



Memorandum of Understanding

between

GSI Helmholtzzentrum für Schwerionenforschung GmbH
64291 Darmstadt

- hereinafter referred to as GSI-

and

Ministry of Education and Science of Georgia
0102, Tbilisi Georgia

- hereinafter referred to as MES -

Preamble

For more than 20 years, the Helmholtz Research Centre in Jülich (Forschungszentrum Jülich (FZJ), Germany) successfully cooperates with a consortium of Georgian universities (Agricultural University of Georgia (AUG), Georgian Technical University (GTU), Ilia State University (ISU), Iv. Javakhishvili Tbilisi State University (TSU) and recently Kutaisi International University (KIU)). In 2004 the **Georgian-German Science Bridge** (GGSB) was founded. The GGSB cooperation comprises three pillars:

- **Education:** Georgian students are participating in various educational programs, e.g., internship programs at FZJ and block of lectures at Georgian universities.
- **Research:** Georgian students and their supervisors, are actively involved in diverse joint research projects for their Master's and PhD projects.
- **Knowledge transfer:** Georgian outstanding young scientists are supported to return to universities of the consortium to operate and lead so-called SMART|Labs. Two were established (2016 -2017) at TSU in the research fields of Elementary Particle Physics (SMART|EDM_Lab) and Atmospheric Chemistry & Simulations (SMART|AtmoSim_Lab).

Based on the discussions and personal agreements among the chairs of the Board of Directors of the Helmholtz Research Centre in Jülich (FZJ, Prof. Wolfgang Marquardt), the Helmholtz Zentrum Dresden-Rossendorf e.V. (HZDR, Prof. Sebastian Schmidt), and the GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt (GSI, Prof. Paolo Giubellino), it has been decided the extension of the science bridge (GGSB) (see Annex 1 and Annex 2) to include GSI by a Memorandum of Understanding (MoU).

Note: **Annex 1** (existing MoU between FZJ and MES for the period 2021- 2026)

Note: **Annex 2** (existing MoU between HZDR and MES for the period 2021- 2026)

Partners

GSI represented by the Board of Directors, and MES, represented by the Minister, intend to enter into specific negotiations on the contracts to be concluded, currently involving the following partners (which can be broadened on mutual agreement):

- a. **GSI Helmholtzzentrum für Schwerionenforschung in GmbH**
- b. **Consortium of the Georgian Universities**
- c. **LEPL Shota Rustaveli National Science Foundation of Georgia (SRNSFG)**

SRNSFG serves as the Georgian managing body of GGSB (see Annex 3).

Note: **Annex 3** (existing MoU between FZJ and SRNSFG for the period 2021- 2026)

Article I. Subject matter of the negotiations

(1) Research

The main (but not exclusive) objective of the future research part of the GGSB is to focus towards one of the Grand Challenges facing society ("Health as a Global Challenge - Contributions by the GGSB") under the acronym GGSB_PLUS (called the PROJECT below). Within this intent, possible areas of common research are: proton and hadron therapy, clean energy, circular economy, fluid dynamics, radiation physics, radiobiology, radio oncology and radionuclide production. This comprises:

- a. Fundamental research: Support of the SMART|EDM_Lab with refocus on "Equipment Development for Medicine" in conjunction with the planned Hadron Therapy Center at KIU;
- b. Biomedical research: Support to a SMART|BioMedImage_Lab to be founded at one of the mentioned universities with focus on treatment of tumors;
- c. Applied research: Support of the foundation of a SMART|Tech_Lab and SMART|Digital_Lab;
- d. Supercomputing, data analysis, and machine learning: Initialization of a group at KIU (SMART|Data_Lab).
- e. Foster collaborative efforts for joint participation in relevant calls within EU Framework Programme for Research and Innovation - "Horizon Europe", targeting at the areas of this memorandum.

In the long-term, the intention is to merge these interdisciplinary SMART|Labs into a Georgian Science and Technology Center (GSTC) in order to foster cooperation and synergetic exchange between the labs.

(2) Education

- a. Student exchange: Continuation of the highly successful exchange program in the frames of the MoU between FZJ and SRNSFG for Bachelor, Master and PhD students, co-financed (50:50 share) by GSI host institutes and MES (via SRNSFG); a specific agreement on GET_INVolved Programme will be signed for the implementation (see **Annex 4**).

- b. Topical Workshops and Summer Schools for students in Georgia and/or GSI;
- c. Education weeks (Block Lectures/Practices) in Georgia and/or GSI, internships and Traineeships within the framework of ERASMUS+ and GET_INVolved Programme;
- d. Foster collaborative efforts for joint participation in the calls within Marie Skłodowska-Curie Actions, targeted at development and implementation of the programs for doctoral education and postdoctoral fellowship in the areas of this memorandum.

(3) Knowledge (and technology) transfer

- a. Transfer of expertise to operate a proton cyclotron for radiation therapy;
- b. Support of existing and future SMARTILabs (e.g. technology);
- c. Scientific and technological consulting, i.p. for the Hadron Therapy Center of LEPL Kutaisi International University.
- d. Collaboration on Development of detector technologies and develop beyond state-of-the-art detector technology for the instrumentation within the framework of EURIZON (successor of CREMLINplus) Programme.

Article II. Legally binding provisions

1. With the exception of the following provisions, no legal obligation for either of the parties can be derived from this MoU. In particular, there is no obligation to conclude the contracts specified under I.
2. Either party shall bear its own internal and external costs incurred in connection with the negotiations and other relevant measures. Either party shall be entitled to terminate the negotiations at any time without giving reasons, provided that a declaration in writing to this effect is presented to the other party.
3. In case of failure to materialize the PROJECT or to comply with the time schedules agreed upon, the parties shall not bring forward any claim against one another, irrespective of the legal basis. This shall apply, in particular, to claims for damages or the reimbursement of costs due to failure to conclude the contract. The parties, moreover, shall not be liable for information not being provided at all, or not in good time, or being provided in a faulty manner.

4. Either party shall use all and any information obtained from the other party within the framework of the discussions and negotiations exclusively for the purposes (see Preamble) for which it has obtained such information, shall not disclose it to third parties and shall protect it like its own trade secrets. This obligation shall not apply to information that is generally known, information that has been provably derived independently by the party receiving such information, or information lawfully obtained from third parties without infringing any obligation of confidentiality. This obligation shall not be applicable either in case a party is compelled to disclose the information obtained on the grounds of legal provisions. This obligation shall be valid for a period of six (6) years after this MoU has ceased to be in force.
5. Any modifications to this MoU shall be made in writing in order to become valid. The form requirement can only be waived by agreement in writing.
6. This MoU shall enter into force on the date of signature by both parties. It shall cease to be valid upon conclusion of all contracts required for the implementation of the project and in case the negotiations are terminated, at the latest, however, on **31st of December 2026 (31/12/2026)**. However, the provisions on confidentiality shall remain valid.
7. Should a provision of this MoU be or become ineffective, this shall not affect the validity of the other provisions. The parties undertake to replace such ineffective provision by an effective provision as close as possible to the regulation purpose of the ineffective provision.
8. This MoU is subject to the competent German authority granting any approval which may be necessary for the transfer of objects, know-how, and software to Georgia or technical assistance or Georgian nationals under the relevant export control provisions (see Article IV).
9. The exclusive place of jurisdiction for all disputes arising from this MoU shall be Darmstadt.

ARTICLE III. Intellectual Property

1. The Parties acknowledge that nothing in this Memorandum of Understanding shall affect ownership of any pre-existing intellectual property rights of the Parties.

2. The Parties will respect each 'Other's right of due attribution.
3. The Parties expressly agree not to divulge or disclose "confidential information" that will be exchanged directly or indirectly between them to any third Party, or outside Party to this instrument, partially or in total.

Article IV. Export Control / Peaceful Purposes

1. All activities under this Agreement will be conducted in compliance with applicable export control and economic sanction laws and regulations. Each Party shall not knowingly transfer any export controlled item, data, or services, including the transfer to persons employed by, associated with, or under contract to the Party or the Party's Subcontractors, without the authority of an export license, agreement, or applicable exemption or exception. To the extent that information disclosed is export controlled the Parties agree to comply with all regulations regarding its use, disclosure, export, and transfer.
2. Both parties assure that contributions (e.g. technology, know-how, goods, services, money) provided within the framework of this cooperation are exclusively used (or transferred) for non-military purposes.

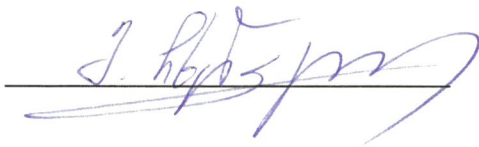
Article IV. Final Provisions

1. The Parties may terminate this MoU by written notice, with a period of six (6) months in advance.
2. The termination of this MoU shall not affect the implementation of projects and programs already approved or already started under a fully executed Cooperation Agreement(s) and contracts, in which case the Parties should maintain their budgets for the projects and program already approved and/or underway.

Signed in two original copies in English language.

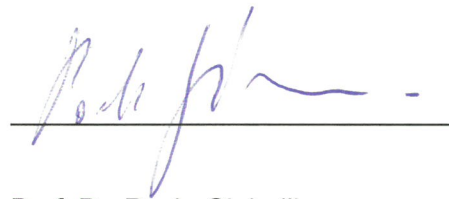
Darmstadt/Tbilisi, 24/1/2023

**Ministry of Education and Science,
Georgia**



Prof. Dr. Mikheil Chkhenkeli
Minister of Education and Science

**GSI Helmholtzzentrum für
Schwerionenforschung (GSI), Germany**



Prof. Dr. Paolo Giubellino
Scientific Managing Director GSI



Dr. Ulrich Breuer
Administrative Managing Director GSI

Annex 1 existing **MoU between FZJ and MES** for the period 2021- 2026

Annex 2 existing **MoU between HZDR and MES** for the period 2021- 2026

Annex 3 existing **MoU between FZJ and SRNSFG** for the period 2021- 2026

Annex 4 GET_INvolved Programme Partnership Agreement

The GET_INvolved Programme will act as implementation agreement on activities of exchange between Georgia (partner institutions listed in Preamble of this MoU) and GSI. The agreement shall comprise with following salient features:

1. Potential methods collaborations between MES and Partners listed within the scope of this MOU and GSI will be implemented.
2. Parties will enter into a specific agreement towards internship and training for young students and short and medium term research opportunities with conditions agreed in the GET_INvolved Programme Agreement with MES and other designated partners in Georgia.
3. The GET_INvolved Programme agreement will take into account topics agreed in this MoU.