Dental CAD/CAM technology has recently undergone enormous development. At the moment, it is the most innovative segment in dentistry and will again be the focal point of this year’s International Dental Show (IDS), where plenty of manufacturers are going to showcase new systems and CAD/CAM solutions. While dental technology was the primary focus in the past, developers are now also looking at the manner in which these technologies can be applied to the dental practice. Digital impressions play a key role in this process. Manufacturers are currently making large investments in this technology and are thus able to constantly introduce new innovations. In this particular field—handheld systems for precise 3-D surface measurements—dentistry is the fore-runner of all other engineering sciences, a fact that acknowledges the pioneer achievement of these developments.

Further examples are functional diagnostics with virtual articulators, implant treatment planning through the combination of DVT data and intra-oral scans that allow for chairside production of surgical guides, as well as facial scans serving as a base for a secure prosthetic planning.

However, CAD/CAM technology is not limited to the fabrication of dental restorations. Computerised dentistry is now also influencing other fields in dentistry, such as diagnostics, 3-D assessment and digital storage. Owing to these developments, complex approaches have become simplified and can better be integrated into the daily practice—all for the benefit of the patient. As a result of these new developments, dentists will have to become acquainted with these new technologies. Only well-educated dentists and dental technicians are able to assess the differences between the available systems and technologies. Just as studying material science enables confident handling of different materials, the basics of computerised dentistry must find their way into the dental curriculum.

The upcoming IDS will prove that the time is ripe!