

17.6 Generation of abbreviations for experimental techniques

It is a natural and common practice to use short abbreviations, usually acronyms for lengthy names of experimental techniques that have to be repeated many times in a scientific paper. When these abbreviations are listed prominently near the beginning of the paper in question, and are not used in the title or abstract in accordance with previous IUPAC recommendations (Pure and Applied Chemistry, 52, 2229, 1980), little difficulty is caused. Increasingly, however, such abbreviations become more generally and less carefully used, not only in publications but also in posters and oral presentations when professional editorial scrutiny is not feasible. They can then cause substantial communication difficulties for a worker with interdisciplinary interests whose expertise is in one discipline but who wishes to be conversant with the literature, and possibly to make use of the results or experimental capabilities of adjacent disciplines.

The field of Surface Science is one which has seen a particularly large-scale proliferation of often inconsistent abbreviations. In a recent IUPAC survey of the field (Pure and Applied Chemistry, 59, 1343, 1987) no less than 139 different abbreviations were listed (!), some of them repetitive in meaning and most of them undoubtedly obscure to most readers other than those working in a particular narrow field. As many of the techniques are spectroscopic, this situation has also been reflected in abbreviations in chemical spectroscopy as a whole.