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**Steroids**

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**Development of new synthetic routes leading to 14  $\beta$ -hydroxypregnane derivatives**

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The 14 $\beta$ -hydroxy pregnane skeleton represents a very important scaffold found in numerous bioactive steroids like cardenolides (cardiotonic properties), bufadienolides (anticancer properties) and in compounds isolated from the genera *Caralluma* and *Hoodia* (anti appetant properties) belonging to the family of *Apocynaceae*. To afford the tetracyclic core in present in 14 $\beta$ -hydroxy pregnanes, synthetic routes calling for halo Michael aldol reactions, *n*-Bu<sub>3</sub>P organocatalyzed reactions and Diels-Alder reactions will be presented. On the other hand, the total synthesis of Hoodigogenin A, the aglycone of numerous 14 $\beta$ -hydroxy pregnane glycosides extracted from *Hoodia gordonii* will be presented, the key step of the reaction being a Norrish-Prins reaction.

**Biography**

Michel Miesch has completed his PhD from Université Louis Pasteur-Strasbourg (France) and Postdoctoral studies from University of California at Los Angeles in the laboratory of Prof. D. J. Cram. He is group leader at the University of Strasbourg/CNRS (France). He is involved into the development of new synthetic methodologies, (neuro) steroid chemistry and plant hormone chemistry. He has published more than 95 papers in reputed journals and he is serving as Regional Editor for Current Organic Synthesis and Mini-Reviews in Organic Chemistry (Bentham).

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