

# Winners of World Cultural Council awards announced – Award Ceremony to be held in Japan for first time

## **Science**

The winner of the **2019 Albert Einstein World Award of Science** is **Dr. Zhong Lin Wang**, Chair and Regents Professor, School of Materials Science & Engineering at Georgia Institute of Technology, USA.

The prize is awarded for **Dr. Wang's** pioneering and seminal contributions to the discovery, innovation and implementation of nanogenerators and self-powered systems. These innovations enable unprecedented new technologies for harvesting energy from the environment and biological systems, with applications in personal electronics, sensor networks, biomedical and healthcare devices, and environmental monitoring.

The jury also acknowledged the significant impact of his discoveries and breakthroughs, which have already inspired worldwide efforts in academia and industry towards a wide range of technological applications that will be of great benefit to humankind and the sustainable development of our society.

## **Arts**

The **2019 Leonardo da Vinci World Award of Arts** will be presented to Portuguese independent film producer, **Paulo Branco**.

This recognition is given for **Mr. Branco's** engagement with new views on cinematographic expressions and his dedicated commitment to cultivating intensive communication and activity between the different fields of culture, such as literature, fine arts and music.

It is a prize granted for his prolific and varied achievements in the dynamics of independent cinema, producing and coproducing with film directors from four continents, constantly open to new ideas, opening new paths and building bridges worldwide, as well as his dedicated commitment to bringing together different fields of culture, such as literature, fine arts and music.

# **The 2019 Award Ceremony**

This year the **World Cultural Council (WCC)** will celebrate its 36th Award Ceremony on Friday 4th October 2019 at **the University of Tsukuba**, Japan, in the framework of the **Tsukuba Conference**.

It will be a very special occasion for the WCC to hold its Award Ceremony within the frame of the Tsukuba Conference. Bringing together global leaders in the field of science, technology and innovation, the conference will engender opportunities for these to express their visions of the future and to meet potential partners for solving a diverse range of social issues.

As part of the programme, the WCC, in cooperation with **the University of Tsukuba**, organizes laureate lectures that create an opportunity for interaction between the community and the winners. These lectures will take place on Friday 4th October.

During the Award Ceremony, the World Cultural Council will grant special acknowledgements to young researchers or scholars from Japan who have achieved outstanding performance in science or the arts.

The ten promising young research leaders are: **Dr. Shinichi Enami**, Senior Researcher, National Institute for Environmental Studies; **Dr. Yasunori Ichihashi**, Team Leader, BioResource Research Center, RIKEN (Institute of Physical and Chemical Research); **Dr. Kazuhiro Ikeda**, Research Group Leader, Photonics System Group, National Institute of Advanced Industrial Science and Technology; **Dr. Yasunori Kikuchi**, Associate Professor, Institute for Future Initiatives, The University of Tokyo; **Dr. Masayuki Matsumoto**, Professor, Faculty of Medicine, University of Tsukuba; **Dr. Hiroyuki Miyauchi**, Senior Research Engineer, Building Research Institute; **Dr. Yuko Shimada**, Assistant Professor, Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance, University of Tsukuba; **Dr. Ken-ichi Uchida**, Group Leader, Spin Caloritronics Group, National Institute for Materials Science; **Dr. Yutaka Ushiroda**, Professor, High Energy Accelerator Research Organization and **Dr. Taiyo Yoshioka**, Researcher, The National Agriculture and Food Research Organization.

They will each receive a commemorative Diploma for their impressive work at such an early stage of their careers.

For further information please visit: https://tsukuba-conference.com/wcc/

## Winners' Achievements

**Dr. Zhong Lin Wang** received his Ph.D. in Physics from Arizona State University in 1987. Throughout his career, he has made seminal and pioneering contributions to developing new energy and sensor technology that are expected to change the world in the near future.

He is best known for the discovery and development of nanogenerators for self-powered systems and large-scale blue energy, an unprecedented technology for harvesting energy from the environment and biological systems, for applications in personal electronics, internet of things, biomedical devices, environmental monitoring and robotics. His innovations also provide a revolutionary approach for obtaining large-scale energy from daily life non-polluting sources with potential to harvest huge amounts of energy from ocean waves, aimed at solving the future energy needs of the world.

**Wang's** discovery and breakthroughs in developing nanogenerators have established the principle and technological road map for using mechanical energy for powering mobile sensors. He first showed that the nanogenerator originated from the Maxwell's displacement current and revived the applications of Maxwell's equations in energy and sensors. His recent understanding on the physics of triboelectrification solves a 2,600 year old science problem and establishes the foundation for triboelectric nanogenerators.

His research on self-powered nanosystems has inspired the worldwide efforts in academia and industry for harvesting ambient energy for micro-nanosystems, which is now a distinct discipline in energy science – nano energy.

Nanogenerators have the potential to revolutionize every corner of our life, ranging from the internet of things, to human-machine interfacing for robotics and artificial intelligence, implantable medical devices, health care, self-powered sensors for infrastructure monitoring and even environmental protection.

It is remarkable that his discoveries and inventions originate from innovative and creative unprecedented fundamental studies based on basic physical properties of materials and long-known theories, such as piezoelectricity and triboelectricity.

**Dr. Wang** has already published a remarkable number of peer reviewed papers 1,500 including 55 in Nature, Science and sister journals, and has an enormous impact on the nanotechnology community as measured by the number of citations (over 205,000) and has an H-index of 226, according to Google Scholar, June 2019. In addition to being a chair professor at Georgia Institute of Technology, he is also the director of Beijing Institute of Nanoenergy and Nanosystems.

Finally, **Dr. Wang's** personal qualities should not be overlooked. He has been described as a "natural leader, always very kind, inspiring, full of energy, with a positive impact on everyone collaborating with him."

### Paulo Branco

Born in Lisbon in 1950, **Paulo Branco** is a Portuguese independent film producer. Since 1979 he has produced or coproduced over 300 films, working with Portuguese and international directors from four continents, and often giving the chance of a screen debut to aspiring filmmakers who have gone on to become great cinematographers. His constant openness to new ideas and support for creative figures from all over the globe make him a truly unifying force, whose contribution to the enrichment of cinema is colossal.

According to John Malkovich, **Branco** is "possibly the most prodigious producer of art films in the history of cinema", while German director Wim Wenders describes him as "a producer of the kind that has almost altogether vanished: he cares for his films and invests himself personally." His work entails the arduous job of finding financing for arthouse films, described by Wenders as a "Herculean

task", but one that he successfully achieved, constantly providing alternatives to mainstream production.

**Paulo Branco** has promoted Portuguese and European cinema at international festivals, where he has also sat on the jury or been its president. Twenty-seven of his films have been included in the Official Selection at Cannes, while 48 have been presented at Venice Film Festival.

In his home country, he has also facilitated access to culture by distributing films and building cinema theatres. He is the Director and founder of the Lisbon & Sintra Film Festival, which he founded in 2007. Fostering dialogue between cinema, literature, music and the visual arts, this encounter supports reflection and debate on the great issues of our times. Every year **Paulo** welcomes some of the world's greatest film directors (such as Francis Ford Coppola, Bernardo Bertolucci, Pedro Almodovar), writers, actors, artists and musicians, among others. His commitment to independent cinema in Portugal has helped to bolster its position on the cultural map of the world.

During his 40-year career, **Branco** has been awarded numerous accolades for his work, including "Greatest European Producer" by the European Parliament in 1997, the "Gabriela Mistral Order" – the highest distinction in Chile in 1998, the first Premio Raimondo Rezzonico (The Best Independent Producer Award) at the Locarno Film Festival in 2002 and the Officier de L'Ordre des Arts et Des Lettres de la Republique Francaise, France, in 2004 and the CINEUROPA Award in 2014.

The work of **Paulo Branco** has made a huge contribution to furthering the aesthetic horizon of cinema, in Portugal and worldwide, as well as broadening the cultural formation of audiences and the public in general.

### **Related links:**

https://www.consejoculturalmundial.org

https://tsukuba-conference.com/wcc/