

CHEMICAL COMMUNICATION AND CHEMICAL ASSEMBLY TIMELINE

Anita Jocelyne Marsaioli (Instituto de Química – UNICAMP)

The molecules are too small to be detected using normal microscopes however their physical properties allows predicting their behavior and reactivity when interacting with each other or a surface or a living organism. Scientists have been using these interactions to explain animal behavior while marking a territory by leaving pheromones, or chemical marks behind. Some animals leave scent posts to mark their territory. Snakes use their forked tongues to "taste" or collect pheromones of prey animals that are in the air. Notwithstanding these evidences scientist have recently been astonished by the evidences that molecular recognition chain is a phenomenon that was born at the dawn of times when the first cells were born and discovered that by assembling they could build membranes and create a barrier to protect them from their environment. This talk will include examples of chemical communications in Eukaryote and Prokaryote and in chemistry.

Biograph: Graduated in Chemical Engineering from the Federal University of Paraná (1969) and Master of Science (1974) and PhD from University of Campinas (1978). Post doc at the ICSN at Gif sur Yvette in France 1978 under Prof Gabor Lukacs supervision, visiting Professor in Germany at the University of Hamburg under Prof de Meijere supervision. Present professor at the Chemistry Institute from University of Campinas and I A researcher from CNPq. Was Director of the Pluridisciplinary Center CPQBA/UNICAMP for 3 years. At the moment is consultant of CNPq, FAPESP, FINEP, CONICYT etc.

She directed 72 masters and doctors and supervised 12 postdoctoral fellows. She has given dozens of conferences as a guest abroad and in Brazil. Published more than

166 articles and has IH 28. She was vice-director and director of CPQBA-UNICAMP. Participated in several committees within IQ / UNICAMP. Coordinated large projects that were beneficial to the Chemistry Institute and coordinated the first biotechnological laboratory of the chemistry Institute /UNICAMP