

**PRIZE WINNERS  
FOR THE 2017 AWARDS  
OF THE DIMITRIS N. CHORAFAS FOUNDATION**

**Scientific Advisor:  
WEIZMANN INSTITUTE OF SCIENCE,  
FEINBERG GRADUATE SCHOOL**

**The Partner Universities are Listed in Alphabetic Order  
July 2017**

**CLASSIFICATION OF PRIZES**

Life Sciences/Medicine	9
Physics	8
Informatics/Computer Science	6
Chemistry	3
Engineering of Finance and Risk Management	2
Mathematics	1
<b>Total</b>	<b>29</b>

**GENDER DISTRIBUTION**

Men	21
Women	8

**Charles University of Prague**

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**City University London, Cass Business School**

Anran CHEN (Ms)

*The Impact of Behavioural Factors in Annuitisation Decisions and Decumulation Strategies***Ecole Polytechnique de Lausanne**

Konrad DOMANSKI

*The Quest for Stability of Perovskite Solar Cells: Understanding Degradation Mechanisms and Improving the Lifetimes*

Dr. Edoardo BALDINI

*Nonequilibrium Dynamics of Collective Excitations in Strongly Interacting and Correlated Quantum Systems***ETH Zürich**

Dr. Markus JESCHEK

*Engineering Escherichia coli for Non-natural Metabolism*

Dr. Hortense LE FERRAND (Ms)

*Magnetically-driven Assembly of Bio-inspired Multifunctional Composites***George Washington University**

Aleksandra KLIMAS

*All-Optical Cardiac Electrophysiology: Design, Validation and Applications In Vitro and In Vivo***Hebrew University of Jerusalem**

Lili NIMRI (Mrs)

*Mechanisms Linking Obesity to Altered Metabolism in Colon Carcinogenesis*

**Hiroshima University**

Dr. Satoshi TOMANO

*A Study on Stock Structure of the Oval Squid Sepioteuthis spp. around Japan*

**Karolinska Institutet**

Dr. Arvid GUTERSTAM

*The Neural Mechanisms of Body Ownership and Self-location*

**Massachusetts Institute of Technology**

Dr. Cynthia R. SUNG

*Computational Design of Foldable Robots via Composition*

Dr. Hannah A. CLEVENSON

*Sensing and Timekeeping Using a Light-trapping Diamond Waveguide*

**National Technical University of Athens**

Dr. Evangelos BELLOS

*Exploitation and Optimization of Solar Systems in Buildings*

Dr. Athanasios SARIGIANNIDIS

*Optimal Design and Operation of Electric Traction Systems*

**Norwegian University of Science and Technology**

Dr. Olav MØYNER

*Next Generation Multiscale Methods for Reservoir Simulation*

**Politecnico di Milano**

Dr. Abdulrahman KAITOUA

*Scalable Data Management and Processing for Genomics*

Dr. Rafael Jan Pablo SCHMITT

*CASCADE – A Framework of Modeling Fluvial Sediment Connectivity and its Application for Designing Low Impact Hydropower Portfolios*

**Purdue University**

Justus Chukwunonso Ndukaife

*Plasmon Nano-optical Tweezers for Integrated Particle Manipulation: A Route to Positioning, Sensing, and Additive Nanomanufacturing On-Chip*

**Technical University of Berlin**

Riccardo SCOTT

*Colloidal II-VI Nanoparticles: Linear and Nonlinear Properties of the Electronic System under High Fields and High Intensities*

Ilhan ÖZGEN

*Coarse Grid Applications for the Shallow Water Model*

**Technical University of Munich**

Dr. Alexander Bernhard NOTTBECK

*Examination on the Impact of Enhanced Speed on Existent Railway Tracks*

Matthias WIECZOREK

*Anisotropic X-Ray Dark Field Tomography*

**Tokyo Institute of Technology**

Dr. Shimpei OTSUKA

*Molecular Mechanism of Porphyrin Metabolism in Hypoxic Tumor-Microenvironment*

Keisuke MOCHIDA

*Study on Selective Autophagy in Budding Yeast*

**Tsinghua University**

Dr. Zhen YAN (Ms)

*Structural Investigation of Calcium Release Channel RyR1*

Dr. Sicong TIAN

*Synthesis of Highly-efficient, Ca-based CO<sub>2</sub> Sorbents from Steel Slag and Application for Carbon Capture in the Iron and Steel Industry*

**University of California, Los Angeles (UCLA)**

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**University of Fribourg**

Dr. Marcus DANTZ

*Spin, Orbital, Charge and Lattice Excitations in Low-dimensional Cuprates and Related Compounds*

**University of Toronto**

Graham EDGE

*Imaging Fermionic Atoms in a Quantum Gas Microscope*

**Weizmann Institute of Science**

Naama AVIRAM (Ms)

*Targeting and Translocation to the Endoplasmic Reticulum:  
Uncovering a Novel SRP-Independent Pathway*

Dr. Arbel Haim

*Majorana Bound States in Condensed Matter Systems: Realizations and Physical Signatures*

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**2017 Prizes**  
**(Partner Universities in alphabetic order)**

<b>Partner University</b>	<b>Number of Prizes</b>	<b>Prize Winners</b>	<b>Men</b>	<b>Women</b>
Charles University of Prague <sup>1</sup>	-	-	-	-
City University of London	1	1	-	1
Ecole Polytechnique Fédérale de Lausanne	2	2	2	-
ETH Zürich	2	2	1	1
George Washington University	1	1	-	1
Hebrew University of Jerusalem	1	1	-	1
Hiroshima University	1	1	1	-
Karolinska Institutet	1	1	1	-
MIT	2	2	-	2
National Technical University of Athens	2	2	2	-
Norwegian University of Science and Technology	1	1	1	-
Politecnico di Milano	2	2	2	-
Purdue University	1	1	1	-
Technical University of Berlin	2	2	2	-
Technical University of Munich	2	2	2	-
Tokyo Institute of Technology	2	2	2	-
Tsinghua University	2	2	1	1
UCLA Engineering <sup>1</sup>	-	-	-	-
University of Fribourg	1	1	1	-
University of Toronto	1	1	1	-
Weizmann Institute of Science	2	2	1	1
<b>Total 2017</b>				

<sup>1</sup> Due to staff changes, *Charles University* and *UCLA* were not able to submit candidate files. They will, however, participate again to the Awards in 2018.