



# Ceramics capital opens trade fair

By YUAN HAO

The Ninth China (Zibo) International Ceramics Exposition opens for business on September 6. The event is once again taking place in Zibo, a city in the eastern Shandong province long renowned as the “capital of ceramics” for its associations with the porcelain and ceramics industry. This year the four-day event is expected to attract delegates from across the world.

Liu Huiyan, Party secretary of the Zibo municipal committee, said: “The ceramics industry does not only embody traditional Chinese civilization, but also now embraces new materials and techniques. Porcelain has made Zibo famous at home and abroad.”

In the 1970s, Zibo ceramics were frequently chosen as gifts to foreign governmental dignitaries and were frequently used at high profile central government functions.

Most memorably, the “Chinese Dragon”, a dragon-motified ceramic teaset, specially designed by craftsmen in the

city to mark the 50th national day back in 1999, was universally feted when it made its commemorative debut at a state banquet in the Great Hall. Since then, the teaset – along

**Design and innovation are essential for the sustained growth of the ceramics industry.**

LIU HUIYAN  
Party secretary of the Zibo municipal committee

with many other exquisite items of porcelain tableware from the city – has frequently been the centerpiece at state banquets.

President Hu Jintao and his predecessor, Jiang Zemin, both sent Zibo-made porcelain as gifts to their US counterparts. A number of other overseas leaders have also had their state visits commemorated with a gift of Zibo pottery. To date,

more than 60 ceramic sets, totaling some 30 million individual Zibo-made porcelain items, have been selected as state gifts or for use in the central government. More than 600,000 Chinese Dragon cups alone have been ordered by government ministries.

With the looming 60th anniversary of the establishment of New China, Zibo-sourced ceramics have once again been officially designated by the State Council as approved gifts for the National Day festival celebrations.

Their high artistic value has seen a number of items of Zibo-made chinaware installed in the collections of several leading museums and galleries. These include the Shenyang Imperial Palace Museum, the Art Institute of Chicago and the Canberra Museum and Gallery.

Zibo’s ceramic connections date back more than 10,000 years, according to discoveries made at an archeological dig in the Bianbian Cave in Yiyuan, one of the counties adjacent to the city. By the time of the Three Kingdoms (AD 220-280),



Zibo

had already become the most important ceramics center in northern China.

Its prestige continued to grow, with the Song Dynasty (960-1279) proving to be the heyday of the city’s ceramics business. Despite some decline in its fortunes, by the time of the mid-Qing Dynasty (1644-1911), thousands of people were still involved in porcelain production in the city. Today, visitors to the city may still view 10 well-served ancient kiln sites.

Despite its historical renown and its long tradition of handing down time-honored skills from generation to generation, the city’s craftsmen have no inclination to wallow in the past. Instead, they continuously experiment with the use of new materials and innovative technologies in order to improve the quality of Zibo’s porcelain production.

Commenting on this commitment to embrace change, Liu said: “Design and innovation are essential for the sustained growth of the ceramics industry. Over countless years of continuing effort, Zibo chinaware workers have developed various new materials, ranging from soapstone (steatite) to high-purity quartz and synthetic bone. Only through this process of continuous renewal has the city maintained its leading position in the porcelain industry.”

In terms of recognition, the city’s soapstone and high-pu-

rity quartz china won third prize in the National Creation and Invention Awards, whilst its synthetic bone china secured the second prize in the National Technological Innovation awards, the highest accolade the Chinese ceramics industry has received since 1949.

The city’s innovative steatite products were awarded the gold medal at an international ceramics expo held in Munich in southern Germany, the first gold medal that Chinese ceramic art has won abroad since the founding of New China.

Recent years have seen hi-tech porcelain products introduced in a number of sectors, including the aerospace, defense and electronic information industries. This has opened up a whole new raft of opportunities for the ceramics business.

At present, the city is home to some 300 ceramic companies with more than 70,000 employees. With at least 10,000 different kinds of porcelain products being produced every year, the city generates an annual porcelain output of 858 million items, with a turnover of more than 8 billion yuan.

The city’s ceramics and construction materials market has annual sales of more than 20 billion yuan and is one of the nation’s most renowned center for ceramic transactions.

Internationally, the city’s ceramic output is now exported to more than 10 countries and regions, notably South Korea, Japan, Middle East and Africa, as well as Hong Kong and the Taiwan province. During 2008, the city’s ceramic export earnings were \$200 million, a year-on-year increase of some 17.34 percent.



Overseas delegates peruse new porcelain products at the Zibo ceramics show.

Ju Chuanjiang

## Material innovation rejuvenates ancient industry

By JU CHUANJIANG AND JI YUAN

The rapid development of innovative materials is giving a new lease of life to one of China’s most antique production centers – Zibo, a city that has been the hub of China’s ceramics industry for more than 10,000 years.

Outlining the significance of the changes, Liu Huiyan, Party secretary of the Zibo municipal committee, said: “Zibo’s innovative use of new materials is the sign of huge progress and has driven the development of the city’s emerging hi-tech industry.”

As part of an initiative to push back the boundaries of the ceramic sciences, the China (Zibo) International New Material Technological Forum was launched in 2002.

Focusing on innovations in materials development, it has been held annually ever since.

The forum provides a platform for sharing the latest developments in technical innovation and has proved a huge boost for both the city’s economic growth and its international reputation.

A large number of academic and industry professionals, from at home and abroad, now make an annual pilgrimage to eastern China to attend the event.

Due to their efforts and those of several scientific research institutes, 37,000 technological projects have been initiated over the past seven years.

These cover a vast array of new materials-related fields, including ceramics, pharmaceuticals, biotechnology, electronic information and ad-

vanced manufacturing.

As a direct result of initiatives stemming from the forum, 3,507 technological cooperative projects have now been established in Zibo, representing a total investment of 35.12 billion yuan.

By the end of 2008, the number of hi-tech enterprises in the city had risen to 408, up from 138 seven years ago – a growth of an astonishing 295.65 percent.

Last year, these projects generated 178.43 billion yuan in industrial output value, contributing more than one third of the city’s total.

A total of 17 academics from the Chinese Academy of Engineering and the Chinese Academy of Sciences have been employed by the city government as advisers.

And academicians that have set up research and develop-

ment centers and work stations in Zibo now number 18. They have signed 198 cooperative projects with the city and helped solve some 840 technical problems.

A number of the successful projects in the city have received national recognition, including the virus inactivation blood transfusion filter. Conceived and developed by the Zibo Zhongbaokang Medical Equipment Co Ltd and professor Tian Bo, it has now been designated as a national hi-tech project.

In addition to its retinue of distinguished academics, the city is also home to 390 scientific service agencies and more than 300 post-doctoral mobile research centers, with 1,700 professors providing part-time support for local business.

During his June inspection

tour of the Dongyue Group, a local company operating in the eco-friendly materials and clean energy sector, Premier Wen Jiabao said: “This company has enormous prospects and we should value, nourish and support such businesses for their work in the renewable energy, new materials and environmentally friendly, energy-saving technology sectors.”

Zibo has won a string of honors for its outstanding achievements in technological innovation. It has long been on the list of China’s innovation-focused cities and has been designated as one of top 50 cities for its comprehensive strength in innovation. It has also been acknowledged by the Ministry of Science and Technology as one of the country’s key pump and ceramics industry centers, under the terms of the Torch Plan, a national hi-tech program.



Hi-tech high returns: a trained technician at work in Shinva Medical’s Zibo facilities.

By YUAN YUE

The hi-tech industry in Zibo, a prefecture level city in eastern China’s Shandong province, demonstrated robust growth throughout 2008. The sector generated more than 178 billion yuan in annual industrial output value, accounting for some 34 percent of the city’s total.

The new materials sector contributed 58 percent of the city’s total hi-tech industrial output value last year, up to more than 103 billion yuan, establishing

it as one of the city’s core economic contributors. Behind this boom lies a huge investment into research and development (R&D) in this sector.

The city now houses 138 engineering technological centers at provincial level and above, with seven of them operating at a State-level. In the new materials research field alone, 84 engineering centers are operational, including five State-level, 53 provincial-level and 11 post-doctoral centers. The number of hi-tech companies currently registered is 93.

Through years of continuous effort, a number of companies and institutions have developed several proprietary technologies and products. The local ceramics industry, for instance, has been granted more than 200 patents. Hi-tech ceramics are now widely used across a range of area, notably in the aerospace, defense industry and nuclear energy sectors.

Finding success in an entirely different sector is the locally-based Jinjing Group. Its state-of-the-art glass products have been specified for use

in Tibet-bound trains and in a number of Beijing Olympic facilities, including the Bird’s Nest and the Water Cube. It has also been widely used in a number of other landmark buildings at home and abroad.

To date, the city has to its credit more than a thousand technological breakthroughs and creative successes. Among these, 13 have won national awards for technological progress and 148 have been honored with provincial awards.

Currently, local hi-tech companies and research in-

Schedule
<b>Opening Ceremony</b> Time: Morning of Sept 6th Venue: Zibo International Convention & Exhibition Center
<b>Major activities for the expo</b> ■ Ceremony for launch of authorized regional brand: “Capital of Ceramics” Time: Sept 7 Venue: National Ceramics and Fireproof Material Quality Supervision & Inspection Center ■ 2009 China (Zibo) Ceramics Product and Technological Innovation Development Forum Time: Sept 7 Venue: National Ceramics and Fireproof Material Quality Supervision & Inspection Center ■ The 5th World Ceramics Purchase Convention & China Building Material Circulation Forum Time: Sept 6-9 Venue: Zibo International Convention & Exhibition Center ■ China (Zibo) Fair for Trade and Economic Cooperation Time: Sept 5-7 Venue: Zibo Hotel ■ The First Zibo Culture and Art & Shandong Classic Rosewood Furniture Expo Time: Sept 6-7 Venue: Zibo International Convention & Exhibition Center ■ Unveiling Ceremony for Zhang Shouzhi’s Studio & International Ceramics Design Summit Time: Sept 6 Venue: China Ceramics Hall ■ “Capital of Ceramics” Series Exhibition Time: Sept 6-9 Venue: Zibo International Convention & Exhibition Center ■ China Ceramics Hall’s Exhibition Time: Sept 6-9 Venue: China Ceramics Hall ■ Zibo Unique Skill Live Show Time: Sept 6-9 Venue: Zibo International Convention & Exhibition Center ■ Ceramics Expo Galleries—Previous Ceramics Expos Retrospective
<b>Activities for the 8th China (Zibo) New Material Technological Forum</b> ■ Scientific and technological academics and experts’ tour around Zibo Time: Sept 6—8 Venue: Century Hotel, concerning enterprises ■ China (Zibo) International Scientific and Technological Investment Fair Time: Sept 6-8 Venue: International Convention & Exhibition Center ■ Resource and Environment Projects Fair of China’s Agenda 21 Time: Sept 5—8 Venue: Century Hotel, Zibo International Convention & Exhibition Center ■ China (Zibo) Marine Pharmaceuticals and Biological Products Fair Time: Sept 6-8 Venue: Century Hotel, Zibo International Convention & Exhibition Center ■ Scientific and Technological Projects Presentation: The New Materials Base of the Chinese Academy of Sciences Time: Sept 6-9 Venue: Zibo International Convention & Exhibition Center ■ Technological Innovation Service Platform Promotion Time: Sept 6-8 Venue: International Convention & Exhibition Center ■ SDUT Technological Projects Fair Time: Sept 6—8 Venue: International Convention & Exhibition Center ■ Unveiling Ceremony of SDUT Fine Chemicals and Catalytic Materials Lab Time: Afternoon of Sept 6 Venue: SDUT ■ Overview of Academics participating in previous China (Zibo) New Material Technological Forums Time: Sept 6-9 Venue: International Convention & Exhibition Center ■ Signing Ceremony of Cooperative Programs for Academics’ Tour & Fairs Time: Afternoon of Sept 8 Venue: People’s Hall of Luzhong Hotel
<b>The 9th China (Zibo) International Ceramics Expo</b>
<b>The 8th China (Zibo) New Material Technological Forum &amp; International Fair for Scientific and Technological Projects</b> <i>Date: September 6—9</i> <i>Venue: International Convention &amp; Exhibition Center Zibo, China</i>



## Surge in hi-tech sector fuels profit and patent boom for Zibo

stitutions are working on 612 technological projects at the provincial level and above, with one of them listed among the key items in the national scientific and technological program. The city’s total patent applications now number 23,343, with more than half of them having already been granted.

As a result of its demonstrative strength in technological innovation, the city has been designated as a center for the commercialization and industrialization of new materials,

biomedicines and advanced ceramics.

As one of the foremost production centers for new materials, the city’s production capacity of green refrigerants, plastic agents and fireproof fiber reportedly ranks as number one in Asia.

At present, a number of industries, especially those concerned with new materials, pharmaceuticals, biological technologies and electronic information, have grown into key sectors driving the city’s hi-tech industrial development.