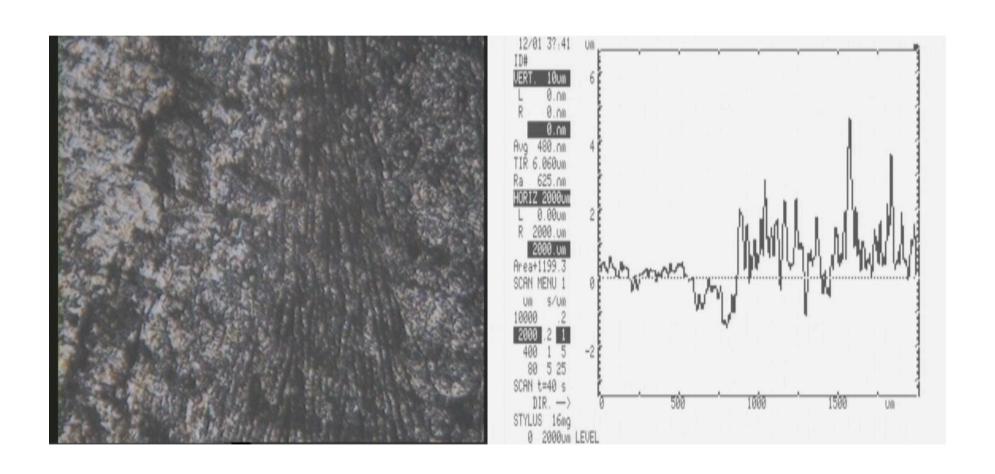
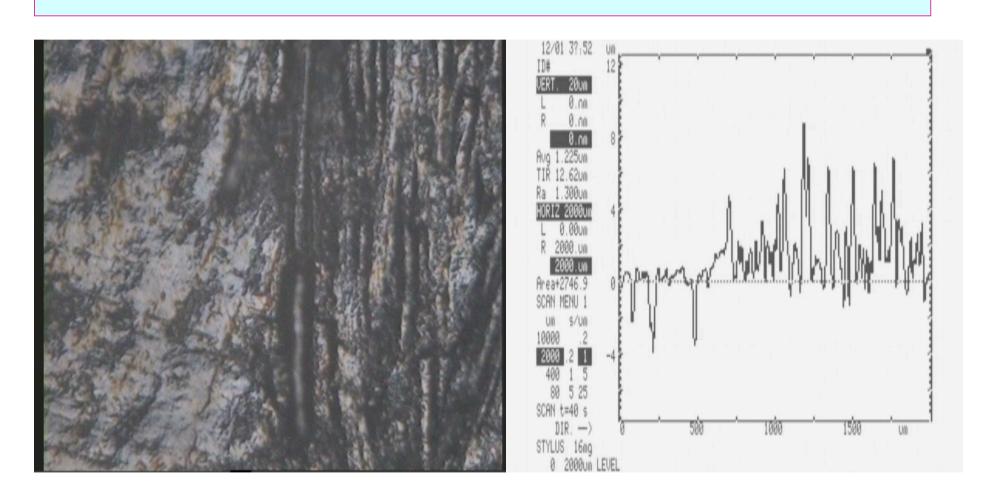
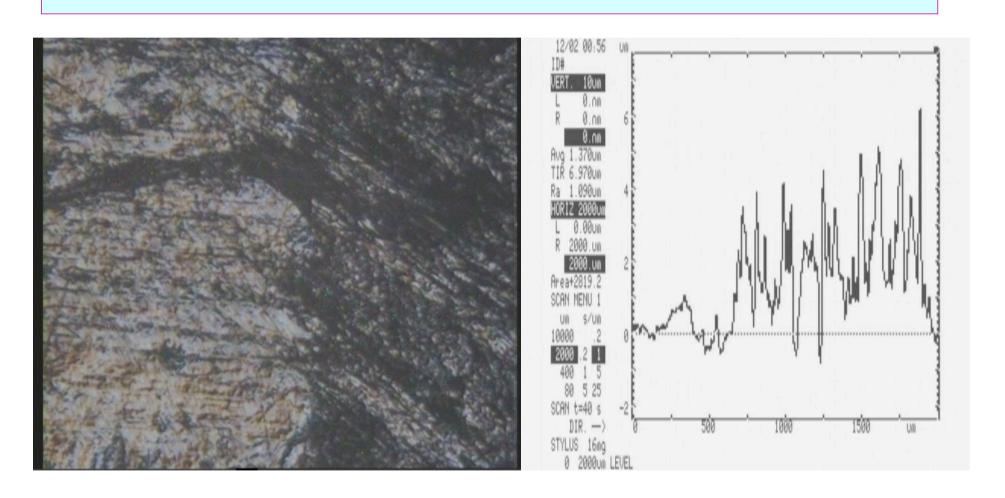
# Measurements of Radiation Induced Deformation in Graphite Composite Material REC Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 3x10 E17 p/cm 2



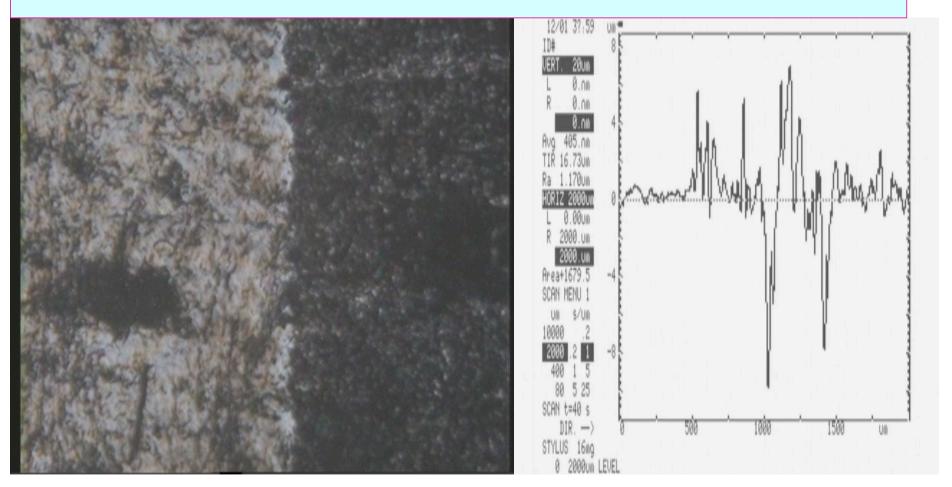
#### Measurements of Radiation Induced Deformation in Graphite Composite Material REC Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 1x10 E18 p/cm 2



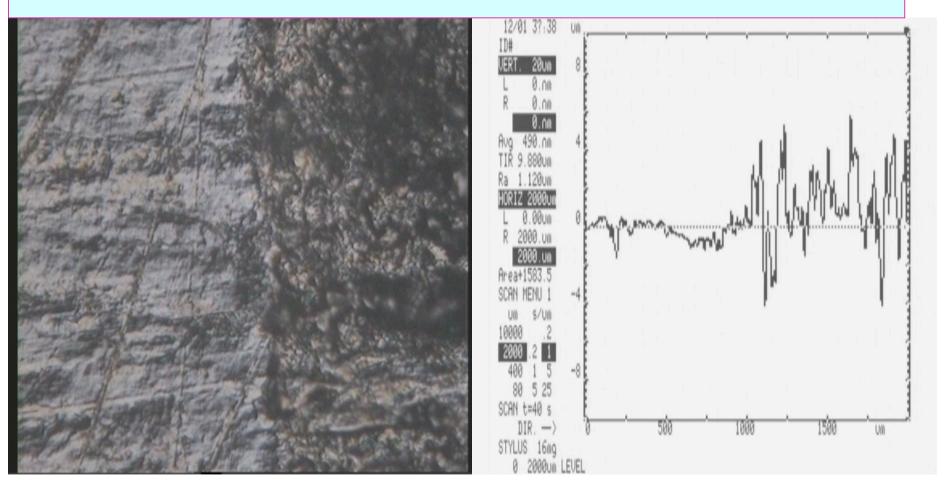
#### Measurements of Radiation Induced Deformation in Graphite Composite Material AC Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 1x10 E17 p/cm 2



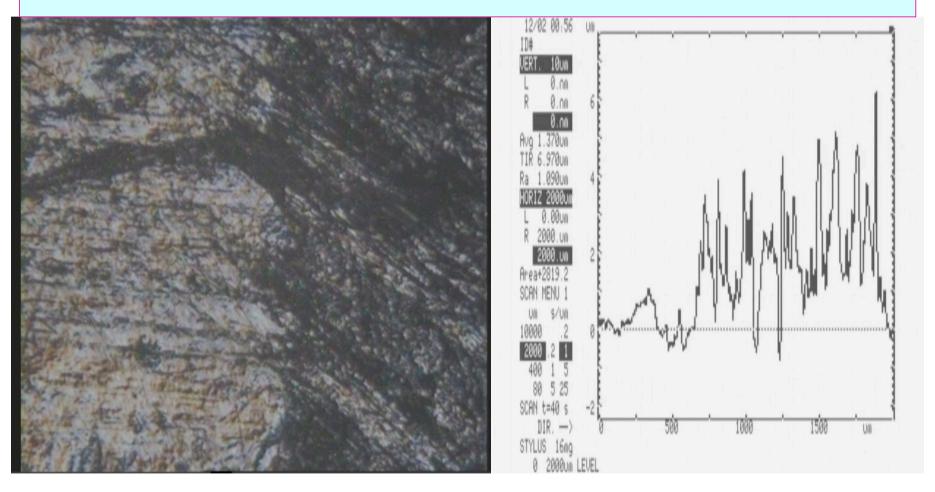
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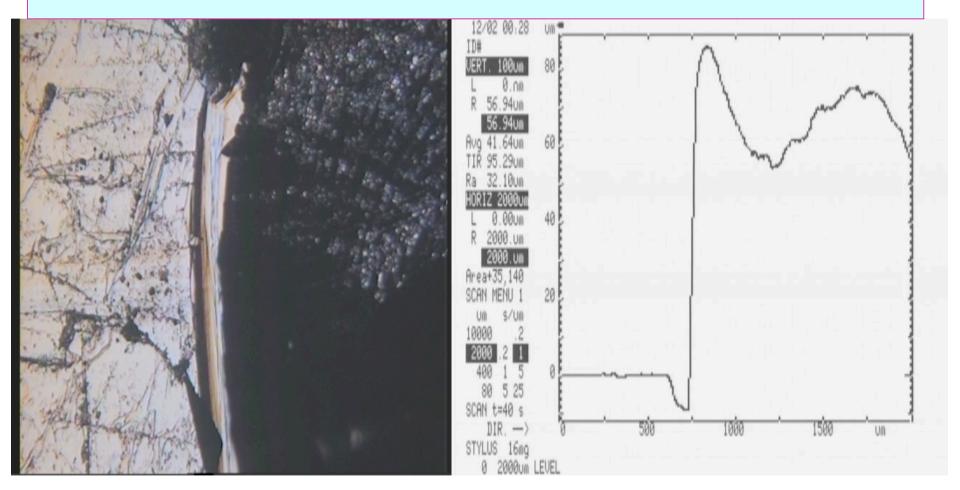
#### Measurements of Radiation Induced Deformation in Graphite Composite Material AC Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 1x10 E18 p/cm 2



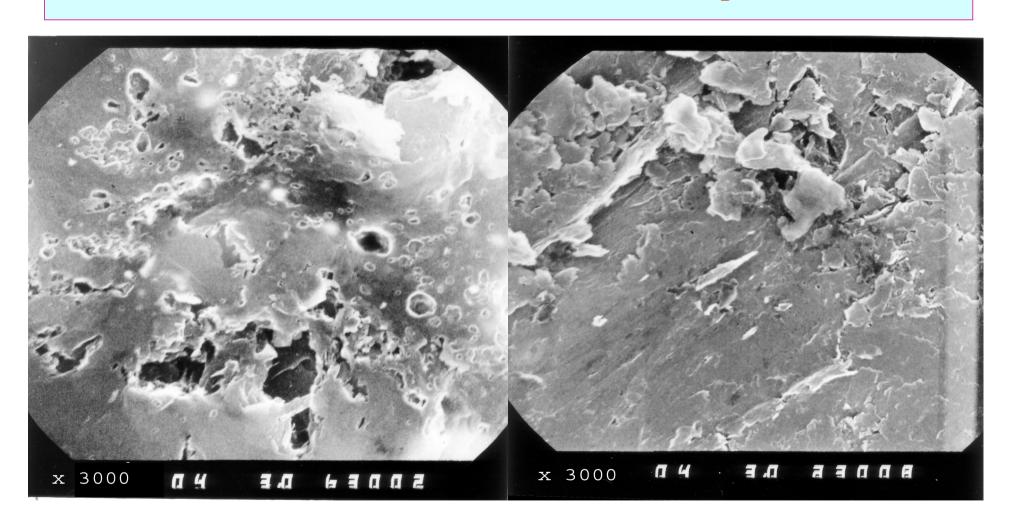
#### Measurements of Radiation Induced Deformation in Graphite Composite Material R4SSO Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 1x10 E17 p/cm 2



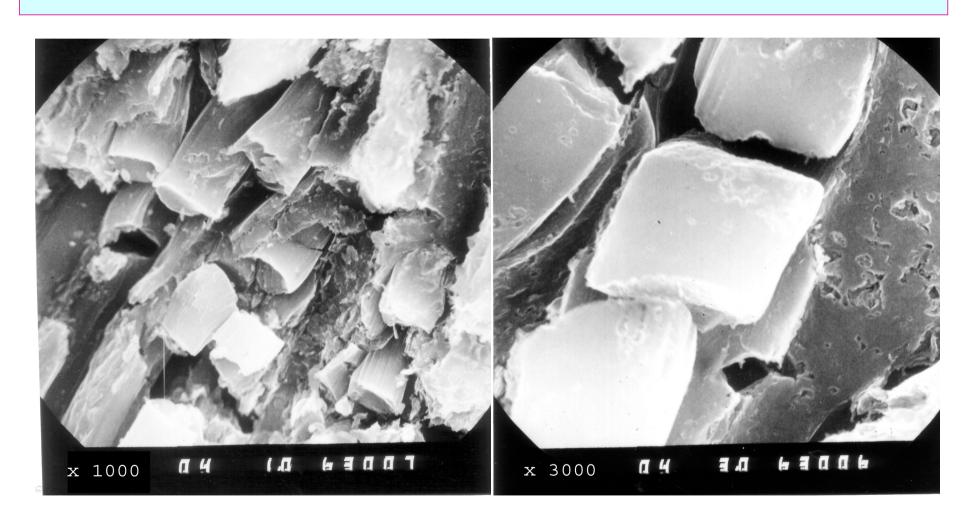
#### Measurements of Radiation Induced Deformation in Pyro -Graphite Material Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 1x10 E17 p/cm 2



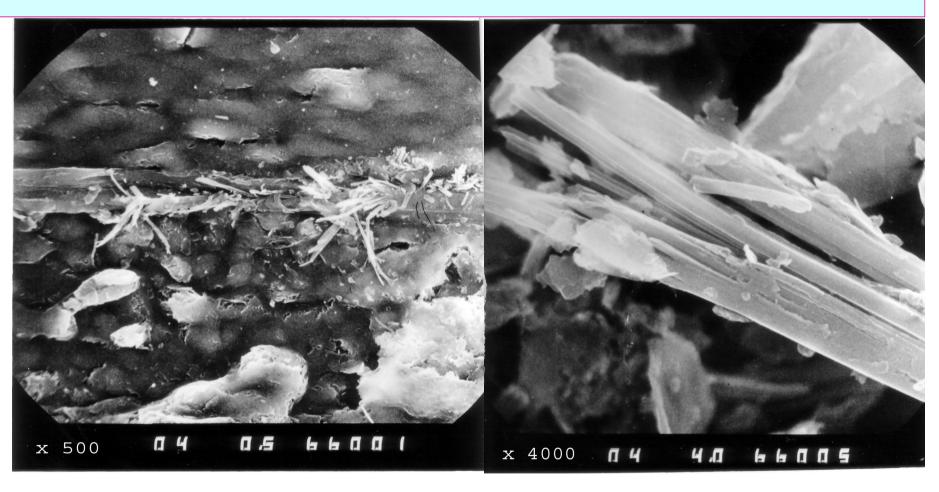
#### Analysis of Radiation Induced Erosion in Graphite Composite Material REC Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 1x10 E17 p/cm 2



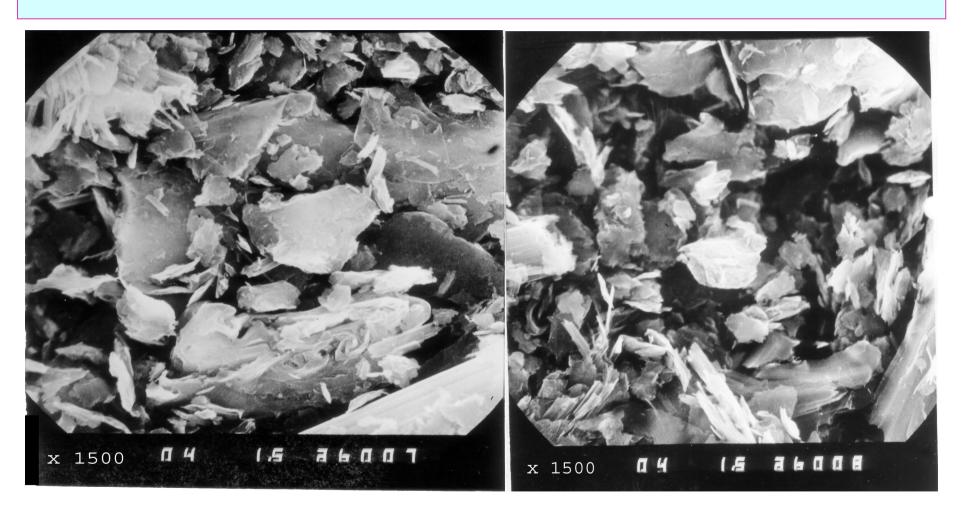
#### Analysis of Radiation Induced Erosion in Graphite Composite Material REC Irradiated by Carbon Ions with the Energy 5 MeV at Irradiation Dose: 1x10 E17 p/cm 2



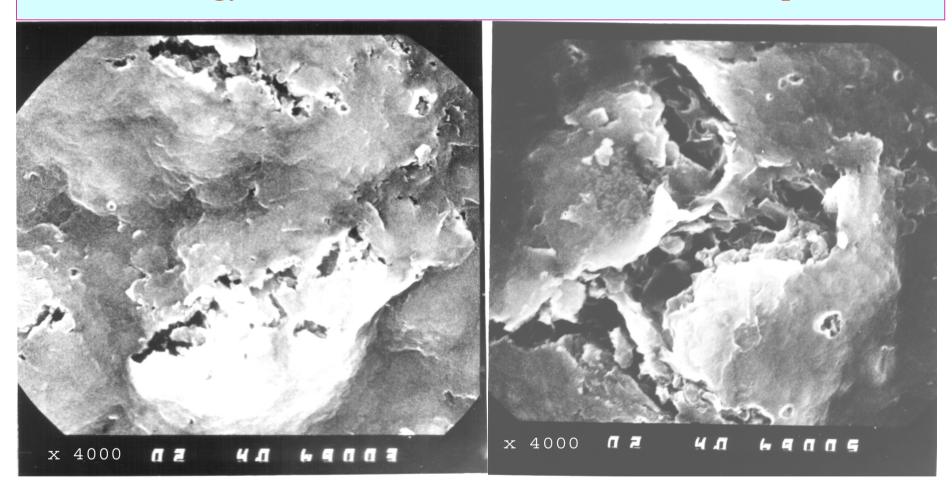
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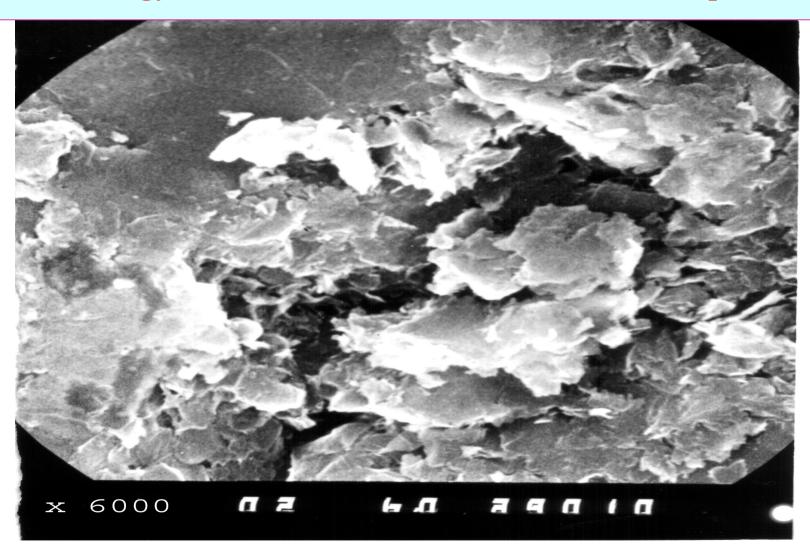
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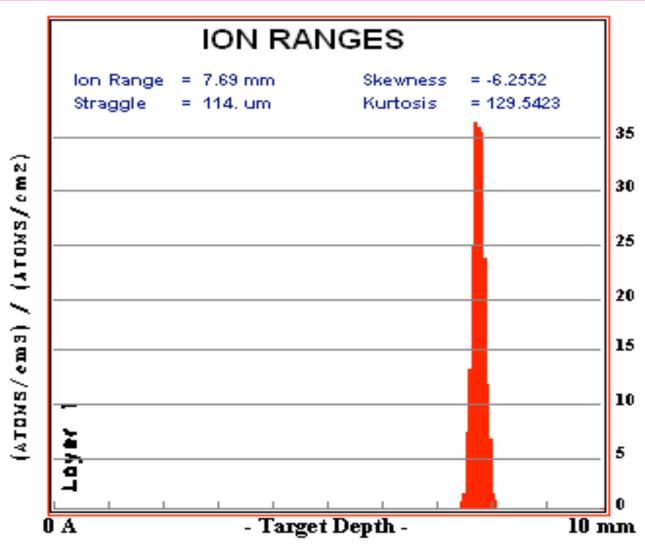
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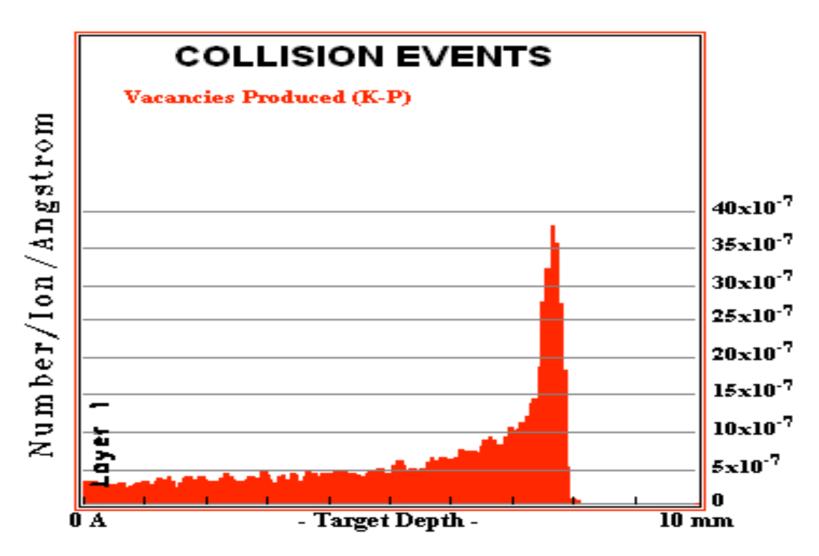
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## Penetration Depth in Graphite under 35 MeV Proton Irradiation



### Collision Events in Graphite under 35 MeV Proton Irradiation



### Future work for investigations of proton irradiation on Graphite Collimator Materials for LHC

- Investigations of radiation-induced deformation under proton irradiation at different doses of DPA and temperatures in irradiated graphite materials for LHC.
- Investigation of radiation induced erosion and microstructure change in proton irradiated graphite materials for LHC at different temperatures.
- Analysis of thermal expansion in proton irradiated C-C graphite materials for LHC in dependence on temperature and irradiation doses in DPA.
- Studies of proton irradiation effects in DPA on thermal conductivity, electrical resistivity and mechanical properties.