



Contribution ID: 49

Type: Poster

## Development of a Surface Plasma Method for Production of Negative Ion Beams

By now, the fluxes of accelerated negative ions of steel an indispensable tool for accelerators, plasma physics, solid state physics, chemistry, biology, medicine, important areas of new technique and technology. It arouses increased interest to the development of intensive sources of these particles.

The cesiation effect - a significant increase in the emission of negative ions from the discharge with a simultaneous decrease in the flux of accompanying electrons below the current of negative ions after adding a small amount of cesium or other substances with a low ionization potential to the discharge was discovered 50 years ago, on July 1, 1971 in the Budker Institute of Nuclear Physics (BINP), Novosibirsk, Russia.

The cesiation effect has opened the door to high-intensity, high-brightness negative ion beams production.

### E-mail for contact person

dvg43@yahoo.com

### Funding Information

**Primary author:** DUDNIKOV, vadim (Muons, Inc)

**Presenter:** DUDNIKOV, vadim (Muons, Inc)

**Session Classification:** Poster Session 1

**Track Classification:** Negative ion sources