

## ZAFRA MARGOLIN LERMAN

President, Malta Conferences Foundation  
Distinguished Professor of Science and Public Policy (Emerita)  
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### EDUCATION:

1964–1969: Ph.D., chemistry, Weizmann Institute of Science, Rehovot, Israel.

1961–1964: M.Sc., chemistry, The Technion-Israel Institute of Technology, Haifa, Israel.

1956–1960: B.Sc., chemistry, The Technion-Israel Institute of Technology, Haifa, Israel.

### PROFESSIONAL EXPERIENCE:

2012-Present: President, Lerman Institute for the Advancement of Science, Evanston, IL.

2001-Present: President, Malta Conferences Foundation, Washington, D.C.

1977–2009: Distinguished Professor of Science and Public Policy, Head, Science Institute, Columbia College, Chicago.

1984–1985: Visiting professor, Graduate Program in Science, Technology and Public Policy, The George Washington University, Washington, D.C.

1976–1977: Visiting Scholar, Technisch-Chemisches Laboratorium, E.T.H., Zürich, Switzerland.

1972–1976: Research Associate, Department of Chemistry, Northwestern University, Evanston, Illinois.

1969–1972: Postdoctoral Fellow, Department of Chemistry, Cornell University, Ithaca, New York.

### FELLOW OF:

Royal Society of Chemistry (RSC), England; International Union for Pure and Applied Chemistry (IUPAC); American Association for the Advancement of Science (AAAS); American Chemical Society (ACS); American Institute of Chemists (AIC)

### SELECTED HONORS AND AWARDS:

2018, 2019, 2020, 2021, 2023: Nominated for the **Nobel Peace Prize** by a member of the French parliament and a member of the US Congress.

2017: Al-Nisour University (Iraq) Shield of Novelity, Appreciation, and Gratitude.

2017: Selected by 365 Women in STEM to be highlighted as an excellent woman in STEM.

2017: International Union of Pure and Applied Chemistry (IUPAC) **Distinguished Women in Chemistry or Chemical Engineering Award.**

2016: United Nations **Award for Peace and Justice** for her work with the Malta Conferences which uses science as a bridge to peace in the Middle East.

2016: American Physical Society, **Andrei Sakharov Prize**, Award Citation: " For life-long devotion to the scientific freedom and human rights of scientists throughout the world and for compelling leadership in using science as a bridge to peace in the Middle East."

2015: American Association for the Advancement of Science (AAAS) **Award for Science Diplomacy** presented for, "Her efforts to foster scientific cooperation in the Middle East in order to encourage understanding and peace in a region facing political and societal tensions."

2011: The International Conference on Chemistry for Mankind (India) **Award for Stimulating Collaborations and Ensuring Human Rights.**

2010: National American Chemical Society **George C. Pimentel Award in Chemical Education**, presented "to recognize outstanding contributions to chemical education."

- 2007: The U.S. Civilian Research & Development Foundation (**CRDF Global**) **George Brown Award for International Scientific Cooperation**
- 2005: AAAS honor on International Human Rights Day, "in recognition of her tireless advocacy on behalf of scientific freedom and the human rights of scientists worldwide".
- 2005: Royal Society of Chemistry (England) **Ronald Nyholm Award**. "The award has been made for your outstanding contributions to chemical education in defining and developing methodology to utilise visual and performing arts activities in the teaching of chemistry."
- 2005: NY Academy of Sciences **Heinz R. Pagels Human Rights Award** for "your effective and tireless work on behalf of dissident scientists throughout the world and in particular your groundbreaking efforts in the Middle East."
- 2004: Elected an Honorary Member of the **Cuban Chemical Society**.
- 2003: National American Chemical Society **Charles Lathrop Parsons Award**, presented "in recognition of outstanding public service to chemistry."
- 2000: American Institute of Chemists **Joseph Hyman Ethics Award**, in recognition of "individuals who perform their duties dictated by ethical consideration, in the face of difficulties, for the benefit of the public."
- 2000: World Cultural Council **José Vasconcelos World Award of Education 2000**, given in recognition for valuable and pioneering contributions in the education field; this was the first international award presented in the new democratic South Africa.
- 1999: **Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring** White House, Washington, DC. [President Bill Clinton]
- 1998: American Chemical Society Award for **Encouraging Disadvantaged Students into Careers in the Chemical Sciences** sponsored by the Camille and Henry Dreyfus Foundation Inc. Award citation: "for her tireless support of underprivileged and minority students in discovering their own voices and improving their self-esteem and self-confidence, and for pioneering teaching methods which incorporate students' interest and cultural backgrounds into the learning of chemistry at all levels."
- 1998: **Kilby Laureate Award** citation: "Israeli scientist whose legendary bravery and success defending scientists under persecution throughout the world is matched only by her creative ability to empower teachers to integrate art, music and theater with scientific concepts, making science literacy available to disadvantaged young people everywhere."
- 1997: **Public Affairs Award**, ACS—Chicago Section. Award citation: "In recognition of your outstanding efforts in defense of scientific freedom throughout the world."

#### **SELECTED GRANTS:**

- 2005-2023: **Organisation for the Prohibition of Chemical Weapons (OPCW)** (\$153,000) for Malta Conferences.
- 2022: **kENUP Foundation** (\$40,000)
- 2005-2022: **Alexander von Humboldt Foundation** (\$76,000) for Malta Conferences.
- 2021: **American Chemical Society** (\$50,000) for the Malta X Conference.
- 2020: **Alfred Bader Foundation** (\$67,000) for the Malta X Conference.
- 2019-2020: **American Chemical Society** (\$15,000) for the Malta IX Conference.
- 2017-2018: **MacArthur Foundation** (\$75,000) for Malta Conferences.
- 2017-2018: **European Commission on Research and Innovation** (\$15,000) for Malta Conferences.
- 2014-2018: **Carnegie Corporation of New York** (\$200,000) for Malta Conferences.
- 2009-2016: **Rockefeller Brothers Fund** (\$40,000) for Malta Conferences.

2012-2013: **Google Inc.** (\$50,000) for Malta VI Conference.

2012-2013: **Skoll Global Threats Fund** (\$25,000) for Malta VI.

2009-2013: **Office of Naval Research Global (ONRG)** (\$45,000) for Malta Conferences.

2011-2013: **U.S. Army Forward Element Command Atlantic** (\$10,000) for Malta Conferences.

2007-2012: **UNESCO** (\$30,000) for the Malta Conference.

2007-2012: **CRDF (Civilian Research and Development Foundation)** (\$43,680) for Malta Conferences

2003-2010: **NSF** (\$100,000) for Malta Conferences.

2009-2010: **US Department of State** (\$25,000) for Malta Conferences.

2004-2008: **Camille and Henry Dreyfus Foundation** (\$65,000) Malta Conferences.

1997–2005: **City of Chicago Board of Education** (\$2,000,000) STEM Academy.

1997–2001: **Chicago Annenberg Challenge** (\$460,000) "The Fun, the Beauty, and the Challenge of Science."

1993–2000: **Joyce Foundation** (\$632,300) "It Takes a Village to Raise a Child."

1991–1994: **NSF** (\$265,000) "From Ozone to Oil Spills" a curriculum with Princeton and Indiana University.

1991–1995: **U. S. Dept. of the Naval Research** and **U. S. Air Force Office of Scientific Research** (\$393,000)

1989–2007: **NSF** (\$1,896,000) "Physical Science Workshops for Teachers."

#### **SELECTED LECTURES:**

2023: Invited lecture, "Human Rights, Education, and Peace for the Progress of Humanity," The Mentor Project.

2023: Invited lecture, "Science Diplomacy as a Bridge to Peace in the Middle East," The Israeli Parliament, Boca Raton, Florida.

2023: Presented a lecture, "UN Sustainable Development Goals and the Malta Conferences," American Chemical Society National Meeting, Indianapolis, IN.

2022: Presented a lecture, "Innovation, Entrepreneurship, Collaboration, and Cooperation in the Middle East: The Malta Conferences," Atlantic Basin Conference on Chemistry (ABCChem), Morocco.

2022: Invited to deliver a keynote lecture, "Science Education and Science Diplomacy – Contributions to the Progress of Humanity," 5<sup>th</sup> African Conference on Research in Chemistry Education (ACRICE), Cairo, Egypt.

2022: Invited to deliver a plenary lecture at NYU Abu Dhabi, "Science Diplomacy Can Overcome Cultural, Religious, and Political Barriers," Third Middle Eastern Materials Science Conferences.

2022: Invited Speaker, "From Fighting for Human Rights to Using Science as a Bridge to Peace," Symposium on Speaking Up for Human Rights of Scientists, Just as Important Now as in Andrei Sakharov's Time, American Physical Society (APS) March Meeting.

2021: One of 5 Invited Plenary Lectures: "Education and Peace through Chemistry – Contributions to the Progress of Humanity", International Union of Pure and Applied Chemistry (IUPAC).

2021: Invited Panelist, "From Fighting for Human Rights to Using Science Collaborations as a Bridge to Peace", American Physical Society (APS), "Physics, Peace, Human Rights"

2021: Invited Speaker, "Science Diplomacy in the Middle East: Challenges and Opportunities", NYU Abu Dhabi Institute

2021: Invited Panelist, "Science as a Diplomatic Tool", American Chemical Society (ACS)

2020: Organizer and chair of a virtual Malta Conference, "Insights into Science-Diplomacy on Covid-19" presented by Victor Dzau, President, US National Academy of Medicine.

2020: Organizer and chair of a virtual Malta Conference, "Insights on the collaboration between Pluristem Therapeutics (Israel) and Abu Dhabi Stem Cells Center (ADSCC) concerning Covid-19". The first scientific collaboration between Israel and the UAE was unveiled in the virtual Malta Conference and was reported all over the world.

2019: Invited Lecture: "Science Diplomacy in the Middle East", Northwestern University, Evanston, IL.

2019: Invited Lecture: "Science Diplomacy in the Middle East", Savannah River National Lab, Director's Colloquium.

2019: Invited Lecture: "Science Diplomacy: From Fighting for Human Rights to Using Science as a Bridge to Peace". Johns Hopkins SAIS, Washington DC.

2018: Invited Lecture: "Science and its Added Value—Helping Diplomacy and Defending Human Rights". Nancki Institute, Warsaw, Poland.

2018: Invited Lecture: "Science Diplomacy in the Soviet Union, Cuba, and the Middle East". ACS, Boston.

2018: Invited Lecture: "Developing Relationships Between Cuba and ACS since 1998". ACS, New Orleans.

2017: Organizer and Presider of Special Symposium: "Using Science for Peace in the Middle East: Challenges and Opportunities". World Science Forum, Jordan.

2017: Conferencia: "Human Rights, Education, and Peace – Contributions to the Progress of Humanity". Oviedo, Spain.

2017: Invited Presidential Lecture: "Science Diplomacy and Public Policy: The Malta Conferences". ACS, Washington DC.

2017: Panelist: "Improving the world – Chemistry and the Sustainable Development Goals". IUPAC. Sao Paulo, Brazil.

2017: Invited Lecture: "Science Diplomacy – Using Chemistry to Bridge Gaps Between Nations". San Juan, Puerto Rico.

2016: Invited Lecture: EU Research Council Conference on "Frontier Research and Science Diplomacy". Brussels, Belgium.

2016: Invited Lecture: "The Malta Conferences - Using Green Chemistry to Bridge Gaps Between Nations". 6th International IUPAC Conference on Green Chemistry, Venice, Italy (invited by UNESCO).

2016: Invited Lecture: "Science Diplomacy: Cross-border Collaborations Towards Peace". GYA, Netherlands.

2016: Organizer, moderator and speaker: "Toward a Sustainable Future in the Middle East: Building Scientific Collaborations". Symposium, AAAS Washington DC.

2016: "Sakharov Award Lecture: Human Rights and Peace – A Personal Odyssey". APS, Salt Lake City, Utah.

2015: Invited Lecture: "Science Diplomacy Among Nations in Conflict". STS Forum. Kyoto, Japan.

2015: Panelist: "Science Diplomacy: Cross-border Collaborations Towards a Sustainable Future". AAAS, Washington, DC.

2015: Panelist: "Science Diplomacy: Cross-border Collaborations Towards a Sustainable Future". EU Commission on Research and Innovation. Amman, Jordan.

2014: Invited Lecture: "Science Diplomacy as a Bridge to Peace." Nobel Symposium, Russian Academy of Science., Russia.

2013: Chaired Panel: "Solar Energy and Peace in the Middle East." Solar Energy for World Peace. Istanbul, Turkey

2012: Invited Speaker: "Science as Diplomacy and a Bridge to Peace." Argentine Chemical Society, Buenos Aires, Argentina

2012: Invited Speaker: "Science and Diplomacy: Science Education as the Catalyst." Science Diplomacy, Alexandria, Egypt.

2011: Plenary Speaker: "Using Chemistry to Bridge Gaps Between Nations." 15<sup>th</sup> ISCB. Rajkot, India.

2009: Presented: "Science as a bridge to peace and international development." The **Norwegian Nobel Institute**, Oslo, Norway.

**MEDIA COVERAGE:** Zafra M. Lerman has been honored by widespread coverage in newspapers and magazines across the U.S. and around the world. She has been interviewed for: **National Public Radio, Voice of America, and National South African Radio**, as well as featured on **CNN, C-SPAN, WGN, ABC, NBC, CBS, South African Broadcasting Company, Cuban National Television, Chinese National Television, and Spanish National Television and Radio**. Copies of media reports are available upon request.

**PUBLICATIONS:** Zafra Lerman published many articles in scientific magazines, journals, and book chapters, and produced numerous videos. The list is too long to include here and is available upon request.