

# Off-Broadway Sampling

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The Dutch Not-for-Profit organisation TOXICOWATCH has for ~15 years performed a critical and wide-ranging public duty on a shoestring budget – with remarkable technological, environmental, and societal impact.

For its **biomonitoring** fieldwork, TOXICOWATCH is developing a very broad range of sampling media (sample types in the TOS parlance) to do environmental assessments. TOXICOWATCH's new, innovative sampling media are of more than academic interest – indeed quite the contrary. This issue of SST is proud to present the prospects offered by this creative sampling media bonanza to the IPGSA community, an approach far removed from our more traditional sample types: rocks, ore, soil, food, feed, industrial intermediates, and final products. Indeed, we are introduced to the featured topic of SST#3 which the editor has termed '**Off-Broadway sampling**'.

The first two articles in this issue truly live up to this declaration. The first by TOXICOWATCH, which kindly accepted an invitation to feature its important societal work with a focused scope on the bewildering range of sampling media used. This is followed by an even more exotic approach for a purpose so far away from IPGSA's traditional sampling context so as to defy belief – at first. But it is hoped these clashes with our usual sampling approaches will be inspiring for the IPGSA community.

Two articles follow from the highest echelons re. sampling theory, complementing the featured theme in SST#2, '**Heterogeneity Testing**'.

**Biomonitoring** involves the use of organisms to assess environmental contamination (pollution). Biomonitoring is carried out quantitatively by measuring accumulation of chemicals in organism tissues. By observing or measuring the effects the environment has on its resident organisms, suspected pollution can be indicated, demonstrated or proved. In analytical chemistry **biomonitoring** means measurement of the body burden of toxic chemical compounds, elements and or their metabolites in biological tissues. With the human perspective, such measurements are typically performed on blood and urine samples, but involving whole populations (or statistically selected parts hereof) often requires a major logistical and economic effort. **Biomonitoring** serves several purposes and objectives regarding environmental health, occupational safety, workplace health surveillance – and as a means of toxic pollution exposure assessment – the latter preferentially with a minimum economic cost in order to provide maximum coverage e.g. of threatened population segments or local communities living close to potential or **proved** sources of toxic emissions and related pollution.

An **off-Broadway** theatre is an alternative professional venue in New York City with limited seating, distinctly different from the established big Broadway theatres. The term originally referred to any venue and its productions on a street intersecting Broadway Avenue in Midtown Manhattan's theater district, the center of the American theatre. An 'off-Broadway production' is a production (play, musical) appearing in such a venue. The present **off-Broadway SST issue** brings some not-so-mainstream sampling media to its readers!

The debate that was initiated there is unfolding with élan and panache – to be appreciated here in SST#3 as well. This is a front-and-center debate on a perennial theme that has been discussed for many decades .... Will these two articles close this debate?

Alan Rawle continues his magisterial series 'Giants of Sampling' with a third contribution, this time on **Sylvanus Albert Reed**. We are again treated to a wonderful and colorful tour de force through a decisive life with ample achievement and impact, most certainly not only regarding sampling. Thank you, Alan, for enriching our collective historical education.

Finally, there is a new attempt at a most difficult subject:

What is the *best* way to introduce the Theory of Sampling (TOS) to parties new to this discipline? There are currently several attempts to solve this challenge ongoing within IPGSA where the goal is to be able to explain the tenets of TOS in the clearest and simplest language possible. In the alternative attempt presented here, the author (who has more than 25 years educational experience) has decided to address an educated audience (general university education level). Why? Because, going forward, this is precisely where IPGSA will find its largest new audiences (still) not aware of the need for and the benefits to be had from TOS.

This issue concludes with three important association news messages. Enjoy SST#3!