

Registration:

Course fee (+10% after early booking deadline, 4 weeks before seminar)	USD	Please select ↓
Attendance option		
"MR Safety Expert" 23, 24, 25 Feb 2023 physicists / physicians (Lectures & MRI hands-on):	1,890	
"MR Safety Expert" 23, 24, 25 Feb 2023 technologists / radiographers (Lectures & MRI hands-on):	1,390	
Online	20% off	

Title, First name, Name

Function title

Organization

Street, Number

City, Zip-code

Telephone, Fax

Email

Land / Country

Date, Signature

Please send your registration to:
MRI-STaR GmbH
Fax: +49 209 1497730 88
Email: seminar@mri-star.com

Information:

Terms of payment:

The amount is due for payment 2 weeks after receipt of the invoice. The course fee must be paid via wire transfer, check or via credit card. Information is provided in separate invoice. Credit card information please provide here via fax:

Visa MasterCard AMEX

Credit card #

_____ Name of
card holder _____
valid until _____
date _____

Discounts:

Every 2nd and further registrant from the same organization applies for a 5% discount on top.

Registration is valid only with receipt of confirmation and payment of the course fee. Early booking deadline: 4 weeks before seminar date.

A cancellation is free of charge up to 6 weeks before the seminar date. After that date we charge 50% of the registration fee. For a cancellation within the last 7 days 80% are charged of the course fee. If the cancellation takes place later or the participant or a backup does not attend in the course, we are entitled to deduct the full participation fee.

The course fee includes: MRI-STaR certified MRSE exam, certificate, script, confirmation of participation, breakfast snack, lunch, dinner, hot and cold drinks.

The number of participants is limited. The places will be assigned in sequence of the receipt of registrations. MRI-STaR reserves the right to offer an alternative seminar date, if the number of participants is too low or too high.

Seminar location:

Lucas Center
Stanford University
1201 Welch Road
Stanford, CA
94305 USA

We would be pleased to welcome you as attendee!



MRI-STaR
Magnetic Resonance Institute
for Safety, Technology and Research

on site & online

Hands-on MR Seminar

in
Stanford, Bay Area

The "MR Safety Expert" (MRSE)

acc. to ABMRS Syllabus, DIN 6876-1, OENORM
1125-1/2, Dutch/MHRA/RANZCR Guidelines

February 23-25, 2023

Organizer

MRI-STaR GmbH
www.mri-star.com

Host:

Karla Epperson, RT(MR)(ARMRIT)

This course prepares the attendee to sit for the MRSE exam!

In cooperation with **MR comp** www.mrcomp.com

 **MRSE Seminar Day 1:**

08:00	08:15	Welcome reception with breakfast	
08:15	08:45	Introduction	Sch
08:45	09:00	Virtual visit of the MR system	Kug
09:00	10:30	Basics of MR physics and technical aspects - Static mag. field, RF-Field, Gradient-field - MR system components - Refresh of the physical principle - Physics of MRI (spin, magnetization, MR signal) - MR image acquisition (RF pulse sequences, gradients, geometry, signal to noise and contrast, contrast agents) - MR Imaging techniques (fast imaging, Perfusion, Diffusion, Spectroscopy)	Kug
10:30	10:45	Grab a Coffee	
10:45	12:15	Significant hazards MRI I system-specific (MR safety, the MR system and the MR worker – IEC 60601-2-33) - General terms - Presentation of hazards - Technology of superconductivity and potential risks of cryogenics; Laser	Eng
12:15	13:15	Lunch break	
13:15	14:00	MR safety instruction/Hands on preparation	Kug
14:00	16:00	Hands-on: Behavioral measures in possible emergency situations for medical personnel, firefighters and for technical staff - General behavior when entering the scanner room - Safety provisions for the MR environment - Magnetic emergency - Electricity failure and fire	Kug Sch
16:00	16:30	Coffee break/back to conference room	Kug
16:30	18:15	MR safety & compatibility of medical devices (and items) I / Significant hazards MRI II item-specific - Interactions of items (incl. implants) within the MR environment (static magnetic field, switched gradient and RF field) - Current technical standards & guidance, MR testing methods	Sch
18:15	open	Final discussion with snack	

Program is subject to changes

 **MRSE Seminar Day 2:**

08:00	08:15	Breakfast	
08:15	09:45	Significant hazards MRI III patient-specific - Risks with respect to the static magnetic field - RF field and gradient field - Examples from clinical practice	Kug
09:45	10:00	Coffee break	
10:00	11:00	Significant hazards MRI IV - Contrast agents	Fau webex
11:00	11:15	Grab a Coffee	
11:15	12:40	Behavioral measures in MR routine I - Access control to the scanner room - Patient positioning	Kug
12:40	14:00	Lunch break/transfer to scanner	
14:00	16:00	Hands-on: Practical demonstrations and exercises - Patient positioning - Medical emergency - Emergency exercises	Kug
16:00	16:30	Coffee break/back to conference room	
16:30	17:30	Laws, regulations and clinical standards for MR operators - Employee protection - Responsibilities	Fricke webex
17:30	17:45	Discussion	
18:15	open	Get together dinner	

Target audience:

The seminar is especially designed for the **MR physicists, technologists/radiographers, MR clinicians.**

The seminar language is English. The MR user will learn about MR safety regulations, standards, measures inside the MR environment. The user will be elevated to be able to organize the MR environment as MR safety responsible expert using the MR safety measures, know-how about SOPs and organization of processes for patients, MR workers and volunteers or other individuals.

TIME SLOTS in Pacific Standard Time (PST)

 **MRSE Seminar Day 3:**

08:00	08:15	Breakfast	
08:15	09:30	MR safety and compatibility of medical devices (and items) II - Finding the "worst-case" - Labeling of devices for the MR environment	Sch
09:30	09:45	Coffee break	
09:45	10:45	Hands-on: Behavioral measures in MR routine II (Implant labeling research) - Implant research - case studies	Sch
10:45	11:00	Coffee break	
11:00	11:45	Scanning of active implants	Pan
11:45	12:00	Grab a coffee/snack	
12:00	13:20	Behavioral measures in MR routine III - Servicing and cleaning operations - Documentation (training, accidents)	Kug
13:20	14:00	MRI-STaR Certificate Examination (Multiple-Choice-Test) for free; Optional: ABMRS additional examination on official MRSE exam date	
14:00	14:30	Final discussion/Farewell	

Lecturers:

Dr. rer. nat. H. Kugel
University Clinic for Radiology, University of Munster, Germany

H. Engels, Ph.D.
MR Safety Consultant, MR:comp and former MR Safety Director Philips Healthcare, The Netherlands

Wm. Faulkner, BS, RT(R)(MR)(CT), FSMRT, MRSC (MRSC)
William Faulkner & Associates, LLC, Chattanooga, USA

S.T. Fricke, Ph.D.
MR-Physicist, Children's National Medical Center, Washington, DC

Anshuman Panda, Ph.D.
Medical Physicist, Mayo Clinic, Phoenix, USA

Dipl.-Phys. F. Schmitt
MR-Consultant, MR:Comp, former VP Gradient Systems & Director Ultra Highfield Imaging at Siemens Healthcare, Erlangen, Germany

G. Schaefers, Dipl.-Ing. (FH)
MR Safety Testing Laboratory, MR:comp GmbH, Gelsenkirchen, GER

***The seminar will be held together with the separate course Medical Device MR Safety Specialist (MRSS) for industry participants (est. in 2007).**