Editor's note

During the very successful international conference GEOMETRY, CONTINUA AND MICROSTRUCTURE GCM'6, held in Belgrade in September 2002, there was an argument about shortcomings and advantages of the exterior differential calculus with respect to traditional commonly used tensor calculus. Dr. David A. Burton claimed that it is simpler than traditional calculus. Indeed, it may be a truth but for specialists only. In order to confirm his standpoint he made a considerable effort to write the enclosed primer.

On the other hand this highly sophisticated mathematical tool has been appearing recently in some papers devoted to crystal defects in plasticity, fluid mechanics, microstructure in continua, general relativity etc.

Therefore, this issue is planned to be an efficient tool for all, primarily younger, researchers who want to follow papers written by using this method and, eventually, to develop later their own papers by making use of the exterior differential calculus.