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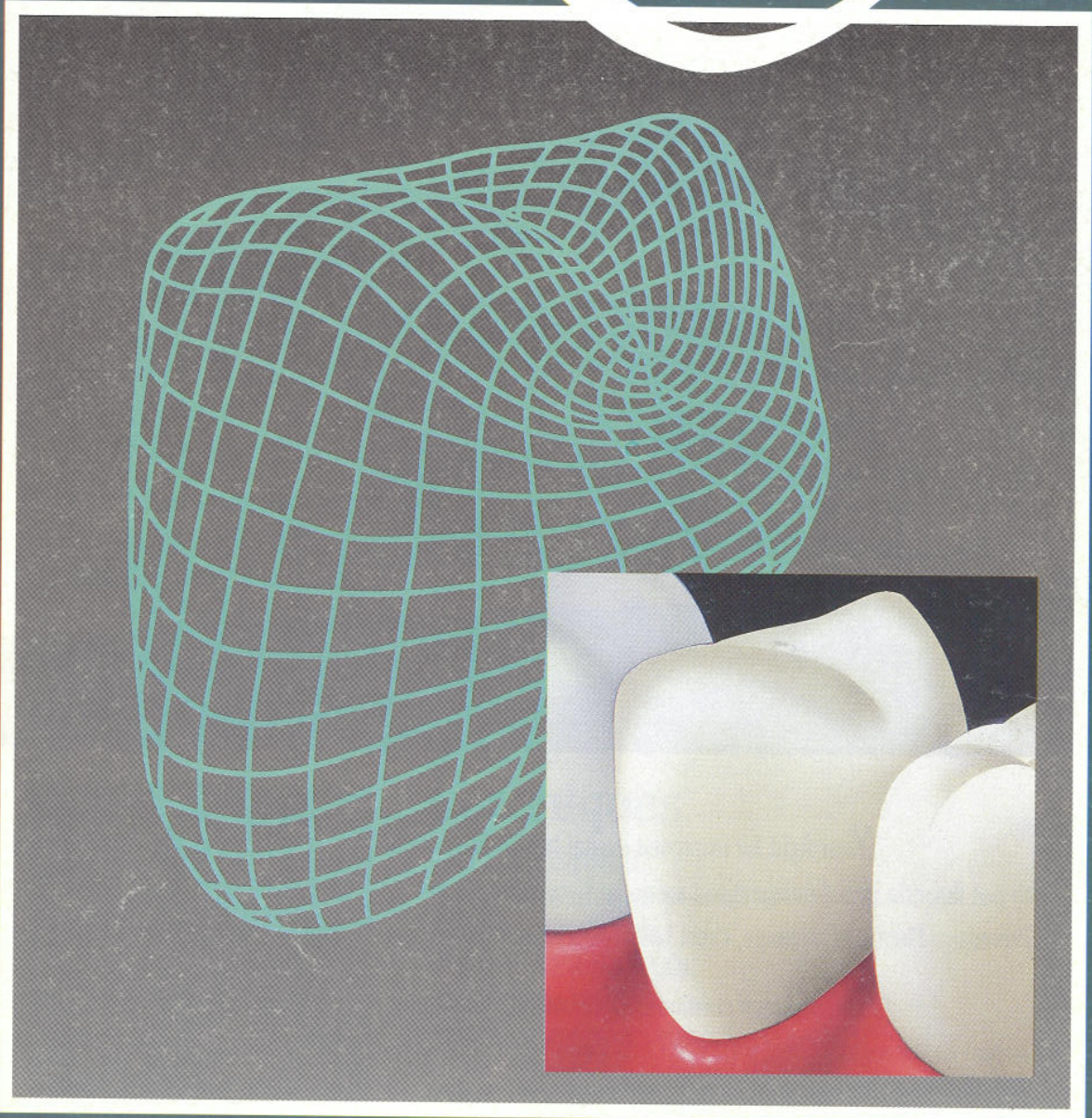
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• PART TWO •

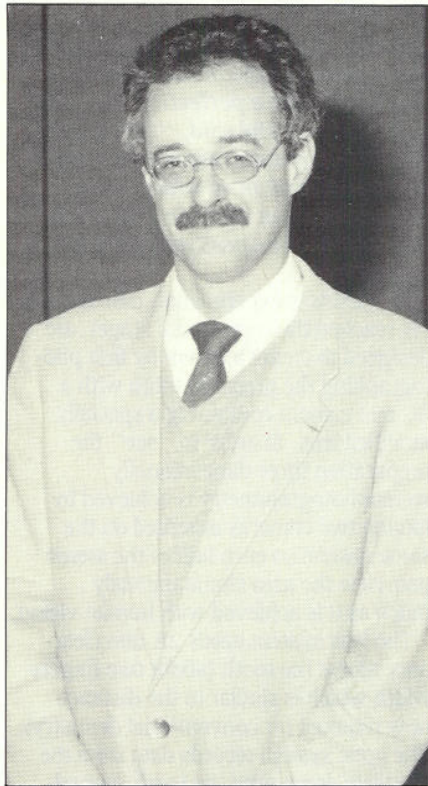
FRANÇOIS DURET — a man with vision

While the symposium in Vancouver allowed an opportunity to observe, to listen and to participate in the brilliance of Dr. Duret — he has a dental degree, a medical degree and two PhDs — it was difficult to gauge the depth of the man himself rather than just his scientific knowledge. Lectures don't allow much in the way of personal glimpses. Fortunately, a lunch-time interview was arranged.

An interpreter participated in the interview. Dr. Duret is quite conscious of his ability to converse in English. It is hard to believe that until 1986, Dr. Duret had never spoken any English. One would never guess it during his lecture. Although heavily accented, the lecture was flawless and perfectly understandable. He is sensitive however to language difficulties during spontaneous question and answer episodes.

Dr. Duret was about 23 years of age when he developed the concept of applying the knowledge of computers and robotics to dentistry. He virtually laboured alone in his research but was heavily influenced by Dr. Joseph Thouvenot in 1975 and this encouragement no doubt helped overcome the "low points" during twenty years of endeavour. When asked to describe the highs and lows, he modestly replied, with a quiet smile, that probably his first low point occurred in 1979 when he was fired from the University of Lyon because his superiors felt his ideas were "crazy".

Discouraged perhaps, but not deterred, he was to enjoy his first "high" in 1983 when his CAD/CAM, a prototype, was demonstrated for the first time outside of a laboratory at La Garancière, the Dental Congress, in Paris. Possibly the second high point of achievement occurred in 1985 when for the first time in public, at the Association dentaire de France meeting in Paris, he prepared and fitted a crown for a patient (his wife! who is also a dentist). A milestone had been reached. However, modestly, Dr. Duret realized that the prototype of 1985 was far differ-



Dr. François Duret

ent from that which would be required for the dental office.

That first crown required eight engineers and two and one half hours to complete. "Probably the most expensive crown in history," said Dr. Duret.

First commercial system this fall

Another milestone will be achieved this fall when the first commercially designed Duret CAD/CAM systems will be marketed and will produce for dentists crowns that will be every bit as good (or better!) than that produced by the conventional lost wax techniques.

The interview probed several parameters of the CAD/CAM system, among which was "what is the advantage to the patient?". Dr. Duret replied that probably the patient will not financially benefit from the system but will be

more satisfied. He indicated how much more convenient it was to have preparations prepared and a restoration cemented in a one hour appointment rather than the two appointments (or three!) that are required today. Not only is saving time an advantage, but the patient will also be glad to circumnavigate the added inconvenience and discomfort. An added benefit could well be a more precise prosthetic appliance, better fitting and superior occlusal integrity.

Questioned how CAD/CAM would effect dental education, Dr. Duret said that the system would have little effect upon the time involvement of the dental student but increased computer skills would be necessary. Eventually there will be a decrease in student time once conventional impression making, model pouring, waxing and casting procedures are phased out. At Dr. Duret's university, CAD/CAM is already a mandatory requirement.

'Must be ready to adapt'

Dr. Duret indicated that CAD/CAM will become common place in the next five to ten years and universities must be ready to adapt and change quickly. Otherwise industry will take over. Dental companies are already closely following the project and will be involved with the dental material prospects of the future. The dental trades currently have their own agendas to follow, he implied, but as always, they are opportunistic to take advantage of innovations. Dr. Duret said, "the software of CAD/CAM is the very heart of the system and it is in this area that industry cannot easily copy."

Essentially a private practice dentist, Dr. Duret carried on his own practice for 15 years, but has little time for it now. The bulk of his time is in research and development and the necessary travelling throughout the world to demonstrate his beloved CAD/CAM. He enjoys the travel as it gives him great opportunity to associate with confrères and scientists but he does regret being away so much from his wife and three children. Δ