Exoskeletons as wearable technology are in the focus of the current development to support the human through machines. They enable new forms of therapy, rehabilitation and prevention. Their fields of application range from hospitals to factories and our homes.

New challenges emerge in different sectors around the world: The emphasis is on medical applications in hospitals and during homecare. Furthermore, these technologies empower patients to lead an independent life.

Additionally, the aging population requires the use of exoskeletons at the workplace in fields such as logistics, manufacturing and healthcare. The goal is to prevent chronic diseases and to maintain a motivated workforce as well as know-how in an evolving high-tech world.

Achieving these goals requires new approaches in human-machine interaction as well as intelligent safety methods and international standardization.

For this conference we invited the leading experts in the field of exoskeletons from around the world. Their topics range from medical applications over exoskeletons at work to safety aspects of wearable machines.

Stuttgart, May 2015

Head of Institute

Prof. Dr.-Ing. Thomas Bauernhansl
AIM
Fraunhofer is the connecting element between industry and academia. Our role is to bring new ideas from academia to the applications of industry and society. Therefore we would like to introduce the newest developments in the field of exoskeletons to a huge variety of stakeholders, costumers and potential partners with this event.

The goal is to create new opportunities for everyone involved and to establish a regular exchange within the field of exoskeletons. As many international experts are in Stuttgart already due to the ISO Meetings, we take the chance to have such an event right before these meetings.

TARGET AUDIENCE
As the field is still growing we have invited stakeholders from many backgrounds, countries and fields. We are convinced that a transdisciplinary variety of, for example, experts, costumers, manufactures are the optimal setting for creating a powerful, innovative and inspiring community for groundbreaking solutions. Hence this symposium is aimed at:

Costumers: Industrial manufacturers (e.g. automotive, machines), logistics companies (e.g. delivery services, distribution centers), hospitals, rehabilitation centers, insurers, therapists.

Partners: Academic researchers, components manufacturers (e.g. sensors, motors, controls), distributors, medical device manufacturer, industrial automation manufactures, investors, funding bodies.
from 8.30  Registration and Coffee

Welcome Speech
9.00  Prof. Dr. Thomas Bauernhansl
Head of Institute, Fraunhofer IPA, Germany

Session 1  Keynote Speakers
9.15  Prof. Dr. Gurvinder Singh Virk
University of Gävle & KTH,
Sweden and CLAWAR, UK

9.45  Dr. Kiyoyuki Chinzei
AIST, Japan

10.15  Prof. Dr. Yoshiyuki Sankai
Cyberdyne Inc., Japan

10.45  Break for Refreshments

Session 2  Therapy and Rehabilitation Application
11.15  Dr. med. Urs Schneider
Fraunhofer IPA, Germany

11.45  Burkhard Zimmermann
IISART, Hocoma AG, Switzerland

12.15  Dr. Amit Goffer
ReWalk Robotics, Israel

12.45  Lunch Break (Catering)
Session 3  Medical Innovation & Research 1
13.45  Prof. Dr. Robert Riener
ETH Zurich & University Hospital Balgrist,
Zurich, Switzerland
14.15  Dr. Jan F. Veneman
TECNALIA Research & Innovation, Spain
14.45  Dr. Nicola Vitiello
Scuola Superiore Sant’Anna, Italy
15.15  Break for Refreshments

Session 4  Medical Innovation & Research 2
15.45  Prof. Dr. Yoji Yamada
Nagoya University, Japan
16.15  Prof. Dr. Homayoon Kazerooni
University of Berkeley, USA
16.45  Short Break for Refreshments

Session 5  Exoskeletons at the workplace
17.00  Dr. Cota Nabeshima
CYBERDYNE Inc., Japan
17.30  Prof. Dr. Carmen Constantinescu
Fraunhofer IAO, Germany
18.00  Dr. Oliver Schwarz
Fraunhofer IPA, Germany
18.30  Get-Together with Dinner and live Music
SOCIAL EVENT

There will be a relaxed dinner event at our facility with a German beer garden atmosphere, drinks, local food and music. We encourage all participants to engage, discuss and network in a more informal manner after the sessions.

GENERAL CHAIR
Dr. med. Urs Schneider
Head of Department Biomechatronic Systems
Head of Business Unit Medical Engineering and Biotechnology
Fraunhofer IPA, Stuttgart

TECHNICAL PROGRAM CHAIR
Dr. rer. nat. Oliver Schwarz
Group leader Biomimetics in Medical Engineering
Department of Biomechatronic Systems
Fraunhofer IPA, Stuttgart
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GENERAL INFORMATION

INFORMATION AND REGISTRATION
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Phone +49 711 970-1204 | Fax -1877
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ORGANIZATION
Verein zur Förderung produktionstechnischer Forschung e. V. (FpF), Stuttgart

CONFERENCE FEE
The conference fee is € 590,— per person.
This fee includes the participation in all presentations, lunch and refreshments during the conference and at the dinner.

REGISTRATION
We request online registrations to the participation with informal mail containing the participant’s name, address and possibly deviating invoice address. After the registration, the invoice and further information will be sent to you.

The deadline for registration is Monday, June 29, 2015.
Speakers are free and do not have to register.

CHANGE OF REGISTRATION
A change of registration to another participant is possible. Please inform the conference office about the alternate participant. This service is possible at any time and free of charge.
CANCELLATION OF REGISTRATION
For cancellations until 10 days before the conference we have to charge € 100,–. After this date the full participation fee is charged.

ACCOMMODATION IN STUTTGART
Regio Stuttgart Marketing- und Tourismus GmbH
Phone  +49 711 2228-233, -246  |  Fax -251
www.stuttgart-tourist.de/DEU/gastro/hotels_buchen.html

Please ask for special Fraunhofer rates.

LOCATION
Fraunhofer Institute  |  Institute Center Stuttgart (IZS)
Main Building, lecture halls A+B
Nobelstrasse 12  |  70569 Stuttgart (Vaihingen)  |  Germany

DIRECTIONS
www.ipa.fraunhofer.de/anfahrt
REGISTRATION

Please return via Fax +49 711 970-1877 or via E-mail: karin.reinert@fpf.fraunhofer.de

Verein zur Förderung Produktionstechnischer Forschung e.V. (FPF)

Nobelstraße 12
70569 Stuttgart

symposium

July 6th 2015

Exoskeletons in Medicine and at Work

Karin Reinert
c/o Fraunhofer IPA

Verein zur Förderung Produktionstechnischer Forschung e.V. (FPF)
Fraunhofer IPA Symposium | July 6th 2015
Exoskeletons in Medicine and at Work

Last Name

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Registration
Register for the Fraunhofer IPA Symposium (Organisation commitee FpF)

Exoskeletons in Medicine and at Work

July 6th 2015
Conference Fee € 590,–

Please pay after having received the invoice and confirmation of registration.

Note: According to § 26.1 German Federal Data Security Law we inform you that we will store your adress in a computer file.

I acknowledge the terms and conditions indicated for registration in this brochure.

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Signature