WAVE

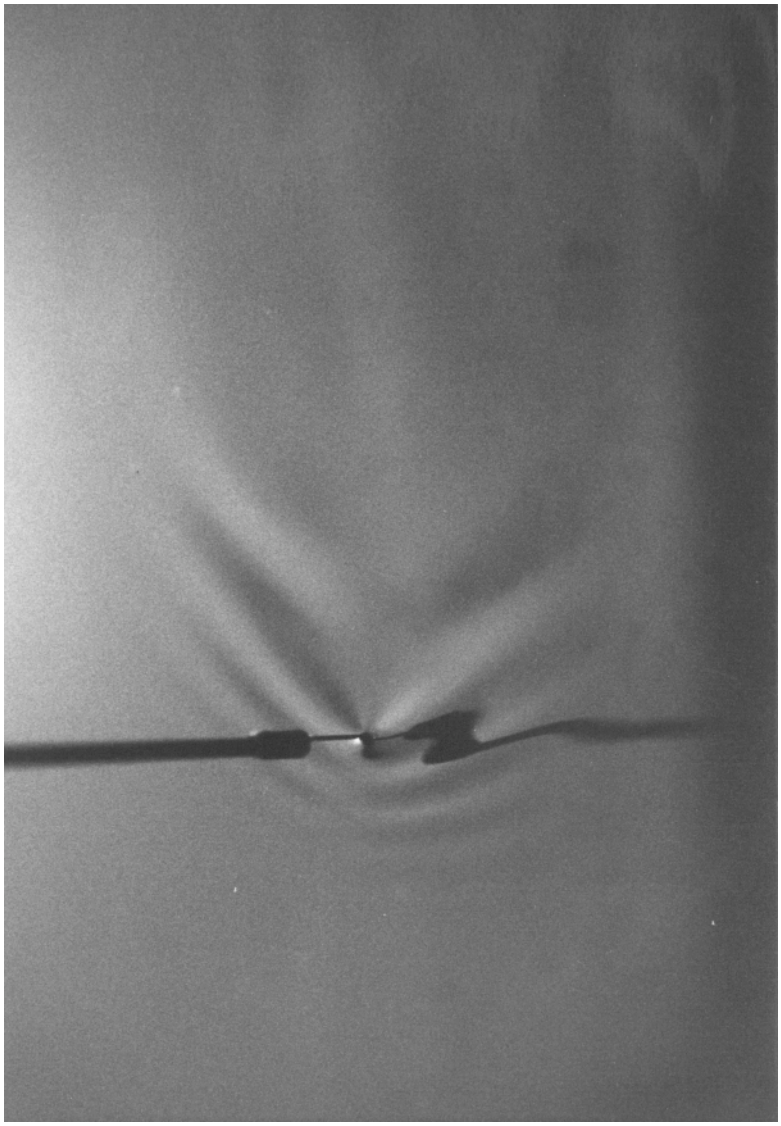

Image ID : WAVE-01
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface wave around a thin cylinder moving along the surface of static water
Notes : Static watertank experiment.
Diameter of the cylinder d = 0.5mm, Velocity U =24cm/s.
Floude number F = 1.60. Weber number W = 34.0. R = 3850.

Author : S. Taneda
Published in :
Copyright :
Reproduced from: unpublished

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave

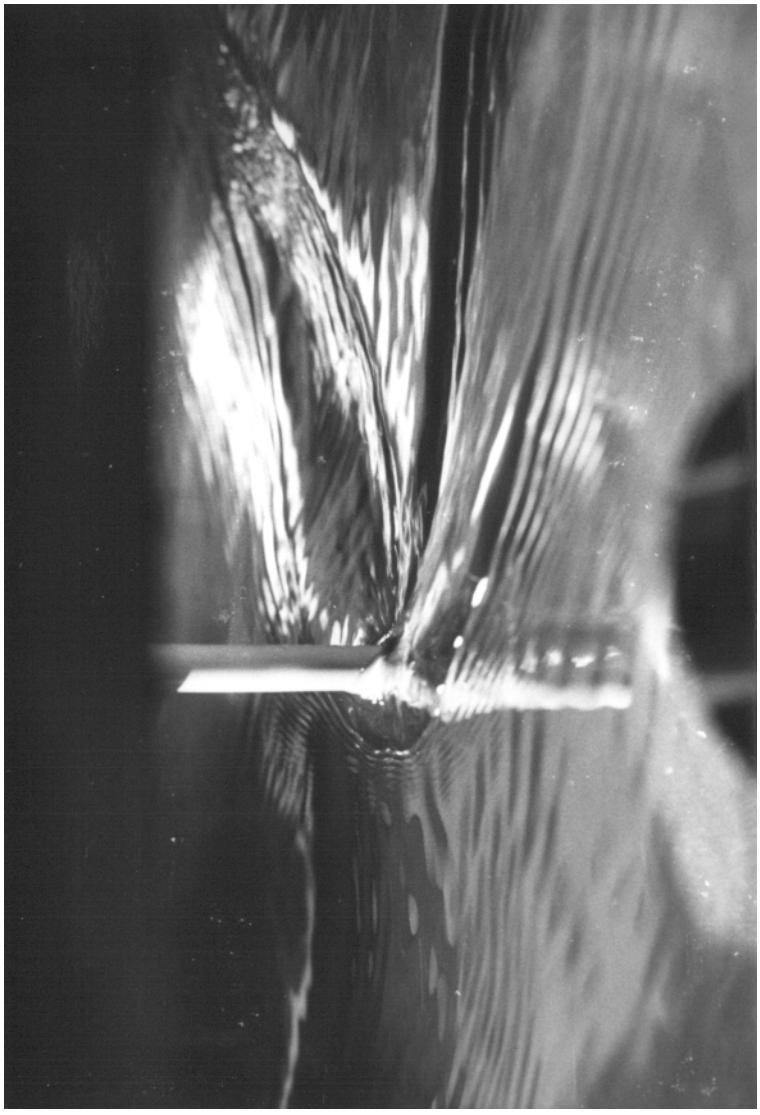

Image ID : WAVE-02
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface wave of water around a cylinder standing vertically in an open water channel
Notes : Open water channel experiment.
Diameter of the cylinder d = 1cm, Water velocity U =50cm/s.
Floude number F = 1.60. Weber number W = 34.0. R = 3850.

Author : S. Taneda
Published in :
Copyright :
Reproduced from: unpublished

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave

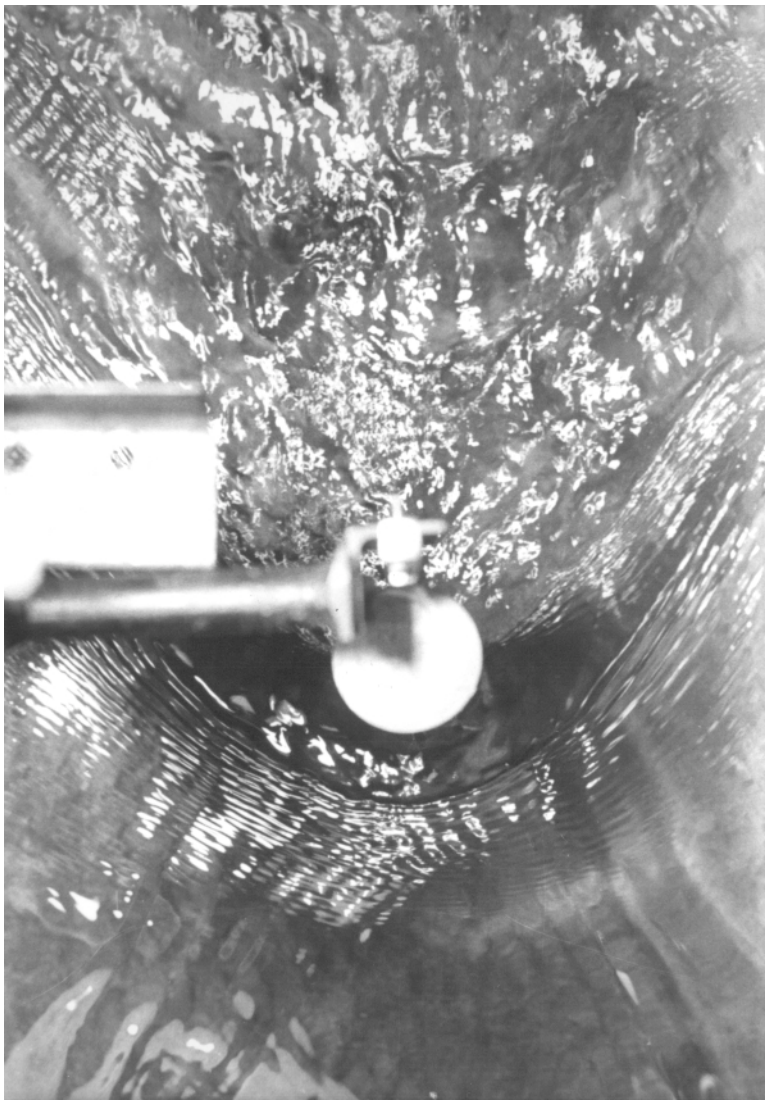

Image ID : WAVE-03
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Plane view of a surface shock wave on the water surface(one-step type) in front of a cylinder
Notes : Open water channel experiment.
Diameter of the cylinder d = 5cm, Water velocity U =50cm/s.
Floude number F = 0.71. Weber number W = 171. R = 19200.

Author : S. Taneda
Published in : 1974

Reproduced from: S.Taneda: J. Phys. Soc. Jpn, Vol.36, No.1 (1974) 298.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave

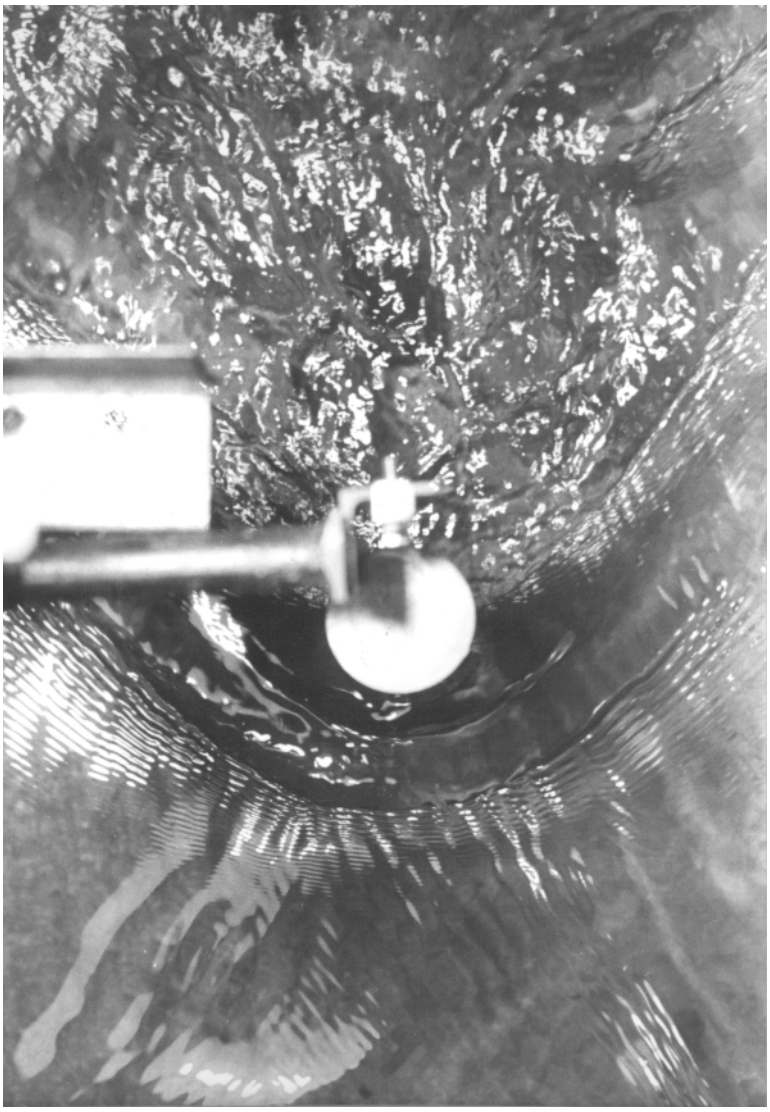

Image ID : WAVE-04
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Plane view of a surface shock wave on the water surface(two-step type) in front of a cylinder
Notes : Open water channel experiment.
Diameter of the cylinder d = 5cm, Water velocity U =50cm/s.
Floude number F = 0.71. Weber number W = 171. R = 19200.

Author : S. Taneda
Published in :
Copyright :
Reproduced from: unpublished

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave

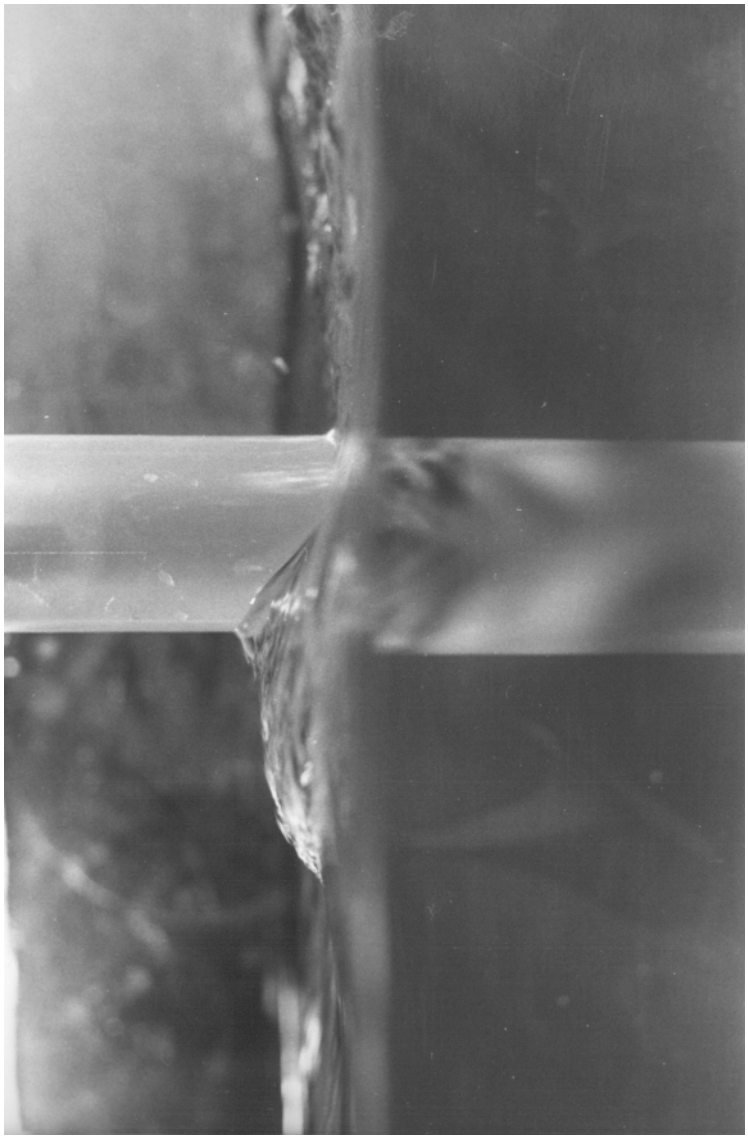

Image ID : WAVE-05
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Side view of a surface shock wave in front of a vertical cylinder
Notes : Open water channel experiment.
Diameter of the cylinder d = 5cm, Water velocity U =55cm/s.
Floude number F = 0.78. Weber number W = 207. R = 25000.

Author : S. Taneda
Published in : 1974

Reproduced from: S.Taneda: J. Phys. Soc. Jpn, Vol.36, No.1 (1974) 298.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave

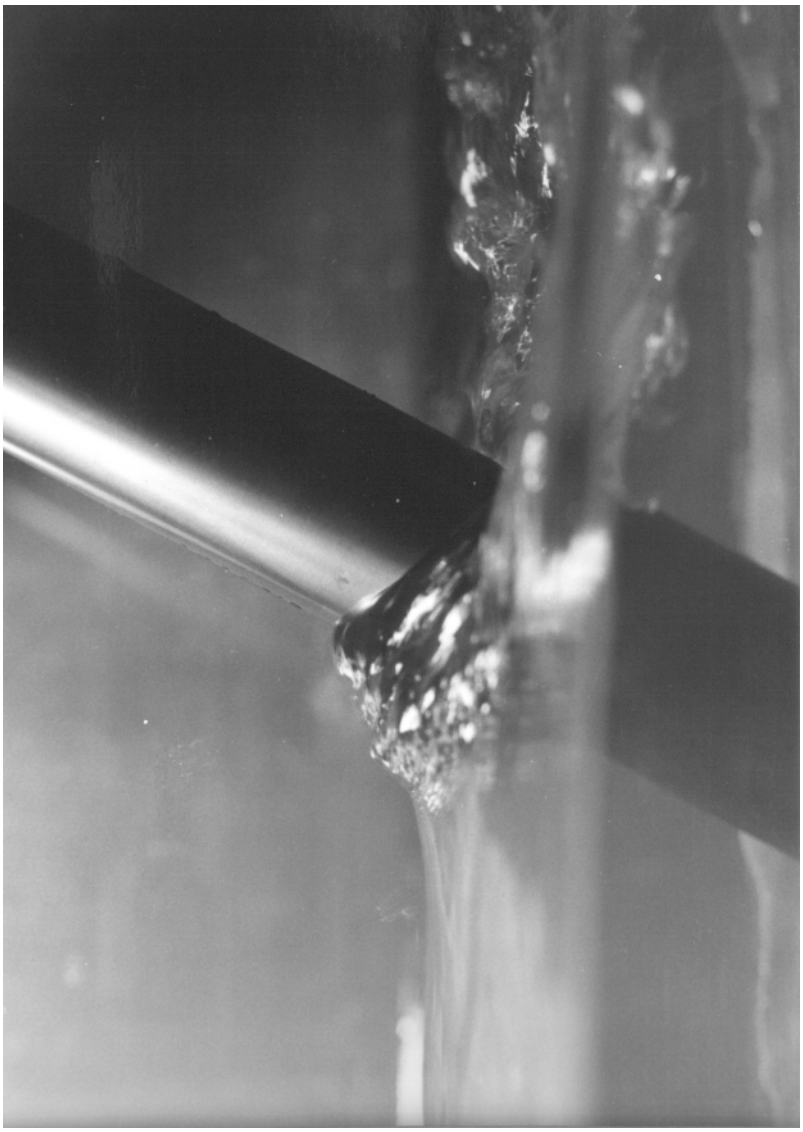

Image ID : WAVE-06
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface shock wave in front of an oblique cylinder (inclination angle is120°)
Notes : Open water channel experiment.
Diameter of the cylinder d = 5cm, Water velocity U =75cm/s.
Floude number F = 1.07. Weber number W = 385. R = 41700.

Author : S. Taneda
Published in : 1988
Copyright : S. Taneda
Reproduced from: S. Taneda: Fluid Dynamics Learned from Images (Asakura-Shoten, 1988).

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Oblique cylinder, Wave

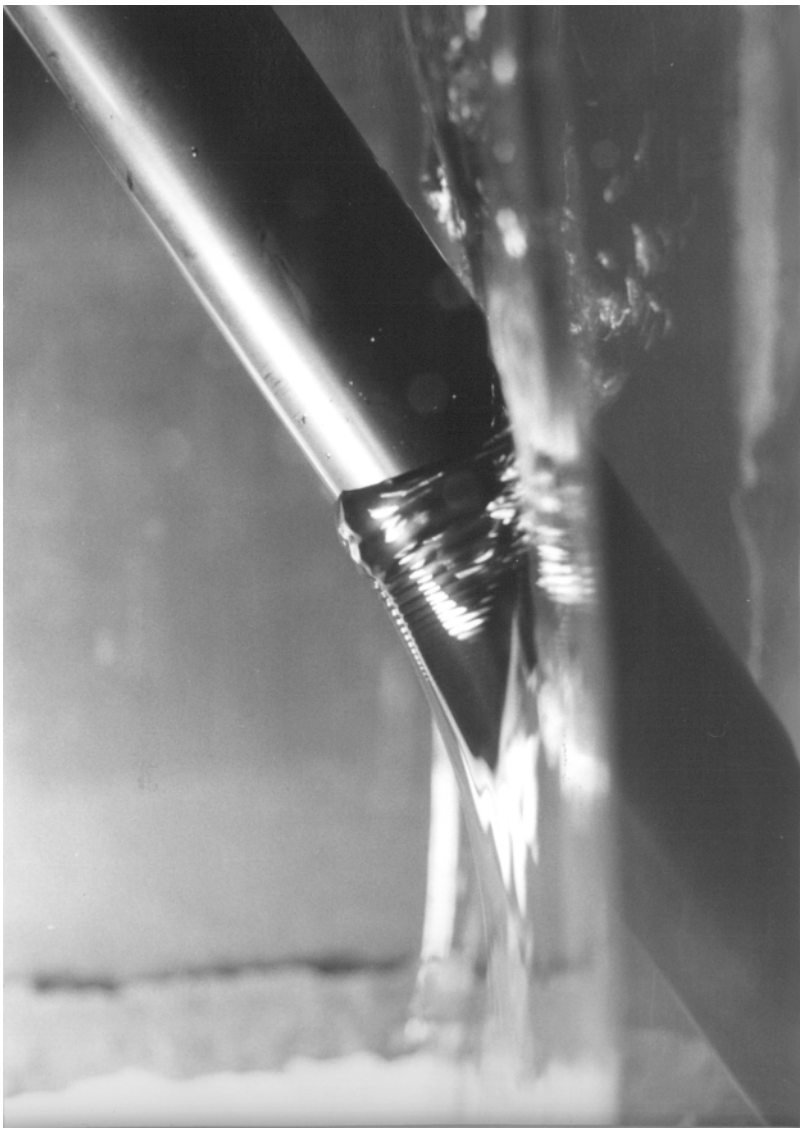

Image ID : WAVE-07
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface shock wave in front of an oblique cylinder (inclination angle is 150°)
Notes : Open water channel experiment.
Diameter of the cylinder d = 5cm, Water velocity U =75cm/s.
Floude number F = 1.07. Weber number W = 385. R = 41700.

Author : S. Taneda
Published in : 1974
Copyright : Physical Society of Japan
Reproduced from: S.Taneda: J. Phys. Soc. Jpn, Vol.36, No.1 (1974) 298.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Oblique cylinder, Wave

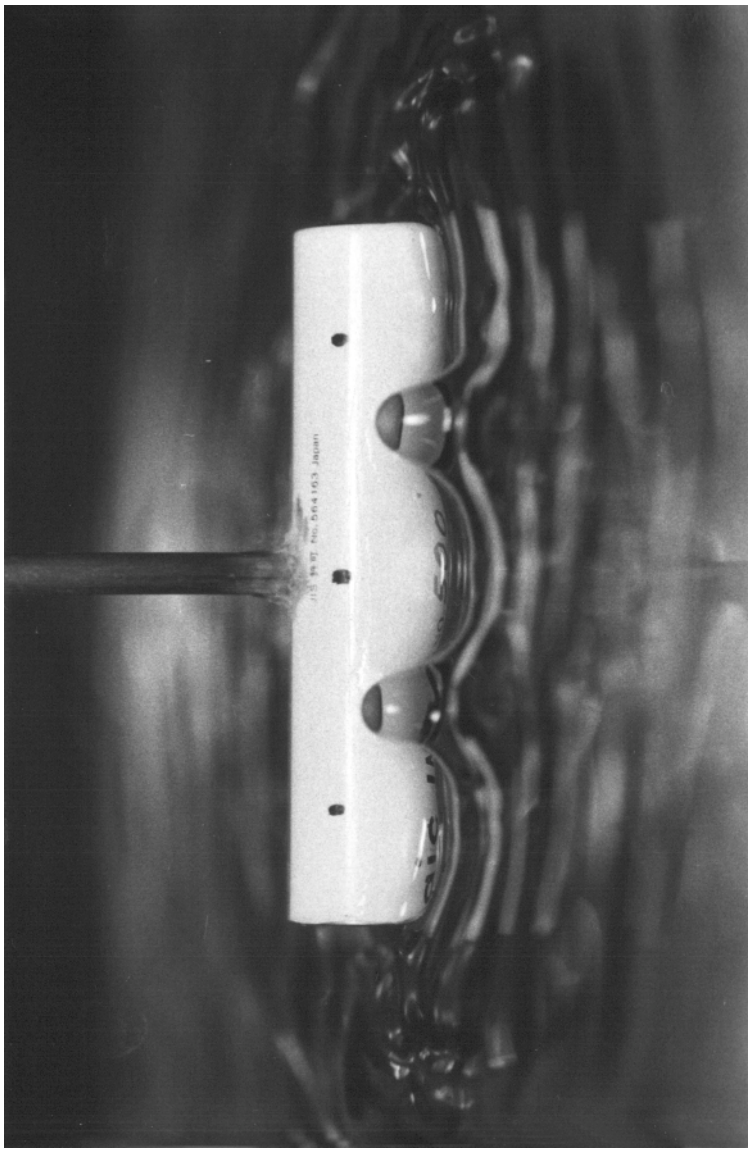

Image ID : WAVE-08
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Standing wave around a vibrating cylinder immersal halfway under the water surface (D/L=5)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.5cm, length L = 6cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 20Hz.
Amplitude a = 1.4mm.

Author : S. Taneda
Published in : 1995

Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.16 (1995) 61.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

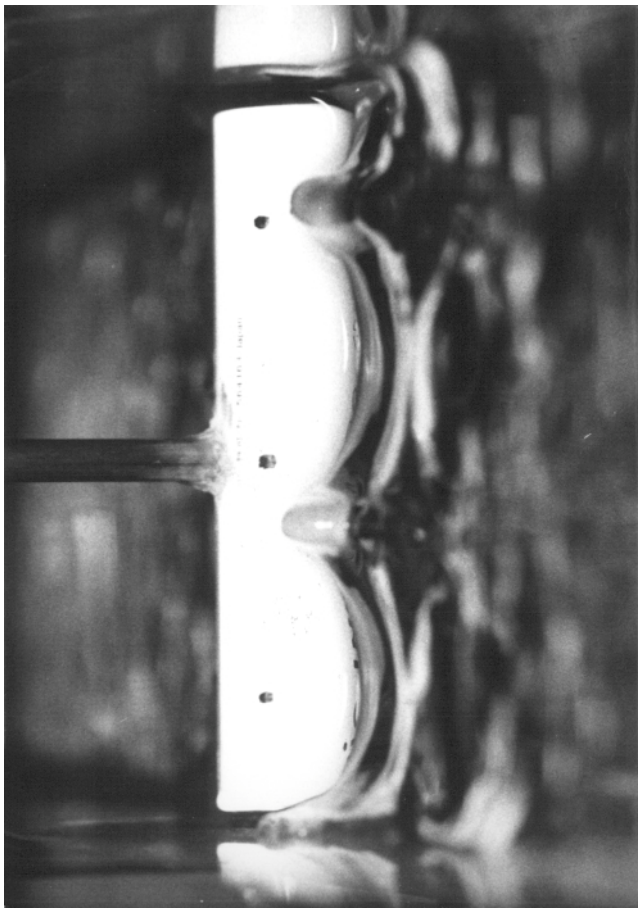

Image ID : WAVE-09
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Standing wave around a vibrating cylinder immersal halfway under the water surface
(Mode number 5)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.5cm, length L = 6cm.
Width between the walls of the watertank D = 6.2cm. Vibration frequency 20Hz.
Amplitude a = 1.62mm.

Author : S. Taneda
Published in : 1995
Copyright : Japan Society of Fluid Dynamics
Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.16 (1995) 61.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

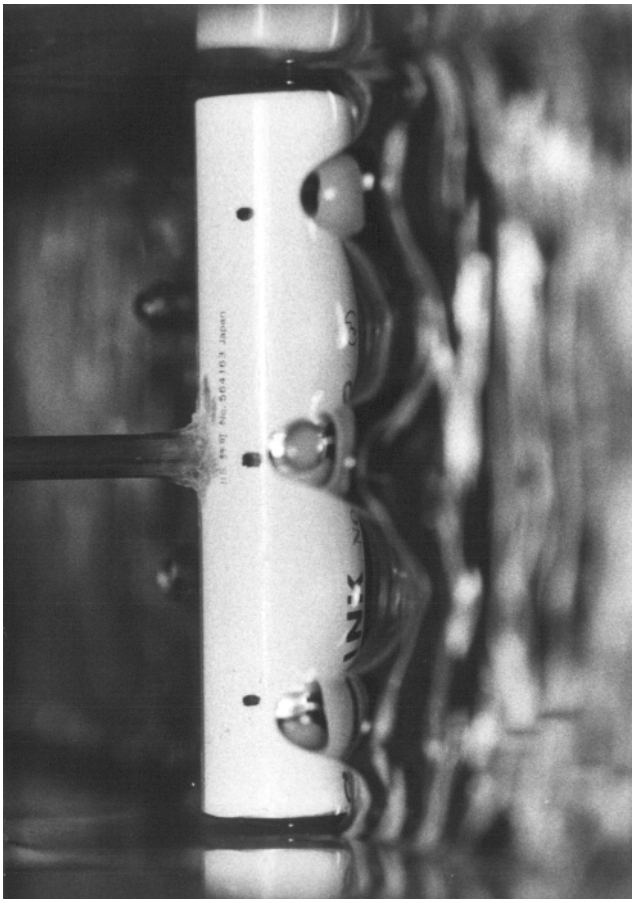

Image ID : WAVE-10
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Standing wave around a vibrating cylinder immersal halfway under the water surface (Mode number 6)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.5cm. length L = 6cm.
Width between the walls of the watertank D = 6.2cm. Vibration frequency 20Hz.
Amplitude a = 1.62mm.

Author : S. Taneda
Published in : 1995
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Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

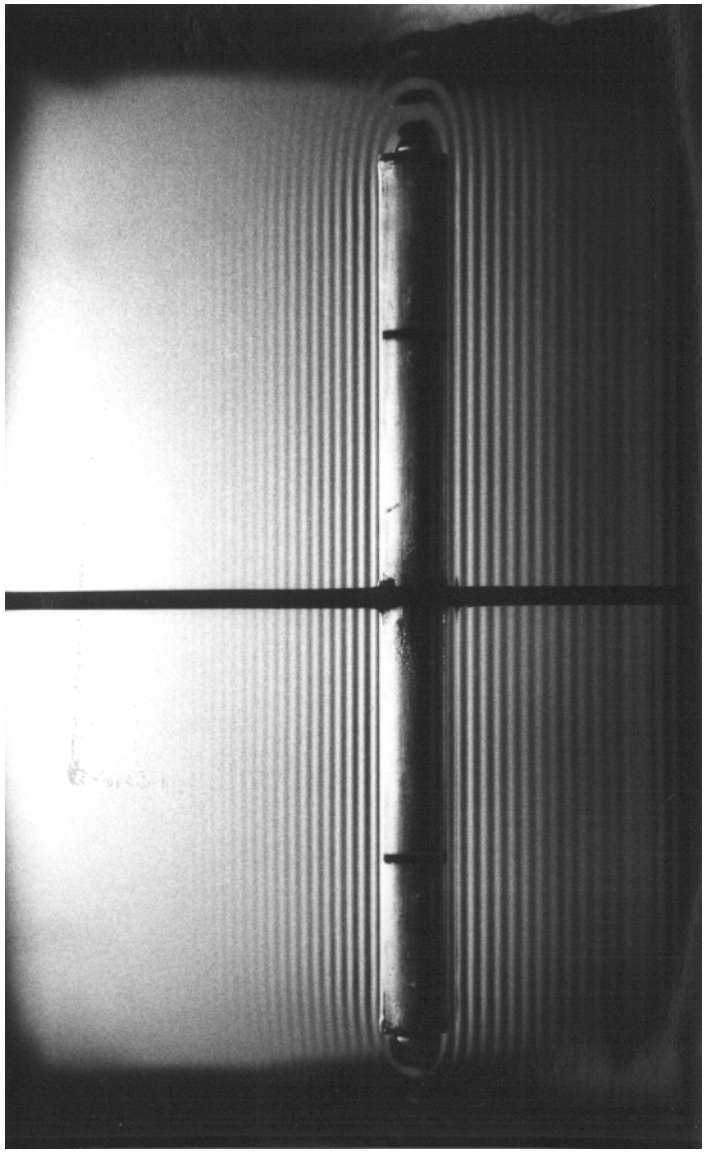

Image ID : WAVE-11
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Front view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is quite small)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.23mm.

Author : S. Taneda
Published in : 1994

Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

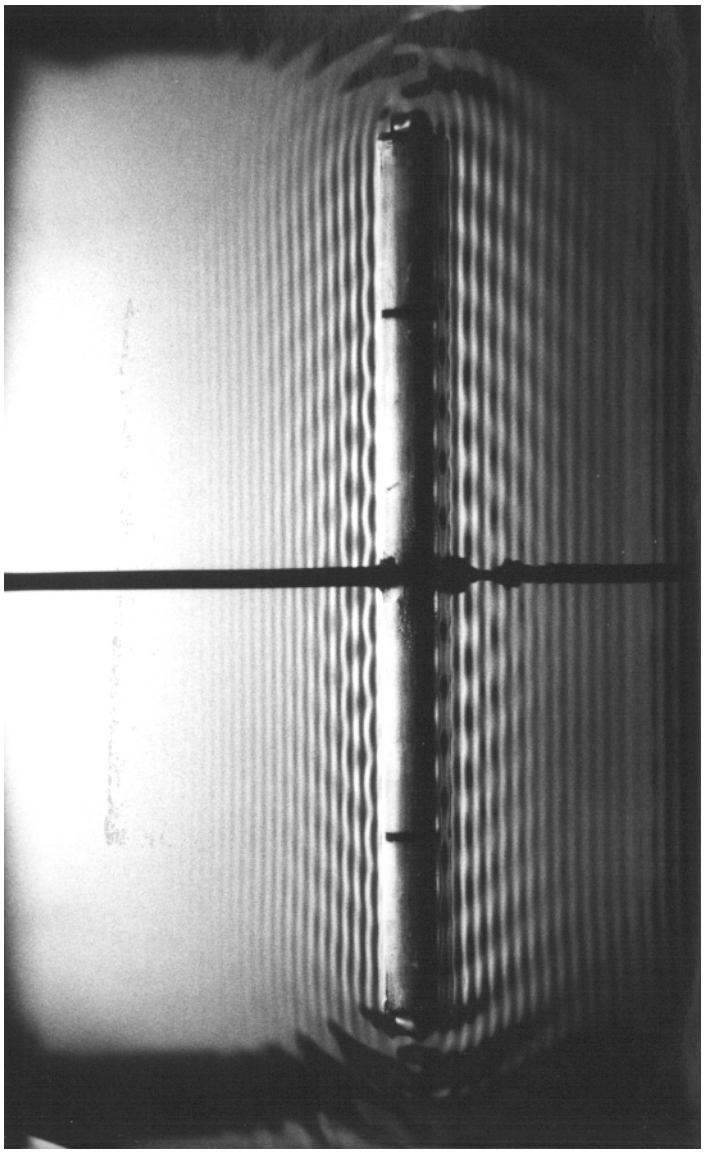

Image ID : WAVE-12
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Front view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is small)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = cm.
Width between the walls of the watertank D = 30cm, Vibration frequency 36Hz.
Amplitude is 0.32mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

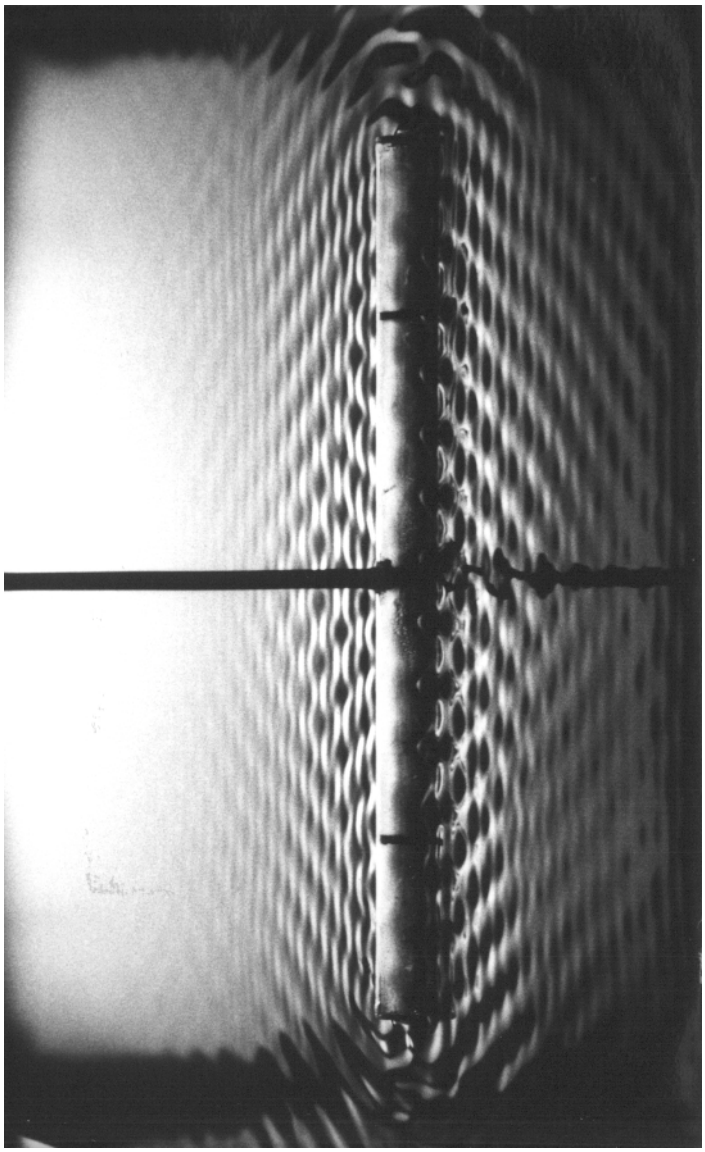

Image ID : WAVE-13
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Front view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is moderate)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.51mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

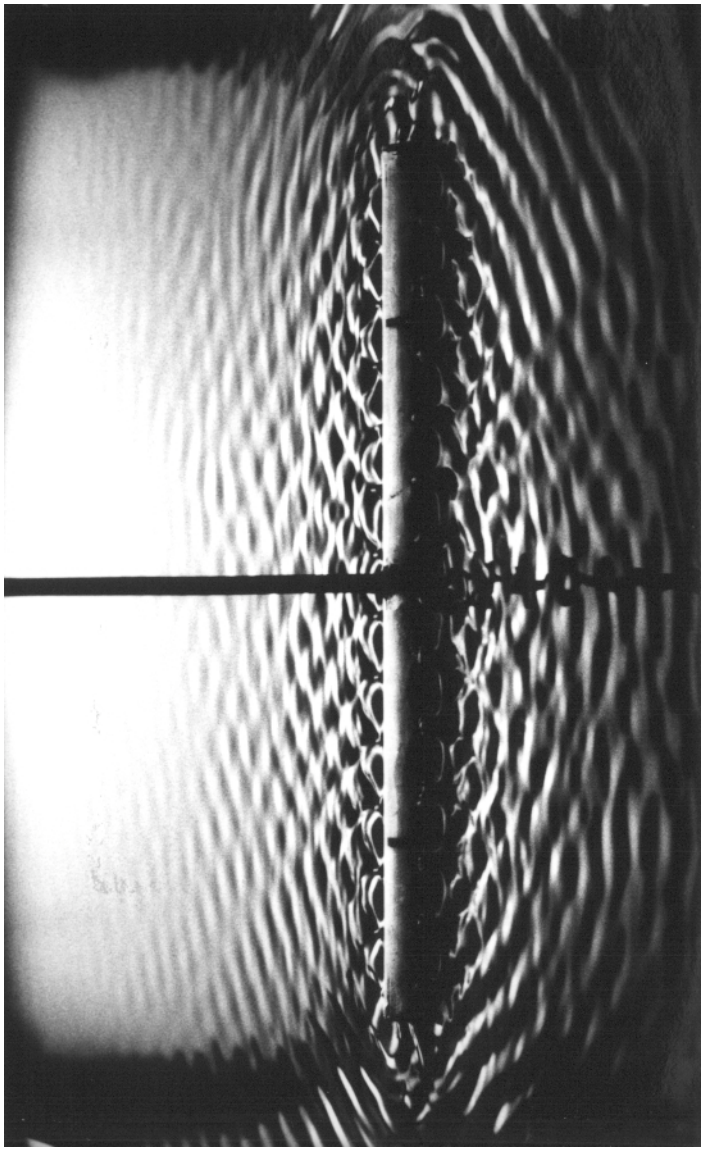

Image ID : WAVE-14
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Front view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is large)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.87mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Irregularity

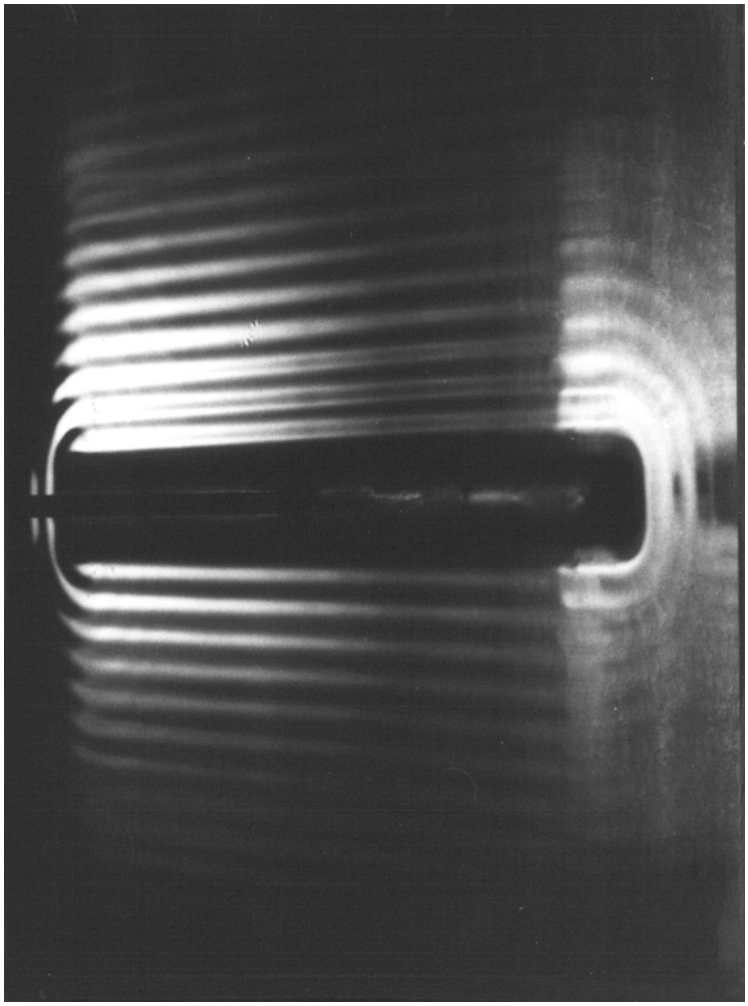

Image ID : WAVE-15
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Side view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is quite small)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.27mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

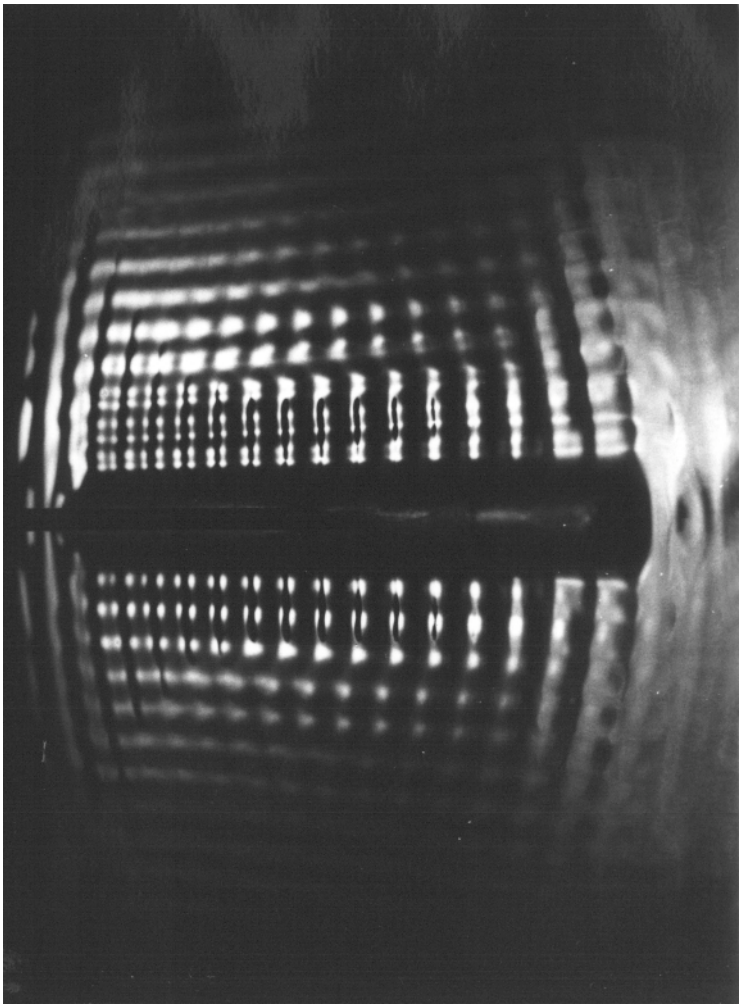

Image ID : WAVE-16
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Side view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is small)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.33mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

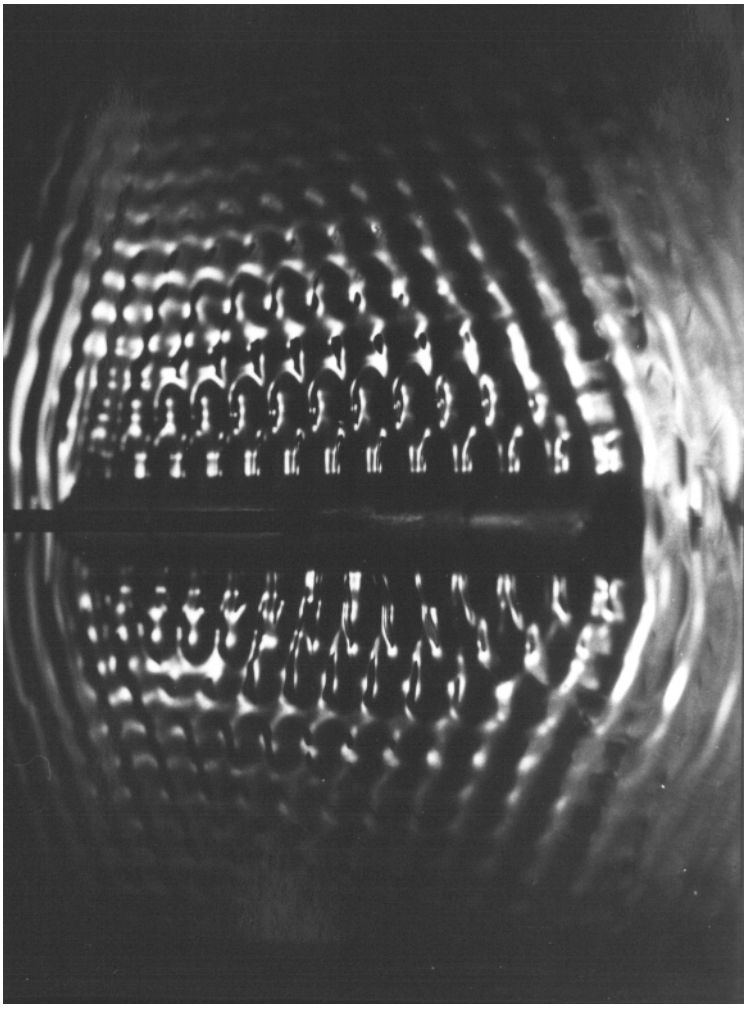

Image ID : WAVE-17
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Side view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is moderate)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.57mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

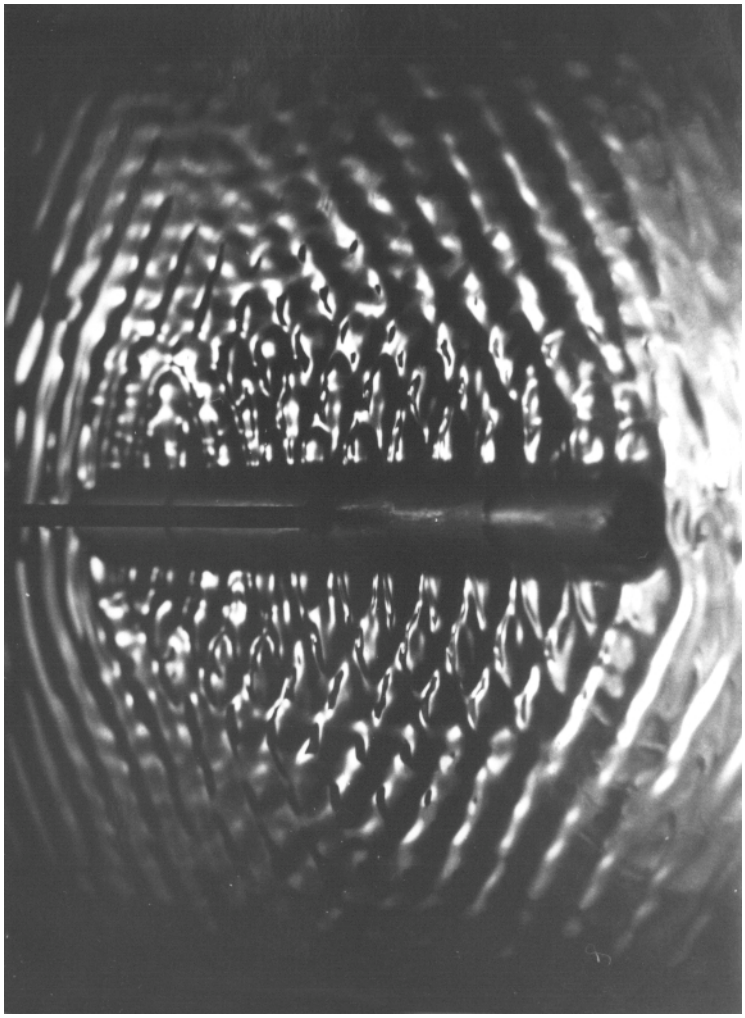

Image ID : WAVE-18
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Side view of a surface wave around vibrating a cylinder immersal halfway under the water surface (amplitude is large)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.75mm.

Author : S. Taneda
Published in : 1994
Copyright : Japan Society of Fluid Dynamics
Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Irregularity

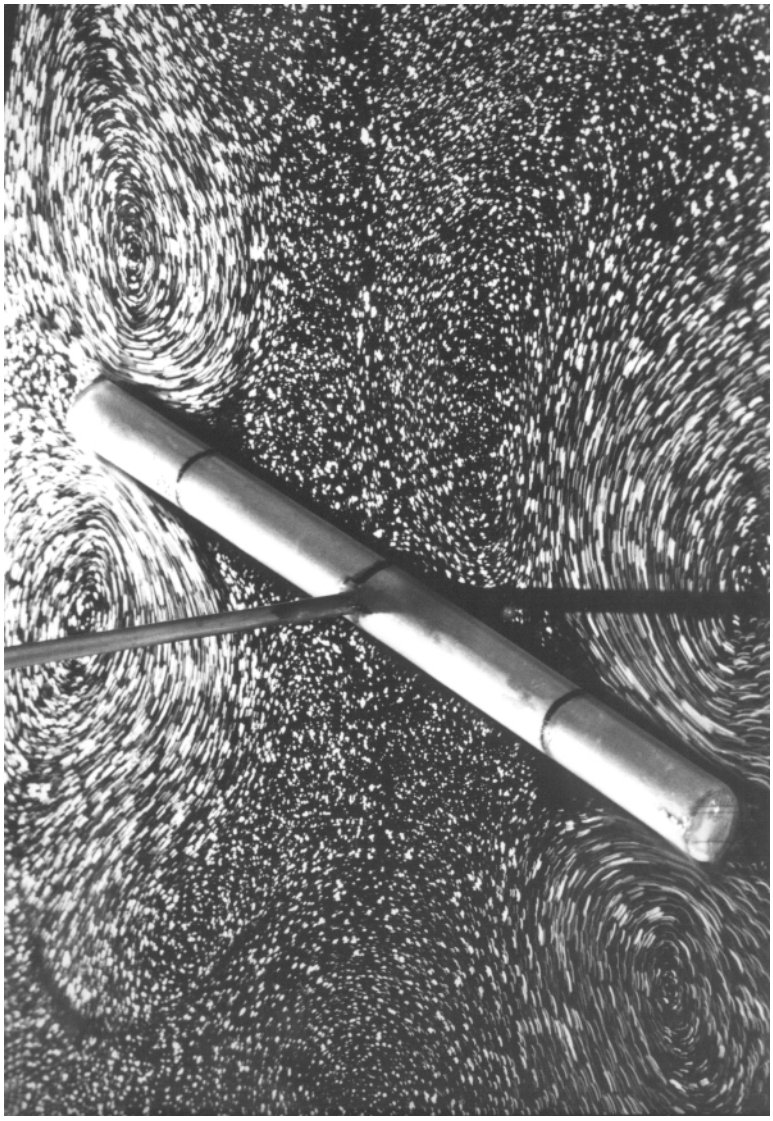

Image ID : WAVE-19
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface (Amplitude is quite small)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.22mm. Streamline pattern visualized by suspending aluminum powder.

Author : S. Taneda
Published in : 1994
Copyright : Japan Society of Fluid Dynamics
Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Tracer photograph, Streamline
Shape features : Cylinder, Spiral, Regularity

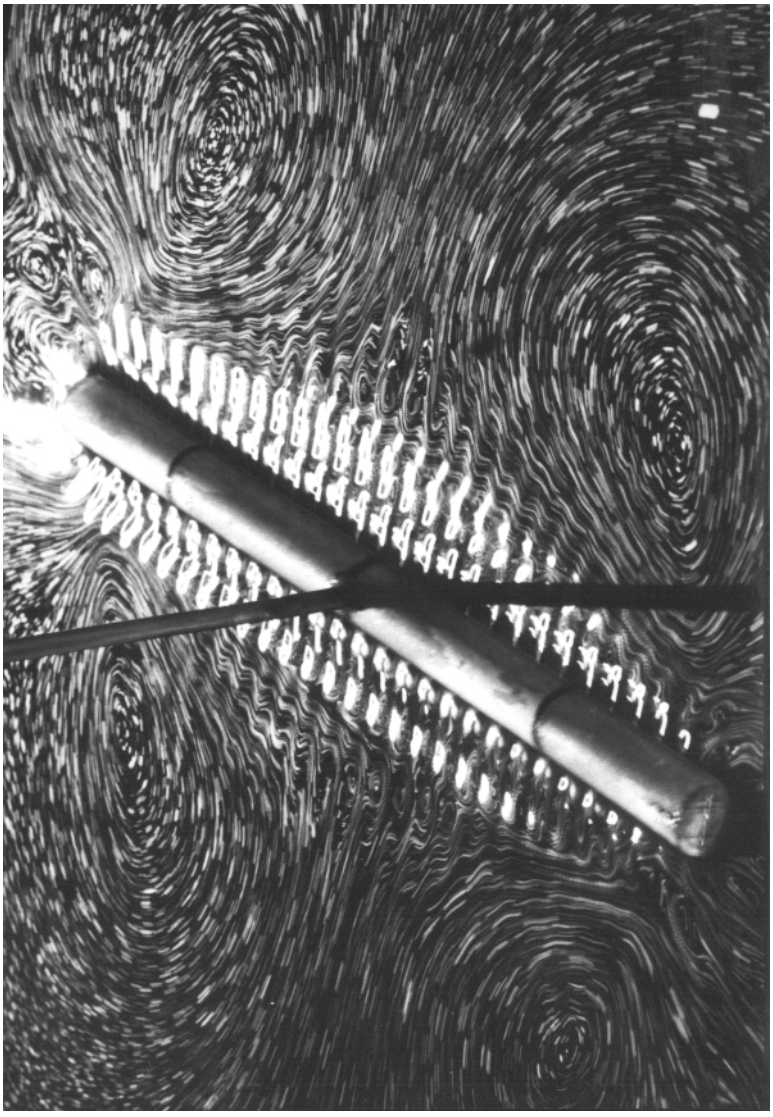

Image ID : WAVE-20
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface (Amplitude is large)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.48mm. Streamline pattern visualized by suspending aluminum powder.

Author : S. Taneda
Published in : 1994

Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Tracer photograph, Streamline
Shape features : Cylinder, Spiral

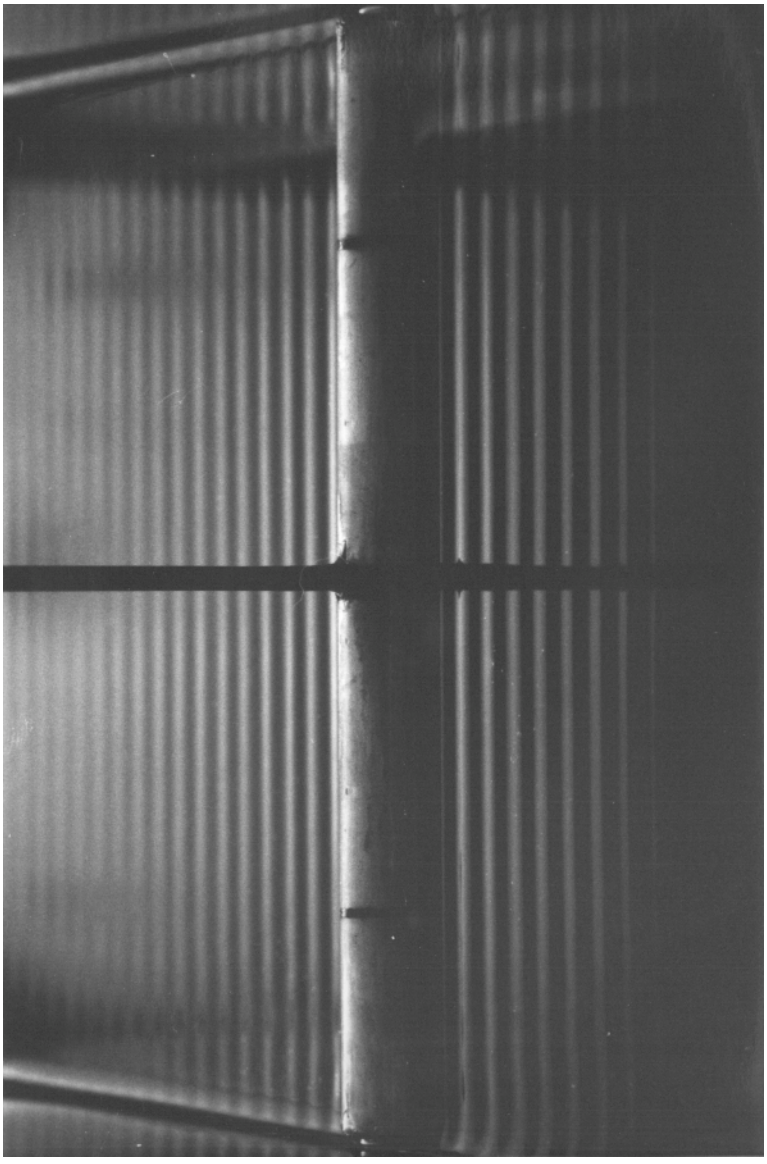

Image ID : WAVE-21
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Both ends are the walls, Amplitude is quite small)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.28mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

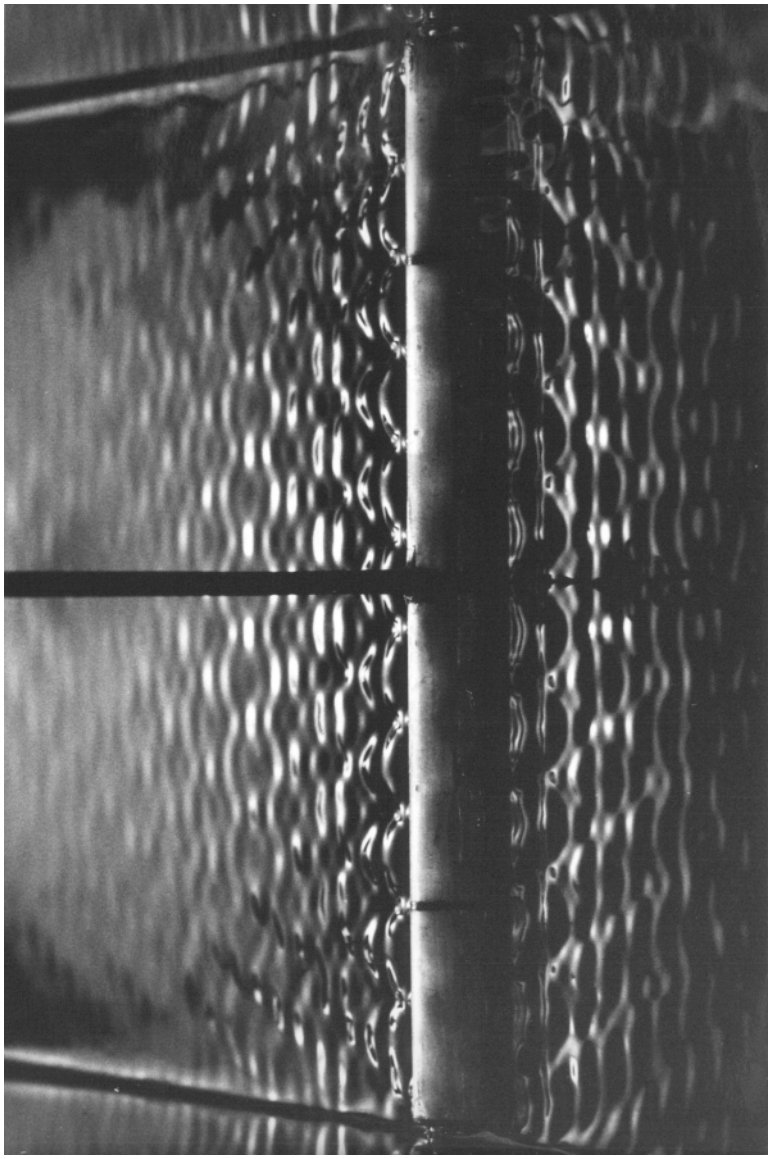

Image ID : WAVE-22
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Both ends are the walls, Amplitude is large)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.61mm.

Author : S. Taneda
Published in : 1994
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Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Cylinder, Wave, Regularity

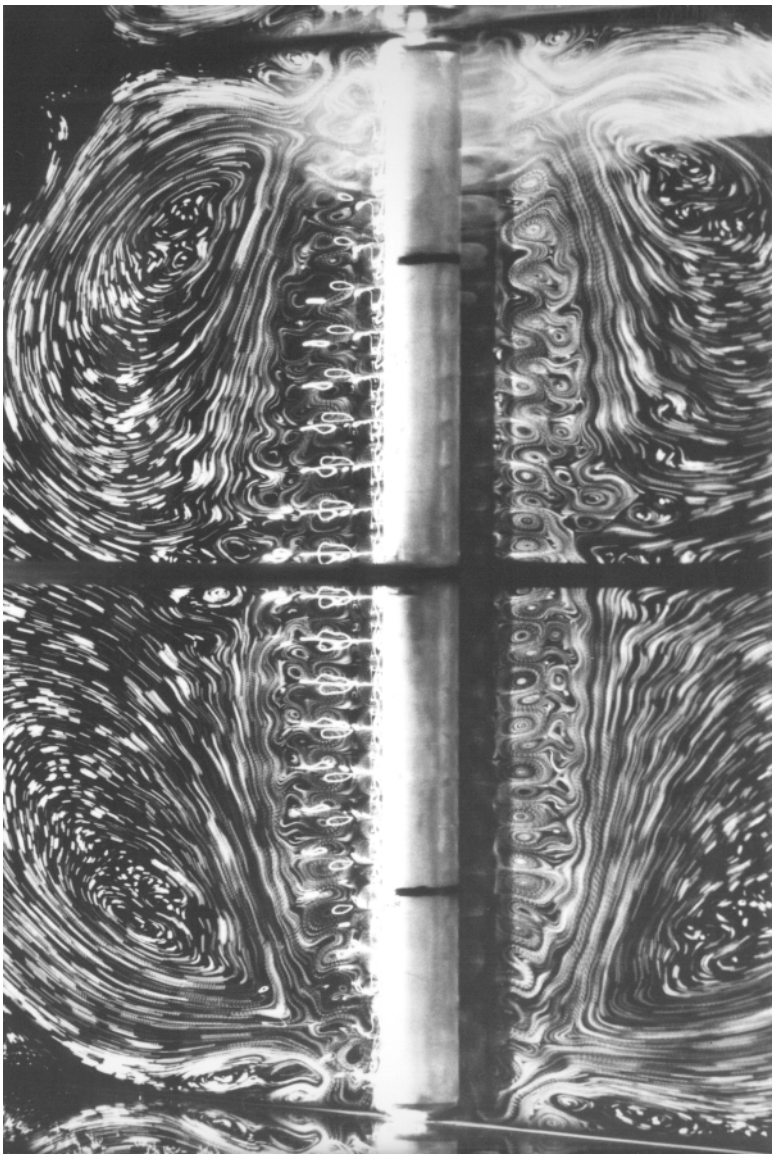

Image ID : WAVE-23
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface (Both ends are the walls)
Notes : Static watertank experiment.
Diameter of the cylinder d = 1.2cm, length L = 17cm.
Width between the walls of the watertank D = 30cm. Vibration frequency 36Hz.
Amplitude is 0.61mm. Streamline pattern visualized by suspending aluminum powder.

Author : S. Taneda
Published in : 1994

Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.13 (1994) 119.

Research Field : Fluid dynamics
Expressed as : Tracer photograph, Streamline
Shape features : Cylinder, Wave, Regularity

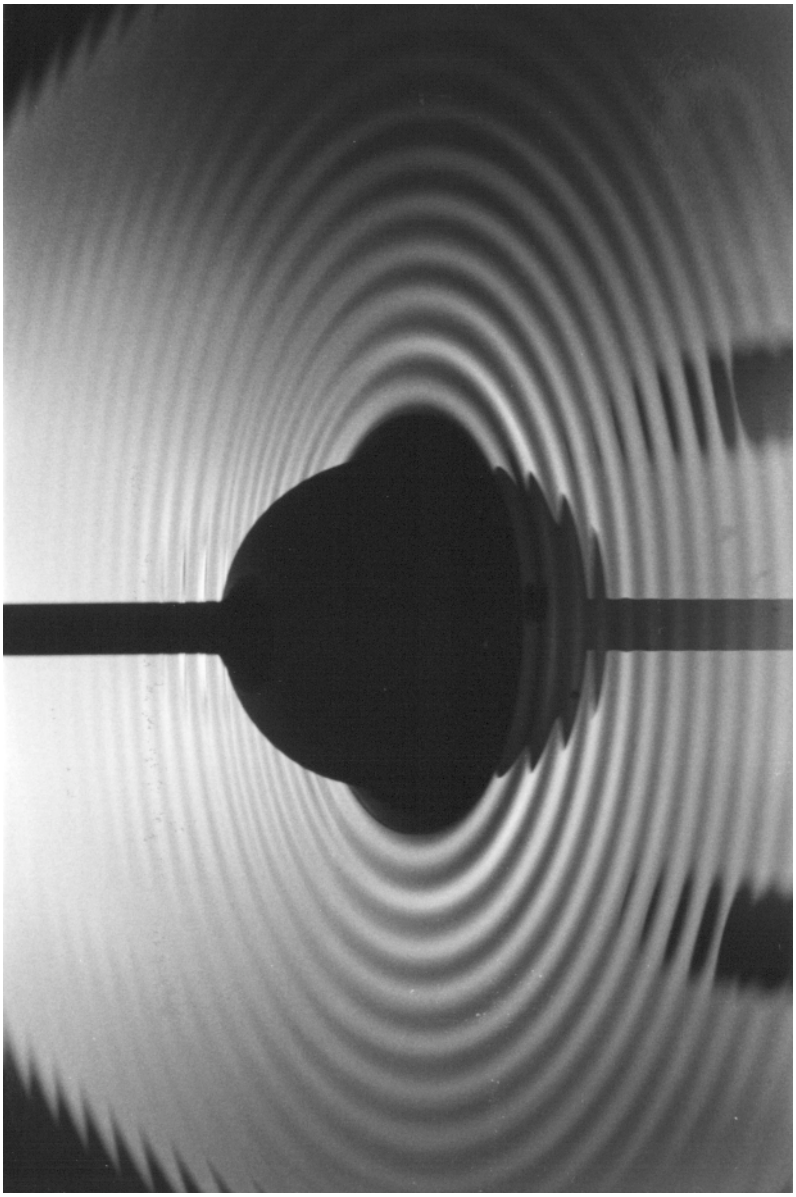

Image ID : WAVE-24
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Amplitude is quite small)
Notes : Static watertank experiment.
Diameter of the sphere d = 3.75cm, Vibration frequency 50Hz.
Vertical vibration with amplitude 0.304mm.
Progressive wave of concentric circles.

Author : S. Taneda
Published in : 1986
Copyright : Japan Society of Fluid Dynamics
Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.1, No.1 (1986) 1.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Sphere, Wave, Concentric circles

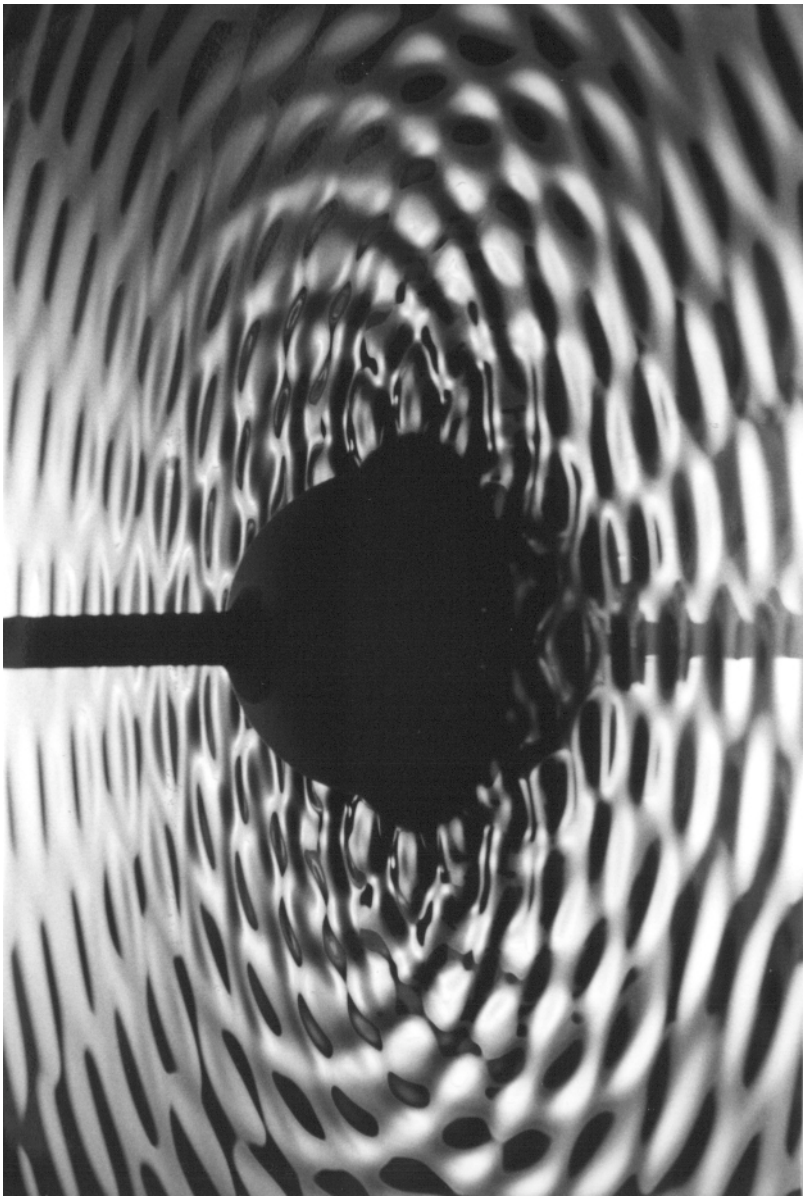

Image ID : WAVE-25
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Amplitude is small)
Notes : Static watertank experiment.
Diameter of the sphere d = 3.75cm. Vibration frequency 50Hz.
Vertical vibration with amplitude 0.536mm.
Standing waves are superposed. Nodal lines are linear.

Author : S. Taneda
Published in : 1986

Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.1, No.1 (1986) 1.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Sphere, Wave, Regularity

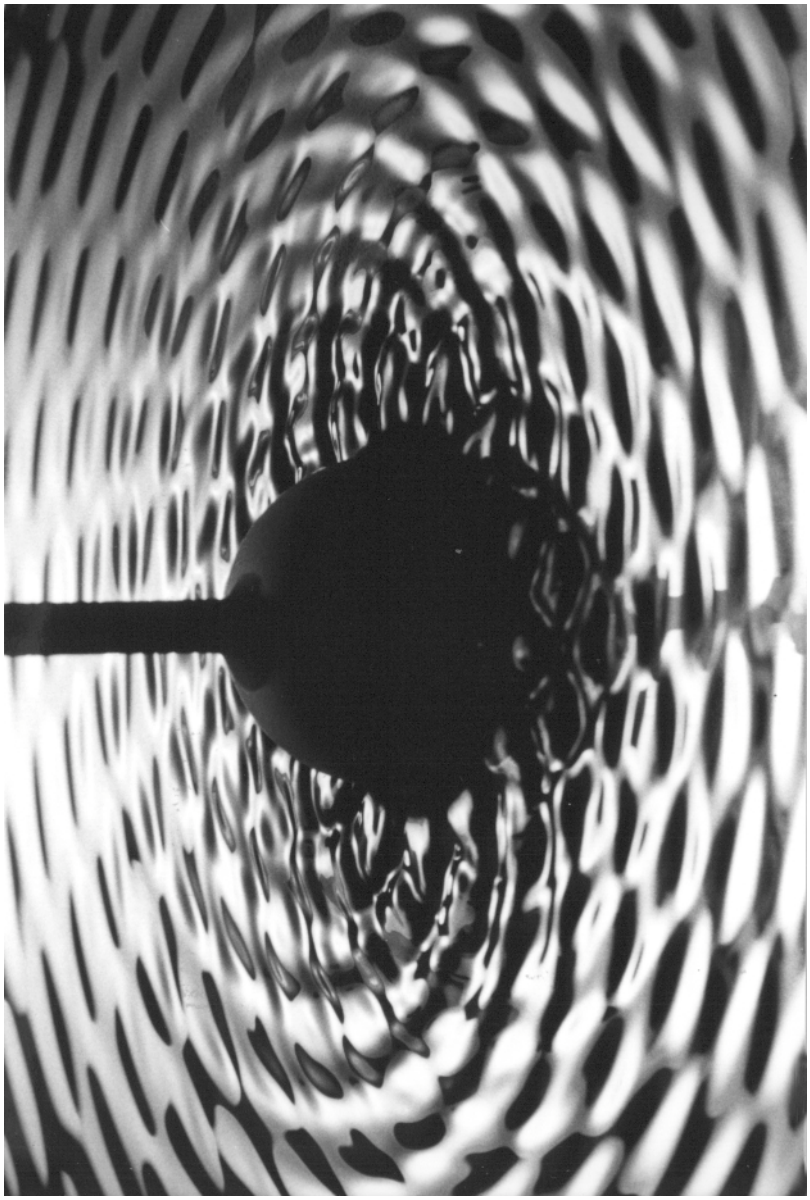

Image ID : WAVE-26
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Amplitude is moderate)
Notes : Static watertank experiment.
Diameter of the sphere d = 3.75cm. Vibration frequency 50Hz.
Vertical vibration with amplitude 0.674mm.
Wave pattern rotates around the sphere. Nodal lines are linear.

Author : S. Taneda
Published in : 1986

Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.1, No.1 (1986) 1.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Sphere, Wave, Spiral

Image ID : WAVE-27
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Amplitude is large)
Notes : Static watertank experiment.
Diameter of the sphere d = 3.75cm. Vibration frequency 50Hz.
Vertical vibration with amplitude 1.272mm.
Wave pattern changes irregularly. Nodal lines are not clear.

Author : S. Taneda
Published in : 1986
Copyright : Japan Society of Fluid Dynamics
Reproduced from: S.Taneda: Fluid Dynamics Research, Vol.1, No.1 (1986) 1.

Research Field : Fluid dynamics
Expressed as : Ordinary photograph
Shape features : Sphere, Wave, Irregularity

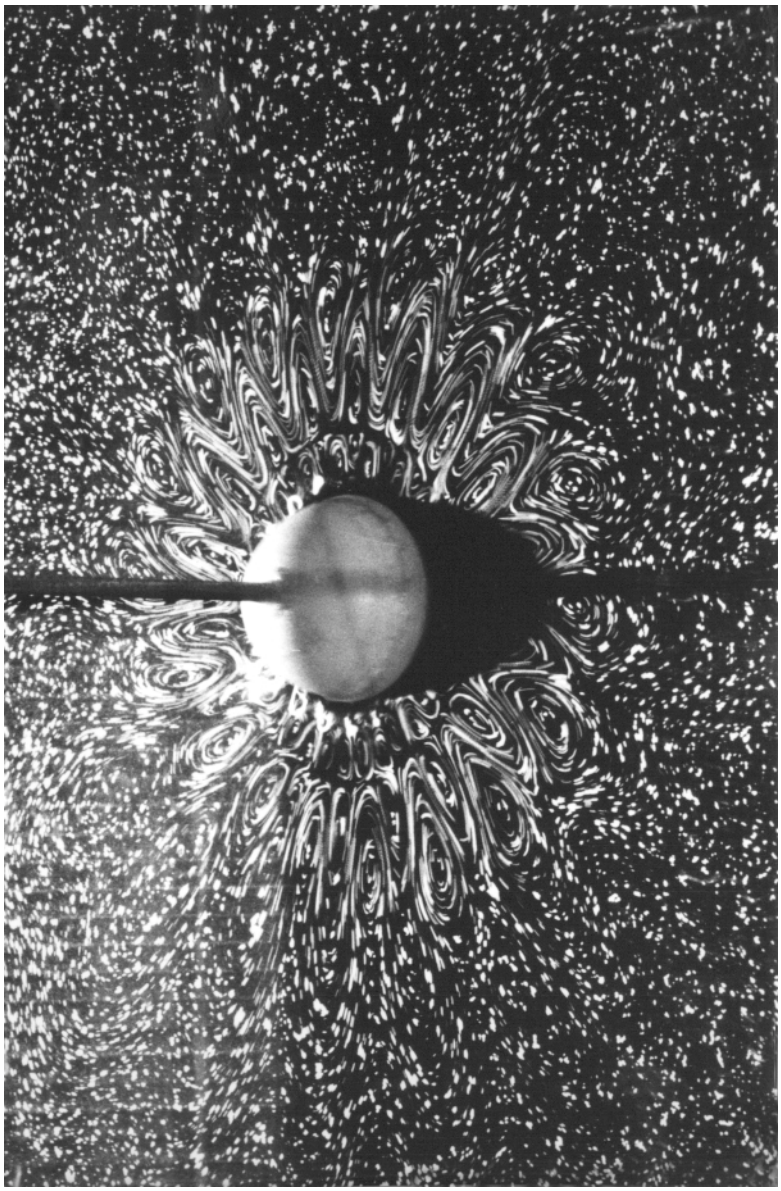

Image ID : WAVE-28
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Amplitude is small)
Notes : Static watertank experiment.
Diameter of the sphere d = 3.75cm. Vibration frequency 30Hz.
Vertical vibration with amplitude 0.75mm.
Streamline pattern visualized by suspending aluminum powder.

Author : S. Taneda
Published in : 1991

Reproduced from: S.Taneda: J. Fluid Mech., Vol.227 (1991) 193.

Research Field : Fluid dynamics
Expressed as : Tracer photograph, Streamline
Shape features : Sphere, Spiral

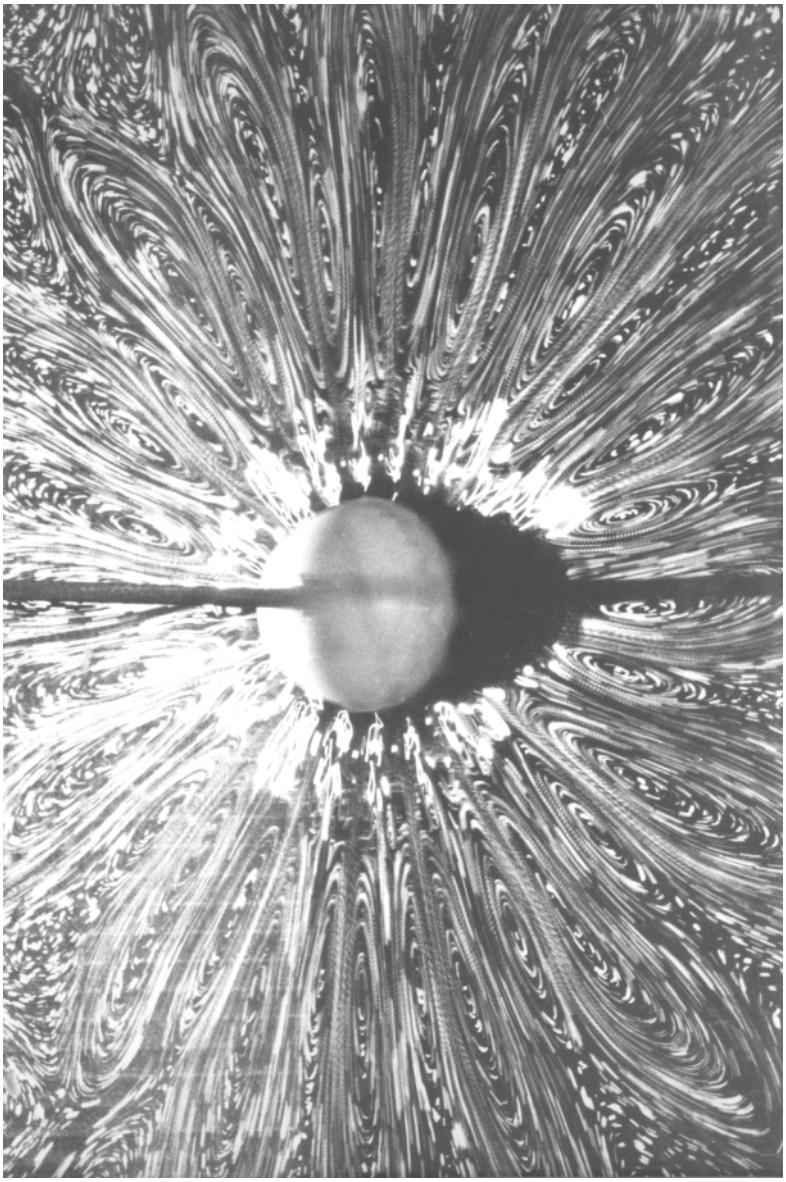

Image ID : WAVE-29
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Amplitude is moderate)
Notes : Static watertank experiment.
Diameter of the sphere d = 3.75cm. Vibration frequency 30Hz.
Vertical vibration with amplitude 1.35mm.
Streamline pattern visualized by suspending aluminum powder.

Author : S. Taneda
Published in : 1991

Reproduced from: S.Taneda: J. Fluid Mech., Vol.227 (1991) 193.

Research Field : Fluid dynamics
Expressed as : Tracer photograph, Streamline
Shape features : Sphere, Spiral

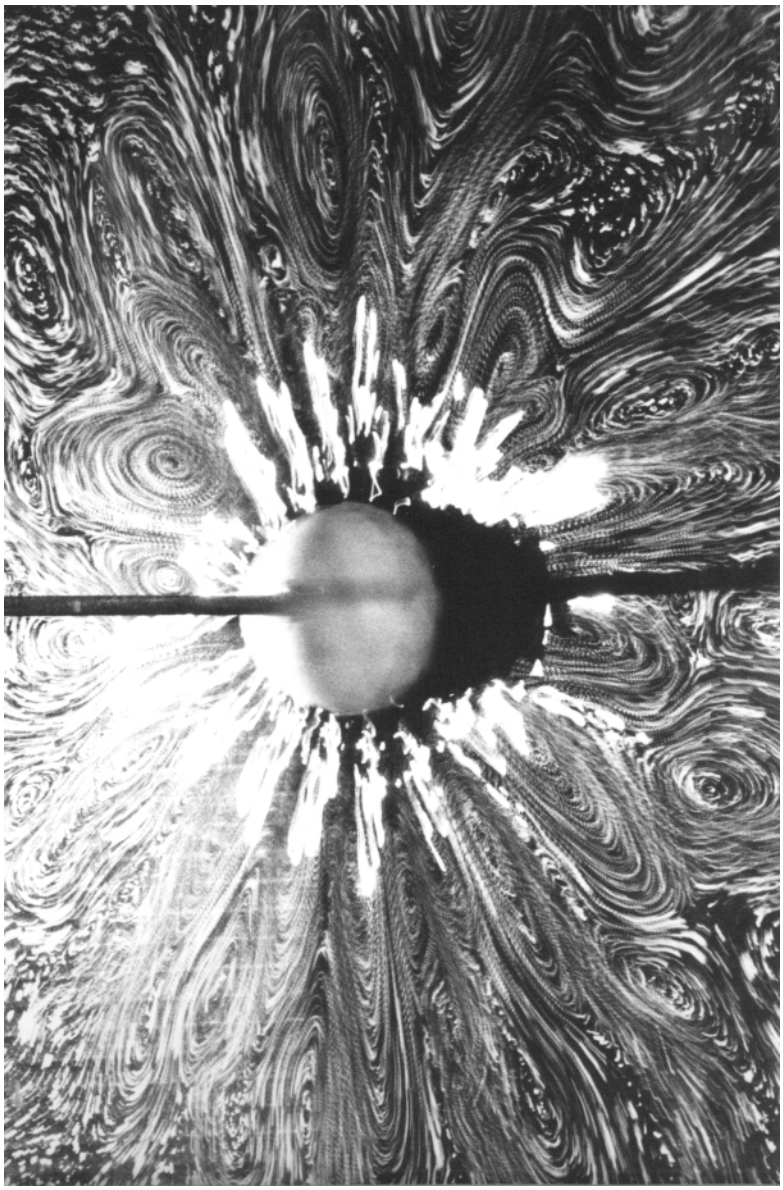

Image ID : WAVE-30
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Surface flow of around a vibratingcylinder immersal halfway under the water surface
(Amplitude is large)
Notes : Static watertank experiment.
Diameter of the sphere d = 3.75cm. Vibration frequency 30Hz.
Vertical vibration with amplitude 1.85mm.
Streamline pattern visualized by suspending aluminum powder.

Author : S. Taneda
Published in : 1991

Reproduced from: S.Taneda J. Fluid Mech., Vol.227(1991)193.

Research Field : Fluid dynamics
Expressed as : Tracer photograph, Streamline
Shape features : Sphere, Spiral, Irregularity

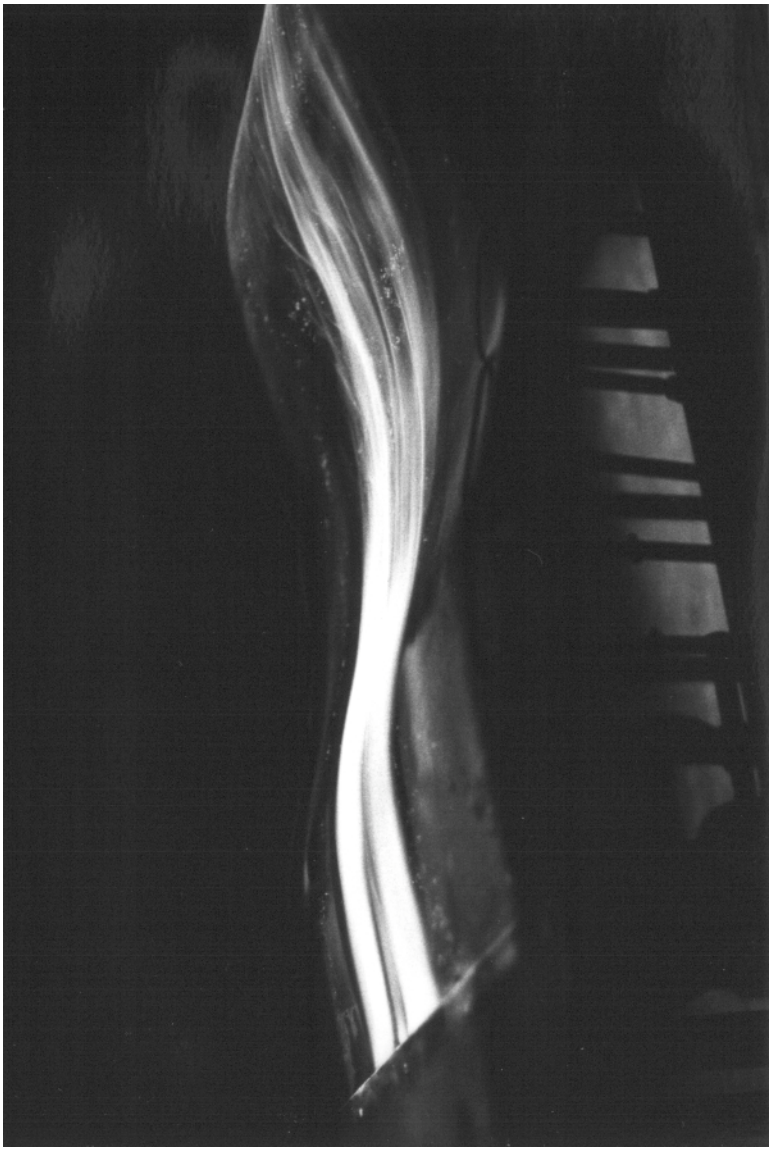

Image ID : WAVE-31
Data Base Name : FLOW-VIS
Input by : S. Taneda
Input on y/m/d : 1998. 11. 25
Image Title : Flow along a surface of rubber membrane performing progressive wave motion
Notes : Wind-tunnnel experiment.
Length of the rubber membrane is 2.2m. Wave length is 1.2m.
Amplitude of the wave is 0 at the leading edge, and 10cm at the trailing edge.
Wave speed is 50cm/s. Smoke method.

Author : S.Taneda & Y.Tomonari
Published in : 1974
Copyright : Physical Society of Japan
Reproduced from: S.Taneda & Y.Tomonari : J. Phys. Soc. Jpn, Vol.36, No.6 (1974) 1683.

Research Field : Fluid dynamics
Expressed as : Tracer photograph
Shape features : Wave