Halina Abramczyk studied physics at the University of Lodz and received the Master of Science degree in physics. After obtaining her Ph.D degree in physical chemistry in 1982 from Technical University of Lodz. Dr. Halina Abramczyk joined the Chemistry Faculty at the Technical University of Lodz. After habilitation in molecular and laser spectroscopy in 1989 she became the Head of the Laboratory of Laser Molecular Spectroscopy (LLMS) of the Technical University of Lodz.

Her research interest involves ultrafast and Raman spectroscopy and medical applications of breast cancer diagnosis by optical methods. She has been carrying out studies on mechanisms of vibrational relaxation in solutions, glasses and crystals in H-bonded systems, solvation dynamics of an excess electron, the mechanisms of phase transition as well as the mechanisms of femtosecond dynamics in the bacteriorhodopsin photocycle and its retinal modified analogs. She currently studies the photochemistry and femtosecond dynamics of metal complexes of phthalocyanines that are photosensitizers in photodynamic therapy. The current studies focuses also on examination of Raman markers that can be useful for the preclinical and clinical in vivo breast tissue applications.

She has published around 120 scientific papers and is an author of 6 books (or chapters in the books) including scientific monographies and the books for graduate and Ph. D. students. She has supervised 9 Ph.D theses and 18 M.Sc theses on molecular spectroscopy, fiber optical transmission, and laser-oriented chemical dynamics. Halina Abramczyk is the member of the editorial board of Journal of Molecular Liquids since 1994 and the member of the International Executive Committee of European Molecular Liquid Group since 1991. She received Fulbright (USA), DAAD (Germany), International Federation of University Women (Spain), Zentrum fur Interdisziplinare Forschung (Germany) awards. She was a coordinator of the Polish-American Joint project between the Polish Ministry of Education and National Science Foundation (MEN- NSF). In 2007 she received the prestigious Award from EU - Marie Curie Excellence Chair at the Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy (MBI) in Berlin Germany, which coordinates and administrates one of the I3 Infrastructures (LASERLAB-EUROPE) that combines 17 laser national infrastructures from 9 European countries.

Her interests include adventure travels, reading and learning foreign languages.