BISSON Technology

NEUTRON INSTRUMENTATION

For over 20 years I worked in the design and production of equipment related to the neutron instrumentation.
I offer you my skills and experience in the field of neutron instrumentation:

- Optical components
- Sample environment
- Radiation shielding
- Spectrometer - Diffractometer - Reflectometer
- Positioning
- Procedures
- Appendices

In this area, my proposal ensures the smooth operation of instruments on the basis of drafts to installation on site. Cost control is defined at the outset of the project.

- **Optical Components**
  - Environment neutron guide, shield tunnel, shutters, beam stop
    - Focalizations apparatus for monochromator and Analyzer: for crystals: graphite, copper, germanium, Heusler, silicon, in cooperation with the ILL neutron optics.
    - Horizontal
    - Vertical
      (A simple and / or double curvature)
  - Diaphragms with optical bench for installation monitor, filter, detector, collimator

- **Sample environment**
  - Vacuum technology: primary, secondary and UHV
  - Technical non magnetic (environment polarized neutrons)
  - Head goniometer sample
  - Positioner: high load capacity. Very high accuracy.

- **Radiation shielding**
  - Study of heavy concrete bunker and ordinary concrete hall guide
  - Materials: B4C sheet flexible ...

- **Spectrometer, diffractometer, reflectometer**
  - Diffractometer non magnetic
  - 3-axis spectrometer, classical and non-magnetic
  - Reflectometer

- **Positioning**
  - Positioning:
    - Rotary tables – different models
    - Rotational modules 400/800
    - Linear modules 400/800
    - Base modules 400/800
    - Elevators different models
    - Linear tables X-Y
    - Goniometer cradles, different models
    - 2 circles and 4 circles Eulerian
      The components are available in several sizes depending on the instruments
  - Facilities: motors, encoders, normal version or nuclear

BISSON Technology – SAS au capital de 10 000 € - Siret 524949328 00016 – APE 7490B
16 Rue Jean Moulin 38360 Sassenage France – Tel +33 0 4 76 94 92 34 – Portable +33 0 6 32 44 47 65 – E-mail : jean-marie.bisson38@orange.fr

- **Procedures**
  - Define the technical specifications
  - Study of Prices
  - Procedure for manufacturing, assembly, testing
  - Manual: Maintenance, mantenance of instruments
  - Quality Assurance

- **Appendix**
  - Expertise: modernization of the instuments
  - Transfer of skills and networks of partners
  - Project monitoring, research and manufacturing
  - Council and experience in design and product development