Minutes of the GGSB Round-Table Discussion

Introduction

On **Friday, September 27, 2019**, within the framework of the "Science and Innovation Fest 2019" in Tbilisi, a strategy meeting of the Georgian-German Science Bridge (GGSB) took place in form of a round-table discussion at the Georgian Technical University (GTU) organized by Shota Rustaveli Science Foundation (SRNSFG). The day before, the Jülich delegation had the opportunity to discuss GGSB issues in a meeting with the German Ambassador in Georgia, **Hubert Knirsch**, and his deputy, **Michael Fabri**.

The meeting was attended by:

- a German delegation from Forschungszentrum Jülich (FZJ): Andro Kacharava, Astrid Kiendler-Scharr, Eva Portius and Hans Ströher;
- scientists and representatives of Georgian universities: Zaza Metreveli (Agricultural University of Georgia, AUG), Archil Prangishvili, Ketevan Kotetishvili, Lili Nadaraia (Georgian Technical University, GTU), Revaz Solomonia (Ilia State University, ISU), Revaz Shanidze, Giorgi Jibuti, Rusudan Kakava, David Mchedlishvili, Dito Shergelashvili, Mikheil Nioradze, Mirian Tabidze, Nugzar Mosulishvili (Tbilisi State University, TSU) and Alexandre Tevzadze (Kutaisi International University, KIU);
- the Director General (DG) of Shota Rustaveli National Science Foundation of Georgia (SRNSFG), **Zviad Gabisonia**;
- the Science Advisor for Education of the Georgian Prime Minister, Mikheil Chkhenkeli;
- a representative of the Academia Europaea (AE) hub in Georgia, **David Prangishvili**, and the PhD student **Medea Abramishvili** (TSU, JuLab);
- the Director of the National Center for Teacher Professional Development (Ministry of Education and Science, MES), **Berika Shukakidze**;
- a representative of the German Academic Exchange Service ("Deutscher Akademischer Austauschdienst", DAAD), **Gebhard Reul**;
- and the Deputy German Ambassador in Georgia, Michael Fabri.

The meeting was organized according to the previously distributed agenda (details see attachment):

- a welcome by Archil Prangishvili (Rector GTU), host of the meeting;
- an introduction of status and achievements of GGSB by **Hans Ströher** (FZJ) and of SMART|Labs by **Andro Kacharava** (FZJ);
- an overview of the new KIU (including the envisioned proton therapy center), presently under construction in Kutaisi, by **Alexandre Tevzadze** (Rector KIU);
- a proposal for an upgrade/extension of GGSB into GGSB-PLUS by Astrid Kiendler-Scharr (FZJ).

In addition, **Mikheil Chkhenkeli** made remarks and comments for the Georgian government about the strategic importance of KIU for education and research in the western part of Georgia and the wish to have FZJ contribute to this effort via GGSB.

An open discussion between all participants followed, guided by the three pillars of GGSB: education, research and knowledge transfer. In particular, the possible content of GGSB-PLUS ("Health as a global challenge – contributions by GGSB") was addressed, which should lead to a follow-up Memorandum-of-Understanding between FZJ and the consortium of Georgian universities.

Findings and Suggestions

- 1. The two existing SMART|Labs (EDM ... Electric Dipole Moments, AtmoSim ... Atmospheric Investigations and Simulations) are both working very well, but they are facing a number of severe challenges:
 - a. Building II of TSU is currently (and for the near future) under renovation, making it very hard or even impossible to conduct research with the equipment installed and operated there. A short-term solution is urgently needed to remedy this situation due to commitments within running external (ERC) and internal (SRNSFG) grants. In the longterm, one must consider a dedicated building to host the SMART|Labs in form of a SMART|Hub.
 - b. The administrative burden for the heads of the laboratories is deemed too high it should be reduced in order for them to be able to concentrate on research. It must be made clear that although research goals and milestones should be defined, the way to achieve these is not predictable in detail and can always be due to changes!
 - It is highly acknowledged that the two SMART|Labs have started to cooperate.
- 2. According to the DG of SRNSFG, **Zviad Gabisonia**, PhD students currently can only be financed for up to 3 years. This is in conflict with the fact that the time to finalize a PhD frequently takes longer for PhDs at FZJ, the average PhD duration is 3 ½ years. **Ways should be found to prolongate the support accordingly.**
 - Currently there is no possibility for SRNSFG to fund Georgian Bachelor-students abroad, because they are still in their education phase. This issue must be discussed with the Science Advisor, Mikheil Chkhenkeli.
- 3. The feedback from the QUALI-Startup participants in Jülich was, whether in future one could foresee an introduction phase in order to be better prepared when they come for a week to FZJ. It is suggested to use part the GGSWBS (Georgian-German School and Workshop in Basic Science) in 2020 for this purpose.
- 4. The representative of DAAD, **Gebhard Reul**, suggested that individual applications for DAAD scholarships can be submitted by Master students and researchers. Bachelor students can be funded through programmes for university collaborations (like GGSB!). **This message should be forwarded to interested students of the consortium universities.**
- 5. The representative of Academia Europaea hub in Tbilisi, **David Prangishvili**, expressed his interest/willingness to cooperate with GGSB. **We will have to find out how this can be achieved.**
- 6. After a test in 2018, a pilot education workshop for teachers and pupils will be conducted between October 14 and 18, 2019 by JuLAB of FZJ at TSU. In order to develop it further into a SMART|SmR_Lab ("School meets Research"), the Georgian partners must take the initiative by identifying corresponding people and working out a MoU together with the JuLAB.

Plans and Vision for GGSB-PLUS

- 1. The Rector of KIU, Alexandre Tevzadze, requests that KIU becomes a member of the consortium of Georgian universities. Since the vision of GGSB-PLUS explicitly states that new partners should be included, this initiative was unanimously welcomed. It was agreed that it should be discussed internally (all involved Georgian universities) and, provided the will be no objections, be formalized in the update of the MoUs (FZJ-MoE, FZJ-SRNSFG; see below).
- 2. An extension (or a new) MoU between FZJ and the University consortium should be drafted by a working group, comprising representatives from all involved parties, since the current MoU will expire in June 2020. As an immediate step, the German representatives asked their Georgian partners to detail their boundary conditions:
 - a. What is the suggested number of Master and PhD positions per year?
 - b. Suggested funding commitment (up to now funding is split into 50% Georgia, 50% FZJ).
 - c. Duration of support for PhD students (up to now it is 36 months)?
 - d. Inclusion of pupils (in form of a SMART|SmR_Lab), internships and Bachelor students?
 - e. Commitment for continuation of existing and funding of new SMART | Labs.

From the German side the working group will comprise:

For IEK: Astrid Kiendler-Scharr, Andreas Wahner;

> for INM: Jon Shah, Bernd Neumaier;

for IKP: Andro Kacharava, Hans Ströher;

for ZEA: Ghaleb Natour, Stefan van Waasen;

> for IBG: Hanno Scharr;

> for FZJ U-E: **Eva Portius**.

For the Greorgian partners:

for AUG: Zaza Metreveli;

for GTU: Ketevan Kotetishvili;

➢ for ISU: Revaz Solomonia (tbc);

for KIU: Alexander Tevzadze, Ramaz Botchorishvili;

for TSU: Giorgi Jibuti, David Mchedlishvili, Rusudan Kakava (tbc);

> for SRNSFG: Zviad Gabisonia (tbc).

It was further suggested that **FZJ provides a first draft** in the spirit of GGSB-PLUS and the results of the round-table discussion by the end of 2019.

- 3. The proposed **thematic focus on "Health as a global challenge"** was unanimously approved; it should comprise:
 - a. Investigation and mitigation of sources of illness, i.p. atmospheric pollution;
 - b. Diagnostics of severe health problems, i.p. cancer;
 - c. Treatment of diagnosed cancer by hadron therapy.

This is very much in line with the proposed hadron therapy center in Kutaisi.

- 4. Concerning the **discussion about new SMART|Labs**, the following was concluded:
 - a. SMART|BioMed_Lab: the proponents should proceed to detail its contents and the host; the Rector of GTU, Archil Prangishvili, expressed the wish/willingness to host this lab at GTU. It should be coordinated/discussed further within the members of consortium. The members of TSU group, Bezhan Chankvetadze and Rusudan Kakava, are in internal discussion with Bernd Neumaier (INM-5) to prepare the content of such a project.

- b. SMART|Techno(SET)_Lab: the proponents, Ghaleb Natour and Stefan van Waasen (ZEA) and Zaza Metreveli (AUG), should proceed to outline its contents; it will be very helpful that block lectures are scheduled by FZJ scientists at AUG in Spring 2020 to identify its scope and required resources.
- c. An initiative was put forward to propose a SMART|Lab with focus on computer-science. The rector of KIU, Alexandre Tevzadze, welcomed this idea and suggested to work out details between his staff and colleagues from FZJ institutes.

SMART|Labs currently have a rather undefined status. It should be elaborated how they formally can be incorporated in the academic structure of the Georgian universities.

5. Next steps/visits:

- a. Within the framework of GGSB-PLUS, Forschungszentrum Jülich has offered to a fully operational cyclotron for radioisotope production to the Georgian partners. Details of the donation need be worked out, but as a first step it is proposed that the Georgian side writes an informal letter to the Board of Management of FZJ to ask for the possibility to acquire this device.
- b. A dedicated **group from Georgia** including the consortium universities and SRNSFG should **visit Jülich** to finalize editorial work on the updated/new MoUs (2020 2025).

These minutes, once unanimously agreed upon by the participants of the meeting, will be made available to the Board of Management of Forschungszentrum Jülich, the Georgian Ministry of Education, Science Sports and Culture and the representatives of FZJ institutes and Georgian universities that could not attend the round-table discussion.

Attachments: Agenda of the meeting, talks presented

Tbilisi/Jülich, September 2019

Hans Ströher (Minutes)