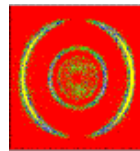


COLTRIMS

spectrometer systems



RoentDek
Handels GmbH
Supersonic Gas Jets
Detection Techniques
Data Acquisition Systems
Multifragment Imaging Systems

The **Cold Target Recoil Ion Momentum Spectrometer** was developed for the spectroscopy of atomic and molecular reactions. Several atomic physics groups contributed to the technique and nowadays so-called Reaction Microscopes provide the most detailed insight in the dynamics of objects on atomic scales, like atoms, molecules and clusters.

The technique involves a supersonic gas jet target, a well-defined electrostatic field and position&time-sensitive particle detectors, e.g. of the **RoentDek** types **DLD** and **HEX**.

RoentDek builds custom-designed **COLTRIMS** systems ranging from complete setups to individual and modular spectrometer solutions. Complete systems were designed for:

IKF, Frankfurt, Germany
CAB, Bariloche, Argentina
PUC, Rio de Janeiro, Brasil
Auburn University AL, USA
TAGEN, Sendai, Japan
ANL, Argonne IL, USA
HU, Zarqa, Jordan
AIST, Tsukuba, Japan
NRC, Ottawa, Canada
LBL, Berkeley CA, USA
JR MacDonald Lab, Manhattan KS, USA

COLTRIMS setup components (gas jet target parts, spectrometer, detectors) have been delivered to

ETH, Zürich, Switzerland
JILA, Boulder CO, USA

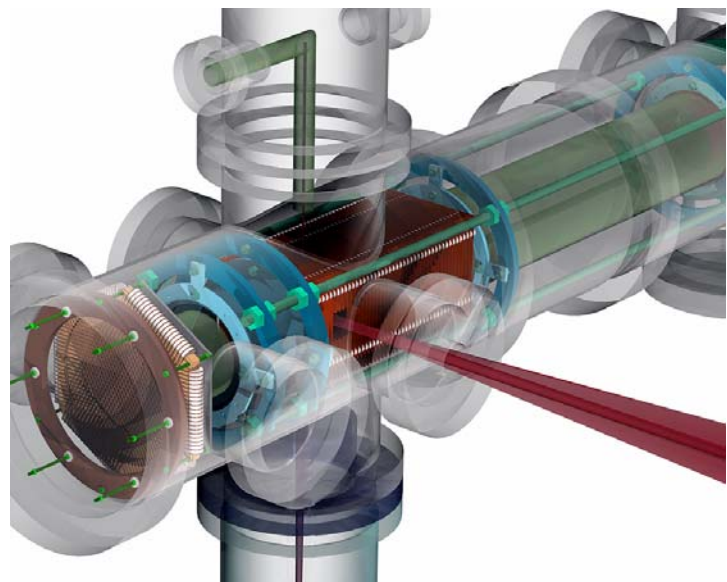


Figure: typical **COLTRIMS250** setup

The majority of these groups is in an ongoing collaboration with **RoentDek** and/or the IKF atomic physics group in Frankfurt/Germany. Each **COLTRIMS** setup consists of a modular assembly which can be adapted to our customer's demands and requirements.

Worldwide, **RoentDek** detectors and electronics are used in spectrometers and imaging systems similar to the **COLTRIMS**-system. More information can be found at www.roentdek.com