Speech Geert de Snoo 8 november 2017

Esteemed colleagues,

It is an honour for me to introduce Professor Omar M. Yaghi, professor of Chemistry, as the winner of the 2017 ALBERT EINSTEIN World Award of Science.

The prize is awarded (and I quote) ‘for his ground-breaking 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).’

Complicated? For people outside chemistry I think it is. When I have to put it in my own words: it is all about the discovery that we can make solid materials with an enormous internal microporosity. We are talking about 6,000 up to 10,000 square meter per gram. In these kind of materials, gases can move in and out the material without the fact that the structure collapse.

Very interesting from a theoretical and an experimental point. But the findings are also opening the way for a huge number of practical applications. Think about gas storage and separations. For example with the use of the Metal-Organic Frameworks it is possible to capture carbon dioxide from the air and this is really a challenge in the field of emission reduction related to climate control. But also the fact that we can capture water from the air in the dry areas on our planet is promising. So in this sense, the Metal Organic- and Covalent Organic Frameworks will be of major importance for making our world more sustainable.

The World Cultural Council acknowledges Prof. Yaghi’s leadership in this field of research and mentoring emerging scholars in multiple countries around the world, along with his commitment to develop innovative solutions to problems that threaten world sustainability. Not only is this a very valuable service to mankind but it also inspires future generations.

Prof. Yaghi was born 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, professor Yaghi left Jordan for the USA. He received his PhD from the University of Illinois. He did a Postdoc at Harvard and 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 University of California 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. For many years he is listed among the most highly cited chemists worldwide. He has won many national and international awards.

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

The “Albert Einstein” World Award of Science was created as a means of recognition and encouragement for scientific and technological research and development. It takes into special consideration research which has brought true benefit and wellbeing to mankind.

Ladies and gentleman, to cut it short: the achievements of Professor Omar Yaghi both in science and society are outstanding and the honour of the is well deserved.

I would like to invite you to watch the following video on Professor Omar Yaghi.

After the video

I would like to ask Sir Colin Blakemore, Rector Carel Stolker and Esteban Meszaros to present the 2017 Albert Einstein World Award of Science to professor Yaghi.