



UNESCO's Human Resource Capacity building programme in Basic and Engineering Sciences in Africa

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Director

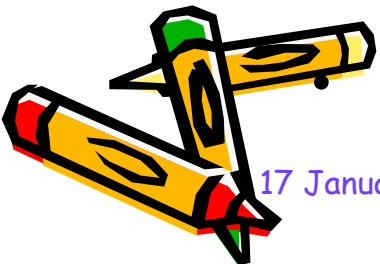
*UNESCO Regional Bureau for Science and
Technology in Africa, Nairobi, Kenya*



Overview of the Presentation

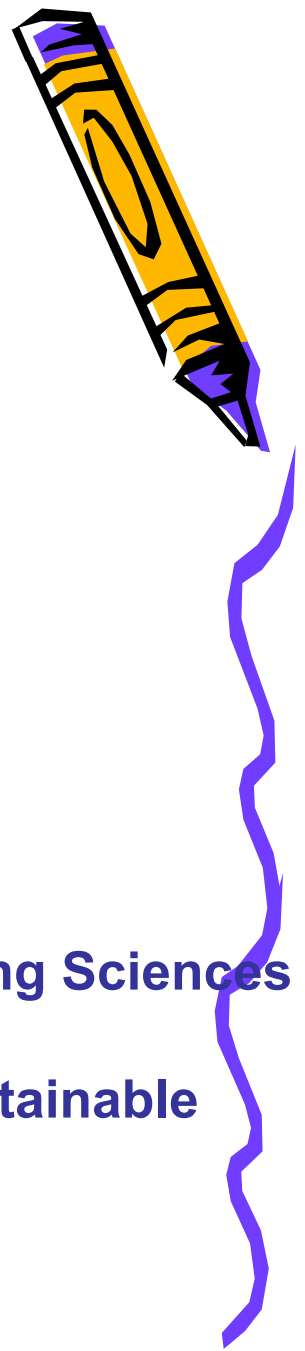
- Highlight the importance UNESCO attaches to capacity building activity in Basic and Engineering Sciences
- Modalities used for capacity building
- Partnerships and Resource mobilisation
(The ANSTI project - *The African Network of scientific and Technological Institutions*)

About ANSTI and its Activities



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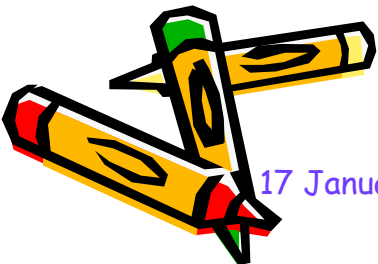


Major programme: Natural Science

Programme 1 – Science , environment and sustainable development

Programme 2 - Capacity building in Science and Technology for development

- 1. Capacity building in basic and Engineering Sciences**
- 2. Science and Technology policies for sustainable development**



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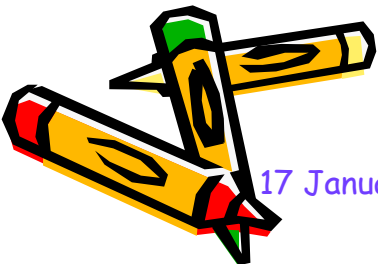
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Level of activity devoted to Capacity Building



- Capacity building is one of the two programme in the Science sector. A mainline of Action is devoted to capacity building in the Basic and Engineering Sciences.
- 70% of the activities in the Basic Sciences in Africa is devoted to Capacity building.
- Eighty (80%) of the resources are devoted to the this action

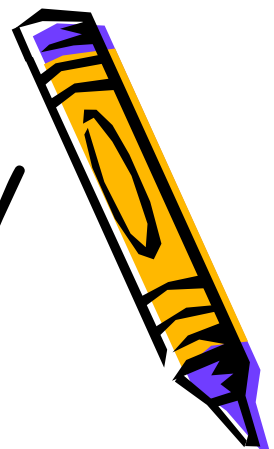


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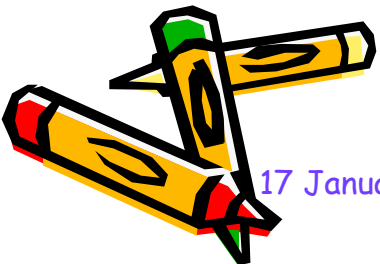
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Modalities used in Capacity building



- Training (*Award of fellowships; training workshops*)
- Production of teaching/ learning materials
- Awareness raising and facilitating the discussion of strategic issues
- Exchange of visits and strengthening of research experience.
- Assuring quality and relevance

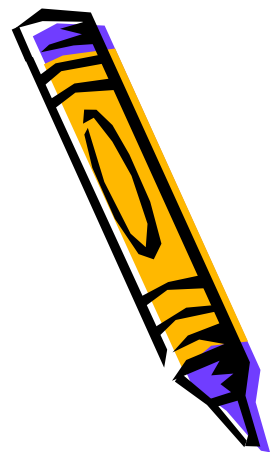


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Partnerships and Resource Mobilisation



- Capacity Building is an expensive Process. Hence there is ample need for extra-budgetary resources and Partners
- The regional office has a project to forge Partnerships and mobilise resources for Human Resources Capacity Building in Science and Technology. This is the Project *“The African Network of Scientific and Technological Institutions”*



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What is ANSTI ?

African Network of Scientific Technological Institutions, (ANSTI) is an organ of cooperation that embraces African Institutions engaged in University level training and research in the fields of science and technology.

The History

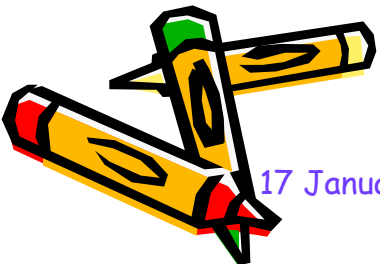
ANSTI was established in 1980 by UNESCO through the help of two donors:-

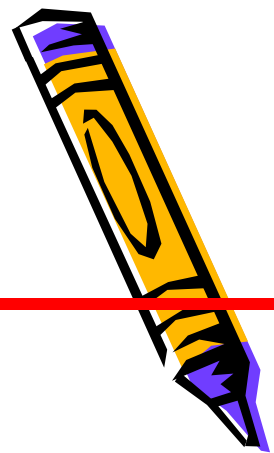
United Nations Development Programme (UNDP)

The government of Germany

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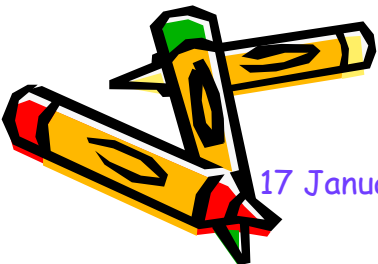
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Number of member Institutions ?

**105 member institutions
in 35 countries**



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ANSTI MANAGEMENT STRUCTURE

Members include

- Association of African Universities (AAU)
- Representatives from UNESCO, UNDP, ECA, AU
- Representatives of Donor community
- Representatives of Member institutions
- Representative of Federation of African Organisation of engineers (FAOE)

The Governing Council

Ad hoc
Committees

National
Coordinating
Institutions

Regional Coordinating Unit
THE SECRETARIAT

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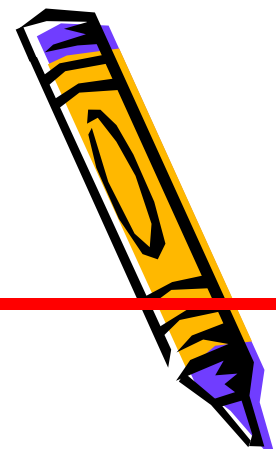


THE ACTIVITIES

The following activities are carried out. They embrace all the modalities for human resource capacity building

- Training Fellowships Awards / support for training workshops
- Exchange of visits and strengthening of research experience
- Teaching/ learning materials development
- Publications and dissemination of information
- Organization of meetings/ conferences to examine issues in Science and engineering education





TRAINING ACTIVITIES

Three types of training activities are carried out:-

(a) *Award of **Post-graduate Fellowships in ANSTI Institutions***

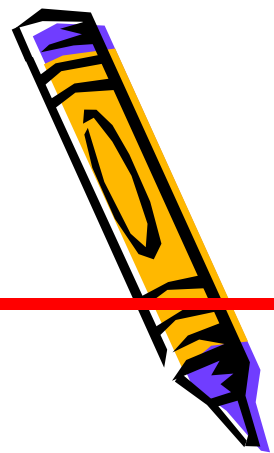
Each year, 10 fellowships are awarded and to date there are over two hundred and fifty (250) students who have been sponsored.

(b) *Organization of training Workshops*

(c) *Short term training Fellowships*

This is for participation in short courses within and outside the region



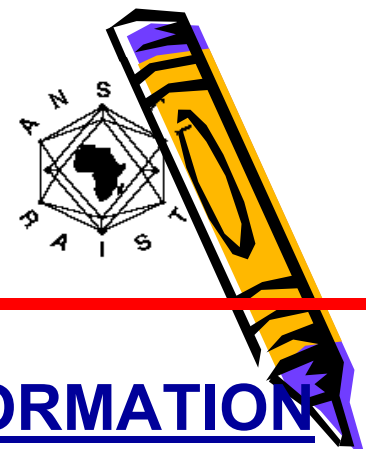


Teaching/ Learning Mat

ANSTI has a **textbook** writing programme and to date has produced several textbooks in basic and engineering science.

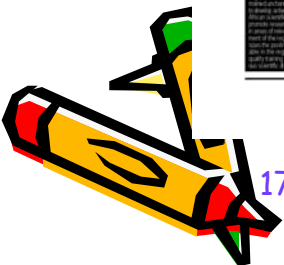
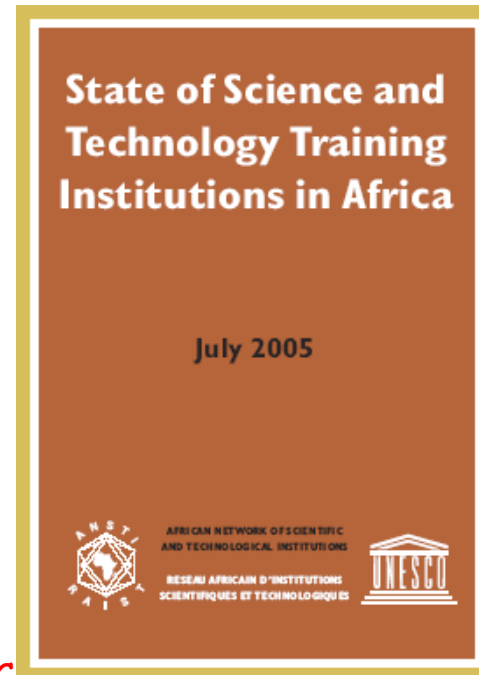
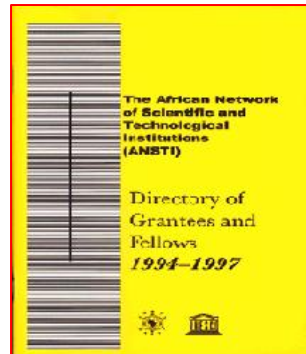
E-content for e-learning in courses in basic and engineering sciences





PUBLICATIONS AND DISSEMINATION OF INFORMATION

This is an important activity carried out through both the electronic and print media.

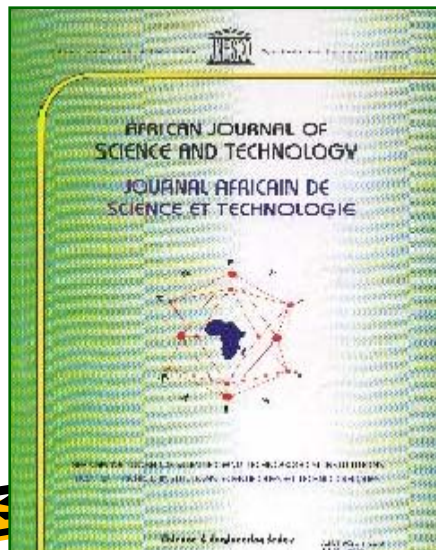


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Publications / Dissemination

The African Journal of Science and Technology

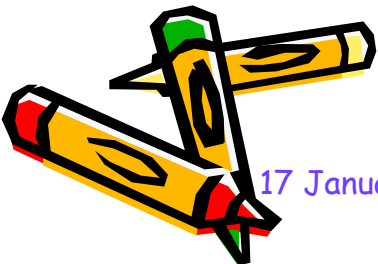
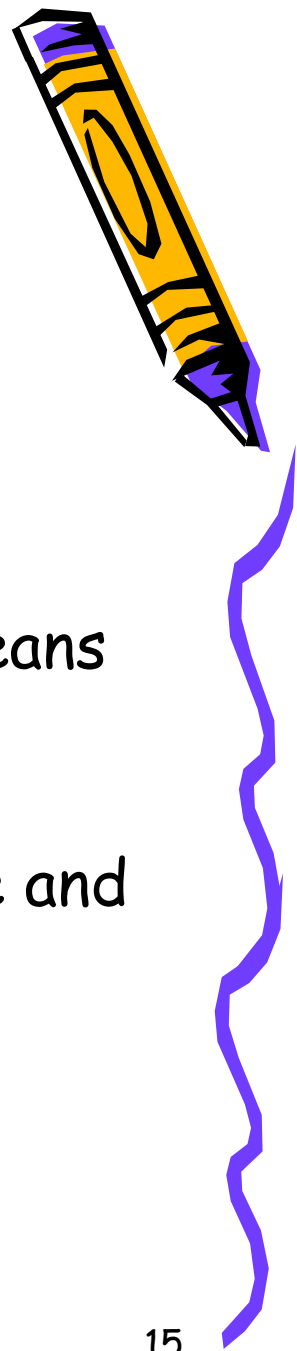


This is an important publication of ANSTI and there are two issues per year.



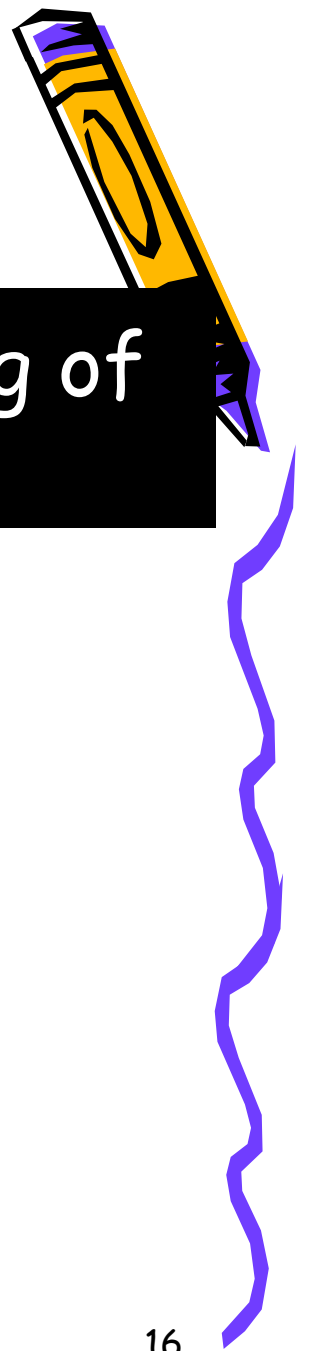
Organization of meetings/ conferences to examine issues in Science and engineering education

- The recent meeting of Vice-chancellors, Deans of science Engineering and Technology
- Expert group meetings on quality assurance and financial management



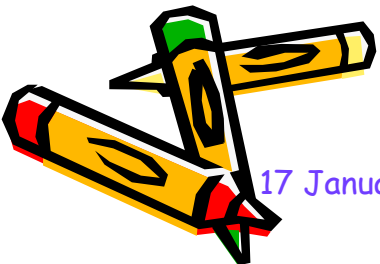
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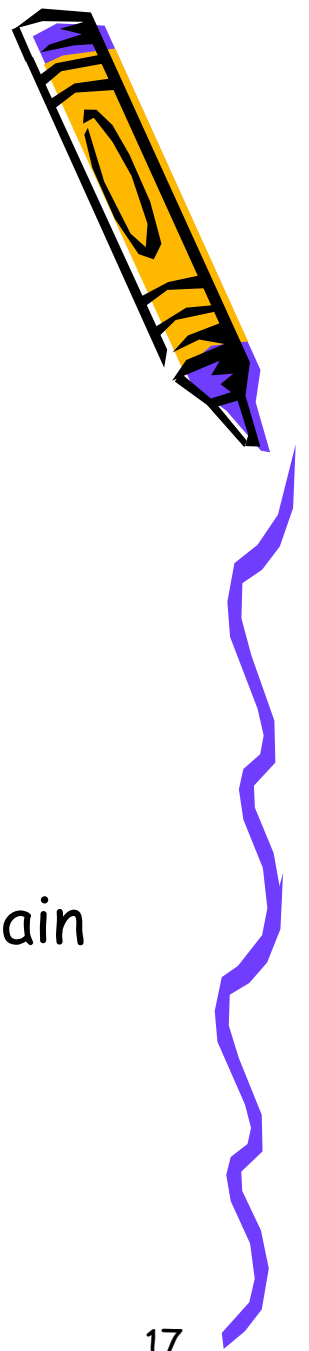
Exchange of visits and strengthening of research experience

- Staff exchange visits
- Support of publication of Journal
- Conference grants



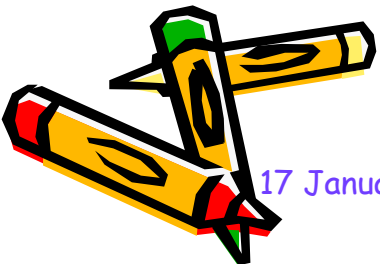


Staff Exchange/ Visiting Professors 1



Two types:

- Research Staff exchange fellows
- Teaching staff exchange fellows
- Criteria for the awards
 - Letter of invitation and work programme
 - Promise from host institution to offer certain facilities

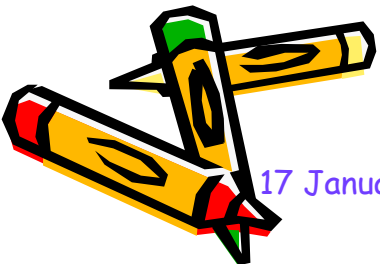




Staff Exchange/ Visiting Professors 2

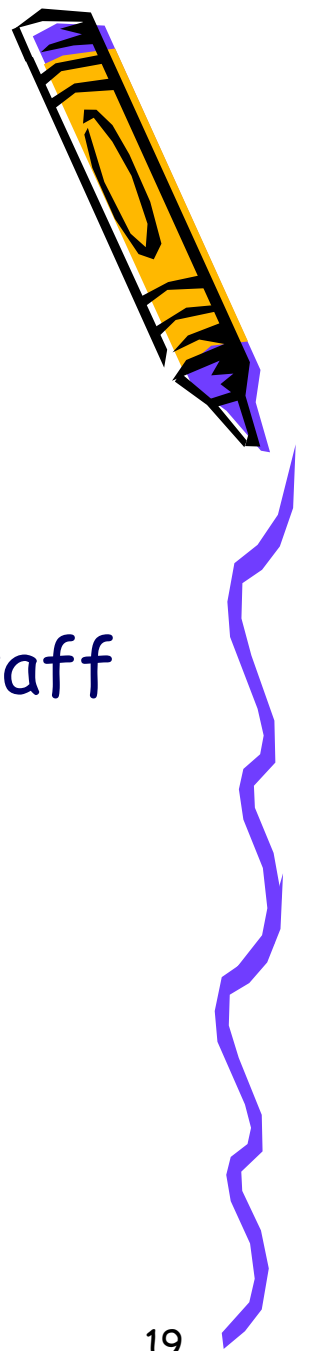


- Host institution's Responsibility
 - For Research Staff exchange: Host institution office space, free use of laboratory and other research facilities
 - For Teaching Staff exchange: Host institution must offer accommodation and/or allowances

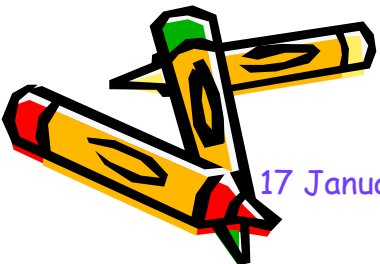




Staff Exchange/ Visiting Professors 3

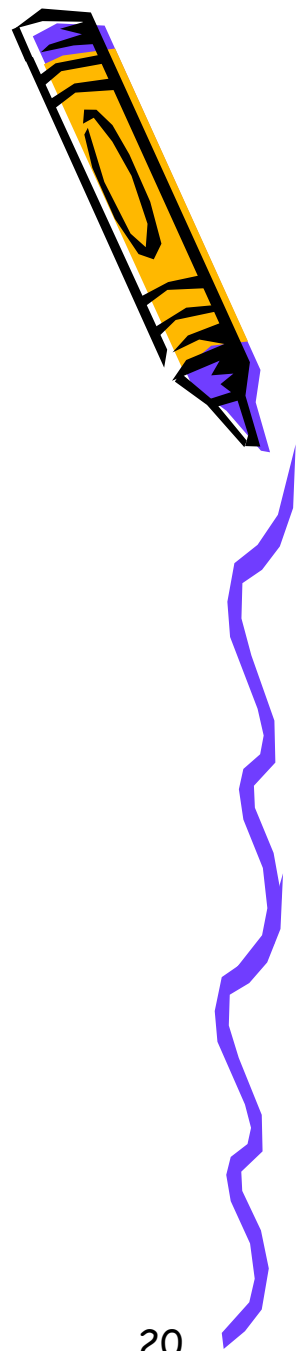


- Benefits of the award
 - Return air ticket
 - Honorarium for those on teaching staff exchange fellowships.
 - Stipend for those on research staff exchange fellowships

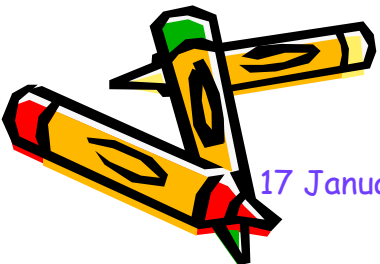




Staff Exchange/ Visiting Professors 4

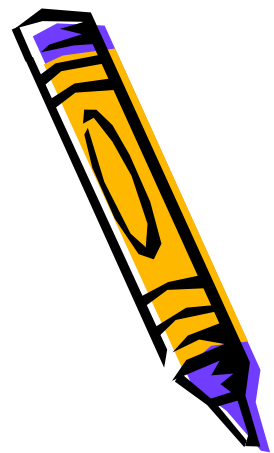


- Other features
 - Duration: 3-12 months
 - Tenable only in Africa
 - Candidate or host institution is responsible for any insurance

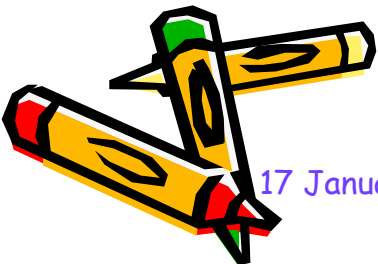




Staff Exchange/ Visiting Professors 5



- Lessons learnt
 - Fulfilling the Host's responsibility sometimes poses constraints for them.
 - Funding is expected by the host institution
 - Initial difficulty in financial transaction when the visitor arrives

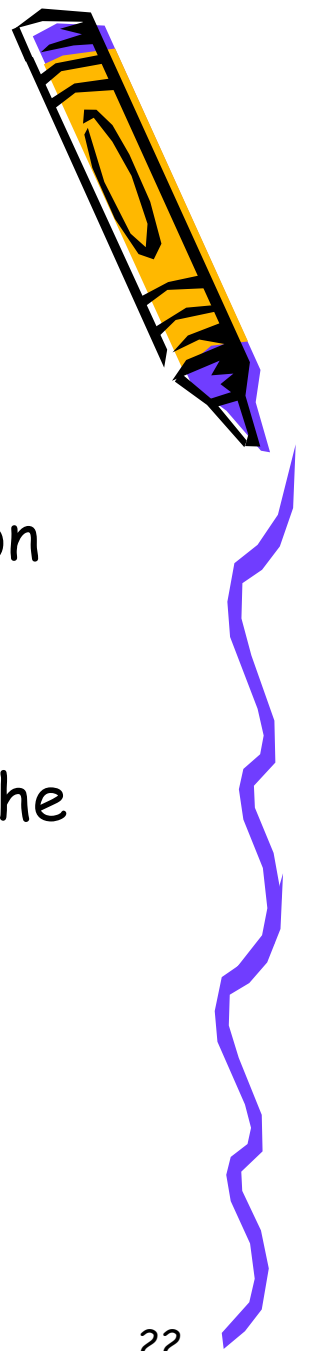


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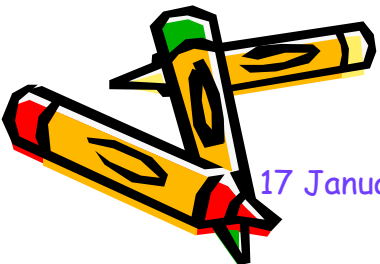
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Staff Exchange/ Visiting Professors 6

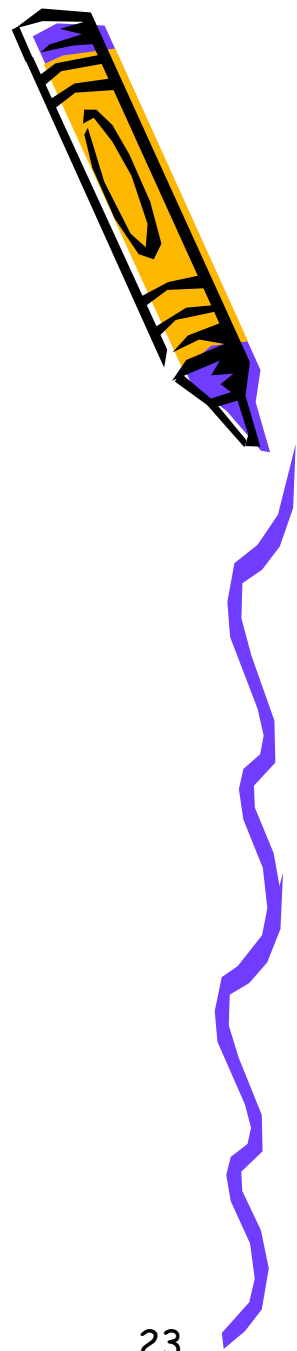


- Advantages of the programme
 - Teaching programmes at the host institution enhanced
 - Enhancement of the research capacity of the individuals (visiting and host Professor)
 - Promotes research collaboration





The END
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Thank You



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