COLOR PLATE LEGENDS

Page I above: Colony of bacteria, *Bacillus subtillis*, spreading on an agar plate (Matsushita and Fujikawa, 1990). The growth displays a certain similarity to the DLA model, since the spread of the bacteria is governed by the diffusion of the nutritiants that they absorb (photograph kindly provided by M. Matsushita, Chuo University, Tokyo).

Page I below: Sliding spark forming at the surface of a dielectric (S. Larigaldie in *Fractal Forms*, edited by E. Guyon and H.E. Stanley, Elsevier/North-Holland and Palais de la Découverte, 1991).

Page II above: Electrolytic deposit of copper, obtained by electrolysis in a thin layer of copper sulphate solution situated between two glass plates. As one of these plates has had its surface treated, growth occurs there (photograph kindly provided by Vincent Fleury, Laboratoire PMC, Ecole Polytechnique).

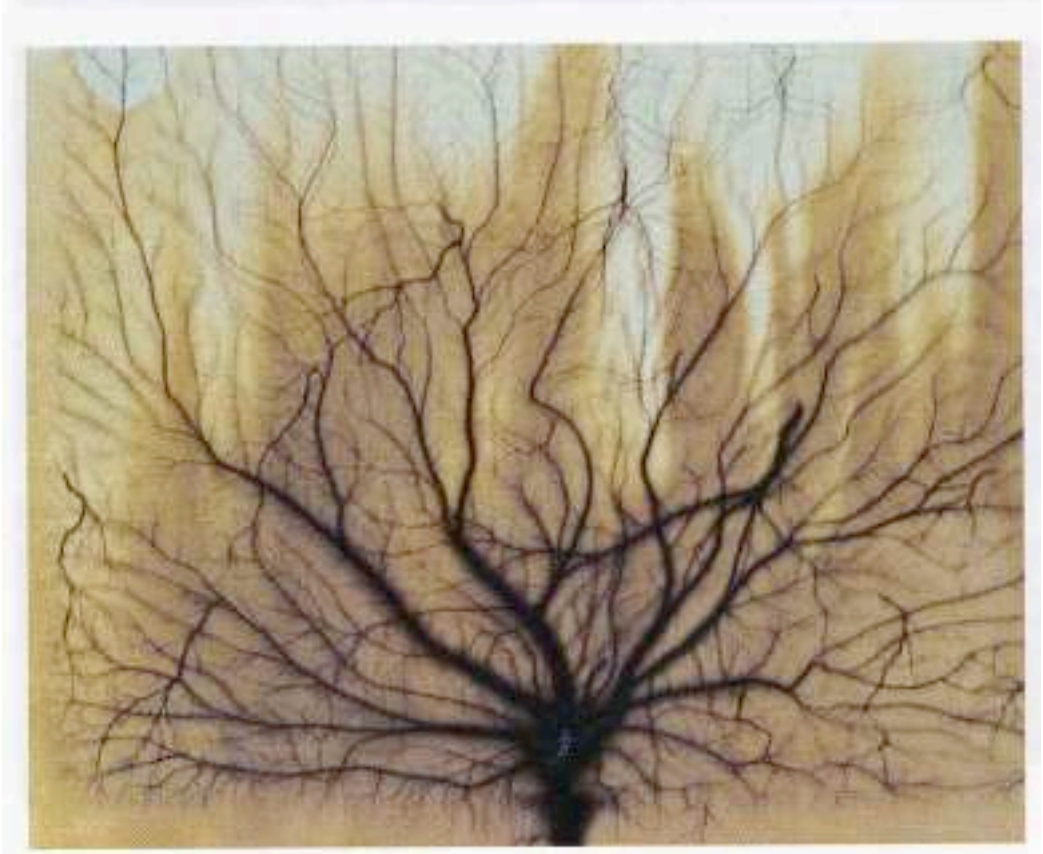
Page II below: Enlargement of the box indicated in the photograph above, demonstrating the self-similar character of the deposit. The fractal dimension was found by V. Fleury to be D = 1.76.

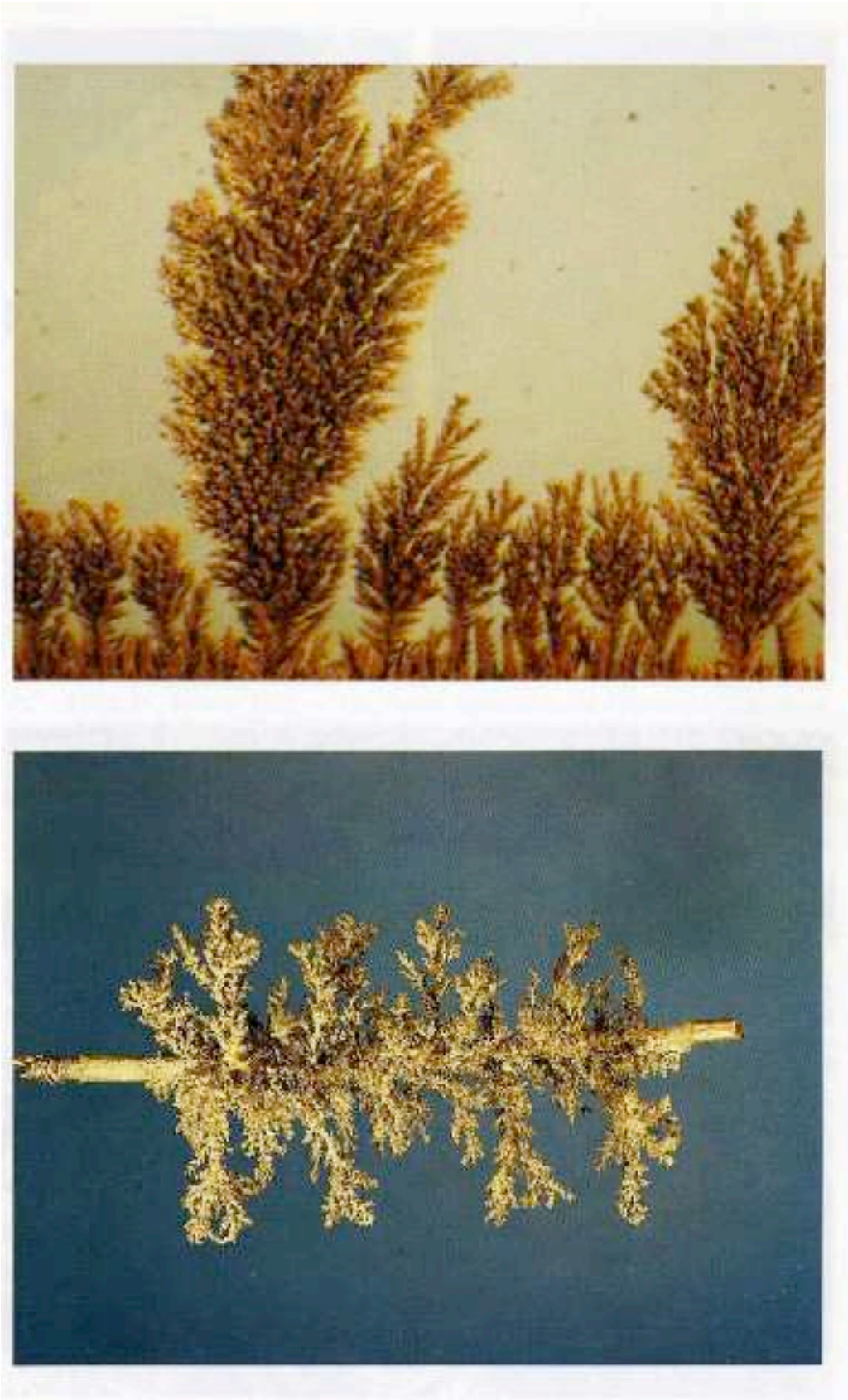
Page III above: Electrolytic deposit of copper showing a similar structure to page II, but using untreated glass plates. Growth occurs throughout the gap. The object shown here has a broadly self-affine structure (photograph kindly provided by Vincent Fleury).

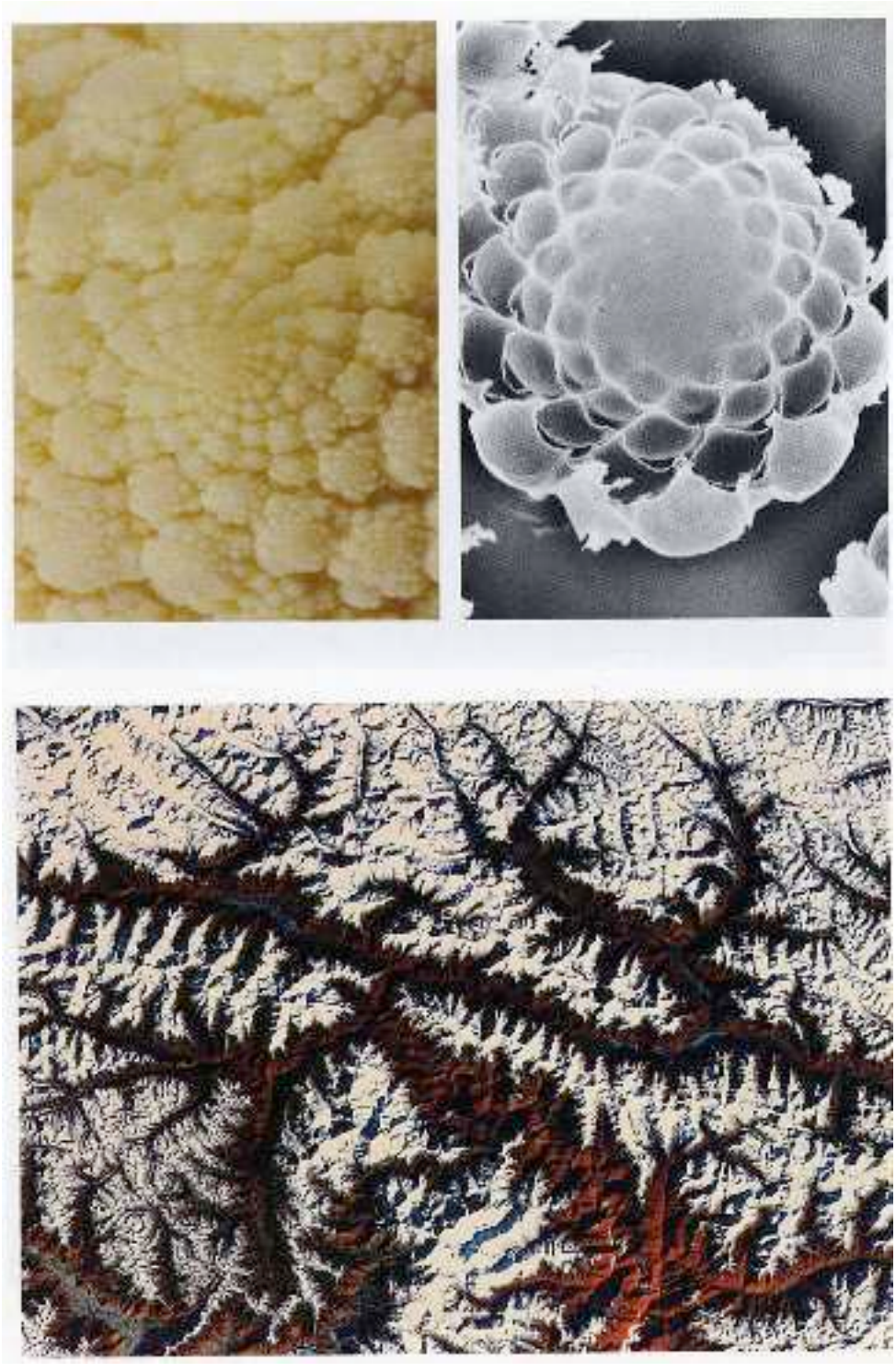
Page III below: Mould of a three-dimensional dissolved structure produced by injecting water under pressure into a cylinder of plaster (through a hole pierced through the center of the cylinder, as can be clearly seen from the mould) (photograph kindly provided by Roland Lenormand and Gérard Daccord, I.F.P., Rueil-Malmaison).

Page IV above: On the left, a photograph of a cauliflower (Broccoli romanesco), displaying an almost deterministic fractal structure. On the right, enlargement by electron microscope showing the smallest scale at which a "pineapple" structure may be observed (photograph kindly provided by François Grey, Risø National Laboratory, Denmark).

Page IV below: Photograph taken from the landsat satellite of Tibetan mountain ranges, showing the horizontal limit of snowfall, and thus displaying a section of a particularly rough natural surface. The image resembles a dendritic growth structure (P. Taponnier, in *Fractal Forms*, edited by E. Guyon and H.E. Stanley, Elsevier/North-Holland and Palais de la Découverte, 1991).







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