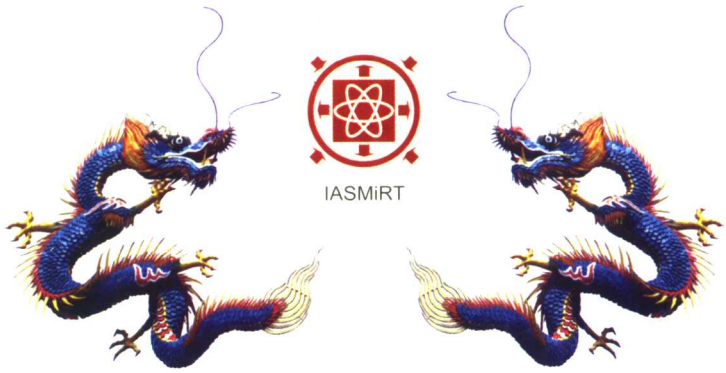
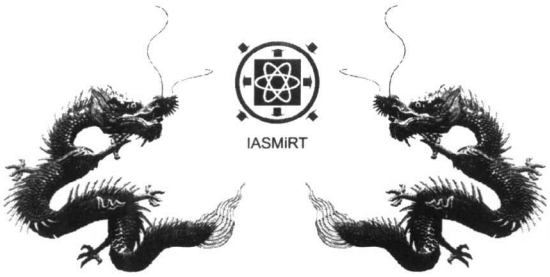


STRUCTURAL MECHANICS IN REACTOR TECHNOLOGY

EDITORS

Yu ZHOU
Suyuan YU
Yang XU

Atomic Energy Press



PROCEEDINGS OF 18TH INTERNATIONAL CONFERENCE ON STRUCTURAL MECHANICS IN REACTOR TECHNOLOGY

SMiRT 18

BEIJING FRIENDSHIP HOTEL
Beijing, China
August 7-12, 2005

EDITORS
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Suyuan YU
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International Association for Structural Mechanics in Reactor Technology (IASMiRT)
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Preface

After traveling alternatively in Europe, America and Asia every other year for more than thirty years, SMiRT Conferences, for the first time, come to China. This great event coincides with a new epoch in Chinese nuclear industry. The significance is far beyond what it appears to be.

While "nuclear" is still associated with catastrophe or hazard, its increasingly important role has been gradually recognized by the public. Fifty years have passed since Eisenhower first put forward the concept of "atomic for peace". With the passage of time, nuclear industry has been fulfilling its commitment to the blessing of human beings, alleviating energy shortage, offering access to those who are in need. Despite this, its development is not as what the optimists expect. The nuclear industry has experienced the thorny times. The stagnancy, even the decline of the industry, is still fearful. However, as human being has ushered into a new millennium, the concern about the sustainable development of the environment we live in makes us take a more rational look at nuclear energy. It is up to us to tap the potentials of nuclear energy.

The development of nuclear industry owes a lot to the scientists and engineers. Their pursuit of originality and innovation makes them never cease the efforts to create miracles. Their frontier work gives birth to the novel ideas and new concepts which shape the nuclear development in the future.

That is why we are here in China, a country determined to give nuclear energy more shares in the energy mix and await nuclear economy. Based on the seven hundred abstracts submitted from more than forty countries, the conference selected about five hundred full papers from both academic institute and industry. Presentations for these papers will be organized in thirteen Divisions, one hundred and one sessions and two workshops for five days. Besides, three post conference seminars are held in Shanghai, Chengdu and Vienna. SMiRT18 will take this opportunity to offer a forum for free discussion.

The time has presented the opportunities to us. To be or not to be, that is a question, but in taming the shrew, we should have full confidence in ourselves.

As the ancient Silk Road opened a door to the west, SMiRT 18 expects to draw the scientists and engineers worldwide closer. Hope you enjoy your stay in Beijing.

Yours sincerely

Suyuan YU
President of IASMiRT
Chairman of SMiRT 18
August 8, 2005

INTERNATIONAL ASSOCIATION FOR STRUCTURAL MECHANICS IN REACTOR TECHNOLOGY (IASMiRT)

The International Association for Structural Mechanics in Reactor Technology (IASMiRT) was founded in Berlin in 1971 as a registered non-profit international scientific and engineering society. It sponsors biennial international conferences on Structural Mechanics in Reactor Technology (SMiRT) and related post-conference seminars.

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SMiRT 18 is held from August 7 through 12, 2005 in Beijing at the Beijing Friendship Hotel, the People's Republic of China. It follows 17 successful biennial conferences organized in major cities around the world.

The SMiRT conferences bring together scientists and engineers who deal with all aspects of structural mechanics applied to buildings and components in nuclear power plants and facilities.

SMiRT 18 has 13 divisions representing specific areas. It features plenary and keynote lectures, workshops, and about 500 presentations, in which a comprehensive coverage of important topics is involved. All abstracts consist the proceedings and the full-length papers are collected in one CD attached to the proceedings.

Three post-conference seminars are held in Shanghai, Chengdu and Vienna with specific subjects.

Previous SMiRT Conference

1st	Berlin	1971	Thomas. A. Jaeger
2nd	Berlin	1973	Thomas. A. Jaeger
3rd	London	1975	Howard Gott
4th	San Francisco	1977	Bruno A. Boley
5th	Berlin	1979	Thomas A. Jaeger
6th	Paris	1981	Jean Rastoin
7th	Chicago	1983	Stanley H. Fistedis
8th	Brussels	1985	Sergio Finzi
9th	Lausane	1987	Folker H. Wittmann
10th	Anaheim	1989	Asadour H. Hadjian
11th	Tokyo	1991	Heki Shibata
12th	Stuttgart	1993	Karl F. Kussmaul
13th	Porto Alegre	1995	Jorge D. Riera
14th	Lyon	1997	Michel Livolant
15th	Seoul	1999	Sung Pil Chang
16th	Washington, DC	2001	Ajaya Kumar Gupta
17th	Prague	2003	Stanislav Vejvoda

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