Description of water samples supplied for surface-tension measurement
Measurement was carried out at the University of Silesia in Katowice

“Z1” - water taken directly from the source

“Z” - blank sample, probably water exposed to the magnetic field of the RAM device,

“G2” - water exposed to:

a/ magnetic field of the RAM device,

b/ field generated by a neodymium magnet

c/ oxygenation process

“G1” - same as G2.

“M” - water exposed only to the magnetic field of the RAM device.

Surface-tension measurements by the Rebinder bubble method

23.09.2011

T = 20 °C

H_2O dest.

h1	h2	delta h		
28,1	19,3	8,8		
28,1	19,2	8,9		
28,1	19,3	8,8		
28,1	19,3	8,8		
28,1	19,2	8,9		
28,1	19,2	8,9		
28,1	19,2	8.9	σ distilled water (from tables)	
		8,857	72,742 10^{-3} N/m	**W1**
			or for reference W2	
			72,58 10^{-3} N/m	**W2**
			72,67 10^{-3} N/m	

T °C	10^{-3} N/m
0	75,64
5	74,92
10	74,22
15	73,49
17	73,19
18	73,05
19	72,9
20	72,75
21	72,59
22	72,44
23	72,28
24	72,14
25	71,97
26	71,82
27	71,66
20	72,58

Z1

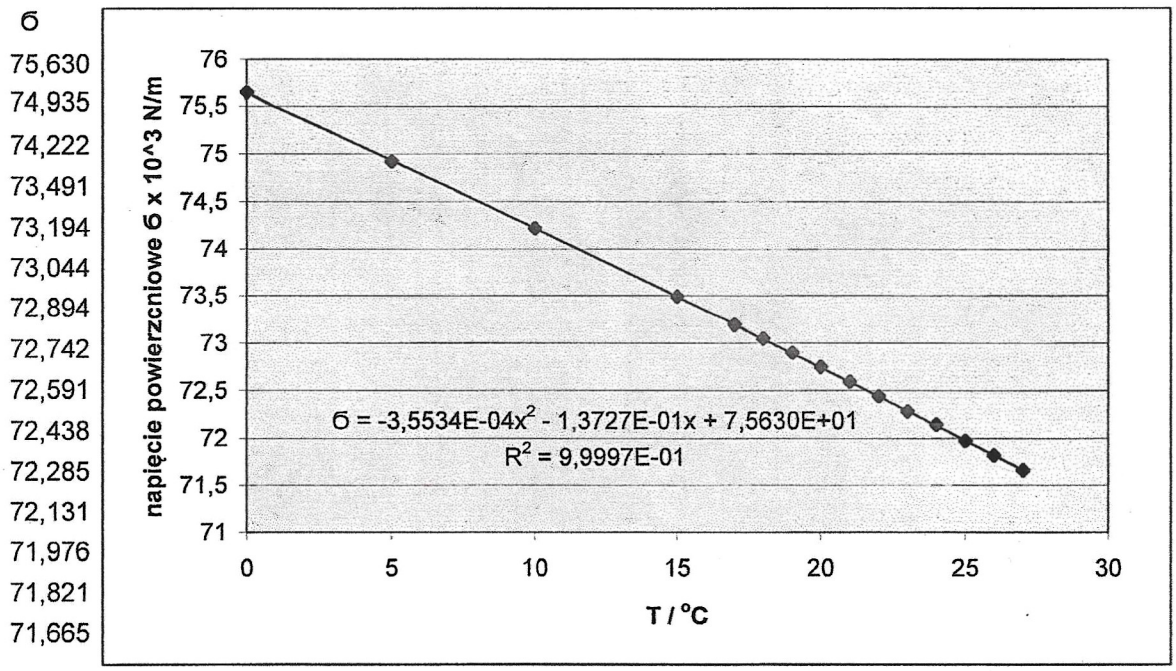
h1	h2	delta h	σ = σ distilled water (delta h / delta h distilled water)		
28,2	19,1	9,1			0,55%
28,2	19,1	9.1	74.74 method resolution	+/-	0,41
28,2	19	9.2	75.56 std. deviation of a single measurement		
28,2	19	9.2	with white cap, no marking 0.05		
28,2	19	9.2	(directly from source) Z1		
28,2	19,1	**9.1**	**MEASUREMENT UNCERTAINTY**	**0.093223**	
28,2	19,1	9,1		0,07	0,10%
		9,143	75,09 10^{-3} N/m	**W1**	
			or dσ/dT = -0.144		
			74,92 10^{-3} N/m	**W2**	10^{-3} N/m K

Z ?

h1	h2	delta h		
28,2	19,1	9,1		
28,2	19,1	9,1		
28,2	19,1	9,1		
28,2	19,1	9.1	with white cap with marking	
28,2	19,1	9,1	(?)	
28,2	19,1	9,1		
28,2	19,1	9,1		
		9,100	74,74 10^{-3} N/m	**W1**
			74,57 10^{-3} N/m	**W2**

G2

h1	h2	delta h		
28,2	19,2	9		
28,2	19,2	9		
28,2	19,2	9		
28,2	19,15	9.05	with dark-blue cap	
28,2	19,15	9,05	(Górski Potok) G2	
28,2	19,15	9,05		
28,2	19,2	9		
		9,021	74,09 10^{-3} N/m	**W1**
			73,93 10^{-3} N/m	**W2**



		Z1	Z ?	G1	G2	M
σ wg W1	10^{-3} N/m	75,09	74,74	74,27	74,09	74,74
% change relative to Z1		-0.5	-1.1	-1.3	-0.5	
σ wg W2	10^{-3} N/m	74,92	74,57	74,10	73,93	74,57
% change relative to Z1		-0.5	-1.1	-1.3	-0.5	

G1 h1 h2 delta h σ = σ distilled water (delta h / delta h distilled water)

28,1	19,1	9
28,1	19,1	9
28,1	19,1	9

28.1 19.1 9 with light-blue cap

28,1	19	9,1 (Górski Potok) G1
28,1	19	9,1
28,1	19	9,1

9,043 74,27 10^{-3} N/m **W1**

or

74,10 10^{-3} N/m **W2**

M	h1	h2	delta h
	28,2	19,1	9,1
	28,2	19,1	9,1
	28,2	19,1	9,1

28.2 19.1 9.1 with green cap

28.1 19 9.1 (after magnetization) M

28,1	19	9,1
28,1	19	9,1

9,100 74,74 10^{-3} N/m **W1**

74,57 10^{-3} N/m **W2**

K-ce 04.10.2011 Krzysztof Bes 504 222 907