and, finally, a well-organized index.

The book is enhanced by over 600 colour photographs, most of which were taken by British-born Gavin Ashworth. His colours are stunningly accurate, and his attention to detail is exceptional. Ashworth raises the standard for ceramic photography in this handsomely illustrated volume.

Subsidized by the Chipstone Foundation, the value of this book far exceeds its price. The only shortcoming is its hefty size. Although beautifully printed and bound with two ribbon bookmarks, it is somewhat difficult to manage because of its weight. But happily, though it is hard to pick up, this highly engaging volume is even harder to put down! It belongs on the bookshelves or bedside tables of curators, archaeologists, collectors, ceramic historians, and material culture specialists alike.

Merry A. Outlaw "New Discoveries" editor Ceramics in America

J Rosen, La Faïence en France du XIVe au XIX siècle. Histoire et Technique Editions Errance, 1995. 215 pp, numerous plates, some in colour. ISBN 2877721078. Price: 195Fr

As stated on the back cover of this attractive volume, faience is an important testimony to changing technology, fashions, ideas, trade and exchange. Many French studies of the subject have, in the past, concentrated on one aspect of the subject to the detriment of others. In this case, however, the author is a doctor of art history and archaeology, who has excavated at the production centres of Dijon, Nevers and Meillonas. This well-presented volume thus rises admirably to the challenge of blending these interests with technical information and social context as evidenced by documentary sources. Here it might be appropriate to explain that in France there is no distinction between different forms of tinglazed ware, all of which are referred to as faience. This bulk of the pottery illustrated in this volume, does, however, correspond with the understanding of the term faience in England and the Netherlands, being tin-glazed on both surfaces (Hurst et al., 1986, 120). The 18th-century faience *fine*, however, has nothing to do with the use of a tin glaze, but emulates cream ware.

The volume is divided into two parts, each with a brief introduction, although the organisation is at first a little unclear (English readers may be somewhat confused by the fact that the index is at the end of the book). There is no glossary, no index or list of plates (indeed both these and the different chapters are unnumbered), nor is there an English or German summary, all of which would have been useful. For this reason this review outlines the content more fully than is perhaps usual. The bibliography, however, is extensive and the photographs are on the whole clear and attractive. A minor complaint is that the pottery plates lack scales and where these are included they lack numbers.

Part 1 (pages 11-72) is concerned with matters technical. It commences with a summary of previous publications, both contemporary technical treatises from the 14th to the 19th century, and art-historical studies of the 19th and 20th centuries. Of these, the most important contribution is clearly that of Alexandre Brongniart (1770-1847), a multifaceted scientist, not only professor of mineralogy at the National History Museum but also director of the Sèvres pottery from 1800-1847. Brongniart can be considered the founding father of modern ceramic studies in France, and his work is frequently quoted in the following sections. These commence with explanations of the characteristics of different clays and their preparation, production techniques (throwing and the use of moulds), biscuit ware, techniques of decoration (including painting and glazing), kilns, firing and wasters. Among the titbits of information we are told that it was common practice to store and transport the prepared clay in biscuit ware wasters, as these would allow the humidity to evaporate. If the clay has rested for less than three months following its preparation, the potter can expect a 75% failure rate, especially when making flatwares. The different stages of firing and the required temperatures are clearly explained (usually $c. 800^{\circ}$ for the biscuit ware and c.940-980° for the glazed ware), as are the terms 'grand feu' and 'petit feu', or 'au réverbère'. The former involves applying the tin glaze to the biscuit ware, and decorating it with up to five colours (blue, purple, green, yellow and red) derived from metallic oxides. As the physical and chemical properties of the paints are compatible with those of the tin glaze or enamel, the decoration is completed in the second firing. Decoration by 'petit feu' involves painting the decoration onto a plain white glaze that has already been fired, and refiring to a lower temperature in a special muffle kiln; this technique allows a wider range of colours to be used. It is stated that this section is not intended to be comprehensive, but it is certainly adequate and, most importantly, clear and easy for the non-specialist to follow. Most interesting to the archaeologist will be the discussions of kilns, firing and wasters as these include details of excavations and finds, some of which were, in 1995, unpublished. Examples of the different wares (e.g. biscuit ware, 'grand feu' and 'petit feu') and paint effects such as camïeu (painting in different tones of the same colour, usually monochrome) are presented in twelve colour plates. Twelve further plates, also in colour, show different styles of decoration (e.g. compendiario, Chinese style, stencilled designs). In both cases the images are arranged chronologically. Other illustrations show, inter alia, moulds, paint pots, test pieces, excavated kilns and kiln furniture, and examples of faults in firing and decoration.

Part 2 outlines the history of faience production in France, in a series of chronological sections, although there is a certain amount of chronological overlap between them. The first section summarises the origins of the tradition in the Near East to Spain and the first French products of the 13th and 14th centuries (pages 77-82). Brief mention is made of the archaeological finds from the 13th-century pottery complex at Marseille and various 14th-century tileries. The short-lived growth of the tradition in the 14thcentury was fostered by royal and ecclesiastical patronage (notably the Ducs de Berry and the Pope). At the papal palace of Avignon green-and-brown wares were produced by Spanish potters brought in for specific commissions. The next chapter (pages 83-5) explains the various socioeconomic problems that hindered the development of the tin-glazed tradition in 14th-century France, and considers the chronological development in 15th- and 16th-century Spain and Italy. This is followed by a consideration of the Renaissance revival in France. Although brief (pages 87-91), this section covers several key events. Arguably the first indication of 16th-century production is at Lyon, where, in 1512, the Florentine potter Angelo Benedetto was working, together with four others, possibly at the invitation of François I. This move led, indirectly, to the development and expansion of the later industry at Nevers. In 1527 the same king invited Girolama della Robbia, another Florentine potter, to decorate, on a scale greater than anything known in Italy, certain parts of a copy of the castle of Madrid that was being constructed in the Bois de Boulogne in Paris. This work, which lasted more than 25 years, was to influence the decorative arts of the late 16th century. Also considered in this section are the innovatory works known as 'St Porchaire' and those produced by Bernard Palissy and Masséot Abaquesne of Rouen, the pavement in the church at Brou (source unknown), and the late 16th-/17th-century maiolica production of the Langeudoc.

The next section (pages 93-7) outlines the development of the industry in the first half of the 17th century, noting the decline of Lyons, the move of various Italian glassmakers and potters from Lyons to Nevers, and the rise of that factory. Of interest here are the political influences that influenced the course of the arts. A key event was the marriage of Louis de Gonzague, an Italian born in Mantua but brought up in the court of François I, and Henriette de Clèves, heiress of the duchy of Nivers, which he acquired in 1652. Exponents of the Renaissance, this couple not only fostered the Italian arts, but also protected the Protestants. It was they who invited four glassmakers from the area of Albisola to Nevers, and these men were soon followed by Italian potters, initially coming from Albisola, but in 1584 also from Faenza; from c. 1600 the name Faenza became increasingly synonymous with tin-glazed pottery. Of the other contemporary potteries that are noted (e.g. Montpellier), Italian potters were present at Nantes, Cosnesur-Loire and possibly at Orléans.

During this period of revival, both documentary and archaeological evidence show that tin-glazed pottery became established as a luxury commodity, even if it was only hired for specific events (indeed, we are told that it was largely the rising prices that led to the downfall of the industry at Lyons). By the mid-17th century, the three main production centres were Nevers, Nantes and Rouen, with Montpellier supplying pharmaceutical wares. During the reign of Louis XIV (1638-1715), there was a move to cut down on imported goods and to promote not only French products but their export, and to establish France as a leader of European fashion (pages 99-101). Another factor was the need of the Treasury to compensate for the cost of various wars, which was solved by gathering in items of precious metal from a select nobility that could be melted down and recycled (pages 101-3). This contributed to an increasingly widespread use of tin-glazed pottery, and the development of armorial decoration. Together with royal commissions, these factors led to both the growth of the existing centres and the opening of new potteries (e.g. Toulouse and Quimper). The latter was aided by the 'head-hunting' and dispersal of various potters working at established centres, and by the use of potters from the Low Countries (e.g. at Rouen and Lille). The increase of production (especially for tiles) to a quasi-industrial level is demonstrated by several examples, including the Trianon de porcelaine at Versailles in which tin-glazed tiles were used by the thousand.

The production of armorial wares between c. 1680-1725 is seen as the final peak of the period in which faience was primarily the preserve of the aristocracy. In the following years, increasing diversity and personalisation of decoration and typology was matched by a subtle move towards the bourgeois market, and a functional emphasis on the serving of wine. The bulk of next two sections (pages 105-124) concentrate on the period 1720-1780, although divided by a block of twelve black and white plates (slightly on the dark side) that are intended illustrate form and function. The first outlines the economic situation and the general development and marketing of faience at this time. The second details various factories, the problems faced by them in the mid-18th century (such as inspections and maintaining adequate fuel supplies), and the recovery and growth seen in the latter part of the century. This is followed by a more lengthy consideration of the social background and factors that influenced the development of faience, such as the increasing use of porcelain (pages 125-34). As the latter took hold of the upper end of the market, so faience became the pottery used by the bourgeoisie and even the middle classes. The development of the 'petit feu' technique, however, was intended to provide a product that could complete with porcelain for the market in luxury goods. Other developments, which mirror changing social customs and dietary habits, include the creation of a new body that could withstand heat (terre à feu and faience brune), and thus be used for serving or drinking tea, coffee and chocolate. Other innovations were the use of pipeclay and the adoption of methods of production used at Stoke-on-Trent, specifically for cream ware. The French equivalent, known as faience fine, at first produced in a range of bodies, was made at numerous factories, but was ultimately overshadowed by imported English wares.

The remaining sections mainly consider the late 18th and 19th centuries. Entrepreneurs and clients are discussed on pages 135-139, while political factors such as the Treaty of Vergennes (1786) following the American war, and the French revolution, are considered on pages 141-145 and 146-152 respectively. The former led to the increase of English imports and a decline of faience production in France, which was sealed by the latter. The 19th century is discussed in two sections, divided somewhat uncomfortably by a block of black and white plates illustrate form and function, mostly of 18th-century pieces.

The penultimate section (pages 175-183) covers the historiography of the subject, the first exhibitions, of which that at Sèvres was the first permanent display, and other matters such as fakes and private collectors. The last section (pages 185-193) presents the main avenues for further research, stressing that identification by decoration alone is unlikely to succeed, not least because, as already explained, there was a national trend towards uniformity in the 18th century and few kiln sites have been adequately excavated and studied (page 122). Furthermore, it is pointed out that at its peak the industry may have had up to 1000 industries, and even those that are known are poorly understood. There is a need, therefore, for more archival research, for archaeological excavation, and scientific analysis of the fabrics. The latter, one might be surprised to read, was attempted as early as the mid-19th century, but real progress only came in the late 1980s with work on material from Rouen and Meillonas. The techniques used are mainly NAA, XRF and optical spectrography, which are explained in outline, together with seven stages of questions to be asked of the material and the need for co-ordinated research that can build up a reference collection of analytical data. It would be interesting now to see how the new technique if ICPS has influenced this work; being rather cheaper it will hopefully overcome budgetary problems that in the past have resulted in only small numbers of samples being studied.

The test of a good book is whether it stands the test of time. Despite the lapse between publication and this review, it can be said the book remains an important contribution to the subject, because it is a departure from the norm. Those seeking detailed typologies and discussion of form will be disappointed, but such studies can be found elsewhere. As stated in the title, the main emphasis of this book is on history and technology. The period covered spans the 14th to 19th centuries, but the main emphasis is on 18th and 19th centuries. It is not intended as a mere supplement, or counterpart, to more art-historical studies, although this is largely achieved. The overall aim is, overtly, to not to provide a definitive text, but to give a better understanding of the subject; behind this, however, other aims can be detected. Firstly, to give a wake-up call to alternative approaches and interests, both for the amateur and the professional student of ceramics. Secondly, to bring a relatively modern period, for the most part the domain of the collector and connoisseur, to the attention of the archaeological world, and show that this material has much to offer the study of earlier industries. Much of the text is quite simple, yet the content is scholarly and enhanced by numerous quotes used to support the argument in question. The narrative is balanced by the number and range of the illustrations, including photographs of pottery, 19th-century engravings of potters at work and their equipment and views of archaeological sites, which ensure that the publication will appeal to a wide audience. One of the most appealing photographs is of a dish from Nevers showing a pottery at work (page 104).

Had this been a travel book, a map would have been provided. Given the number of other illustrations and that the book is aimed largely at the amateur market, who could be forgiven for not knowing where different industries were based, this oversight is both unfortunate and disappointing (especially for the foreign reader unfamiliar with the geography of France). In this reviewer's opinion, this omission could be taken as the book's weakest point. In other respects, however, it functions well as a 'guide'. Signposts are offered, summary details of the possible destinations are supplied, mainly in manageable, bite-sized essays of no more than four sides, and these inspire further expeditions. It is up to the reader to make the journey – to follow the road back from finished object to its origins, and to consider new avenues of research. The author may, therefore, be congratulated for presenting a holistic approach that can, and should, be applied not only to the study of faience, but any other major ceramic tradition. It is fitting to round off this review, as the author prefaces his own conclusions (page 194), by drawing attention to a plate of c. 1770-1780 from Moustiers which shows a figure (presumably a potter) holding a flag inscribed 'vive la fayence'.

Lyn Blackmore