
GSC Partnership: African Institutions Perspective

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- rapid and remarkable advances during the last 15 years
- research focus areas are in the natural products and analytical chemistry
- It has a staff of 26 academic members, over 20 technicians, and 36 postgraduate students.

Department of Chemistry

- Has two active Networks
 - Network for Analytical and Bioassay Services in Africa (NABSA),
 - Southern and Eastern African Network of Analytical Chemists (SEANAC).
- African South Center of Excellence, where TWAS senior associates' fellowships are tenable

Department of Chemistry

- has well equipped laboratories, with high field NMR and mass spectrometers, and other modern state-of-art instruments.
- A recent MSI-related development, is the effort to launch the Ethno-innovation research center.

Areas of involvement of GSC fellows

- **Postgraduate programs and research**
 - the search for bioactive plant metabolites and specifically anti-plasmodial, anti-viral and anti-tuberculi natural products, and
 - search for compounds that would reverse parasite resistance to chloroquin.
 - bioanalytical as well as enviroanalytical chemistry

Areas of involvement of GSC fellows

- **NABSA and SEANAC activities**

Providing Analytical (NMR and MS) and Bioassay services,

Hosting short-term research visits of researchers from selected laboratories, and

Organizing regional symposia.

Number of analytical services rendered by the NABSA Center from Gaborone to various scientists in Africa

Year	NMR	MS
1999	476	124
2000	844	296
2001	967	294
2002	1025	333
2003		
2004	1911	234
2005	1662	

Areas of involvement of GSC fellows

- GSC fellows could be very helpful in improving the efficiency of these services.
- Two recently acquired facilities include a LC-NMR accessory to the 600 MHz spectrometer and HPLC-CD facility. GSC fellows may be involved in assisting us reach a higher level of capacity with respect to the use and applications of these facilities.

The Ethno-innovation Research Center (EIRC)

- The University of Botswana (UB) is on the verge of establishing a multidisciplinary research center.
- Indigenous knowledge systems (IKS) are a vital source of knowledge development, innovation and entrepreneurship, and that this huge store of knowledge and wisdom that has been built over centuries by our societies needs to be explored, documented, studied as well as 'modernised'

Botswana's Vision 2016

while much can be borrowed from other countries we will need to look within our resources and culture to find the sources of innovation that will allow us to shape our own future.

1996

EIRC

The EIRC proposal was influenced by the millennium science initiative (MSI) and the associated program of the GSC. We are grateful to Dr. T. Hexner, a member of the SIG Board, for his interest and follow-up of the proposal, and valuable comments that helped shape the proposal. Members involved in the preparation of the proposal are hopeful that the GSC will make vital contributions in the realization of the proposed center.

Some comments on the GSC

- We strongly appreciate the vision of the GSC program and the effort being made to enable us to participate in it ,
- interaction with GSC fellows should be most productive and beneficial both to the host institutions as well as to the fellows,
- This experience should be based on realistic expectations from both parties.

Some comments on the GSC

- the SIG/UNDP Global Science Corps Partnership scheme appears to be an attractive approach.
- Many highly trained African scientists in Africa and elsewhere, with complementary field of expertise that could enhance the quality and relevance of our efforts.
- We will also be extremely pleased to host the visit of senior and older scientists from the developed countries which may be interested and willing to share their expertise to help us develop our institutions.

Acknowledgements

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