

Tribology: Science and Practice

인공관절에서 마모: 기초과학과 임상적용

2014년 11월 29일(토) 09:00~17:40

한림대학교 동탄성심병원 대강당

November 29, 2014

Hallym University
Dongtan Sacred Heart Hospital

Tribology2014@gmail.com

International Faculties



Wolfram Mittelmeier, MD

Director, Orthopädische Klinik University Hospital Rostock, Germany
President of OTWorld- World Congress of Orthopaedic Technicians, Leipzig, Germany
Former president, German Association for Orthopaedics and Orthopaedic Surgery



Stephen B. Murphy, MD

Professor, Orthopedic Surgery, Tufts University School of Medicine, Boston, MA, USA
Director, Center for Computer Assisted and Reconstructive Surgery, New England Baptist Hospital



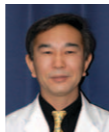
Aldo Toni, MD

Director, Department of Hip and Knee Prosthetic Reconstructive Surgery at the Istituti Ortopedici Rizzoli.
Director, the Laboratorio di Tecnologia Medica in the Istituti Ortopedici Rizzoli, Italy



Harish Bhende, M.S, M.Ch., D.N.B

President, Indian Arthroplasty Association, India
Consultant Arthroplasty Surgeon, Mumbai - Breach Candy Hospital, Hinduja Health Care Hospital, Shushrusha Hospital, S.R. Mehta Hospital and Laud Clinic.



Atsushi Kusaba, MD, PhD.

Director, Rheumatology, Ebina General Hospital, Japan
Member, German Association for Orthopaedic Surgery and Traumatology



Zhanjun Shi, MD.

Director, Professor, Orthopaedic Surgery, Nanfang Hospital, Southern Medical University, Guangzhou, P.R.China.
Chairman, Guangdong Joint Sugery Association.
Vice Chief Editor, Orthopaedic Journal of China



Robert Streicher, PhD.

Vice President, Scientific & Clinical Affairs, CeramTec, Germany
Professor, Università degli studi dell'Insubria, Varese, Italy



Martin Zimmermann, PhD.

Senior Scientific Consultant - Asia for CeramTec, Germany
Orthopaedic Consultant, Owner, Philippines

Program at a Glance

09:00~09:10	Opening Remark		Meeting Director Jun-Dong Chang
Session I. Basics			
09:10~09:40	Session I A. Materials & Tribology	Robert Streicher · Martin Zimmermann	
09:40~10:25	Session I B. Issues in THA	Shin-Yoon Kim · Youn-Seo Park · Deuk-Seo Hwang	
10:25~10:40	Coffee Break		
10:40~11:35	Session II. Current Status of Bearing Surfaces in Arthroplasty		Sang-Hong Lee · Yoon-Je Cho · Hee-Jeong Kim · Robert Streicher
11:35~12:30	Session III. Ceramic on Ceramic Bearing Surfaces in Clinical Practice		Kyung-Hoi Koo · Martin Zimmermann · Yong-Sik Kim · Jun-Dong Chang
12:30~13:30	Lunch		
Session IV. Potpourri of Gobar Ceramic on Ceramic Bearings			
13:30~14:25	Session IV A. Asian	Kyoung-Ho Moon · Atsushi Kusaba · Harish Bhende · Zhanjun Shi	
14:25~15:00	Session IV B. Western	Wolfram Mittelmeier · Stephen B. Murphy	
15:00~15:55	Session V. Outlook	Stephen B. Murphy · Robert Streicher · Wolfram Mittelmeier · Myung-Chul Lee	
15:55~16:10	Coffee Break		
16:10~16:30	Plenary Lecture (Video Live Conference)		Aldo Toni
16:30~17:30	Session VI. Podium Discussion	Discussants: Wolfram Mittelmeier · Harish Bhende · Robert Streicher Ye-Yeon Won · Jeon-Seon Kang · Byung-Woo Min · Taek-Rim Yoon	
17:30~17:40	Wrap Up and Closing Remark		Jun-Dong Chang

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등록 안내 및 등록 신청서

등록방법 아래의 등록 신청서를 작성하여 Fax (031-8086-2429)나 E-mail (Tribology2014@gmail.com)로 보내주시기 바랍니다.

등 록 비 **무료**

참가자성명			
소속(병원명)		의사면허번호	
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오시는 길



한림대학교 동탄성심병원

경기도 화성시 큰재봉길 7 (석우동 40)

문의처 /

한림대학교 동탄성심병원 인공관절센터
(담당자: 최유정)

Tel: 031-8086-2411 Fax: 031-8086-2429
E-mail: Tribology2014@gmail.com

- ◆ 지하철 이용시 1호선 병점역 이용시: 708, 73, 27(병점역사거리)
- ◆ 버스 이용시 **동탄순환버스**: 709, 709-1
일반버스: 92-1, 720-3, 116-1, 13-5, 7-1, 5-1, 303, 707, 708
좌석버스: 1551(강남역, 양재역, 동탄 한림대병원)
광역버스: M4108(서울역, 고속도로, 동탄 한림대병원), M4403(강남역, 양재역, 동탄 한림대병원)
- ◆ 자가용 이용시 찾아오실 때 **기흥** · **동탄 IC** 도로표지판을 따라 오시면 편리합니다.

Dear Colleagues;

It is my great pleasure to hold the “Tribology: Science and Practice” meeting at Hallym University Dongtan Sacred Heart Hospital on November 29th, 2014. It has been 7 years ago since Bioceramics and Alternative Bearings in Joint Arthroplasty, the 12th Biolox[®] Symposium was held in 2007 in Asia. Since then there have been substantial changes and advancements in the field of arthroplasty - one of those being the advancement in bearing surfaces, the most important design factor for the success of total hip arthroplasty.

As for the alternative bearings, favorable mid- to long- term results of the 3rd and 4th generation ceramic bearing and highly cross-linked polyethylenes are being reported from various perspectives; however, the adverse effects of metal-on-metal bearing surface led to substantial decrease in its use, giving rise to more concerns among Asian patients. I believe it would be highly meaningful to discuss impartially the tribology related to the various bearing surfaces in the aspect of different characteristics and defining the future directions for both basic research and clinical practice.

For this meeting, 30 globally renowned scientific and clinical faculties from Korea, USA, Germany, Italy, Japan, China, and India have been invited to share their views with us. The meeting is consisting of a symposium, plenary lectures, and a podium discussion on various issues in scientific basics, developments and clinical practice related to modern bearing surfaces in the field of arthroplasty.

I wish that this meeting will contribute to a better understanding of the aspects of tribology ranging from research to its clinical relevance. It shall offer a fruitful atmosphere for open discussions about the current status and directions for future improvements in arthroplasty in Asia.

I would like to express my gratitude to all of the distinguished speakers who firmly supported this meeting and prepared wonderful lectures: And finally, I am deeply grateful to Mr. Silberer, Mr. Graessel, and the rest of CeramTec who enthusiastically devoted themselves to this meeting to realize it.

Sincerely,

November, 2014



Chang

Jun-Dong Chang M.D., Ph.D.
Meeting Director

PROGRAM

09:00~09:10 Opening Remark Meeting Director **Jun-Dong Chang**

Session I. Basics

Session I A. Materials & Tribology Moderators. **Young-Ho Kim** · **Robert Streicher**

09:10~09:20 Fundamentals of Tribology CeramTec GmbH, Germany **Robert Streicher**
09:20~09:30 Basics of Orthopaedic Implant Materials CeramTec GmbH, Germany **Martin Zimmermann**
09:30~09:40 Discussion

Session I B. Issues in THA Moderators. **Joong-Myung Lee** · **Martin Zimmermann**

09:40~09:50 Wear particles – Different reactions to different particles? Kyeongbuk National University **Shin-Yoon Kim**
09:50~10:00 Is Taper Corrosion an Issue in THA? Sungkyungkwan University **Youn-Soo Park**
10:00~10:10 Do Bearing Surfaces influence the Infection Risk? Chungnam National University **Deuk-Soo Hwang**
10:10~10:25 Discussion

10:25~10:40 **Coffee Break**

Session II. Current Status of Bearing Surfaces in Arthroplasty

Moderators. **Chang-Dong Han** · **Harish Bhende**

10:40~10:50 Evolution of Polyethylene: Will it last? Chosun University Hospital **Sang-Hong Lee**
10:50~11:00 Metal on Metal: Time to say good bye? Kyung Hee University Medical Center **Yoon-Je Cho**
11:00~11:10 Ceramic Bearings: Not improved yet? Seoul National University Hospital **Hee-Joong Kim**
11:10~11:20 Laboratory Evaluation for Different Bearings: Relevance for clinical outcomes? CeramTec GmbH, Germany **Robert Streicher**

11:20~11:35 Discussion

Session III. Ceramic on Ceramic Bearing Surfaces in Clinical Practice

Moderators. **Myung-Chul Yoo** · **Wolfram Mittelmeier**

11:35~11:45 4th generation Ceramic Bearings: Will it guarantee better results? Seoul National University **Kyung-Hoi Koo**
11:45~11:55 Ceramic fractures: Prevention and treatment CeramTec GmbH, Germany **Martin Zimmermann**
11:55~12:05 Tips & Tricks for using Ceramic Bearing Surfaces: Avoiding potential issues Catholic University **Yong-Sik Kim**

12:05~12:15 Bearing surfaces for Revision Total Hip Arthroplasty: An essential choice Hallym University **Jun-Dong Chang**

12:15~12:30 Discussion

12:30~13:30 **Lunch**

Session IV. Potpourri of Gobal Ceramic on Ceramic Bearings

Session IV A. Asian Moderators. **Myung-Sik Park** · **Stephen B. Murphy**

13:30~13:40 Long Term Results of Ceramic Bearings in Korea Inha University **Kyoung-Ho Moon**

13:40~13:50 Survival Analysis of 2,395 Hard-on-Hard Bearing Couples in Patients with DDH Ebina General Hospital, Japan **Atsushi Kusaba**

13:50~14:00 Chances and Limitations: Current status of Ceramic Bearings in India Laud Clinic, India **Harish Bhende**

14:00~14:10 The Chinese Experience with 3rd and 4th Generation of Ceramic Bearings Nanfang Hospital, China **Zhanjun Shi**

14:10~14:25 Discussion

Session IV B. Western Moderators. **Won-Yong Shon** · **Zhanjun Shi**

14:25~14:35 The Evolution of Ceramics and European experience University Hospital Rostock, Germany **Wolfram Mittelmeier**

14:35~14:45 Lessons Learned – CoC long term experience in the USA New England Baptist Hospital,Tufts University, USA **Stephen B. Murphy**

14:45~15:00 Discussion

Session V. Outlook

Moderators. **Young-Hoo Kim** · **Atsushi Kusaba**

15:00~15:10 Can component positioning for hard on hard bearings be optimised? New England Baptist Hospital,Tufts University, USA **Stephen B. Murphy**

15:10~15:20 Pre-assembled cup systems – A way forward? CeramTec GmbH, Germany **Robert Streicher**
15:20~15:30 Ceramics in Total Knee Arthroplasty – A viable option? University Hospital Rostock, Germany **Wolfram Mittelmeier**

15:30~15:40 Options for bearing surfaces for TKA: What’s out there? Seoul National University **Myung-Chul Lee**

15:40~15:55 Discussion

15:55~16:10 **Coffee Break**

Plenary Lecture (Video Live Conference)

Moderator. **Jun-Dong Chang**

16:10~16:30 Personal Ceramic Experience and the RIPO Registry – What can we learn? Istituto Ortopedico Rizzoli, Italy **Aldo Toni**

Session VI. Podium Discussion

Moderator: **Sung-Kwan Hwang**
Discussants: **Wolfram Mittelmeier** · **Harish Bhende** · **Robert Streicher**

16:30~16:35 Should the bearing surfaces be different for different diseases? Ajou University **Ye-Yeon Won**
16:35~16:45 Discussion

16:45~16:50 Ceramic bearings in elderly osteoporotic patients? Inha University **Joong-Soon Kang**
16:50~17:00 Discussion

17:00~17:05 How to overcome small acetabular cups for large ball heads? Keimyung University **Byung-Woo Min**

17:05~17:15 Discussion
17:15~17:20 Squeaking: Is it a problem in Korean population? Chonnam National University **Taek-Rim Yoon**
17:20~17:30 Discussion

17:30~17:40 Wrap Up and Closing Remark **Jun-Dong Chang**