

## THE 2019 GLOBAL ENERGY PRIZE SUMMIT PROGRAM «ENERGY IN THE NEW TECHNOLOGICAL CYCLE»

April, 10, 2019 at Karlsruhe Institute of Technology (KIT) Karlsruhe, Germany

The program is published as of 04.04.2019

April 10, 2019	
09:00-09:30	Registration. Welcome coffee.
09:30-09:50	Welcome speeches of the representatives of the Global Energy Association and the KIT representatives
	Alexander Ignatov, Acting President of the Global Energy Association Oliver Kraft, Vice-President for research, KIT
09:50-12:00	Plenary session "Energy in the new technological cycle"  Address: Presidium, Adolf-Würth-Building, Engelbert-Arnold-Str. 2, Karlsruhe  Energy used to face challenges, the major of which this day is the transition to the new technological cycle. The time of technology to which we are accustomed is coming to an end, and a new time is rapidly coming – the time of digitalization, robots and artificial intelligence. Living in the new technological cycle is impossible without modern, reliable, safe and available energy. The challenge of transition to such energy is inseparably connected with the improving the quality of life for everyone on the planet.
	<ul> <li>Key energy trends of the future</li> <li>Obstacles preventing transition to a new technological cycle</li> <li>Technological revolution in the service of humanity</li> </ul>
	Moderator: Mr. Laurence Kemball-Cook, Director of Pavegen Systems Ltd.
	<ul> <li>Speakers:</li> <li>Sergey Alekseenko, the 2018 Global Energy Prize laureate; Head of heat and mass transfer's laboratory of Institute of Thermophysics of the RAS Siberian Branch.</li> </ul>
	• Rodney John Allam, the 2012 Global Energy Prize laureate; Member of the Global Energy Prize International Award Committee; Partner of 8 rivers capital, LLC; Member of the Intergovernmental Panel on Climate Change (IPCC), awarded with the Nobel Peace Prize in 2007.
	Adnan Amin, Member of the Global Energy Prize International Award Committee; Director-general emeritus of the International Renewable Energy Agency (IRENA).  Proc. March. Chairman of the Global Energy Prize International Award.  Proc. March. Chairman of the Global Energy Prize International Award.
	• Rae Kwon Chung, Chairman of the Global Energy Prize International Award Committee; UN Secretary-General's High-level Expert and Leaders Panel

	<ul> <li>(HELP) on water and disasters, Adviser to the Chair; Member of the Intergovernmental Panel on Climate Change (IPCC), awarded with the Nobel Peace Prize in 2007.</li> <li>Uli Lemmer, Head of Optoelectronics Department, Light technology Institute Director, Karlsruhe Institute of Technology.</li> <li>Xiansheng Sun, Member of the Global Energy Prize International Award Committee; Secretary General of the International Energy Forum.</li> </ul>
12:00-12:10	Signing of the agreement between Karlsruhe Institute of Technology and the Global Energy Association  Alexander Ignatov, Acting President, The Global Energy Association.  Thomas Hirth, Vice-President for Innovation and International Affairs, Karlsruhe Institute of Technology.
12:10-13:40	Lunch Address: Gastdozentenhaus, Engesserstraße 3, Karlsruhe
13:40-15:20	Round table "The energy requirements for sustainable development"  Address: Presidium, Adolf-Würth-Building, Engelbert-Arnold-Str. 2, Karlsruhe  How can the changes connected with the new technological cycle make people's lives easier? More than a billion people, mostly in rural areas, do not have access to electricity. Ensuring access to affordable, reliable and modern energy for all is an important requirement for the transition to a new era.  Sustainable development trilemma Ecological, economic and social aspects of achieving the global goal International energy cooperation  Moderator: Julia S. Hagel  Speakers:  Thomas Albert Blees, the Global Energy Prize International Award Committee member; President of the Science Council for Global Initiatives (SCGI).  Marta Szigeti Bonifert, Member of the Global Energy Prize International Award Committee; Board Member of the Hungarian Business Leaders Forum (HBLF), Environment and Sustainability WS Leader.  William Il Young Byun, Member of the Global Energy Prize International Award Committee; Managing Director at Asia Renewables; Head of Greenpower Fuels and Principal at Conchubar Infrastructure Fund.  David Faiman, Member of the Global Energy Prize International Award Committee, Professor Emeritus of Ben-Gurion University of the Negev.  Thorsitenn Ingi Sigfusson, the 2007 Global Energy Prize laureate; Director General of the Innovation Center of Iceland.  Michael Williamson, Section Chief of the Energy Division in the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP).
13:40-15:20	Youth program*  Address: Kollegiengebäude am Ehrenhof (Geb. 11.40), Tulla lecture hall, Englerstraße 11, Karlsruhe  The Global Energy Youth Talks is an initiative of the Global Energy Association for KIT students. The event is held within the Global Energy Youth Program.

	Selected KIT students will get the chance to present their researches to leading energy industry representatives and get comprehensive evaluation from the Global Energy Association's experts. The competition is aimed at building a dialogue between scientists and engineers in the energy sector and providing assessment of the young scientists' projects from honored experts.  The winner will be determined by the highest score of the expert jury. The Global Energy Youth Talks winner will get a special invitation to the 2019 Global Energy Prize Award Ceremony and laureates week. One more participant will be determined by the audience voting and will get the audience's choice award. The audience will rate the presentations of each participant by applauding, which is measured by the sound level meter.  Moderator: Alexander Colsmann, Head of Organic Photovoltaic Group, KIT
15:20-15:40	Coffe-break
15:40-16:50	Round table "The impact of the 4th industrial revolution on the energy sector"  Address: Presidium, Adolf-Würth-Building, Engelbert-Arnold-Str. 2, Karlsruhe  The time we live in has become a time of radical changes affecting the scientific, social, economic and other fields of life. The 4th revolution differs in scope and complexity of the implemented changes from all previous ones. Our time is a transitional period: the 4th revolution has not come yet, but the innovations of the third are already out of date. When will the 4th industrial revolution take place? What changes do we need to prepare for? How drones, automation and robots will be able to replace humans? What projects of the future already exist in the world? What impact does it have on energy?  Are we expecting a revolution, or already living in it?  Benefit or damage  Pitfalls hindering the development of the industry  Moderator: Mr. Laurence Kemball-Cook, Director of Pavegen Systems Ltd.  Speakers:  Dominique Fache, Member of the Global Energy Prize International Award Committee; Member of the Board of Directors of Technopark Sofia-Antipolis; Chairman of the Board of Directors of RTF; an independent director.  Veit Hagenmeyer, Director of the Institute for Automation and Applied Informatics (IAI), Karlsruhe Institute of Technology.  Sauro Pasini, the Global Energy Prize expert; President of the International Flame Research Foundation.  Stanislav Roginskii, associate professor National Research University.  Nikolay Voropai, Member of the Global Energy Prize International Award Committee; Scientific Adviser of Melentiev Energy Systems Institute, Siberian Branch of the Russian Academy of Sciences; Member of the Technical Committee IFAC, Member of the International Council on Large Electric Systems CIGRE.
16:50-17:30	Closing part of the event. Summing up, awarding of the Global Energy Youth Talks winner.

Dear participants, we inform you that on April 9, 2019 from 17:00 to 18:00 there will be a lecture of the Global Energy Prize laureate.

Lector: **Rodney John Allam,** the 2012 Global Energy Prize laureate; Member of the Global Energy Prize International Award Committee; Partner of 8 rivers capital, LLC; Member of the Intergovernmental Panel on Climate Change (IPCC), awarded with the Nobel Peace Prize in 2007.

Moderator: Alexander Colsmann, Head of Organic Photovoltaic Group, KIT.