



**SIMON BOLIVAR UNIVERSITY**  
HIGH VOLTAGE LABORATORY  
CARACAS – VENEZUELA

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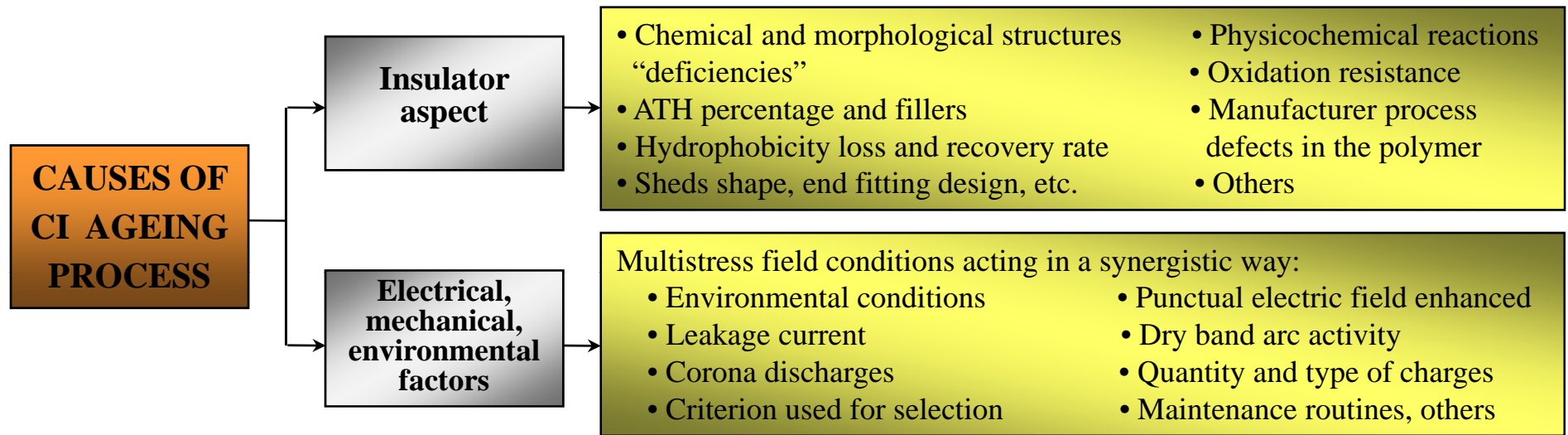
# **COMPOSITE INSULATION AGEING:**

**MAIN FOCUSED PHENOMENA AND ANALYSIS' LIMITATIONS.  
ONE LOOK TO THE FUTURE...**

*Elizabeth Da Silva D*  
*July 2007*

# COMPOSITE INSULATION AGEING:

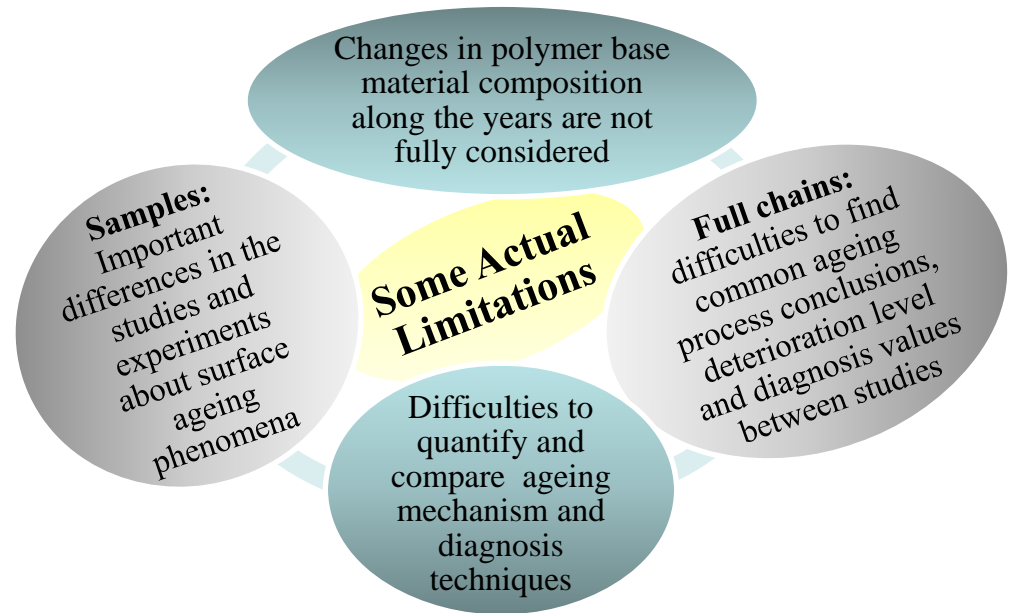
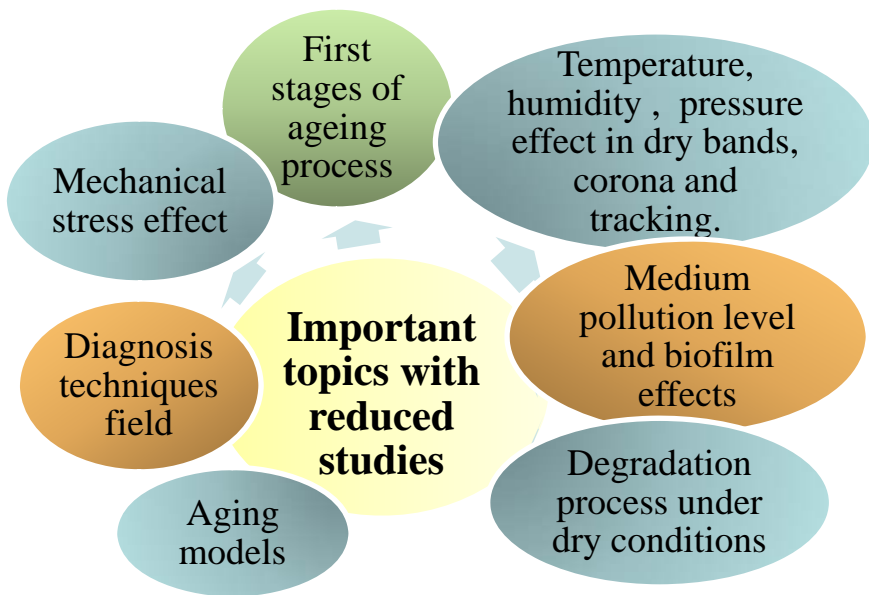
MAIN FOCUSED TOPICS, ANALYSIS' LIMITATIONS. ONE LOOK TO THE FUTURE...



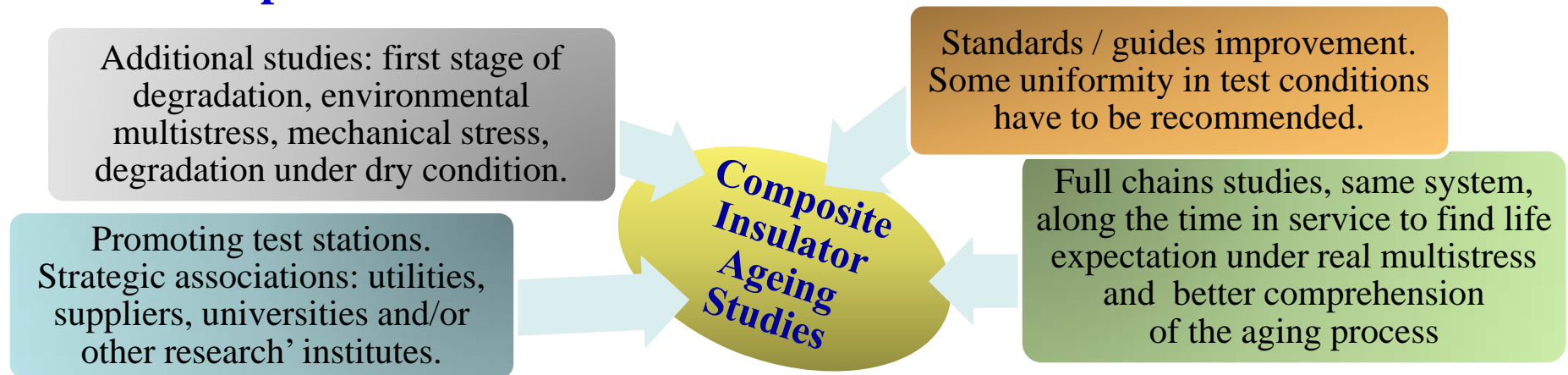
## ACTUAL STATUS OF GOOD INVESTIGATIONS

### Main Focused Phenomena:

- Surface of polymer samples aging (not full chains).
- Tracking and dry bands on insulation surfaces.
- Loss and recovery of hydrophobicity phenomena.
- ATH relevance and different fillers effects.
- Ageing in laboratory vs. degradation in service.
- Development of laboratory' diagnosis techniques.
- Analysis of leakage current behaviour and effects.
- Fog chamber as main standard test.
- Good evaluations using physicochemical tests.
- Old and known diagnoses techniques are used including new computational, digital and new developed measurement equipments.



## What is it important to do?



*Is it possible to establish a formal and strong research community using the potentiality of each group?  
 Can it offer faster developments, less expensive projects and the conjunction of the best ideas?  
 Genetic law: Not only the mix of the best and strongest ones can give the best results... Important information are in the weak ones too...*