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Status and Upgrades of the Instruments and the Positron Beam Facility at NEPOMUC

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The bright low-energy positron beam provided by the neutron induced positron source in Munich (NEPOMUC) at FRM II is used in a large variety of experiments in materials science, condensed matter and surface physics as well as in fundamental research, e.g., for the creation of a positron-electron pair plasma. Within this contribution, an overview of the current status and developments of the positron beam facility with its instrumentation is given. Plans for the installation of a buffer gas trap for the creation of high-density positron pulses as well ideas for increasing the performance of the remoderated positron beam are elucidated. The upgrades of the positron beam instruments (i) Coincident Doppler-Broadening Spectrometer (CDBS) using a scanning positron micro beam, (ii) instrument for the 2D measurement of the Angular Correlation of Annihilation Radiation (2D-ACAR), and (iii) the surface spectrometer are highlighted. Finally, the planned extension of the positron beam facility and the future operation of positron beam experiments in the experimental hall *East* are presented.

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