## 27th Euro Dentistry Congress

October 25-27, 2018 | Prague, Czech Republic



Karel Hero Breuning
Radboud University Nijmegen
Netherlands

## What are the advantages of digital planning and custom orthodontic appliances in orthodontics?

Orthodontic treatment will rapidly change during the next years. The use of intraoral scanners, CBCT radiographs, and 3D extra oral images, will allow the use of a "virtual head" for treatment planning and appliance fabrication. Custom made orthodontic appliances, such as individual brackets, indirect bonding, custom wires, lingual braces and aligners will allow efficient and fast orthodontic treatment. The use of the intraoral scanner and the smartphone photographs during treatment, will allow evaluation of the treatment progress and the correction of treatment to achieve the treatment goal planned, without delay. Patient will know the result of treatment before the actual start. During treatment, they will be informed about the treatment progress. Off course, every treatment should be changed when needed. Monitoring during treatment will improve the progress. After treatment, retention of the treatment result will be needed. Evaluation of treatment stability using intraoral scanners and the smartphone of the patient can be used to prevent a severe relapse of the treatment result

## **Biography**

Karel Hero Breuning is recognized internationally for his innovation in orthodontic procedures and appliances. He is the Inventor of the combination of active and passive selfligating brackets. He has lectured internationally on subjects such as efficient use of selfligating brackets, indirect bonding of brackets, efficient use of TAD's: when to use miniscrews, palatal miniscrews or miniplates? He is an Assistant Professor of 3D imaging at the Department of Orthodontics Nijmegen, the Netherlands and is involved in projects such as diagnosis using digital dental models, indications for CBCT's, digital planning of orthodontic treatment advantages of custom orthodontic appliances and intra oral scanning for orthodontic patients. He has published many research papers and articles in peer viewed professional journals. He is a Reviewer for seven orthodontic journals. Currently, he prepares a new book on digital planning in orthodontics, with professor Chung How Kau and professor Orhan Tuncay.

herobreuning@gmail.com

**Notes:**