

ABSTRACT

The world is going green and chemists are being asked to 'shift' their thinking to Green Chemistry for sustainable development - design processes that '--- meet the needs of the present without compromising the ability of the future generations to meet their own needs'. To give guidelines on sustainability, the 12 principles have been enunciated by Paul Anastas and John Warner; the seventh principle says - "a raw material should be renewable rather than depleting whenever technically and economically practicable". Certain natural products provided in large amounts by higher plants and fungi secondary metabolism should be highlighted as raw materials for synthesis (structural modification) of fine chemicals such as drugs and other biologically active products to propagate green. Many plant species scattered amongst different plant families produce in large amounts what may be referred to as surface exudates - non polymeric organic molecules that seem to have protective function to the plants. These exudates in the aerial parts have functionality that make them attractive to be considered as green synthons. Examples of surface exudates plants studied (*Polygonum senegalense*, *Psiadia punctulata*, *Dodonaea angustifolia*, *Senecio roseiflorus*) for quantities of exudates and structural diversity will be given in this lecture; structural derivatisation of the natural compounds for activity optimization, in certain cases, under green conditions will be alluded to. Other examples of plants with high yielding potential sources of starter compounds will also be mentioned.