

# Soda, Clay and Fire

By Gail Nichols

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*Book review by Owen Rye*

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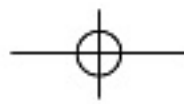
*Publisher: The American  
Ceramic Society, Ohio 2006.  
Paperback, 176 pages.  
Price: \$34.95  
ISBN: 1 57498 167 6*

Gail Nichols has developed a unique niche for herself in the world of ceramics based on her distinctive approach to soda-glazing using processes originally developed in research for her PhD. Since this work reached its refined stage some years ago she has been in demand internationally for workshops where her techniques are demonstrated and explained. Now we have the book that sets it all out clearly.

Soda-glazing began only as recently as the 1970s, mainly as an attempt to find a non-polluting environmentally responsible process. Nichols gives an overview of various methods that have been used to introduce soda vapours to the work, noting that these do not distribute as well as the vapours produced by common salt. One consequence of this has been the widespread view that soda glazing gives a rather thin insipid surface, its main virtue being enhancement of some colours. This book thoroughly dispels that notion.

Nichols uses the technical findings of her research as a foundation to produce an idiosyncratic body of work with a sensuous organic quality of form and surface, illustrated comprehensively in the almost-all colour images in this book. Her version of soda-glaze has a cool luscious depth, not shiny or dry, but with an unusual matt quality a little reminiscent of fresh snow viewed at a distance. The cool colours have a distinctive combination of white with a touch of green and a hint of blue, contrasting harmoniously (if such a thing is possible) with the orangey colours around wadmarks and surface dimples. Overall her forms have a slightly loose and organic character ideally matched to the surfaces. Nichols' use of shells as wads in setting gives a result suggestive of woodfired pots, but, as she outlines in the book, the resemblance is somewhat coincidental since woodfiring does not produce the best results with her form of soda-glazing.





So how does she do it? This book will tell you, in detail. It is a 'how to do it' book with a far more sophisticated approach than the average. Everything you need is there – a comparison with other potters who use soda glaze, a discussion of health and environmental issues, a detailed look at the effects of different clay bodies and slips, a section on kiln design, discussion of stacking and firing procedures including variations in kiln atmosphere while firing, a worthwhile discussion of the use of scientific processes in ceramics, and finally her aesthetic rationale. The book has a thorough bibliography for anyone seriously wishing to investigate soda-glazing in its totality.

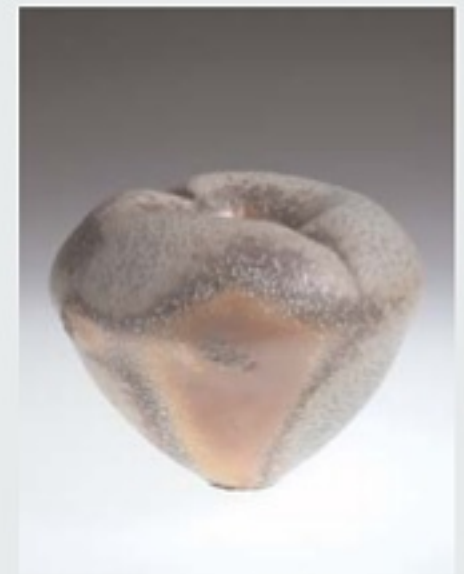
Nichols' process is technically the product of a series of precisely calibrated experiments. The research process involves investigating a single variable under a range of conditions to allow isolating the most desirable aesthetic. The main discoveries from her experiments include the distinctive method of introducing soda to the kiln, the characteristic type of clay body she uses, and a distinctive soda surface unlike anything seen before.

It is common in the world of art ceramics for 'science' to be considered irrelevant. Often it may be, if the underlying technical processes have already been fully developed and all someone has to do is join the dots in making and firing. The rise of ceramics suppliers with fully developed materials and advice on how to use them has contributed to this state of affairs. This approach fails when the technology is not available to suit a particular aesthetic end, when the processes have not yet been developed. Such has been the case with soda-glazing, a fruitful area for experiment. Taking a view that I endorse – that ignorance is not a virtue – Nichols has used the economy of experimental design borrowed from the sciences to achieve a considerable gathering of reliable knowledge in a short time.

Put simply, this experimental procedure involves changing just one variable at a time – for example changing the alumina content of a clay body to see what effect that has on colour. It does away with the confusion that arises when someone varies many things at once (increase the feldspar, change the firing temperature, use a different clay and pray to a different kiln god) and then wonders which one caused the new colour.

The distinctive part of this experimental process researched well is that, having discovered the relationship between, in this example colour and alumina content, there is a final non-scientific or 'art' stage where the experimenter makes an aesthetic judgement that this one is the colour that I prefer. They then know what to do to achieve the preferred colour. This combination of experimental design and aesthetic judgement is fundamental to ceramics. Nichols does it well and explains it well.

This book can be used in various ways. The simplest if not the most imaginative would be to follow Nichols' processes closely and emulate her work with precision. A much more satisfying use of the book would be to study her methods of obtaining information and apply these in a new area which you would then be able to make your own. The obvious merit of this book lies in the meticulous detailing of a process and its aesthetic, but I feel the fundamental value resides in the subtle message of how to go about scientific research into ceramic materials for artistic ends – adaptable to any investigation. Taken either way, this is the definitive book about soda-glazing.



*Top: Gail Nichols' 'sidestoke' propane kiln.*

*Above: Shouldered jar, 30 cm high, Gail Nichols, 2004.*

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Dr Owen Rye is a woodfire potter and former teacher of ceramics. He lives in Gippsland, Victoria.

