

Preface

After the satisfactory finishing of 2008 Beijing Olympic Games, in the moment when the reform and opening policy has been implemented for 30 years in China, the Fourth World Congress on Maintenance, which is hosted by CAPE, ABRAMAN and FFMMS, is held in Haikou city, Hainan province of China on November 23-26th, 2008. This is the first times to hold the international maintenance conference in China. Homochronously the Proceedings of the Fourth World Congress on Maintenance is published, meanwhile the joint declaration on development trend of global maintenance is signed by the international representatives.

The Fourth World Congress on Maintenance is not only the global professional conference in the field of plant management, maintenance and remanufacturing with the high standard, large scale and extensive impact, but also the important platform to show the worldwide development and achievements of plant engineering, and to enhance the core competitive power. According to the current and the future's maintenance development trend, the theme of the congress is defined as Progress, Innovation and Sustainable Development of Plant Maintenance and Management. In the meantime, by virtue of the maintenance development around the world, and the difficulties such as energy-saving, environmental-protecting and safety during the international economic construction, 8 sub-themes are set up in the congress, including: 1) Maintenance strategy and management, 2) Green maintenance and remanufacturing, 3) Dependability, 4) repair techniques, 5) Energy-saving, 6) Maintenance information and knowledge management, 7) Health, safety and environment, 8) Training, qualification and certification.

In the Proceedings of the Fourth World Congress on Maintenance, not only 14 plenary speech papers, but also more than 250 manuscripts, which are carefully chosen from about 400 manuscripts submitted by the authors from more than 30 countries, are included. They are published in disks and paper printings with Chinese and English language respectively. The proceedings contains three parts: preface, plenary speech paper and sub-theme paper, representing the uptodate achievements on management, maintenance and remanufacturing of plant engineering around the world, reflecting the trend and rule of the plant maintenance industry, and takes the very important role in promoting the development of plant management, maintenance and remanufacturing.

The publication of Proceedings of the Fourth World Congress on Maintenance is passionately supported by CAPE, ABRAMAN and FFMMS, and is concretely helped by National Key Laboratory for Remanufacturing, Beijing Information Science & Technology University, Beijing University of Technology, Wuhan University of Technology, Hainan Association of Plant Engineering. The sincere acknowledgement is dedicated to them.

Mr. Ma Yi, the chairman of this congress, president of CAPE, former vice director of National Economy Commission and National Planning Commission, has made a lot of plan for the conference preparation when he was taken ill. He gives an

important contribution to the conference's success.

We are grateful to the financial support from NSFC and lots of enterprises around the world, and the sustenance from the Key Project (50735006) of NSFC.

We give the sincere thanks for Division of Mechanical and Vehicle Engineering of Chinese Academy of Engineering, Chinese Mechanical Engineering Society, China Construction Machinery Society, Daqing Oilfield Incorporated Company, and many thanks for Hainan province government, Development and Reform Office of Hainan province, Council for the Promotion of International Trade of Hainan province, Haikou city government, Hainan University.

We are in acknowledgement of the high effective conference preparation from Hainan Association of Plant Engineering, the contributions from the relative units and friends, the active participation of authors and delegates worldwide, the selfless dedication from the volunteers, and the personal staff's hard work from the Executive Committee, Academic Committee and Organization Committee of Congress.

Owing to the large manuscripts' quantity, wide speciality, complicated editing and limited time, there must exist the errors in the proceedings, we pure-heartedly welcome your criticism and help.

Executive Committee of the Fourth World Congress on Maintenance

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