

Abstract Submitted
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Experimental microbubble generation by sudden pressure drop and fluidics¹ FERNANDO FRANCO GUTIERREZ, Universidad Michoacana de San Nicolas de Hidalgo, BERNARDO FIGUEROA ESPINOZA, Universidad Nacional Autonoma de Mexico, ALICIA AGUILAR CORONA, JESUS VARGAS CORREA, GILDARDO SOLORIO DIAZ, Universidad Michoacana de San Nicolas de Hidalgo — Mass and heat transfer, as well as chemical species in bubbly flow are of importance in environmental and industrial applications. Microbubbles are well suited to these applications due to the large interface contact area and residence time. The objective of this investigation is to build devices to produce microbubbles using two methods: pressure differences and fluidics. Some characteristics, advantages and drawbacks of both methods are briefly discussed, as well as the characterization of the bubbly suspensions in terms of parameters such as the pressure jump and bubble equivalent diameter distribution.

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