The next MIS Global Conference will take place from 8 to 11 February next year in the beautiful Atlantis Resort in the Bahamas. Based on the success of last year’s event in Barcelona in Spain, with its fascinating scientific programme, high-level lectures and amazing entertainment, the next edition promises to deliver an intense and unforgettable experience in every respect.

The scientific committee, headed by Prof. Lior Shapira, Chairman of the Department of Periodontics at the Hebrew University–Hadassah Faculty of Dental Medicine in Jerusalem in Israel, has undertaken all efforts to make the next conference even better than the one before. In addition to contemporary treatment possibilities, insight will be provided into the present and future of dental implants as part of clinical dentistry.

“The podium will be occupied by high-quality clinicians, researchers, and educators, who will share with you their extraordinary experience and clinical excellence,” Shapira said.

With the launch of the V3 Implant System currently underway in the US market, MIS Implants Technologies is devoted to equipping the dental community with the latest innovations and helping clinicians improve patient care. The two-day main programme will feature world-prominent speakers presenting their expertise, which could be implemented in everyday dental practice and optimize dentists’ skills for the benefit of their patients. Some of the key topics of the conference are evolution and horizons in implant therapy, biological principles and predictable aesthetics, the long-term forecast for implant therapy and going digital (where, when and how).

A number of workshops will provide an opportunity for meaningful learning in an intimate environment, with accomplished experts in their specific fields of interest.

As part of its commitment to promoting young clinicians, MIS is continuing the tradition of holding a clinical case competition during its conference. With the focus on modern technologies and techniques in clinical practice this year, 13 top clinical cases will be presented as posters at the conference venue, and the best three will also be awarded.

In the spirit of “ideas worth spreading” and its commitment to innovation, MIS has further proudly announced a new partnership with TEDx. An independently organised TED event, TEDxMIS will be held on 10 February and feature some of the world’s leading thinkers and achievers in the field of implant dentistry. The goal is to give conference guests the opportunity to experience a unique series of fast-paced, eye-opening talks that will inspire them and provoke meaningful engagements with their peers.

Similar to past events, the Bahamas conference is expected to provide an extraordinary environment for knowledge sharing and the opportunity to meet with peers in the international dental community. In 2016, conference guests will also enjoy one of the most beautiful and exotic locations in the Atlantic Ocean: the Atlantis Resort on Paradise Island. When not engaged in the workshops and lectures, they will be able to explore this extraordinary marine habitat, participate in sports activities, and experience the culture and colours of the Bahamas. Full of impressive and fun events, the MIS Global Conference entertainment programme will leave guests with fond memories and looking forward to the next meeting.

More information about the conference can be found at bahamasimplant.com or at Booth P1 in the exhibition hall at EAO 2017.
Investigating the effect of a new approach using a combination of silver, titanium dioxide and hydroxyapatite (HA) nano-coatings on the surface of titanium alloy implants, researchers from Plymouth in the UK have found that the method was successful in inhibiting bacterial growth and reducing the formation of bacterial biofilm. In addition, the coating created a surface with antibiofilm properties, thus supporting successful integration of the implants into surrounding bone and accelerating bone healing.

One of the main reasons for dental implant failure is peri-implantitis, an inflammatory process affecting the soft and hard tissue surrounding dental implants caused by pathogenic microbes that develop into biofilms. Current approaches to managing the development of biofilms include application of antimicrobial coatings loaded with antibiotics or chlorhexidine. However, these are usually only short-term measures. In addition, chlorhexidine has been reported to be potentially toxic to human osteoblasts.

Investigating a new approach to the prevention of biofilm, researchers from the School of Biological Sciences, Peninsula Schools of Medicine and Dentistry, and School of Engineering at the University of Plymouth tested the effectiveness of a dual-layered silver–HA nano-coating on titanium alloy medical implants. The antibacterial performance of the coating was quantitatively assessed by measuring the growth of Streptococcus sanguinis, the proportion of live and dead cells, and lactate production by the microbes over 24 hours. The results showed that the combination successfully inhibiting bacterial growth and reduced the formation of bacterial biofilm on the surface of the implants by 97.5 per cent. Uncoted controls and titanium dioxide nano-coatings showed no antibacterial effect.

According to the researchers, no dissolution was detected for the HA nano-coatings. Thus, application of a dual-layered silver–HA nano-coating on titanium alloy implants further created a surface with antibiofilm properties without compromising the HA biocompatibility required for successful osseointegration and accelerated bone healing.

“In this cross-faculty study we have identified the means to protect dental implants against the most common cause of their failure. The potential of our work for increased patient comfort and satisfaction, and reduced costs, is great and we look forward to translating our findings into clinical practice,” commented Prof. Christopher Tredwin, Head of the Peninsula School of Dentistry.

In the next step, the effectiveness of the approach needs to be tested in vivo, according to the researchers.

---

**Global dental implant market to rise in value**

A recent report on the global dental implant market has forecast a compound annual growth rate of 7.9 per cent for the industry until 2024. The report was compiled by Transparency Market Research and predicts that this market will be worth US$18.18 billion by the end of the analysis period.

This expected continued growth can be attributed to a number of factors. With ageing populations worldwide, more people than ever before are being treated for dental problems. Furthermore, advancements in CAD/CAM technology and increasing recognition of the importance of maintaining good oral hygiene are contributing factors, the report stated.

Titanium implants and zirconia implants were identified as two key segments of this market, with the former expected to be both the leading revenue generator and the fastest growing segment. Titanium alloys used in dentistry are lightweight, resistant to corrosion and wear; and able to withstand high temperatures. Zirconia implants offer a metal-free alternative and provide excellent osseointegration and aesthetic properties.

According to the report, Europe was leading the global dental implant market by overall demand at the start of the forecast period, closely followed by North America. The Asia-Pacific region is the fastest growing market, however, as demand for medical facilities continues to increase.

The report, titled *Dental Implants Market (Products—Endosteal Implants, Subperiosteal Implants, Transosseal Implants and Intramucosal Implants; Materials—Titanium Implants and Zirconium Implants; End Users—Hospitals, Dental Clinics, and Academic and Research Institutes)—Global Industry Analysis, Size, Share, Growth, Trends, and Forecast 2016–2024*, can be purchased from the Transparency Market Research website.

---

**Spanish study finds strong link between OSA and implant complications**

There has been increasing awareness of the reciprocal relationship between obstructive sleep apnoea (OSA) and dental problems, for example sleep bruxism and a higher clench index. However, few studies have investigated the role of OSA in the occurrence of technical failure in fixed prostheses, especially those that are implant-borne. Spanish research conducted by dentists in collaboration with the OGI Araba University Hospital in Vitoria has now found that over 80 per cent of the patients with OSA experienced implant problems—suggesting a potentially strong correlation between the sleep disorder and implant complications.

Aiming to analyse the frequency of prosthetic complications in implant-borne prostheses, a group of researchers from Vitoria investigated implant failure in 67 patients. They identified 30 complications affecting 22 prostheses among 16 patients. Of these, 13 also had OSA (81 per cent). Based on the results, which suggested a strong link between OSA and implant complications, the researchers noted that future studies should explore the correlation further in order to better understand the risk factors and frequencies of these occurrences.

---

**Nano-coating effective in reducing peri-implantitis risk**

Combination of silver, titanium dioxide and hydroxyapatite shows promising results in UK study

According to the researchers, no dissolution was detected for the HA nano-coatings. Thus, application of a dual-layered silver–HA nano-coating on titanium alloy implants further created a surface with antibiofilm properties without compromising the HA biocompatibility required for successful osseointegration and accelerated bone healing.

“In this cross-faculty study we have identified the means to protect dental implants against the most common cause of their failure. The potential of our work for increased patient comfort and satisfaction, and reduced costs, is great and we look forward to translating our findings into clinical practice,” commented Prof. Christopher Tredwin, Head of the Peninsula School of Dentistry.

In the next step, the effectiveness of the approach needs to be tested in vivo, according to the researchers.