

La Société Africaine des Membranes

Une idée qui fait son chemin!
A concept in progress

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‘Eau, Santé & Environnement’ - Bamako, MALI - 29th-31st of July 2010

OUTLINE

Moti-vations



Ablo / Courfia

Vision & Mission

Professional “Membrane” societies in Africa/MENA

Professional “Membrane” societies elsewhere in the world

Objectives & activities (2010-2015)

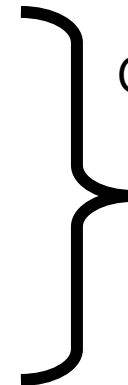
SAM’s strategic functions and operations

Bylaws (draft version) : SAM’s organization /function /memberships etc.

What’s next? / Comments from the audience



Ablo



Courfia

MOTIVATIONS

HISTORICAL PERSPECTIVE

2007: Rencontre Eau et Santé (UCAD, Dakar), by Courfia Diawara

Need to create the 'Réseau Ouest Africain des Membranes'

2008 (MSAS in Bamako) and 2009:

C. Diawara, A Tolofoudye (FAST), A Coulibaly (ENI) & others focused on the bylaws

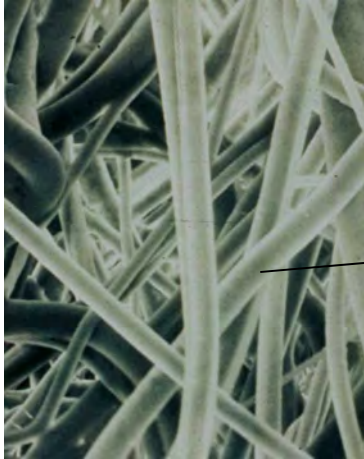


2010 : Courfia & Ablo discussed & met in Dakar (June)

- Need to create a Panafrikan organization: 'SAM'
- SAM's effort must be ACTION-oriented
- Share this idea (SAM) in a face-to-face event (Water workshop 2010, in Bamako)

MOTIVATIONS (technological imperatives)

IN MANY INDUSTRIALIZED COUNTRIES **BLOOD TRANSFUSION SAFETY** IS ACHIEVED BY A MEMBRANE-BASED FILTRATION PROCESS



PBT fibrous membrane
For transfusion safety

PBT membrane
encapsulated in a
blood filter device



MOTIVATIONS (technological imperatives)

RO MEMBRANES USED FOR SEWATER DESALINATION



High flow. This reverse-osmosis plant in Ashkelon, Israel, will eventually turn out 100 million cubic meters of fresh water a year.

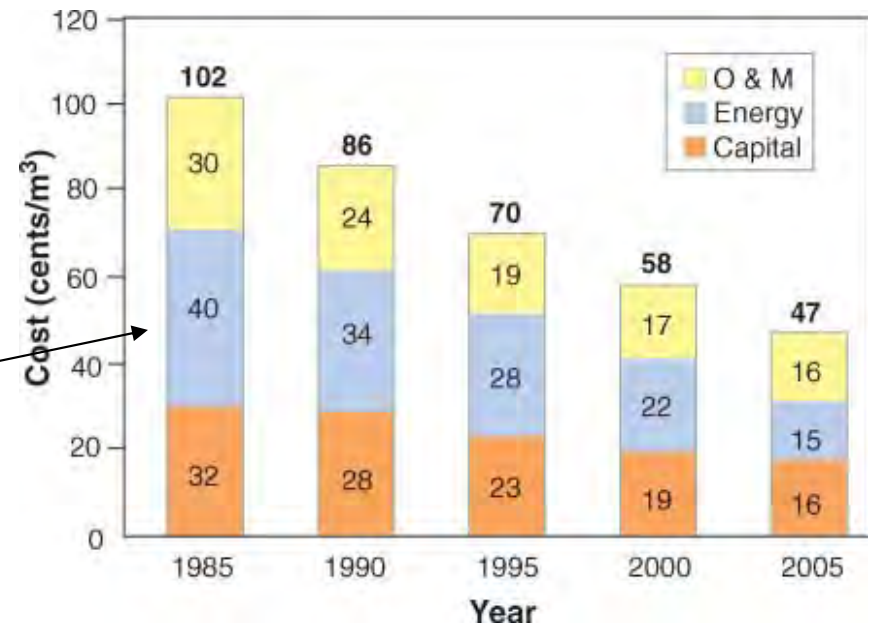
RO plant in Ashkelon is expected to produce **100 million m³ fresh water/yr**

Energy consumption:
1.6 kWh/m³ fresh water

Cost: \$0.6 / m³ clean water

25 Aug 2006 – vol 313, SCIENCE

Significant improvement
in energy recovery technology
Over the past 30 years



Trends in cost breakdown: RO seawater desalination

VISION AND MISSION

'La Société Africaine des Membranes et des Procédés de Traitement des Fluides', will be known as '**SAM**'

VISION: A PANAFRICAN project

*Proactively support the emergence of a critical work-force of experts in the field of Membrane Science & Technologies (MST), everywhere in Africa

* Any sustainable Process Fluid Treatment platform is of interest.



MISSION: a sustainable exchange platform (MST) for many applications/markets

- Set-up technical trainings/meetings on MST, and an international venue in Africa
- Foster teaching/research partnerships (MST) among African countries & elsewhere
- Establish rational use of MST in key development sectors (energy, water/food, health, etc.)
- Inform the policy makers, governments, and private sector about MST potentials
- Support {academe-industry collaboration + emergence of a dynamic private sector}

PROFESSIONAL SOCIETIES IN AFRICA/MENA

Area: process fluid treatment & membranes

- Societe Africaine de l'eau: <http://www.irc.nl/page/6587> (Cote d'Ivoire – water/wastewater)
- Water institute of South Africa www.wisa.org.za/Home/Home.htm (Water/Wastewater)
Wisa membrane division: www.wisa.org.za/Divisions/membrane/mtd_index.htm
- King Abdulaziz City for Science & Technology (Saudi Arabia)
<http://www.kacst.edu.sa/en/Pages/default.aspx>
- King Abdullah University of Science & Technology: <http://www.kaust.edu.sa/index.html>
Advanced Membranes & Porous Materials (gas sep., petrochemicals, water) @
<http://www.kacst.edu.sa/en/Pages/default.aspx>
- Middle East Desalination Research Center, MEDRC (Oman, water/desalination)
<http://www.medrc.org/> (science & technology trainings in the MENA region)

PROFESSIONAL MEMBRANE SOCIETIES ELSEWHERE IN THE WORLD

North American Membrane Society: <http://www.che.utexas.edu/nams/NAMSHP.html>

Headquartered Texas, USA

European Membrane Society: <http://81.255.167.59/~iodeco/ems/site/home/index.php>

European Membrane House: <http://www.euromemhouse.com/>

(industrial implementation of MST – members: EMS, GKSS, IEM, EMI, etc)

Australia-Asia Membrane Society (MSA): <http://www.membrane-australasia.org/>

(Australia is heavily represented in the Board/Committee)

UNESCO-SIMEV : <http://chaireunescosimev.euromemhouse.com/>

(Montpellier/FRANCE – Membrane science & Environment)

Conferences/Events:

ICIM (inorganic membranes) / ICOM (organic polymers) / Gordon Membrane conference (general - US)

OBJECTIVES & ACTIVITIES (2010/2015)

- ⇒ Set-up a bi-annual international venue on MST in Africa
- ⇒ Create a 'SAM' list-serv & design a logo
- ⇒ Design a website: see template by **Jim Barry** (Caltech faculty, California)
<http://www.sam-ptf.com/presentation.html>
- ⇒ Establish dynamic/reliable working groups 'Executive committees' :
- ⇒ Document ongoing MST projects/initiatives in Africa
- ⇒ Liaise with key international partners (MST):
{NAMS, EMS, ICOM, ASMT, UNESCO-SIMEV, KAUST, WISA, MEDRC etc.}
- ⇒ Establish a formal working platform for SAM (not the highest priority)

SAM's STRATEGIC FUNCTIONS & OPERATIONS

Board of Directors



⇒ Support EC to implement SAM's vision, mission, objectives etc

⇒ Seek balance/cohesion within SAM

⇒ Identify strategic partners



Executive Committees (EC)

Communication

Fundraising & Networking

Science & technology

Biannual SAM meeting



+ **1 President, 1 treasurer, 1 General Secretary**



BYLAWS (DRAFT VERSION)

SEE ADDENDUM FROM COURFIA

NEXT STEPS

Don't wait for the bylaws to be ready to get things started!



Suggestions :

1. To those who support the concept: Let's move forward!



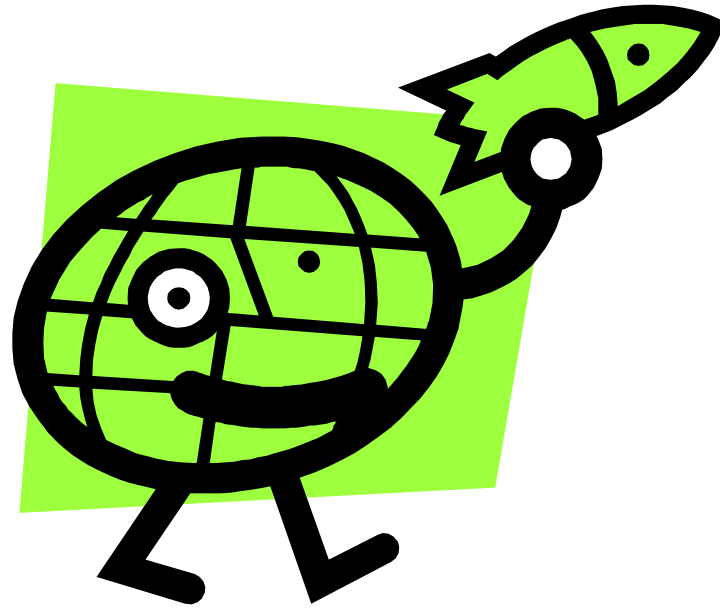
2. One group focuses on immediate assignments
(web, list-serv, planning for 1st SAM international event, **LOGO**)



3. Another group focuses on the bylaws & administrative tasks



Thank You!



Ready for the SAM exploration ?