International mercury treaty signed
Minamata Convention bans products, Agrees to amalgam phase-down

MINAMATA, Japan: Certain products containing mercury will be banned from 2020, according to a new international treaty signed by governments in Minamata in Japan last week. The regulations apply to the production and trade of batteries, cosmetics and fluorescence lamps containing the toxic material, among other products. Amalgam dental fillings are not affected by the ban.

However, the treaty agreed on a number of provisions on the phasing down of the controversial dental material. The Convention, which was proceeded by five intergovernmental negotiation rounds and set in place for adoption at a meeting in Geneva in January, was signed by 87 countries.

Governments now have three years to develop and implement national strategies to reduce or eliminate the production and industrial use of the toxic metal. Mercury emission from large-scale industrial plants, the main source of mercury pollution worldwide, will also be controlled.

Dental associations reacted positively to the decision, which will permit the use of amalgam as a restorative dental material for the years to come. Dr Stuart Johnson from the British Dental Association, who took part in the negotiations on behalf of the FDI World Dental Federation, commented: “We are delighted that the Minamata Convention allows the dental profession continued access to a key restorative material. Dental amalgam is safe and effective: it has been in use for over 150 years and no studies have demonstrated any harm to human health.”

He said that despite amalgam not being banned by the treaty, the decision is “a victory for dental patients across the world.”

Desensitising confirmed
A study conducted by dental researchers in Taiwan has provided new evidence that toothpaste containing the amino acid arginine and calcium carbonate can contribute to a significant reduction in dentine hypersensitivity. In the study, almost 98 per cent of the participants reported reduced hypersensitivity after having used the toothpaste for eight weeks.

The study involved 18 male and 25 female adults with dentine hypersensitivity and caries-free teeth. In order to evaluate the clinical efficacy of desensitising toothpaste, which is considered the most cost-effective and easiest treatment for most patients, the participants were asked to brush their teeth twice a day with Colgate Sensitive Pro-Relief toothpaste, containing 8 per cent arginine and calcium carbonate, for eight weeks. Comparative dental examinations at baseline, and after four and eight weeks of product use found that there were no adverse effects on the oral soft and hard tissue. Forty-two participants (97.7 per cent) reported significantly reduced hypersensitivity.

Mouthwash made from neem bark
The International Association for Dental Research (IADR) has recognised a dental student from Myanmar for his research on the clinical effectiveness of mouthwash made from the bark of the neem tree, which is used in traditional South-East Asian medicine.

The study by Mg Ye Htut Oo, a final-year student at the University of Dental Medicine, Yangon, found that the plant-derived mouthwash is just as effective as conventional mouthwashes. Moreover, it was more effective at reducing stains.

The prize was awarded during a meeting of the IADR’s Asia Pacific divisions in Australia, New Zealand, China, Japan, Korea and South-East Asia that was held from 21 to 25 August in Bangkok.

Regeneration with diamonds
New research suggests that nanodiamonds could be used to promote bone growth as they bind rapidly to both bone morphogenetic protein and fibroblast growth factor. According to the US scientists, the by-product of conventional mining and refining operations can be inserted non-invasively through injection or an oral rinse.

GC opens new headquarters
GC International has recently opened its new head office in Lucerne in Switzerland. The newly established international branch of dental products manufacturer GC will be guiding the international affairs of GC Asia, GC Europe and GC America in the future. GC Corporation will continue to operate independently from Japan.

Plenipotentiaries on the Minamata Convention on Mercury
October 9, 2013 Tree-planting ceremony
(From left to right) Yoshihuru Ishihara, Minister of Environment, Japan, Achim Steiner, UNEP Executive Director, Ikuo Kabashima, Governor of Kumamoto Prefecture, and Katsuaki Miyamoto, Mayor of Minamata, posing with a plaque commemorating the signing of the historic treaty. (DTI/Photos courtesy of ENB)