

Alicia Durán Short Bio

Alicia Durán is a Research Professor of the Spanish Research Council (CSIC) Madrid, Spain. She received a degree in Physics, from the Universidad Nacional de Córdoba (Argentina) and a PhD in Physics from Universidad Autonoma de Madrid (UAM), Spain.

Dr. Durán has directed 15 PhD theses, 9 International and one Extraordinary Prize UAM and more than 40 MSci theses. Her CV includes over 270 articles in WOK/Scopus journals with more than 6900 citation and s an H index (WOK) 50 (the highest index in Spain in Science Materials, Ceramics). She has published 14 books and 14 book- chapters, and has given more than 40 international invited talks/keynotes from 2010-2022.

Prof. Durán became from as Associate Editor to co-editor in chief of International Journal of Applied Glass Science (IJAGS) in 2018, with Mario Affatigato as new editor-in-chief. The strategy included the design of special issues. In particular, Women in Glass in June 2020 that constitutes the first issue fully dedicated to women working in glass all over the world, gathering 17 papers from women working in 14 countries in a wide range of topics. The impact of this issue has been very important, taken as an example of how to promote the work of women in science and especially in glass sector. The guest editors, Kathleen Richardson, Lili Hu and Alicia Durán also reflect the goal of integrating West and East in our journal. A new special issue dedicated to FUNGLASS, the European glass project with the highest budget ever financed by EU, was published in October 2021. A special issue focused in the Future of Glass, was launched for opening the International Year of Glass 2022, and Glass and Sustainability is the new project of special issue to appear in July 2024.

The International Year of Glass 2022 (IYOG2022) was an idea born in the US in the frame of the movement announcing the arrival of the Age of Glass. The special issue of IJAGS devoted to the Glass Age published the article: "Welcome to the Glass Age" by D. Morse, J. Evenson.

Durán, as President of the International Commission on Glass (ICG), accepted the challenge of presenting the IYOG to United Nations, and getting the support of the Permanent Mission of Spain at UN in New York. She has intensively worked as chair of this initiative receiving the support of more than 2500 institutions from 96 countries of the five continents. After a long route, writing different documents and advancing the support of other countries, the IYOG2022 was finally approved by unanimity at the General Assembly of UN on May 18, 2021 with the explicit signature of 19 countries. Hundreds, thousands of activities were developed across the planet in all fields of glass: industrial fairs and congresses, courses and artist gathering the IYOG. *Welcome to the Glass Age* was published in English and Spanish, as well as itinerant exhibitions, videos and magazines.

Durán is the leader of the research group GlaSS at the Institute of Ceramic and Glass, ICV (CSIC), nominated as Excellence group of CSIC, in the first top 10% of the 1650 research groups of CSIC (<u>http://glass.icv.csic.es/</u>)

The general objective of the research group GlaSS is the design, processing and characterization of glasses, glass-ceramics and sol-gel materials, going from the structural features to properties (optical, mechanical, chemical, thermal, electrical, etc.) and applications.

The research lines focus on topics going from basic research up to applications in the industrial glass sector and other final users of glassy materials. The main research lines are condensed in 3 topics, financed from different sources including R&D European programme, Spanish R&D programme as well as other international projects and contracts with companies: Glasses and glass-ceramics produced by melting, Sol-gel materials for sustainable applications and Industrial collaboration: energy saving, food safety and environmental issues.

Topics connected to energy and environment research were the aim of most projects developed in the last 20 years, focused in the Glass and Sustainability. Different materials and components for fuel cells (PEMFC membranes, sealing glasses and glass-ceramics for MCFC and SOFC), solid electrolytes and electrodes for Li-batteries, low temperature sealing in solar energy devices, come together with protective and environmentally friendly anticorrosive coatings, mesostructure coatings with photocatalytic activity for abatement of water or gas pollutants, solar cells and nano glass-ceramics with photonic applications produced by melting, sol-gel and SPS. Energy saving is an important issue with different approaches, from industrial glass furnaces to solar and heat control glasses for buildings.

Glass and Sustainability were also the driving force of research and topics developed across the planet during the IYOG, including glasses in biomedicine applications, renewable energies and glass, glass in buildings and transport, decreasing CO₂ emissions and foot print of glass processes, optical fibers and ICT or 5G, as well as protecting glasses and glasses in art for enhancing well-being. Education and promotion of equality are key tools to get these goals.

Prof. Durán was President of the International Commission on Glass (ICG) in 2018-2021, and Treasurer (ICG) 2002 - 2015.

She has received several Awards, including the Internacional Prize Vittorio Gottardi of ICG, Prize RAICES (ROOTS) of International Cooperation in Science and Technology, granted by the Ministry of Science, Technology and Productive Innovation of Argentina, Guest Professor Wuhan University of Technology, China, Glass person of the Year 2019. Phoenix Award International Glass Industry, Fellow of the American Ceramic Society. In 2022 she received the Prize to Research life SOCIEMAT-Spanish Chapter American Ceramic Society, the Otto Schott Award 2022, the President's Award ICG, instituted by ICG to relevant work for the association and was nominated Honorary member of The Worshipful Company of Glass Sellers of London.