A: Materials Science

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Materials Science (MS) is an interdisciplinary field that involves the knowledge of materials properties and its use in various fields of science and engineering. In the World, MS is evolving constantly, constituting today a field of intense scientific, technologic and innovation activity that involves researchers with different ground back like; engineers, physicists, chemists, mathematicians, biologists, physicians. This development has basically two intrinsically associated factors. The first is the development in the last century of techniques that permit the manipulation of the matter in the atomic scale. The second was the concomitant development of characterization techniques in the nanoscale as well as realistic computational modeling also in this scale. As a consequence, nowadays it is common that particular characteristics or functionalities are chosen and afterwards the material is synthesized.

It is hard to define when the field started, however as a significant mark the creation of the Materials Research Society (MRS) may be used. Until mid sixties interdisciplinary projects in the funding agencies had difficulties in being accessed, since there was no mechanism or structure for proper evaluation. In the seventies several research groups realized this difficulty and funded MRS in 1973. It has today approximately 14.000 members. In Brazil our equivalent society, *Sociedade Brasileira de Pesquisa em Materiais* (SBPMat) was created in 2001. The first graduate course on Materials Engineering in Brazil started in 1970 at UFSCar. Today there are 21 ME courses all over the country. In 2006, at least 120 groups in 80 different Institutions were actively doing research in Materials Science/Engineering.

In the end of 2007 the Evaluation Directory (Diretoria de Avaliação) and the High Council (Conselho Superior) decide to create a new evaluation area called Materials (Materiais). In 2008 14 Graduate colleges from different Brazilian Universities decide to move to this new area of evaluation. In our contribution we will discuss and other issues concerning Materials Science.

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1. <http://www.unesp.br/aci/debate/materiais.php>

2. http://www.capes.gov.br/images/stories/download/avaliacao/MATER15out09.pdf