

# Preface

The 13th International Conference on Mechanical Engineering Design of Synchrotron Radiation Equipment and Instrumentation (MEDSI 2025) was held in Lund, Sweden, from 15 to 19 September 2025, hosted by MAX IV Laboratory. The conference gathered more than 390 delegates from 25 countries, representing synchrotron, free-electron laser, and neutron source facilities, research institutes, and industry partners from around the world.

This edition marked a special milestone — the 25th anniversary of the first MEDSI workshop, held at the Paul Scherrer Institute in 2000. Over the past quarter century, MEDSI has evolved into the leading international forum for engineers, designers, and technical specialists advancing the mechanical design and instrumentation of modern photon science facilities.

The programme featured 46 contributed oral presentations, five keynote and two invited talks, more than 180 posters, and an industrial exhibition with over 35 sponsors and companies. The sessions covered a broad range of topics, including accelerator and beamline components, vacuum and cryogenic systems, precision motion, and innovative engineering solutions, with special emphasis on beamline instrumentation.

These proceedings reflect the high quality of the contributions and the collaborative spirit that characterise the MEDSI community. All papers were submitted, reviewed, and prepared according to the standards of the Joint Accelerator Conferences Website (JACoW).

We extend our sincere gratitude to all participants, authors, reviewers, sponsors, and committee members, as well as the staff of MAX IV Laboratory for their dedication and support.

Warm regards,  
Joaquín B. González Fernández  
Chair of the Local Organizing Committee  
MEDSI 2025

