



## Georgian-German Science Bridge (GGSB)

### A Model for Scientific and Technological Cooperation

The Georgian German Science Bridge (GGSB) was initiated to act as an umbrella encompassing the multitude of activities between a consortium of four Georgian universities (AUG, GTU, ISU and TSU) and institutes of Forschungszentrum Jülich (IEK, INM, IKP, JCNS, ZEA). The objective of the GGSB is to connect scientists from both countries via common research projects and students through education and exchange programs, thus fostering mutual Georgian-German cultural relationships.

### SMART|Lab Concept

A major new component of GGSB, so-called SMART|Labs, whereas SMART means Science, Medicine, Applied Research and Technology, were proposed for outstanding young, well-educated scientists, allowing them to return to their home country. SMART|Labs will support the further development of the Georgian science system and are therefore funded by the Georgian Ministry of Education and Science; they involve the establishment of laboratory centres at Georgian universities for jointly defined scientific projects. The SMART|Labs are equipped with modern instrumentation by the partners to effectively carry out their activities and meet their (international) objectives within the project. Thematically differently oriented SMART|Labs will be internally linked in order to make best use of synergies at all levels.

### Milestones

- 1992 First contacts between IKP of KFA/FZJ Jülich (O.W. Schult) and HEPI TSU (M. Nioradze)
- 2004 1<sup>st</sup> "Caucasian-German School and Workshop in Hadron Physics" (CGSWHP, later GGSWBS) in Tbilisi; start of GGSB
- 2011 Student exchange program between Shota Rustaveli National Science Foundation (SRNSF) and FZJ
- 2013 1<sup>st</sup> "Autumn Lectures" at Georgian Technical University (GTU); agreement on equipment exchanges
- 2014 2<sup>nd</sup> round of the SRNSF-FZJ fellowship program; **10 years of GGSB**
- 2015 Delivery of laboratory equipment from FZJ to GTU; 2<sup>nd</sup> "Autumn Lectures" at GTU
- 2016 Visit of the Georgian Ministry delegation to FZJ, 1<sup>st</sup> SMART|EDM\_Lab at TSU opened
- 2017 2<sup>nd</sup> SMART|AtmoSim\_Lab at TSU opened; Quali-Start-up lectures for Georgian students in Jülich
- 2018 Visit of Jülich delegation in Tbilisi – Celebration event of 100<sup>th</sup> Anniversary of TSU

### Planned events for 2018

- August 20 – 25** GGSWBS´18 (8<sup>th</sup> meeting)
- September 26 + 27** GGSB Day as part of the Science and Innovation Festival in Tbilisi
- October 12** GGSB project presentation at Frankfurt Book Fair (October 10 – 14)

### Vision

The GGSB vision is to also formally coordinate the thematically different labs into a "hub" structure to exploit possible synergies and to mirror partly the structure of FZJ in Georgia. We further aim to involve additional partners within Germany and (possibly) Caucasian countries to extend the Georgian-German Science Bridge (GGSB) to a Caucasian-German Science Bridge (CSBG). Furthermore, we would like to support the education of talented Georgian students before joining the universities by a special training concept. In Germany, the importance to make talented pupils interested in science already during their school years has been recognized: FZJ has opened a laboratory (JuLab) especially for this purpose at FZJ more than 10 years ago, where students of all ages can participate in special practical training courses dealing with general scientific questions. It is envisaged to develop similar Labs in Georgia as well, based on the JuLab experience.