# INVITATION

## 34TH WORLD CULTURAL COUNCIL AWARD CEREMONY

## 8 NOVEMBER 2017

Universiteit Leiden
The Netherlands

WCC
WORLD CULTURAL COUNCIL

Discover the world at Leiden University

# Welcome

The World Cultural Council (WCC) is committed to the recognition of achievements in scholarship, creativity and altruism. It believes that science, education and the arts hold the key to the future of humanity and are the building blocks of culture.

It is a great honour for the WCC to celebrate its 34th Award Ceremony at Leiden University, the oldest university in the Netherlands and one of Europe's leading seats of learning. We are very pleased to return to the Netherlands, following the Award Ceremony held at Utrecht University sixteen years ago.

This small country is famous for its waterways and windmills, for its social conscience and its progressive, libertarian, environmentally sensitive lifestyle. We admire the truth-seeking spirit of great Dutch men and women in many fields of science and the humanities, such as Professor Ewine van Dishoeck, from Leiden University, who won the 2015 Albert Einstein World Award of Science for her work in the field of Molecular Astrophysics.

The motto of the University of Leiden, Praesidium Libertatis or Bastion of Freedom, captures the University's historical commitment to academic freedom – freedom of research, and freedom in teaching and learning. Today, Leiden is an internationally famous research-led university, which strives to create an environment in which academics and students have the opportunity to reach their full potential. According to its institutional plan, Leiden aims to promote "a safer, healthier, more sustainable and more prosperous world – locally, regionally and globally." The WCC admires and applauds the principles championed by Leiden and wishes it every success in this endeavour.

We are delighted to hold our Award Ceremony in such a beautiful, historic and inspiring location.

Colin Blakemore

**Professor Sir Colin Blakemore**
President
World Cultural Council

As Rector and President of Leiden University, I am so proud that the World Cultural Council has chosen our University as the venue for its award ceremony this year. It is therefore with great pleasure that I invite you to the 34th WCC award ceremony in Leiden.

It will be an honour to receive the award winners, all of whom have made exceptional achievements in science and the arts and whose work has had a significant positive impact on the cultural legacy of mankind.

At the event, the Albert Einstein World Award of Science and the Leonardo World Award of Arts will be conferred on eminent pioneers in their respective fields in recognition of their tireless efforts to advance human culture and well-being. Our University is delighted that two highly accomplished individuals will be honoured this year. Professor Omar M. Yaghi and Professor Russell Hartenberger truly deserve the awards being conferred on them. In addition, I am pleased that nine young scholars will receive special recognition on 8 November as part of the award ceremony. They have performed outstandingly in their respective specialist fields and are among the most promising early career researchers in the Netherlands as well as internationally. We believe it is important to recognise, encourage and give visibility to these talented scholars whose current work is breaking new ground. Not only does their research have a beneficial effect on society, but they are also excellent communicators, well able to convey their research findings to both the academic world and the general public.

As a venue, Leiden is a fitting setting for recognising the outstanding achievements of the recipients of these awards and celebrating the inspiration that they bring as role models for bringing academia and society closer together. In 2015, Professor Ewine van Dishoeck from our University, an expert in Molecular Astrophysics, was selected for the Albert Einstein World Award of Science for her contribution to understanding the universe at atomic level.

The Leiden ceremony will be attended by distinguished authorities, national and international, as well as the directors of the WCC. We are enthusiastic about this new partnership. It offers the wonderful opportunity to jointly disseminate our many shared values, such as excellence as a guiding principle in research, innovation and higher education; inspiring future generations by recognising extraordinary individuals and achievements; and embracing a vision of diversity and mutual respect with a view to creating a better world.

I look forward to seeing you all in Leiden on 8 November!

**Professor Carel Stolker**
Rector Magnificus and President
Universiteit Leiden

# The World Cultural Council

The WCC is an international organization, founded over 30 years ago with an initial membership of 124 distinguished scientists and scholars, university presidents and executives from the five continents, including several Nobel laureates.

Its mission is to promote a culture of tolerance, peace and fraternity by recognizing inspiring role models through its awards. These are the annual **Albert Einstein** World Award of Science and, every other year (alternately), the **Leonardo da Vinci** World Award of Arts and the **José Vasconcelos** World Award of Education. By these prizes, presented since 1984, the WCC hopes to bring attention to the positive steps being taken around the world to overcome today's many challenges.

The Award Ceremony is held in a different country every year, at a renowned university or academic institute. It also includes the presentation of Special Recognitions to a number of young researchers from the host university and country. Such ceremonies are a wonderful occasion for disseminating the remarkable achievements of the awardees and acknowledging the inspiration they provide in terms of academic excellence and positive impact on society.

Universities as academic institutions have the privilege and responsibility of serving their students and the whole of humanity, and ensuring a sustainable future for our planet. It is part of our duty to work together with dedication, discipline and enthusiasm to bequeath a better world to the coming generations.

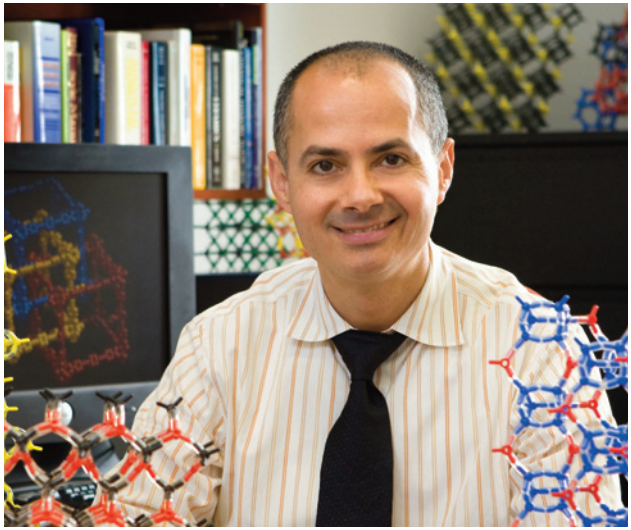

The Albert Einstein World Award of Science was created as a way of acknowledging scientists who have accomplished breakthrough achievements in science and technology, the service which each has made to mankind, and his/her qualities as a role model inspiring future generations to pursue science to forge a better world. The prize is awarded every year.

The Leonardo da Vinci World Award of Arts may be conferred upon an eminent artist, sculptor, writer, poet, cinematographer, photographer, architect, musician or other performing artist, whose work makes a substantial worldwide contribution to the progress of culture and the transmission of skills to younger generations. The award seeks to foster art in all its expressions. The prize is awarded every second year.

# Award Ceremonies

The WCC has been holding its Award Ceremonies since 1984. Each ceremony takes place in a different country, with a renowned university or institute acting as host. The Award Ceremonies have the dual function of encapsulating an international community of outstanding scientists, educators and artists while acknowledging the ethical dignity of the awardees.

2017. Leiden University, Leiden, The Netherlands
2016. Riga Technical University, Riga, Latvia
2015. University of Dundee, Dundee, UK
2014. Aalto University, Otaniemi, Finland
2013. Nanyang Technological University, Singapore, Singapore
2012. Aarhus University, Aarhus, Denmark
2011. Tartu University, Tartu, Estonia
2010. Universidad Autónoma del Estado de México, Toluca, Mexico
2009. University of Liège, Liège, Belgium
2008. Princeton University, Princeton, USA
2007. Universidad Autónoma de Nuevo León, Monterrey, Mexico
2006. Instituto Politécnico Nacional, Mexico City, Mexico
2005. Universidad Autónoma Agraria Antonio Narro, Saltillo, Mexico
2004. University of Liège, Liège, Belgium
2003. University of Helsinki, Finnish Society of Sciences and Letters and The National Archives of Finland, Helsinki, Finland
2002. University of Dublin, Dublin, Ireland
2001. Utrecht University, Utrecht, The Netherlands
2000. University of the Witwatersrand, Johannesburg, South Africa
1999. Norwegian University of Science and Technology, Trondheim, Norway
1998. Victoria University of Wellington, Wellington, New Zealand
1997. Chulalongkorn University, Bangkok, Thailand
1996. University of Oxford, Oxford, UK
1995. INBA, CONACULTA, Palacio de Bellas Artes, Mexico City, Mexico
1994. CODATA/ICSU/UNESCO, Chambéry, France
1993. Presidencia de la República, Mexico City, Mexico
1992. National Research Council, Ottawa, Canada
1991. Australian National University, Canberra, Australia
1990. Eidgenössische Technische Hochschule, Zurich, Switzerland
1989. Massachusetts Institute of Technology, Cambridge, USA
1988. Instituto Politécnico Nacional, Mexico City, Mexico
1987. Universität Heidelberg, Heidelberg, Germany
1986. Universidad de Guadalajara, Guadalajara, Mexico
1985. Royal Institute of Technology, Stockholm, Sweden
1984. World Cultural Council, Monterrey, Mexico



**Professor Omar M. Yaghi, the James and Neeltje Tretter Chair Professor of Chemistry, University of California-Berkeley, USA, has been selected as the winner of the 2017 Albert Einstein World Award of Science.**


The prize is awarded for his groundbreaking scientific contributions in making materials by stitching organic and inorganic units through strong bonds into robust, porous crystalline metal-organic frameworks (MOFs) and covalent organic frameworks (COFs), and for establishing a new field of chemistry – Reticular Chemistry.

These original accomplishments, both theoretical and experimental, have spurred the creation of new fields of chemistry, developing new materials for application in clean energy, hydrocarbon separation, clean water production, catalysis and more recently electronics.

The WCC acknowledges Prof. Yaghi's leadership in research and mentoring emerging scholars in multiple countries around the world, along with his commitment to developing innovative solutions to problems that threaten world sustainability. Not only is this a precious service to mankind but it also inspires future generations.

Omar Yaghi was born (February 9, 1965) and raised in Amman, Jordan. In third grade, he had an experience that would profoundly impact his life. One lunch break, he slipped into the school library and came across drawings of molecules, mysterious yet beautiful to him. Reflecting on the meaning of this discovery, he felt there was a wonderful secret held within him that he could not yet fully understand.

At the age of 15, Omar left Jordan for the USA. He received his BSc from State University of New York-Albany in 1985 and PhD from the University of Illinois-Urbana in 1990, before working as a NSF Postdoctoral Fellow at Harvard (1990-92). He has been on the faculties of Arizona State

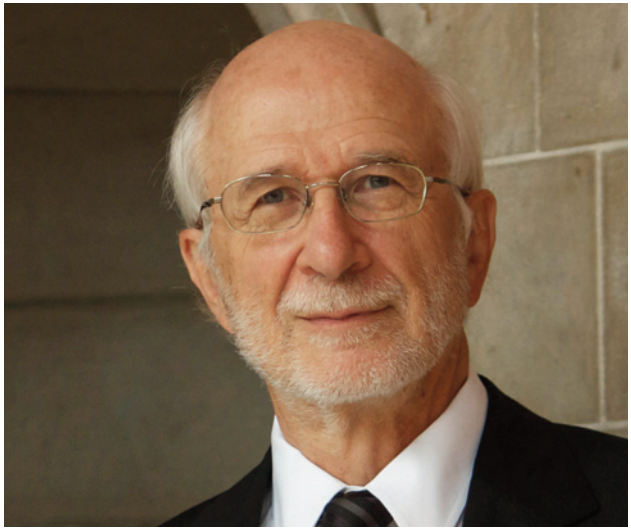
University, University of Michigan, and UCLA. He is currently the James and Neeltje Tretter Chair Professor of Chemistry at UC Berkeley and a Senior Faculty Scientist at Lawrence Berkeley National Laboratory. He is also the Founding Director of the Berkeley Global Science Institute, and Co-Director of both the Kavli Energy NanoScience Institute and the California Research Alliance by BASF.

Prof. Yaghi is noted for his contribution in introducing metal-oxide clusters as anchors for joining organic linkers into robust crystalline open frameworks with permanent porosity. These new metal-organic frameworks (MOFs) are numbered roughly in their chronological order of discovery. MOF-2 (reported in 1998) was the first MOF to exhibit a Type-I gas adsorption isotherm at low pressure and low temperature, the gold standard for proving that gases can move in and out of frameworks without structural collapse thus proving their permanent porosity and opening the way for practical applications in gas storage and separations, including carbon dioxide capture and conversion to fuels. Such frameworks are useful for making our world sustainable with great short and long-term benefits.

Professor Yaghi broke the historic world record of porosity in 1999 by developing MOF-5 and its congeners reaching the highest surface area: 6,500 $m^2$ /g. From 2000-2010, he was listed among the top two most highly cited chemists worldwide (Thomas Reuters, February 10, 2011). He has won national and international awards including the: 2004 Sacconi Medal, Italian Chemical Society, Inorganic Chemistry Division; 2007 Materials Research Society Medal (Sole Recipient); 2009 American Chemical Society Award in the Chemistry of Materials; 2010 Royal Society of Chemistry Centenary Prize; 2015 King Faisal International Prize in Science; 2017 Royal Society of Chemistry Spiers Award, and 2017 King Abdullah II Order of Distinction of the First Class, among many others.

Prof. Yaghi is keen to foster science in other countries. He has founded several research centers in Vietnam, Korea, Japan, Jordan and Saudi Arabia, providing opportunities for young local researchers.

Omar Yaghi now understands the power of those molecular drawings in his school library. They have led him to make major original contributions and create new fields of research. His discoveries over the last 25 years gave rise to an explosive growth in materials chemistry with major impact worldwide.



**The 2017 Leonardo Da Vinci World Award of Arts will be granted to Professor Russell Hartenberger, Professor Emeritus of Ethnomusicology and Percussion, and former Dean of the Faculty of Music, University of Toronto, Canada.**

This recognition is for his lifetime commitment to cultivating and shaping our understanding of music and performance across cultures and genres, respecting the diversity of world traditions, besides his visionary and seminal contributions to percussion and contemporary music.

It is a prize granted to Prof. Hartenberger for his achievements as a scholarly writer, as well as an extraordinarily talented percussionist, and for his commitment to teaching and inspiring new generations of young musicians and scholars. In the words of Evelyn Glennie: "…his knowledge, constant curiosity and dedication to all he does and everyone he meets always means that you are a better person for having been in his presence."

Prof. Russell Hartenberger is considered as a musical visionary and one of the most prominent figures in percussion history. He is a member of Nexus and has been a member of the Steve Reich and Musicians Ensemble since 1971.

He received his B.Mus. degree in 1966 from Curtis Institute of Music, where he studied with Fred D. Hinger; and his M. Mus. in 1969 from the Catholic University. He gained his PhD in 1974 in World Music from Wesleyan University, venturing into a range of instruments, including the mridangam with Ramnad Raghavan of South India, the tabla with Sharda Sahai of North India, Javanese Gamelan with Prawotosaputro, and West African drumming with Abraham Adzinyah.

Russell Hartenberger is a virtuoso soloist whose technical mastery encompasses virtually every percussion instrument imaginable. He has dedicated most of his performing and creative energies to collaborative participations with others, musicians and non-musicians, promoting world understanding among musicians and audiences alike.

He has focused especially on the dissemination of multiple world music styles, practices of improvisation, and most famously, creation, performance and scholarship in the musical tradition of minimalism.

His name has become synonymous with brilliance in percussion playing, rigorous musical scholarship on percussion and musical minimalism, and the championing of musical stylistic diversity and intercultural exchange through musical performance.

Professor Hartenberger has performed throughout the world, including appearances with the New York Philharmonic, Boston Symphony, Cleveland Orchestra, London Symphony, Israel Philharmonic, Cologne Radio Orchestra, Toronto Symphony, BBC Orchestra, New Japan Philharmonic, the Malboro Music Festival under Pablo Casals and other leading orchestras in Europe, Asia and North America. He has appeared on over 70 recordings for various labels including Nonesuch, ECM, DGG, Sony, Phillips and Nexus.

Russell Hartenberger's pledge to demonstrating and performing the fundamental human experience of time through collaborative, cross-cultural percussive performance and improvisation expresses a vision of reaching audiences all over the world. His work has been an exceptional vehicle for fostering the kind of societal-cultural understanding and fraternity that contributes fundamentally to the betterment of the world and its human legacy.

# Leiden University

Since its foundation in 1575 Leiden University has played a visible role in scientific research and teaching, and has made a prominent contribution to creating a secure, healthy, sustainable, prosperous and just world. The University strives for excellence in an open and small-scale academic community where teaching takes place in small groups with the focus on the individual. Freedom of spirit and the free development of research are among the core principles, and quality and integrity are important values for Leiden's academics. The innovative teaching is interwoven with top-quality research. Leiden University has seven faculties, spread over locations in Leiden and The Hague, the International City of Peace and Justice.

**Bastion of Freedom**

Leiden University was the first university in the Netherlands. William of Orange gave Leiden the Academia Lugduno Batava in 1575 in gratitude, as the story goes, for the inhabitants' courageous resistance during the Spanish siege. The motto of the university is 'Praesidium Libertatis' – Bastion of Freedom.

**Students: 26,900**
of whom:
**Bachelor's: 16,900**
**Master's: 10,000**
**International: 3,600**
**Nationalities: 115**

**Bachelor's programmes: 46**
**Master's programmes: 78**

**PhDs: 417**
**Scientific publications: 5,726**
**NWO grants: 37**
**European Research Council grants: 9**

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**Locations: 2**
**Members of the executive board: 3**
**Faculties: 7**
**Research Institutes: 29**
**Staff: 6,500**

**Registered alumni: 103,000**
of whom abroad: 8,700
**Graduates per year**
**Master's: 3,900**
**Bachelor's: 3,700**

*It was my great privilege to have witnessed over the years the development of the World Cultural Council: observing how it contributed to the world's science by identifying the most excellent scientists. My other privilege is that this time the Council is meeting for the second time in my home country, presently in the city of Leiden, which houses the oldest Dutch University, established during the years of the Netherlands' struggle for independence.*
**Prof. dr. Cornelis de Jager, Founder Member WCC**

# WCC 2017 Special Recognitions

## Nadine Akkerman

*Lecturer in Early Modern Literature, Leiden University*

Dr. Akkerman's work in English Literature has focused on bringing knowledge outside academia to connect with society. She already has three books to her name, notably on the life of Elizabeth Stuart and on Female Spies. She has also organized exhibitions, making videos in collaboration with Massachusetts Institute of Technology.
Nadine has received numerous accolades, including worldwide recognition for her project "Signed, Sealed & Undelivered" on the rediscovered trunk of 2,600 undelivered 17th century letters.

## Ann Brysbaert

*Director of Research, Faculty of Archaeology, Leiden University*

Dr. Brysbaert's contributions to archaeology range from how long-term perspectives can help understand people's resilience strategies; and the relation between circular economies, technologies and societal practices; through to theoretical thought that can influence approaches to museum display.
Ann has also played a large role in heritage protection, particularly in the Aegean and Eastern Mediterranean. She speaks five languages, is a regular elected member of the Society of Antiquaries in London, and has written over 70 works, including eight books.

## Marike Knoef

*Associate Professor, Institute of Tax Law and Economics, Leiden University*

Dr. Knoef has focused her economics research on societal questions, such as retirement savings and health care costs for the elderly. She was the leader of a project with the OECD. She regularly informs international delegations, such as the IMF, the World Economic Forum and National and foreign ministries of her research.
Marike has excellent teaching and public speaking skills and has organized three major international conferences. She has also published several articles in top economics journals.

## Marianne Maeckelbergh

*Associate Professor, Cultural Anthropology and Development Sociology, Leiden University*

Dr. Maeckelbergh's social movement research examines the effects of the *Alter-globalization Movement* on democracy and also how digital technology is changing society.
Marianne has publicized groups that resist oppressive forces worldwide, filming short movies, with 2,000 to 75,000 viewings each and over 50 public screenings at film festivals. She is working with the Berkeley University in developing an app for Citizen Participation. Her work has earned her the Marie Curie International Fellowship and Aspasia Grant for outstanding female researchers.

## Victoria Nyst

*Assistant Professor, Centre for Linguistics, Leiden University*

Dr. Nyst's work in sign language is not only outstanding scientifically but also has great societal impact. She has created a website with an overview of African Sign Language and an e-forum on Deaf Studies in Africa, as well as organizing an International Workshop for African Sign Languages.
Locally, Victoria is documenting the history of the hearing-impaired in Leiden and will this year complement the Leidse collection of wall poems with the screening of a poem in sign language.

## Sarah de Rijcke

*Associate Professor, Centre for Science and Technology Studies, Leiden University*

Dr. De Rijcke leads a research group on understanding academic evaluation and the comparative analysis of research practices. She co-authored the Leiden Manifesto for Research Metrics, published in Nature. The Manifesto won the Ziman Award granted by the European Association for the Study of Science and Technology, of which Sarah is an elected council member. She is also a member of Science in Transition, a Dutch initiative to stimulate the involvement of society in shaping research agendas.

## Alicia Schrikker

*Assistant Professor, Institute of History, Leiden University*

Dr. Schrikker's work has focused on colonial and global history, particularly Sri Lanka's transition from Dutch to English rule and colonial interaction in Asia, as well as disaster politics, revealing a deep commitment to how ordinary people deal with social injustice and economic adversity.
Alicia is an inspiring teacher who has built up a large community of scholars in Asia, developing new historical narratives that move beyond the Eurocentric paradigm, profoundly influencing national identities in Asia and Europe.

## Martina Vijver

*Associate Professor, Institute of Environmental Sciences, Leiden University*

Dr. Vijver is an internationally recognized expert in ecotoxicology. Her considerable funding is used to study the effects of physical and chemical stressors on biodiversity and in particular the side effects of nanoparticles, trying to increase international awareness of potential risks.
Martina also founded RISE, a network raising awareness in gender equality within science, and the Living Lab, which studies consequences of chemical compounds present in water, in outdoor research locations.

## Inge van der Weijden

*Senior Researcher, Centre for Science and Technology Studies, Leiden University*

The research of Dr. Van der Weijden into scientific careers and talent policies has been shared with many university Human Resource departments and public policy organizations, such as the Dutch Ministry of Education, Culture and Science. She is a frequent speaker at workshops for PhD students and postdocs.
Inge's outreach work is extensive, and includes the founding of a nationwide platform for post-docs. She is furthermore studying young researchers who develop a career outside the sciences.

# Programme

## Tuesday 7 November

17.00-20.00 hrs.
**Lecture *Seeing in three dimensions. Learning from Michelangelo's mistake* by Sir Colin Blakemore, President World Cultural Council**
LUMC Education Building, Buruma Room, Hippocratespad 21, Leiden
Hosted by Professor Pancras Hogendoorn, Dean of Leiden University Medical Center

We see the world in three dimensions, despite the fact that the image in our eye is essentially two-dimensional. Animals with forward-pointing eyes have the luxury of stereoscopic vision – the ability to interpret the relative distances of features in the world from the tiny differences between the images in the two eyes. But if you close one eye, you can still perceive distance on the basis of information in the single image. Figurative painting depends completely on the viewer's ability to infer depth from such monocular cues, especially perspective, despite the fact that the surface of a painting is actually flat. Sir Colin Blakemore will discuss the possible brain mechanisms for interpreting perspective, whether and how monocular cues are integrated with stereoscopic vision, and the implications of this not only for figurative art but also for architecture. And he will offer an explanation for one of the puzzles in the history of architecture – why Michelangelo apparently made a mistake in the design of Rome's most famous piazza.

**Sir Colin Blakemore**
Sir Colin Blakemore is Professor of Neuroscience & Philosophy at the School of Advanced Study at the University of London and Emeritus Professor of Neuroscience at the University of Oxford.

**If you wish to be present at this lecture, please register at universiteitleiden.nl/lecture-blakemore.**

## Wednesday 8 November

9.30-12.00 hrs.
**Special Lectures by WCC Award Winners**
Academy Building, Great Auditorium, Rapenburg 73, Leiden

9.30-10.30 hrs.
**Reticular Chemistry: The Journey to Beautiful and Functional Porous Crystals**
Lecture to be given by Professor Omar M. Yaghi, Albert Einstein World Award of Science Winner.
Hosted by Professor Geert De Snoo, Dean of Leiden University Faculty of Science

10.30-11.00 hrs.
**Coffee Break**

11.00-12.00 hrs.
**Subdivide and Conquer: A Quest for the Hidden Beat**
Lecture to be given by Professor Russell Hartenberger, Leonardo da Vinci World Award of Arts Winner.
Hosted by Professor Mark Rutgers, Dean of Leiden University Faculty of Humanities

12.00-15.00 hrs.
**Lunch (attendance by invitation only)**

15.00-17.00 hrs.
**2017 WCC Award Ceremony**
Pieterskerk Leiden, Pieterskerkhof 1A, Leiden

- Albert Einstein World Award of Science
- Leonardo da Vinci World Award of Arts
- Special Recognition Diplomas
- Reception
- Musical performances by the Leiden University Academy of Creative and Performing Arts (ACPA).

19.00 hrs.
**VIP guests' dinner (attendance by invitation only)**

**Please register your attendance at one of the Winners Special Lectures and/or the Award Ceremony at: universiteitleiden.nl/wcc.**

For further information on the 34th Award Ceremony and programme, see:
**www.universiteitleiden.nl/wcc**

For information on the World Cultural Council please visit:
**www.consejoculturalmundial.org**

Read more about Leiden University at:
**www.universiteitleiden.nl/en**

RSVP: please confirm your attendance by 27 October 2017 at:
**www.universiteitleiden.nl/wcc**

We look forward to the pleasure of your company.

Universiteit
Leiden
The Netherlands