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Vortex Breakdown Produced in a Cylindrical Rotating End Wall*

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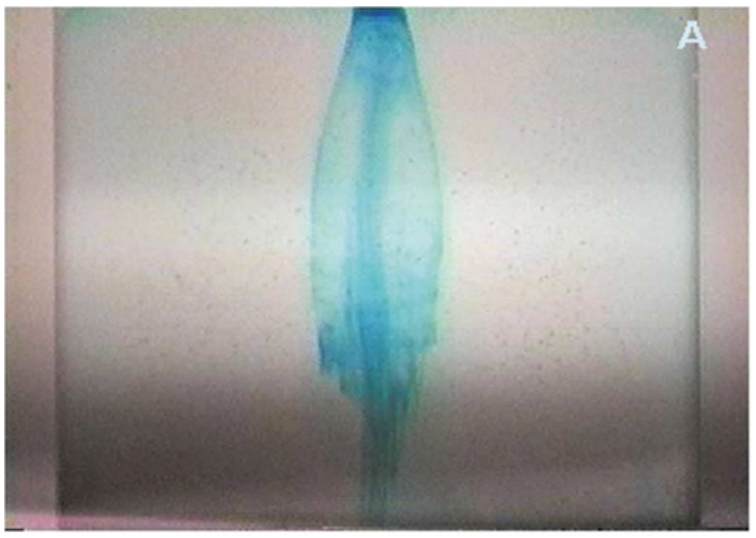

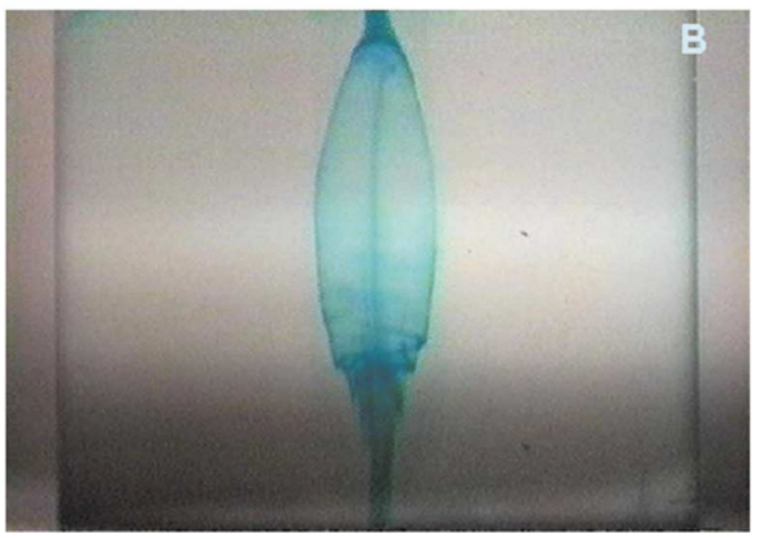

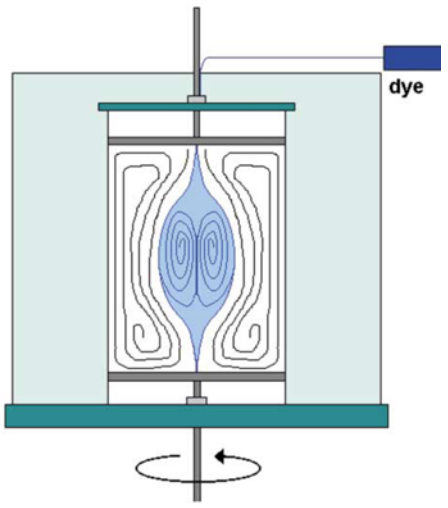

These figures show the flow structure (like a "bubble") produced in a cylindrical container with a rotating end wall. The fluid in the interior of the container is pumped and a vortex breakdown can be produced and revealed using a dye, as schematically represented beside. In this study, a mixture of water and glycerin composes a work fluid. The morphology of the bubble created in the work fluid (A) is highly sensitive to the presence of very small concentration of a polymer dissolved in the work fluid (B).

* More information: 9th International Symposium on Flow Visualization, Edinburgh - 2000 (paper number 258)