editorial

03 Where we have been, where we are and where we are going? Is “Big Brother” watching us?
| Dr Gary Glassman

CE article

06 Mineral trioxide aggregate revisited: A cement for all seasons
| Dr Gary Glassman

case report

10 Apexification with mineral trioxide aggregate (MTA): A case report
| Dr Abu-Hussein Muhamad, Drs Abdulghani Azzaldeen & Abu-Shilabayeh Hanalai

special

14 “A” sequence of irrigation
| Dr Philippe Sleiman

18 PHAST PIPS: The photoacoustic wave of the future?
| Dr Reid Pullen

technique

22 Fifth-generation technology in endodontics: The shaping movement
| Drs Clifford J. Ruddle, John D. West & Pierre Machtou

30 The rationale and use of electronic apex locators
| Dr L. Stephen Buchanan

industry news

34 Apex locator more precise than CBCT
| VDW

36 New endodontic imaging mode from Planmeca fields detailed images without noise or artefacts
| Planmeca

events

38 American Association of Endodontists organised Root Canal Awareness Week for the seventh time
| AAE

40 International Events

about the publisher

41 | submission guidelines

42 | imprint

Cover image: frontal and lateral views of a 3-D reconstruction of a maxillary first premolar showing a three-rooted canal system. This micro-CT image was developed as part of the Root Canal Anatomy Project http://rootcanalanatomy.blogspot.com in the Laboratory of Endodontics of the University of São Paulo in Ribeirão Preto, Brazil by Prof. Marco Versiani, Prof. Jesus Pécora & Prof. Manoel Sousa-Neto