




NEW MEMBERS, HIGH HONOURS

In 2014, the Academy elected 46 new fellows, announced 11 winners of the TWAS Prize, and selected two TWAS Medal lecturers for 2015.

 by Sean Treacy

NEW FELLOWS

Forty-six new TWAS fellows, elected at the 25th General Meeting in Muscat, Oman, bring the Academy's total membership to 1,148. The academy has also elected its first-ever members from Austria, the Central African Republic and Hungary.

There are 11 new fellows from China; 11 from India; five from Brazil; three from Taiwan, China; two from Austria; and two from Tanzania. Of the remaining 12, one each live and work in Argentina, Australia, the Central African Republic, Ecuador, Hungary, Japan, Kuwait, Oman, Trinidad and Tobago, Uruguay, Uzbekistan and Zimbabwe.

The new fellows are divided by scientific field as follows:

Agricultural Sciences

ABDURAKHMONOV, Ibrokhim [Uzbekistan]
DATTA, Swapan [India]
GROSSI DE SA, Maria Fatima [Brazil]
HAN Bin [China]
MUNNS, Rana [Australia]
OMAR ASEM, Samira [Kuwait]

Structural, Cell and Molecular Biology

CHARY, Venkata Ramana Kandala [India]

SALUNKE, Dinakar [India]
SHAHA, Chandrima [India]
TSAI Ming-Daw [Taiwan, China]

Biological Systems and Organisms

ALLEYNE, Trevor [Barbados/Trinidad & Tobago]
BRAHMACHARI Samir Kumar [India]
MAJUMDER, Hemanta K. [India]
MGAYA, Yunus [Tanzania]
RON, Santiago [Ecuador]

Medical and Health Sciences including Neurosciences

CORREA-OLIVEIRA, Rodrigo [Brazil]
CUNHA, Fernando Q. [Brazil]
ELGOYHEN, Ana Belén [Argentina]
GAO, George Fu [China]
MUTABINGWA, Theonest Kahangwa [Tanzania]
SALOTRA, Poonam [India]

Chemical Sciences

ALVES, Oswaldo Luiz [Brazil]
KURODA, Reiko [Japan]
LI Yadong [China]
PATI, Swapan Kumar [India]
TIAN Zhong-Qun [China]
ZHAO Jincai [China]

Engineering Sciences

AL-SULAIMAN, Sabah Ahmed Abdul-

Wahab [Oman]
CHEBIYYAM, Siva Ram Murthy [India]
CHENG Hui-Ming [China]
TAN Tieniu [China]

Astronomy, Space and Earth Sciences

FERESU, Sarah [Zimbabwe]
JIAO Nianzhi [China]
MIRABEL, Igor-Feliz [Uruguay]
ZHAI, Mingguo [China]

Mathematical Sciences

LI Ker-Chau [Taiwan, China]
N'GUEREKATA, Gaston Mandata [Central African Republic]
SRINIVAS, Vasudevan [India]

Physics

MUKHI, Sunil [India]
PÁLINKÁS, József [Hungary]
PIMENTA, Marcos [Brazil]
WU Yueliang [China]
ZEILINGER, Anton [Austria]

Social and Economic Sciences

KUAN Chung-Ming [Taiwan, China]
LUTZ, Wolfgang [Austria]
ZHANG Linxiu [China]

THE 2014 TWAS PRIZES

The 2014 TWAS Prizes, announced at the Academy's 25th General Meeting in Muscat, Oman, are awarded in the nine fields listed below. This year, there are 11 prize winners: two from Argentina; four from China; three from Taiwan, China; one from India and one from Malaysia. The prize winners include two women.

Each TWAS Prize carries a cash award of USD15,000. The winners will lecture on their research at TWAS's 26th General Meeting, slated for Angola in the autumn of 2015.

Agricultural Sciences

● ZHANG Fusuo of China, of the Centre for Resources, Environment and Food Security, China Agricultural University,



in Beijing, for work enhancing food production and reducing environmental damage.

Biology

- Marcelo RUBINSTEIN of the Department of Physiology, Molecular and Cellular Biology, Faculty of Natural Sciences at the University of Buenos Aires in Argentina, for work related to appetite, addiction and obesity.

Chemistry

- XIE Yi of the Department of Chemistry, University of Science and Technology of China, in Hefei, for her work in nanoscale chemistry.

Earth Sciences

- CHUNG Sun-Lin of the Department of Geosciences, National Taiwan University, in Taipei, Taiwan, China, for his work on plate tectonics and magma generation.

Engineering Sciences (shared)

- Viswanathan KUMARAN of Macronix International Co. Ltd. in Hsinchu Science Park, Hsinchu City, Taiwan,

China, for his work on soft-walled tubes and channels.

- LU Chih-Yuan of the Department of Chemical Engineering, Indian Institute of Science, in Bangalore, for his work on semiconductors.

Mathematics

- YUAN Yaxiang of the Institute of Computational Mathematics and Scientific/Engineering Computing, Academy of Mathematics and Systems Science, Chinese Academy of Sciences in Beijing, for his work on numerical methods for nonlinear optimization.

Medical Sciences (shared)

- Irene Oi Lin NG of the Department of Pathology, Queen Mary Hospital, in Hong Kong, China, for her work related shedding light on the nature of liver cancer.

- Tse Wen CHANG of the Genomics Research Center, Academia Sinica, in Taipei, Taiwan, China, for his work on a new therapy for severe asthma.

Physics

- Daniel DE FLORIAN the Department of Physics at the University of Buenos

Aires in Argentina, for his work on using particle colliders to produce Higgs bosons.

TWAS-Celso Furtado Prize in Social Sciences

- Rajah RASIAH of the University of Malaya, in Kuala Lumpur, Malaysia, for his work on the relationship between technology and economic development.

TWAS MEDAL LECTURES 2015

Two distinguished researchers have been selected to give TWAS Medal Lectures on their work next year at the Academy's annual General Meeting. The lectures are one of the organization's highest honours, featuring some of the most prominent accomplishments by elected TWAS members:

Hala El-Khozondar, a professor at the electrical engineering department of the Islamic University of Gaza.

She is recognized for her research on popular materials such as optical fibres and metamaterials, as well as polycrystalline materials – which are composed of small grains that are glued together by forces between atoms. Understanding polycrystalline materials is useful, for example, in improving metals and ceramics for industrial use. She was elected a member of TWAS in 2011.

Hans van Ginkel, a professor emeritus of Utrecht University in the Netherlands. He is a social scientist with special interest in societal uses for geographical knowledge, including urban and regional planning, public housing, housing markets and public administration. He has prepared and led debates on higher education and sustainable human development. He was elected a member of TWAS in 2005. ■