The African Renaissance Institute of Science & Technology (ARIST)

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Outline of Presentation

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Introduction

- ARIST ➔ A partnership of science & engineering leaders from the Diasporas and from African institutions united in a desire to work together for capacity building in Africa.

- ARIST is now a registered non-profit educational organization with a secretariat in Princeton, New Jersey, USA.

- The inaugural meeting of ARIST took place at Princeton University in December 2008.

- ARIST is coordinated by an African Renaissance Committee (ARC) that includes scientists from some of the leading institutions in Africa and around the world.
ARIST Mission

- To help Africa train Africans to solve African problems in Africa ➔ Knowledge for wealth creation in Africa.

  - Assist in the economic transformation of Africa through targeted entrepreneurship-based advanced S&T education and research.

  - Help train a critical mass of Africans with the capacity to solve problems and add value to Africa’s natural resources ➔ Capacity Building.

  - Help refocus emphasis on quality S & T education/research in support of economic & technological developments in Africa for poverty alleviation.
The ARIST Approach

- **Mobilize scientists and engineers** in Africa and in the Diasporas in support of ARIST mission.

- Employ a model involving the development of a **Network of Centers of Excellence** throughout Africa.

- The Centers are based in **existing African Institutions** that agree to partner with ARIST & serve as nodes of excellence ➔ MOUs
The centers focus on interdisciplinary S&T education & research areas that address regional needs ➔ global opportunities.

ARIST is interested in partnering with existing institutions, organizations, and capacity building networks in Africa ➔ RISE Network, AMMSI, AAS.

Solicit for funding from agencies around the world to support ARIST mission.
Recent Developments

- Signed MOU and helped in developing MS & PhD curricula → the International Institute for Water & Environmental Engineering (2iE) in Burkina Faso.

- Mobilized academics to teach two ARIST graduate courses at 2iE:
  - A course on Advanced Water & Wastewater Treatment.
  - A course on Environmental Aspects of Mining, Mineral Processing & Extractive Metallurgy.
Signed additional MOUs with the following institutional partners:

- Science Initiative Group (SIG) – RISE Network ➔ SSAWRN, AMSEN, WIO-RISE, AFNNET, & SABINA.
- University of Connecticut, USA
- National Agency for Science and Engineering Infrastructure (NASENI), Abuja, Nigeria
- African Institute of Science & Technology (AIST) – Arusha, Tanzania.***
Current ARIST Special Cases

■ **AIST – Arusha, Tanzania** — Prof. Burton Mwamila (VC) and leadership team.
  ■ Assist in development of new degree programs & curricula.
  ■ Assist in recruiting faculty ➔ International.
  ■ Plan for faculty & student exchange programs.
  ■ Help identify international funding sources and write joint grant proposals.

■ **University of Liberia** — Prof. Emmet Denis (VC)
  ■ Help reactivate their engineering programs.
  ■ Assist in development of degree programs and curricula
  ■ Collaborate to raise funds globally
  ■ Help develop faculty exchange programs with Diaspora scientists
Currently negotiating MOUs with:

- Kwame-Nkrumah University of Science & Technology, Ghana.
- University of Benin, Nigeria.
- Alexandria University, Egypt.
- Obafemi Awolowo University, Nigeria
- MINTEK, Inc., South Africa
Recent Developments (Contd.)

Additional Institutional Partners:
- Princeton University, USA
- Institute for Advanced Study, USA
- Tuskegee University, USA
- Penn State University, USA
- Massachusetts Inst. of Tech., USA
- Stanford University, USA
- University of California - San Francisco, USA
- University of Chicago, USA
- University of New South Wales, Australia
- ISMANS, France
- University of Nance, France
- University of Mines & Technology, Ghana
- University of Zimbabwe, Zimbabwe
- Addis Ababa University, Ethiopia
- University of Ibadan, Nigeria
- Federal University of Technology – Akure, Nigeria
- University of Dar es Salaam, Tanzania
- University of Nairobi, Kenya
- Makerere University, Uganda
- Rhodes University, South Africa
- University of the Witwatersrand, South Africa
- Mintek, South Africa
Current ARIST Leadership

- **African Renaissance Committee ➔** The governing body of ARIST (15 members).

- **Executive Committee ➔** day-to-day Administration:
  - Prof. Wole Soboyejo – Chair
  - Prof. Nosa O. Egiebor – Vice Chair
  - Ms. Arlen Hastings – Secretary
  - Profs. Haile Debas & Paul Ginies - co-Directors, Fund Raising Committee.
  - Prof. Francois Tsobnang and Dr. Kunle Soyemi – co-Directors, Europe
  - Prof. Soji Adesina – Director, Australasia
  - Prof. Amadou Hama-Maiga – Director, Africa
Conclusion

- The next African Renaissance Committee meeting is scheduled for December 2009.

- ARIST extends invitation to interested individuals, organizations, & institutions to explore partnership & collaboration possibilities.