

# R&D

Research & Development  
at Delong Instruments



# DEVELOPMENT & ENGINEERING



## Mechanical Design

- From electron-optics components to entire electron column designs
- Components, chambers, stages, stands and many others
- Finite element analysis as part of the design

## Electron Optics Design

- Concept proposals
- Testing procedures
- Finite element analysis as part of the design

## Electronics Design

- Voltage and current supplies, LV, HV
- Communication and logic boards
- Complex control electronics for various purposes

## Control Systems

- Complex control firmware and software
- Various control electronics
- Capable of controlling various communication protocols

# UNIQUE & CUSTOM SOLUTIONS



## Our Experience for Your Excellence

- Consulting
- Mechanical, electronics and control systems design
- Prototype manufacturing and tests
- Final OEM products including manufacturing

## Reliable Partner for Your Projects

- Term and delivery reliability
- Creativity in finding solutions
- Significant experience and long-term partnerships

## Confidentiality

- OEM solutions under strict NDA
- Outsourced R&D from first proposal up to proven prototype

# REFERENCES & CONTACTS

## Reference Projects

### Research & Development

- Energy filtering
- Unique detection systems and solutions
- Cold emission sources

### Custom Solutions

- Large field cathodoluminescence SEM (Attolight)
- Vacuum mechatronics (ELI Beamlines, NDA customers...)
- Electron beam columns (IMS Nanofabrication, NDA customers...)

### Projects

- Transmission electron microscopy for sub-visible particle analysis (MiniTEM)
- Electron beam lithography optic column (Rimana)
- Precision lithography wafer stage (Charpan)

## Looking Forward to Meeting You!



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