

Green Talents 2018

Australia

Dr Shirin MALEK POUR, Research Leader in Strategic Planning and Futures Studies; Research Focus: long-term planning under deep uncertainty; strategic processes and tools to support the implementation of the Sustainable Development Goals; MONASH UNIVERSITY, AUSTRALIA

For the jury, Shirin's long-term scientific pursuit of infrastructure planning and policy making is very impressive. They acknowledged her success in connecting different research areas, as well as her specific focus on strategic planning and the implementation of the Sustainable Development Goals.

Azerbaijan

Govhar VALIYEVA, Master's student in Environmental Policy and Management of Energy and Sustainability; Research Focus: sustainable technology, renewable energy sources; UNIVERSITY OF DENVER, UNITED STATES OF AMERICA

The jury commended her long-term orientation towards development opportunities for regional energy trade that reduces greenhouse gas emissions. They further acknowledged her idea that the transportation of the saved natural gas to the European market can lead to the replacement of coal as a source of energy. Finally, they appreciated Govhar's model for the efficient utilisation of resources that ensure a sustainable and green future.

Belarus

Yauheniya SHERSHUNOVICH, PhD student in Economics and National Economy Management; Research Focus: sustainable development of the electricity enterprises in the Republic of Belarus, green economy, waste recycling; BELARUSIAN STATE ECONOMIC UNIVERSITY, BELARUS

The jury acknowledged the relevance of Yauheniya's research to the energy supply in Belarus. The jury especially valued her theoretical research and practical steps taken to reach her sustainability goals in creating the index to assess the performance of the electricity industry enterprise from the point of sustainable development.

Belgium

Dr Jan BRUSSELAERS, Researcher in Bioscience Engineering; Research Focus: modelling and developing the concept of circular economies; VITO, BELGIUM

The jury believes that Jan's revealing data can assist entrepreneurs and policy makers to investigate and invest in this potential. Algebraic models (both partial and general equilibrium models) can also be used to stimulate the impact of policy scenarios, which can contribute to the process of government decisions.

Brazil

Dr Jamil Alexandre AYACH ANACHE, Researcher in Hydraulics and Sanitary Engineering; Research Focus: hydrological monitoring and modelling; UNIVERSITY OF SÃO PAULO – SÃO CARLOS SCHOOL OF ENGINEERING, BRAZIL

The jury was impressed by the ambition and far reaches of his research in the field of water partitioning for the Cerrado Biome area in Brazil. They believe that through Green Talents, Jamil Alexandre will have the opportunity to extend his scientific skills and will be well placed to promote future collaborations between Brazil and Germany.

China

Dr Di ZHOU, Researcher in Environmental Law; Research Focus: ecological civilisation, sustainable development and environmental justice; WUHAN UNIVERSITY, CHINA

The jury was impressed by Di's strong interdisciplinary interests and her work on creating a legal system, in which the legislation is fully embedded within the idea of sustainability. Through this, the rule of law itself can become a driving force for a sustainable development and create an ecological civilization.

Dr Yuli SHAN, Researcher in Climate Change Economics; Research Focus: emission accounts and low-carbon development in cities; UNIVERSITY OF EAST ANGLIA, UNITED KINGDOM

The jury especially values Yuli's scientific expertise regarding his adaption and investigation of sustainability in different cities. Accordingly, they highlight his study "City-level climate change mitigation in China" which found that different cities should have different low-carbon roadmaps due to the natural resources available to them and previous development tracks in each city.

Congo, Democratic Republic of

Nsilulu Tresor MBUNGU, PhD candidate in Electrical Engineering; Research Focus: electrical engineering, energy systems, renewable energy and smart grids; UNIVERSITY OF PRETORIA, SOUTH AFRICA

The jury acknowledged the considerable relevance of Tresor's research and his passion for this subject. His work will not only provide profit to the population in the DRC, but to communities all over the world. The optimisation of future energy growth is an important Sustainable Development Goal and a challenging task for the current and the future generation.

Ecuador

Mario Alejandro HEREDIA SALGADO, PhD student in Energy Systems and Climate Change; Research Focus: integration of pyrolysis and combustion processes to produce soil amendments (e.g. biochar) and renewable thermal energy from agricultural waste; AVEIRO UNIVERSITY, PORTUGAL

The jury was impressed by Mario Alejandro's enthusiasm to put his research into practice as quickly as possible, so that agroindustrial facilities currently led by indigenous and peasant communities living in fragile ecosystems can get access to state of the art technology. To this end, he has endeavoured to take the scientific method out of the laboratory and into the technology sector, by founding the start-up "Andes Bioenergy". Mario Alejandro's device has already generated significant interest from several agro-industrial companies, meaning it could be put to large-scale use in the near future.

Ghana

George Kofi PARKU, MEng (Research) student in Chemical Engineering; Research Focus: pyrolysis of waste polypropylene plastics for energy recovery, optimisation of the conversion and process development at pilot scale; STELLENBOSCH UNIVERSITY, SOUTH AFRICA

The jury especially appreciated his approach of converting waste into sustainable energy and providing alternative means of recycling plastic waste and composite materials. The jury also believes George's research will be of particular interest to the private sector.

India

Ishani KHURANA, PhD student in Synthesis of Graphene Based Materials for the Removal of Water Pollutants; Research Focus: synthesis of graphene based composites for the removal of water pollutants; UNIVERSITY OF DELHI, INDIA

In the face of an increasing global population, water shortages and knock-on effects on ecosystems, biodiversity and landscape functions, the maintenance of sustainable supplies of clean water will be imperative for the wellbeing of societies. The jury especially appreciated Ishani's sustainable

approach, which aims to decontaminate water by using catalysts which are generated from plastic waste. Further efforts in promoting a green economy are essential and Ishani's research is valuable in the pursuit of this goal.

Mohit SARAF, PhD student in Nanotechnology/Materials Science; Research Focus: nanomaterials for electrochemical energy storage and sensors; INDIAN INSTITUTE OF TECHNOLOGY INDORE, INDIA

The jury recognised significant value in Mohit's long-term aim and acknowledged the competitive results of his study. They were also impressed by his orientation on low cost and sustainable development of supercapacitor electrodes. The exchange with international experts and building of professional networks with Green Talents will help him attain his long-term goals.

Vishal TRIPATHI, PhD student in Environmental Science and Technology; Research Focus: nanomaterials for electrochemical energy storage and sensors; BANARAS HINDU UNIVERSITY, INDIA

The jury was impressed by the ambition and far reach of Vishal's project, which will be invaluable not only for India's ecology but for the global ecology. They see his work as related to sustainable clean-up technologies, which can be further used and developed by the knowledge he gains during the Green Talents Science Forum.

Israel

Mark POLIKOVSKY, PhD student in Environmental Bioengineering; Research Focus: interaction between seaweed and bacteria for improving the production of biofuel and protein out of seaweed; TEL AVIV UNIVERSITY, ISRAEL

The jury acknowledges Mark's success in integrating biological understanding in seaweed-associated bacteria and the expansion of bio-based processes. This approach could play an important role in the development of sustainable biomass utilisation infrastructure in Germany.

Kenya

Becky Nancy Achieng' ALOO, PhD student in Biodiversity and Ecosystems Management; Research Focus: biodiversity and ecosystem management; NELSON MANDELA AFRICAN INSTITUTE OF SCIENCE AND TECHNOLOGY, TANZANIA

The jury acknowledged her approach of using the existing potential of the environment whilst protecting it at the same time. They see her research related to sustainability science work in Germany, which especially is of high concern to the field of bioeconomy, fertiliser management and nutrition technology.

Malaysia

Dr Wee Jun ONG, Assistant Professor in Chemical Engineering; Research Focus: engineering next-generation nanomaterials toward efficient artificial photosynthesis for sustainable fuel production from sunlight; XIAMEN UNIVERSITY MALAYSIA, MALAYSIA

The jury values Wee Jun's approach of CO₂ reduction and conversion of solar energy to fuels and sees its potential to become a definitive solution for future energy supply in many countries. The jury also believes that the Green Talents Science Forum will help Wee Jun to establish collaboration between Malaysia and Germany and bring positive impacts to the environment and atmosphere.

Mauritius

Shilpa RUMJEET, Project Coordinator in Bioprocess Engineering; Research Focus: wastewater biorefinery; UNIVERSITY OF CAPE TOWN, SOUTH AFRICA

The jury appreciated Shilpa's research approach, which links closely to the United Nations Sustainable Development Goals of providing clean water and sanitation as well as harnessing clean and affordable energy. Moreover, her pulp and paper wastewater refinery focus offers a possibility to exploit the potential of lignocellulosic waste. The jury believes that her research will bring valuable insights for further studies in wastewater biorefineries.

Nepal

Nirina KHADGI, PhD student in Environment Science and Engineering; Research Focus: heterogenous photocatalysis; HOHAI UNIVERSITY, CHINA

Enhancing the efficiency of water treatment processes will not only improve human health, but will also contribute to a reduction in overall levels of pollution, as pollutants are currently passed on in the cyclic use of water. The jury recognised the benefit of this dual outcome and applauded Nirina's eagerness to improve access to clean water for vulnerable communities in Nepal.

Sagar KAFLE, Lecturer in Agricultural Engineering; Research Focus: fuel pellets, energy policy, energy politics, renewable energy; TRIBHUVAN UNIVERSITY, NEPAL

The jury was impressed by Sagar's dedication to reducing his nation's dependency on coal. By tackling the issue on three fronts, carrying out scientific research, engaging with young people and influencing policy makers, Sagar is setting an example for how to forward the cause of sustainability.

South Africa

Pheladi Venda TLHATLHA, MSc student in Environmental Management; Research Focus: renewable energy strategies for energy poverty alleviation; UNIVERSITY OF PRETORIA, SOUTH AFRICA

The jury acknowledged the relevance of Pheladi's research to Germany. One of the key factors of sustainable development is collaboration and innovation. Although access to energy in Germany is rather different to the situation in South Africa, the exchange of research and knowledge will be of benefit to energy conservation efforts in both countries.

Sri Lanka

Dr Randika JAYASINGHE, Head of the Department of Engineering Technology; Research Focus: sustainable waste management, in particular waste upcycling and waste-based business development, eco-designs and innovations, circular economy; UNIVERSITY OF SRI JAYEWARDENEPURA, SRI LANKA

The jury was impressed by Randika's multi-faceted engagement with the issue of recycling. She is not only attempting to improve sustainability efforts as a scientist, but also as a project manager, business person and activist and it is undoubtedly because of her personal drive that Randika has already achieved a great deal in her field.

Thailand

Dr Nithi ATTHI, Researcher in Electronics and Applied Physics; Research Focus: large-area flexible polymers with antifouling robust micro-structure for marine and medical applications; NATIONAL ELECTRONICS AND COMPUTER TECHNOLOGY CENTER, THAILAND

The jury was impressed by Nithi's interdisciplinary research approach, which incorporates materials science, mechanical engineering, computer science, marine science, biological science, medical science, environmental science and micro/nano patterning.

Togo

Dr Badabate DIWEDIGA, Researcher in Climate Change and Land Use; Research Focus: integrated land use and resilient multifunctional landscapes; UNIVERSITY OF LOMÉ, TOGO

The jury especially valued the integrated approach of Badabate's proceedings. Enhancing a close collaboration between scientists and policy-makers is a beneficial way to make better profits from investments in research. Furthermore, his aim to understand the complex interaction among environmental and social components is important for future sustainable land management and is therefore highly appreciated.

Turkey

Ozgul CALICIOGLU, PhD student in Environmental Engineering; Research Focus: biorefining and bioeconomy; PENNSYLVANIA STATE UNIVERSITY, USA

The jury acknowledged Ozgul's background in waste valorisation and anaerobic bioprocesses, combined with her future interest in sustainable bioeconomy. They believe that her fields of research bring valuable findings that can be interesting for the German research environment. The Green Talents award will support her in her projects and to develop a network during her stay.

Zambia

Brigadier LIBANDA, PhD student in Atmospheric and Environmental Science; Research Focus: ecosystems and climate dynamics; UNIVERSITY OF EDINBURGH, UNITED KINGDOM

The jury acknowledged that Brigadier's work is related to forest protection and conservation in Germany. They were also impressed by his commitment to sustainable forest use, biodiversity conservation and climate change mitigation. They believe that his research stay will enable him to provide practical solutions in these fields.