The conference
The 2013 [MEET THE EXPERT] Implants is dedicated to experts and persons interested in the field of active and passive implants. The program includes expert talks as well as short presentations. Discussions and networking will additionally take place at the tabletop exhibition and poster presentation area. The aim of the event is to present new developments, promote the exchange of know-how, and trigger collaborations between implant producers, subcontractors and end users. Conference languages are English and German with translation from English to German and vice-versa.

Tabletop exhibition
The tabletop exhibition will take place during the conference (exhibitor fee CHF 1’500.00, excl. VAT). Exhibitors have the opportunity to give a one minute talk during the plenary session. Registration for the tabletop exhibition can be found at: www.medical-cluster.ch/mte_participant

Information and registration:
www.medical-cluster.ch/events

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Materials - Surfaces - Manufacturing
Meeting programm

22 - 23 April 2013
Congress Centre Kursaal Interlaken
CH-3800 Interlaken

Congress Centre Kursaal Interlaken
CH-3800 Interlaken
Meeting Program Monday, 22nd April 2013

From 09:30 Registration
10:00 - 10:15 Welcome

Session 1
Chair: Dr. Lukas Eschbach

10:15 - 11:00 Straumann’s view of the dental market (industry partner) and the importance of Time to Market in a fast changing Industry (EN); Dr. Sandro Matter, Institut Straumann AG
11:00 - 11:30 Keynote 1: Considerations on Patient Specific Implants (DE); Dr.-Ing. Jörn Seebeck, Zimmer GmbH
11:30 - 12:00 Flash presentations exhibitors
12:00 - 13:15 Lunch

Session 2
Chair: PD Dr. Christiane Jung

13:15 - 13:45 Keynote 2: Biocompatible elastomers for 3D biomaterials by additive manufacturing (DE); Dr. Kirsten Borchers, Fraunhofer-Institute for Interfacial Engineering and Biotechnology IGB
13:45 - 14:15 Keynote 3: Laser for the medical device industry – challenges in manufacturing and marking of medical implants (DE); Dr. Alexander Knitsch, TRUMPF Laser- und Systemtechnik GmbH
14:15 - 14:45 Keynote 4: Electro-activation of passive implants – propositions from a technology perspective (DE); Dr. Urban Schnell, Helbling Technik Bern AG
14:45 - 15:05 Flash presentations posters
15:05 - 15:30 Break (Exhibition and Poster)

Session 3a: Passive implants
Chair: Prof. Dr. Michael de Wild

15:30 - 15:50 Development of a atrial septal occluder using an biodegradable framework (DE); Andreas Weishaupt, Carag AG
15:50 - 16:10 Is the occurrence of periimplant osteosarcomas related to the use of cast stainless steel plates? (DE); Christoph Sprecher, AO Research Institute
16:10 - 16:30 Development of a new glenoid implant (DE); Samuel Schenk, Mathys Ltd Bettlach
16:30 - 16:50 Antibiotic loaded plaster of Paris: Wear of artificial hip joints in the presence of gypsum particles (DE); Dr. sc. Roman Heuberger, RMS Foundation
16:50 - 17:10 Employing biological and mechanical cues for bone regeneration (DE); Univ.-Prof. Dr.-Ing. Georg N. Duda, Charité - Universitätsmedizin Berlin
17:10 - 18:30 Exhibition / Poster / Aperitif

Session 3b: Electro-active implants
Chair: Dr. Urban Schnell

15:30 - 15:50 Implantable ceramic MEMS electrodes for cardiac pace makers (EN); Dr. Gurdial Blugan, Empa
15:50 - 16:10 Product engineering of active implants (DE); Daniel Thommen, Microdul AG
16:10 - 16:30 Glass encapsulation in intelligent embedded systems (EN); Frédéric Mauron, VALTRONIC
16:30 - 16:50 PEEK casing for an active implant (EN); Dr. Thomas Degen, Sequana Medical AG
16:50 - 17:10 Evaluation of process capability of implant manufacturing (DE); Adrian Gammeter, Integrated Scientific Services, ISS AG

17:10 - 18:30 Dinner at Hotel Metropole

Key: EN = Lecture in English | DE = Lecture in German
### Session 4
**Chair: Prof. Dr. Michael de Wild**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>08:30 - 09:00</td>
<td>Keynote 5: Application of rapid prototyping in complex osteotomies of malunited bones (EN); Matthias Graf, Uniklinik Balgrist</td>
</tr>
<tr>
<td>09:00 - 09:30</td>
<td>Keynote 6: Trends and developments of high-performance ceramics for implants (DE); Dr. Martin Zimmermann, Metoxit AG</td>
</tr>
<tr>
<td>09:30 - 10:00</td>
<td>Keynote 7: Phase contrast and X-ray dark field imaging: New possibilities for non-destructive testing of materials and components (DE); Dr. Christian Kottler, CSEM</td>
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<tr>
<td>10:00 - 10:30</td>
<td>Break (Exhibition and Poster)</td>
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### Session 5a: Passive implants
**Chair: PD Dr. Christiane Jung**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 - 10:50</td>
<td>Latest results in the development of a miniaturized hand held navigation system (DE); Dr. Bruno Knobel, Naviswiss AG</td>
</tr>
<tr>
<td>10:50 - 11:10</td>
<td>Colorimetry on implant surfaces for esthetically demanding applications (DE); Dr. Hans Schmotzer, SigmaRC GmbH</td>
</tr>
<tr>
<td>11:10 - 11:30</td>
<td>CVD coating technology: a high temperature coating alternative for CoCr alloys (EN); Dr. Antonio Santana, IHI Ionbond AG</td>
</tr>
<tr>
<td>11:30 - 11:50</td>
<td>Silver as a lubricant additive in the implant manufacturing (DE); Dr. Bernhard Keller, MOTOREX AG</td>
</tr>
<tr>
<td>11:50 - 12:10</td>
<td>New opportunities for using tantalum for implants with Additive Manufacturing (EN); Ruben Wauthle, LayerWise NV</td>
</tr>
<tr>
<td>12:10 - 13:30</td>
<td>Lunch</td>
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</tbody>
</table>

### Session 5b: Design, Quality, and RA
**Chair: Ralf Schindel**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:30 - 10:50</td>
<td>Breakthroughs in Patient matched medicine through advancements in 3d image analysis (EN); Sebastian De Boodt, Materialise</td>
</tr>
<tr>
<td>10:50 - 11:10</td>
<td>Patient specific implants for orthopedics – streamlining through smart software (DE); Jan Stifter, Medivation AG</td>
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<tr>
<td>11:10 - 11:30</td>
<td>Application of computer tomography in industrial 3d measurements – Methods, application, precision (DE); Andreas Flechtmann, Werth Messtechnik GmbH</td>
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<tr>
<td>11:30 - 11:50</td>
<td>Approval of implants produced with Additive Manufacturing (EN); Oscar Hedin, Arcam AB</td>
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<tr>
<td>11:50 - 12:10</td>
<td>Regulatory Road for Combination Products (EN); PD Dr. Pierre Mainil-Varlet, Aginko</td>
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### Session 6
**Chair: Lukas Märklin**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>13:30 - 13:50</td>
<td>Fixation concept for a ceramic-metal back composite (DE); Dr. Martin Schmidt, Jossi Orthopedics AG</td>
</tr>
<tr>
<td>13:50 - 14:10</td>
<td>Surface property modulation in high-precision cutting of materials for medical applications (EN); Armando Pereira, Agie Charmilles</td>
</tr>
<tr>
<td>14:10 - 14:30</td>
<td>Dental ceramics: past, present, and future (EN); Dr. Simon Jegou, Nobel Biocare Services AG</td>
</tr>
<tr>
<td>14:30 - 14:50</td>
<td>Contemporary dental implant systems: Clinical, biological and mechanical aspects (DE); Dr. med. dent. Urs Brodbeck, Zahnmedizin Zürich-Nord</td>
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<tr>
<td>14:50 - 15:20</td>
<td>Keynote 8: Specificities of implant-associated infections (DE); Dr. Peter Wahl, Hôpital Cantonal Fribourg</td>
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<tr>
<td>15:20</td>
<td>Conference end</td>
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</table>
# Poster Session

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<thead>
<tr>
<th></th>
<th>Title</th>
<th>Presenter/Institution</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>100 million cycle simulator wear characterization of diamond like carbon coated CoCrMo articulating implants</td>
<td>Dr. Dominik Jaeger, Empa, Laboratory for Nanoscale Materials Science</td>
</tr>
<tr>
<td>2</td>
<td>Smart NiTi constructs for 3D cell culture applications</td>
<td>Waldemar Hoffmann, Fachhochschule Nordwestschweiz</td>
</tr>
<tr>
<td>3</td>
<td>Effect of ultrasound on the electrochemical deposition of antibacterial copper particles at anodized titanium discs as model for titanium implants</td>
<td>PD Dr. Christiane Jung, KKS Ultraschall AG</td>
</tr>
<tr>
<td>4</td>
<td>Additive manufactured ceramic/ polymer scaffolds</td>
<td>Sabrina Stevanovic, School of Life Sciences FHNW</td>
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<tr>
<td>5</td>
<td>Macroporous titanium coatings for challenge substrates</td>
<td>Pierfrancesco Robotti, EUROCOATING</td>
</tr>
<tr>
<td>6</td>
<td>Qualitätsdenken - der zukünftige Erfolgsfaktor in der Medizintechnik?</td>
<td>Dr. Margit Widmann, SQMT</td>
</tr>
<tr>
<td>7</td>
<td>Simulierte Muskel- und Gelenkreaktionskräfte als Randbedingung für belastungsgerechtes Implantatdesign</td>
<td>Alexander Nolte, CADFEM GmbH</td>
</tr>
<tr>
<td>8</td>
<td>Hemi-Resurfacing Schulterprothesen: Analyse des knöchernen An- und Umbaus</td>
<td>Christoph Sprecher, AO Research Institute</td>
</tr>
<tr>
<td>9</td>
<td>Biological safety testing on implant devices</td>
<td>Carolin Schmied, BSL BIOSERVICE Scientific Laboratories GmbH</td>
</tr>
<tr>
<td>10</td>
<td>Erfolgreiche Osseointegration von Titan-Implantaten: neueste Erkenntnisse über Biologische und biomechanische Voraussetzungen</td>
<td>Miroslaw Pienkowski, Trinon Titanium GmbH</td>
</tr>
<tr>
<td>11</td>
<td>Bestimmung der technischen Sauberkeit von chirurgischen Implantaten und Instrumenten im Rasterelektronenmikroskop</td>
<td>Dr. Michael Hiltl, Carl Zeiss Microscopy GmbH</td>
</tr>
<tr>
<td>12</td>
<td>Data Analytics: progress without experimental design</td>
<td>Dr. Rodolphe Dewarrat, IMSD Sàrl</td>
</tr>
<tr>
<td>13</td>
<td>Advanced laser ablation for the surface microstructuring of cardiovascular implants</td>
<td>Dr. Jörn Lungershausen, University of Applied Sciences and Arts Northwestern Switzerland</td>
</tr>
</tbody>
</table>
Registration fee
Members of the Medical Cluster, CHF 550.--*
Non-members, CHF 650.-- *
Students (full time, unemployed), CHF 300.--*
Single day visit on either Monday or Tuesday, CHF 370.-
Dinner on Monday, incl. drinks, CHF 85.-
Tabletop exhibition incl. 1 entry, CHF 1’500.-

All prices excl. 8% VAT.

The prices above include conference entry, materials and documentation and all meals during the meeting. Accommodation and dinner on Monday are not included in the prices.
*A discount of CHF 50.- will be applied to participants who register before 26th March 2013.

Registration
Please register until 17th April 2013 at:
www.medical-cluster.ch/mte_participant

Registrations are accepted in the order in which they are received and will be confirmed immediately. The fee for registration cancelation up to 7 days before the event is CHF 50.-.
No refund will be given for cancellations made less than 7 days before the event, though the registrant may transfer the ticket to another person to attend as a replacement.

Program committee
▪ Dr. Lukas Eschbach, Head of Materials Group
RMS Foundation, Bettlach
▪ PD Dr. habil. Christiane Jung, Head of R&D
KKS Ultraschall AG, Steinen
▪ Lukas Märklin, Head of Corp. Manufacturing Technology
Center, Institut Straumann AG, Basel
▪ Ralf Schindel, Head of Medical Manufacturing
inspire, irpd, St. Gallen
▪ Dr. Urban Schnell, Vizepräsident und Head of Optics & Sensors, Helbling Technik Bern AG, Liebefeld
▪ Prof. Dr. Michael de Wild, Fachhochschule Nordwestschweiz, Muttenz

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