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Release of the latest information of Puric ω

Case example of the measurement using Puric ω ultrapure water

(Analysis example of solid surface zeta potential)

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Case example of measuring solid surface zeta potential

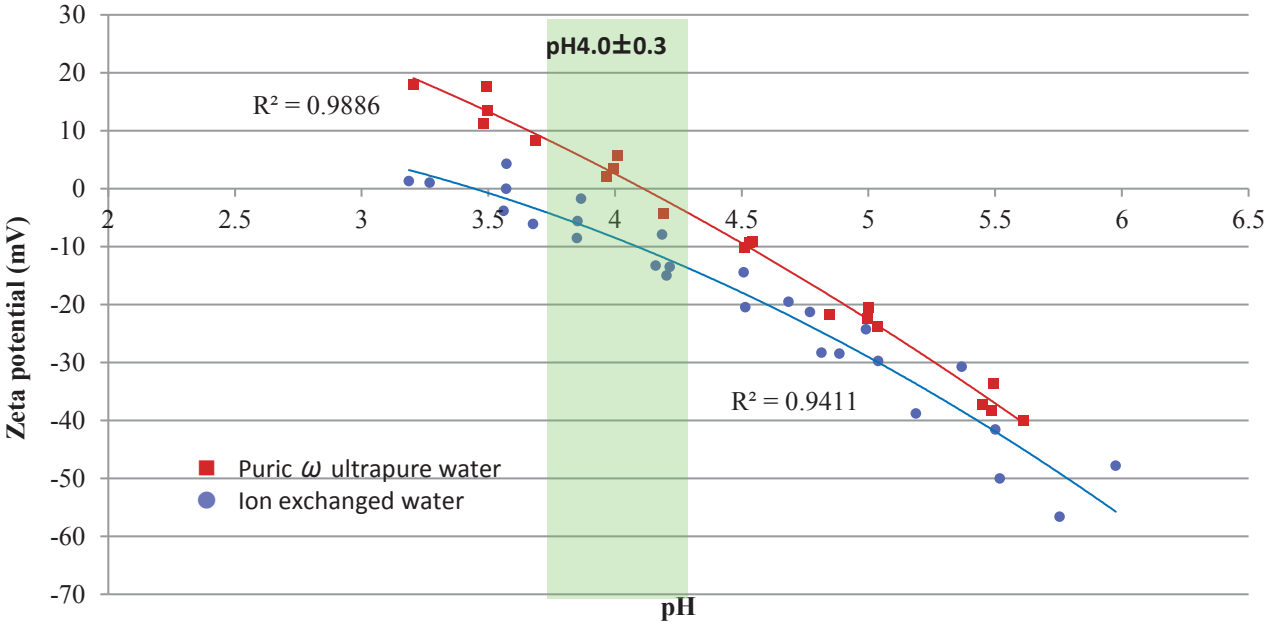
Anton Paar Japan conducted the analysis for solid surface zeta potential using electrolysis liquid prepared by Puric ω ultrapure water. *Example of solid surface zeta potential: wafer, hair, membrane filter, etc.

Analysis conditions

Analysis device	: SurPASS3 (Anton Paar)
Analysis method	: Flow potential method
Samples	: Polypropylene film
Electrolysis liquid	: 1mmol/L KCl solution

*Comparison the solutions prepared between by Puric ω ultrapure water and by ion exchanged water.

■ Analysis Data of Polypropylene film solid surface potential



About the analysis results

We compared the analysis results of zeta potential of polypropylene film, using the solutions prepared between by Puric ω ultrapure water and by ion exchanged water. The standard value for isoelectric point of polypropylene film (pH when zeta potential 0mV) is regarded as pH4.0±0.3. In above data, Puric ω ultrapure water shows pH4.1 for isoelectric point within the standard value, while ion exchanged water shows pH 3.4 for the same out of the standard value. The phenomena for ion exchanged water is regarded that the elements such as Silica having negative potential adhere to the film surface.

Furthermore, Puric ω ultrapure water shows lower dispersion data and higher repeatability. Solid surface zeta potential requires extremely highly sensitive analysis and would be affected by minimum impurities in water. Hence, Puric ω is highly appreciated for being able to provide continuously high purity water.

LAB SALON by ORGANO CORPORATION

◀ For more information, visit our website!
https://puric.organo.co.jp/en/

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