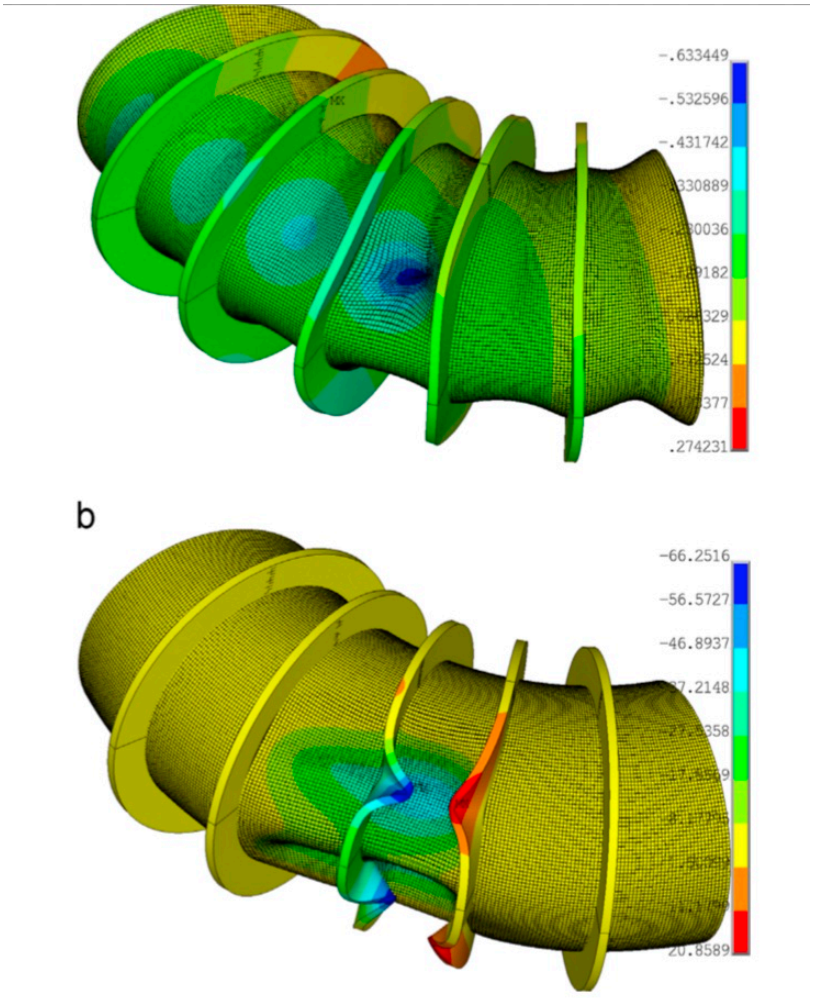


**Fig. 12.** The deformation contour of the tested ring-stiffened toroidal elbow model: (a) under critical pressure and (b) entering into ideal post-buckling flow state.

From: Qinghai Du, Weicheng Cui and Bowen Zhang, "Buckling characteristics of a circular toroidal shell with stiffened ribs", Ocean Engineering, Vol. 108, pp 325-335, 2015

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See:
https://www.researchgate.net/profile/Weicheng_Cui
https://www.wias.org.cn/english/TALENTS/ADVANCEDTECHNOLOGY/201901/t20190107_1759.shtml

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**Biography:**

Professor Weicheng Cui is a research professor and Dean of Hadal Science and Technology Research Center, Shanghai Ocean University. He has a B.Sc from the Department of Engineering Mechanics of Tsinghua University and a Ph.D from the University of Bristol, England. From 1990 to 1993, Prof Cui carried out post-doctorate research in the Department of Aerospace Engineering of University of Bristol, where he made some contributions in the aspects of measurement of interlaminar shear strength, nonlinear effect and size effect of the delamination strength and the delamination mechanism for composite materials. Between 1993-1999 and 2002-2012, Prof Cui worked in China Ship Scientific Research Center (CSSRC) and was was appointed as the Changjiang Professor of Shanghai Jiao Tong University between 1999 and 2002. Since 2013 Prof Cui has been

working at Shanghai Ocean University. He was the project leader and first deputy chief designer of Jiaolong deep manned submersible. He made some contributions in the application of multidisciplinary design optimization method and the establishment of a rational design standard for the manned cabin. Before the jiaolong project, he mainly engaged in the research in ship structural mechanics. He had made some contributions in the areas of the prediction of the ultimate strength of intact and damaged ship structures, fatigue strength assessment of ship structures and reliability based analysis and design of ship structures. He is a standing committee member of ISSC and UT conference. He is an associate editor of «Ocean Engineering» and a member of the editorial board of another four international journals «Marine Structures», «Journal of Marine Science and Technology»,«Journal of Engineering for the Maritime Environment», «Ships and Offshore Structures» and several national journals including the deputy chief editor of «Journal of Ship Mechanics». He has published about 400 technical papers in various technical journals and conferences. His current interest is to develop a full ocean depth manned submersible in order to promote the development of hadal science in the world.

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