A MAJOR ANNIVERSARY IS A NATURAL TIME TO PAUSE FOR REFLECTION. THIS YEAR, AS TWAS CELEBRATES ITS 30TH ANNIVERSARY, WE ARE CONSTANTLY AWARE OF HOW THE VISION AND HARD WORK OF ABDUS SALAM, THE FOUNDING MEMBERS AND HUNDREDS OF OTHER TWAS LEADERS AND FRIENDS HAVE MADE OUR ACADEMY A FORCE FOR GLOBAL SCIENCE. AT THE SAME TIME, WE ARE RENEWING OUR COMMITMENT, SETTING OUR GOALS AND CHARTING A COURSE INTO THE FUTURE.

Certainly the world has been transformed since TWAS's founding ceremony in Trieste. Italy. In 1983, the world population was 4.7 billion. Hundreds of millions of people were trapped in a paralysing and often deadly poverty. Salam and Mohamed Hassan were in a small international group talking about the transformative power of science and technology,

Honouring the past, focused on the future

but in those early years, the topic had scant visibility on the world agenda.

Eight years later, the end of the Cold War gave way to a glob-

al transformation. In ensuing years, new political and economic freedoms opened across much of the world; human mobility increased. The personal computer, the Internet and smart phones allowed access to information – to knowledge – unprecedented in human history.

We know well how China, India and Brazil seized the opportunities of a new era. Smaller nations, too, are using science and technology to drive development: Bangladesh, Rwanda, Tunisia and Chile are among the successes cited in the 2013 Human Development Report published by the United Nations Development Programme.

And yet, even with so much progress, profound challenges await us. The world population now is 7.1 billion, and according to some estimates it could pass 9 billion in 2043, as TWAS celebrates its 60th anniversary.

Globally, 81 nations are lagging in science and technology (S&T), more than half of them in Africa. Poverty itself keeps many of these countries from building research capacity; civil conflict, climate disruptions, poor governance and other factors too often compound the challenges.

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Still, I am hopeful. A number of new developments augur well for TWAS's work in the years ahead.

Leadership: With the start of 2013, we welcome Bai Chunli, an accomplished scholar in chemistry and nanotechnology, as the new TWAS president. Prof. Bai also serves as president of the Chinese Academy of Sciences (CAS), and his essay in this issue shows his ambitious vision and high standards for TWAS.

Education: Early 2013 brought two major PhD Fellowship agreements: Up to 140 earlycareer scientists per year from the developing world will travel to China for PhD study under the new CAS-TWAS President's Fellowship Programme. And the World Meteorological Organization (WMO) and TWAS will support up to 10 PhD fellowships a year focused on weather, climate and water-related hazards. TWAS now offers more than 500 fellowships per year.

Science Diplomacy: Nearly 50 high-level science and policy leaders from 12 nations convened recently in Budapest to explore the renewal of long-standing education and research networks linking Central Europe and the Southern Mediterranean. TWAS organized the roundtable with the Hungarian Academy of Sciences in collaboration with the Italian Ministry of Foreign Affairs and UNESCO.

Fund-raising: TWAS has begun an important new fund-raising effort, reaching out to members, governments, businesses, private foundations and others to support our programmes and endowment. This is a critically important moment for our work, and these new resources have a direct impact on building S&T capacity.

Communication: The TWAS Public Information Office has a new director: Edward Lempinen, a senior journalist and science communicator, who has strong experience in international science and science diplomacy. Cristina Serra, a veteran science journalist, has joined the PIO staff as a writer and liaison to the Italian news media.

Finally, as you may know, a measure approved at our General Meeting in China last year changed the Academy's name. We have begun the transition and henceforth we will be known as 'The World Academy of Sciences, for the advancement of science in developing countries'. Our mission will not change – we will continue to build science capacity and excellence in developing nations – but the new name reflects the ambitious global scope of our work.

New leadership, new ideas, new initiatives – this is the best way to honour our founders. As we celebrate our 30th anniversary, we're committed to continuing their work, matching the dedication and creativity that have helped TWAS to change the world.

WAS Executive Director

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(from top) TWAS Founder Abdus Salam; speakers at the 1983 meeting at the University of Trieste at which TWAS was founded as the Third World Academy of Sciences; founding ceremony, from left: Mohamed H.A. Hassan, Antonino Zichichi, Paolo Budinich; TWAS founding members at the University of Trieste ceremony.