

MEASUREMENTS

Next-Level Performance



SPEAG released [MAGPy3](#), the third generation of the smart probe system optimized for compliance testing of wireless power transfer (WPT) without overestimation. MAGPy3 is significantly faster and has new features, such as snapshot, envelope, and time average evaluations. Stay tuned: the soon-to-be-released V3.2 is set to unlock the system's full potential!

MEASUREMENTS

FCC Persistent Inquiry Approvals



Fantastic news for our DASY8 users: The U.S. Federal Communications Commission (FCC) has recently granted SPEAG two Persistent Inquiry Approvals (PIAs): one for specific absorption rate (SAR) compliance testing with our device-specific phantoms, and one for compliance testing of WPT devices with Module WPT V2.8+. This means our customers no longer need to submit separate PHANTM and NUMSIM Pre-Approval Guidance applications, thereby reducing administrative effort and saving valuable time.

SIMULATIONS

Call for Applications

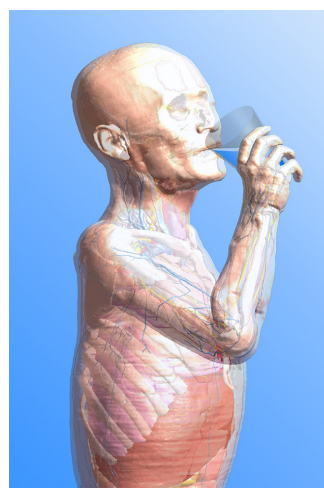


Calling all Bachelor's, Master's, and PhD students working in numerical modeling! Have you been working on a cool project? Or maybe you have presented your work this year at a scientific meeting or submitted a paper for publication. Demonstrate your innovation and technical skills – share your modeling work with us **by October 31, 2025**, to enter this year's Sim4Life Student Competition for a chance to win exciting prizes! Check out the rules [here](#).

Sim4Life V9.0 Opens Up!

Now powered by o²S²PARC technology, Sim4Life amplifies its leading multi-physics simulation platform for research, design, and optimization. Third-party tools can now be integrated, combined with the other Sim4Life features, and take advantage of Sim4Life's advanced UX. In addition, enhanced anatomical modeling and scalable cloud computing facilitate faster, more comprehensive, and smarter *in silico* research, application development, and product design. Learn more about the release [here](#).

VIRTUAL POPULATION



Tissue Properties Database V5.0

IT'IS has released V5.0 of its [Tissue Properties Database!](#) The database now features water content for all major tissues – crucial for accurate thermal modeling – and an important correction of the values for lung perfusion.

MEASUREMENTS



Module SAR V17.0
*Accurate Measurement
Instant for Any Modulation*

[DASY8/6 Module SAR V17.0](#) is out! The latest re-release simplifies calibration for the rapidly growing catalogue of 5G and 6G modulation schemes. With 5000+ new predefined 5G NR / WiFi 7 signals – plus support for custom signals – linearization parameters are now assessed on the fly.

WORKSHOP

Z43-DYMSTEC Workshop



On September 18, the annual Z43-DYMSTEC Workshop brought together 100 experts in South Korea to dive into Z43's latest wireless and medical technologies. The day featured interactive demos, in-depth talks, and plenty of networking opportunities. A huge thanks to the DYMSTEC team for another fantastic event.

EVENTS

Z43 Summer Night Party 2025

Our Summer Night Parties are loved equally by current and former employees! From chilled drinks to sizzling food, from kids' giggles to late-night chats, our courtyard was the perfect setting for our legendary Z43 Summer Party. Thanks to all who joined – we couldn't have asked for a better summer evening!



z43newsletter@z43.swiss

VIRTUAL POPULATION

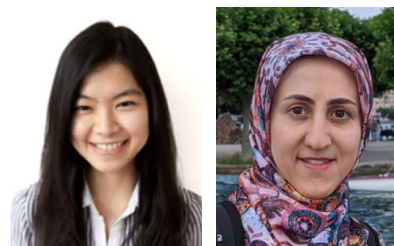
New VIP Models



Our validated morphing technique was used to add [two new obese models](#) to the Virtual Population (ViP) library, both based on the male phantom Eddie V3.2, with body mass indices of 39 kg/m² and 46 kg/m². In addition, two newly released versions of the neuro-functionalized ViP models, [Yoon-sun V4.1](#) and [Jeduk V4.1](#), are now available in Sim4Life. With more than 2,200 mapped nerve trajectories and enhanced anatomy, these models set a new benchmark for full-body neurostimulation research.

AWARDS

STM Grant and BioEM 2025 Award



Congratulations to Ms. Cindy Karina and Dr. Parisa Karimi on being recipients of Short-Term Mission (STM) Grants from the BioEM Society! This grant supports research mobility, fostering innovation and collaboration. Cindy, a PhD student at IT'IS,

will visit the UK Health Security Agency to work on "Low-Frequency Dielectric Characterization of Tissues". Parisa, assistant professor at the Isfahan University of Technology, Iran, visited us with a short project on "Advancing Computational Dosimetry at Higher Frequencies". Cindy further was awarded third place in the student platform presentation competition at the 2025 BioEM Society annual conference in Rennes, France – well done!

RESEARCH

PUBLICATIONS

5G Radio-Frequency-Electromagnetic-Field Effects on the Human Sleep Electroencephalogram: A Randomized Controlled Study in CACNA1C Genotyped Volunteers

G. Sousouri, et al., 2025, NeuroImage, doi: [10.1016/j.neuroimage.2025.121340](https://doi.org/10.1016/j.neuroimage.2025.121340) (online 27 June 2025)

Breast MRI in the Prone Position: Impact on RF-Induced Heating of Active Implantable Medical Devices

A. Yao, et al., 2025, Physics in Medicine & Biology, doi: [10.1088/1361-6560/adb58d](https://doi.org/10.1088/1361-6560/adb58d) (online 29 July 2025)

Traceable Assessment of the Absorbed Power Density of Body Mounted Devices at Frequencies above 10 GHz

N. Chitnis, et al., 2025, Bioelectromagnetics, doi: [10.1002/bem.70018](https://doi.org/10.1002/bem.70018) (online 13 August 2025)

Biodegradable Microwave Cavity Resonator

M. J. Bathaei, et al., 2025, IEEE Microwave and Wireless Technology Letters doi: [10.1109/LMWT.2025.3588738](https://doi.org/10.1109/LMWT.2025.3588738) (online 14 August 2025)

Impact of Simultaneous Exposure to RF and Gradient Electromagnetic Fields on Implant MR Safety Labeling

U. Zanollo, et al., 2025, Magnetic Resonance in Medicine, doi: [10.1002/mrm.70059](https://doi.org/10.1002/mrm.70059) (online 29 August 2025)

Simulation Insights on the Compound Action Potential in Multifascicular Nerves

J. J. Tharayil, et al., 2025, PLOS Computational Biology doi: [10.1371/journal.pcbi.1013452](https://doi.org/10.1371/journal.pcbi.1013452) (online 12 September 2025)

An Implantable System to Restore Hemodynamic Stability after Spinal Cord Injury

A. A. Phillips, et al., 2025, Nature Medicine, doi: [10.1038/s41591-025-03614-w](https://doi.org/10.1038/s41591-025-03614-w) (online 17 September 2025)