

X MAGAZINE

ARS 10



STRUCTURING RESEARCH FOR GREATER IMPACT

/ New Research Focus: Polymer Synthesis from Milk (Galalith)

/ A new ARS
format

/ Future
directions

/ Galalith
Project

/ Balancing theory
&
experimentation

Structuring Research for Greater Impact



Arène Hall at Sorbonne University

The 10th edition of ARS opened with a recap of the All-Hands session, where key organizational adjustments were discussed. One of the main concerns raised was the difficulty of attending Saturday sessions. To address this, it was decided to switch to two 2-hour ARS sessions per month, with the format yet to be finalized (weekday or Saturday). Following this, an open discussion was held to explore members' expectations regarding research within the association:

- **Too theoretical, lacking experimentation**

/While theory is essential for framing practical work, limited funding and insurance policies restrict access to laboratory experiments.

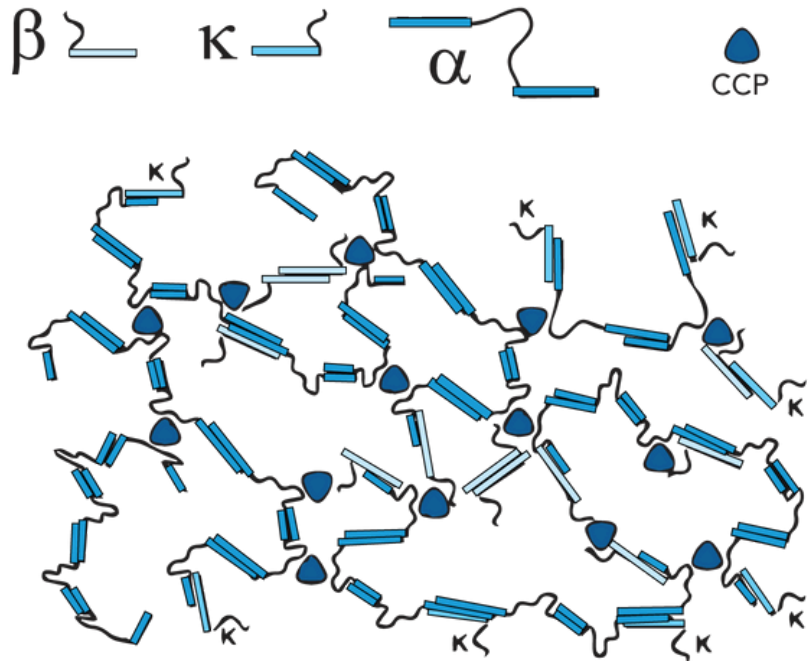
- **Need for concrete, structured projects**

/Some members believe that research would be more effective with a clearer direction and well-defined objectives.

- **Personal growth** /ARS provides an opportunity to deepen knowledge from coursework, improve research skills, and gain exposure to the world of scientific inquiry.
- **Project management and organization** /A clearer project management structure is needed. A proposal was made for a more experienced student to take on a managerial role in the future.
- **Idea of a scientific review** /A structured scientific review could provide a methodological framework for research projects.

NEW RESEARCH FOCUS: POLYMER SYNTHESIS FROM MILK (GALALITH)

the nanocluster model of
casein micelles



To balance fundamental and experimental research, a new team-based approach was adopted. The chosen research topic is the synthesis of a polymer from milk (Galalith). The goal is to optimize the polymerization reaction by adjusting different parameters:

-  Reaction conditions: Temperature, pressure, agitation.
-  Acid selection: Malic acid, vinegar, citric acid, ascorbic acid, purification.
-  Milk selection and purification.
-  Polymer drying process.

Several working groups have been formed, each focusing on specific aspects of the polymerization process.

A More Structured and Practical ARS



The ARS 10 session allowed us to refine our research structure and establish a clearer direction for future projects. This new format, which integrates both theory and experimentation, aligns better with members' expectations and fosters a more dynamic research environment.