collection reflects the success achieved by the staff of Sino-Japan Center for the improvement of China's environmental technology. It consists of broad contents and some research results have reached the first rank in the nation.

The Collection doesn't include the papers from the Department of Public Hazards Prevention and Control Technology and the Department of Environmental Monitoring Technology.

Great support and assistance are given during the compilation of the Collection, here we'd like to express our gratitude to them all.

Due to the time limitation, some papers have not been able to be included in this Collection, and for our knowledge limitation, some papers in this Collection may have imperfections. Criticism is welcomed.

The Compiler
February 23, 1998

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