



## Experiences gained by establishing the IAMG Student Chapter Freiberg

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The International Association for Mathematical Geosciences (IAMG) Student Chapter Freiberg was founded in 2007 at the Technische Universität Bergakademie Freiberg (TUBAF) in Germany by national and international graduate and undergraduate students of various geoscientific as well as natural science disciplines. The major aim of the IAMG is to promote international cooperation in the application and use of Mathematics in Geosciences research and technology. The IAMG encourages all types of students and young scientists to found and maintain student chapters, which can even receive limited financial support by the IAMG. Following this encouragement, generations of students at TUBAF have build up and established a prosperous range of activities. These might be an example and an invitation for other young scientists and institutions worldwide to run similar activities. We, some of the current and former students behind the student chapter, have organised talks, membership drives, student seminars, guest lectures, several short courses and even international workshops. Some notable short courses were held by invited IAMG distinguished lecturers. The topics included “Statistical analysis in the Earth Sciences using R – a language and environment for statistical computing and graphics”, “Geomathematical Natural Resource Modeling” and “Introduction to Geostatistics for Environmental Applications and Natural Resources Evaluation: Basic Concepts and Examples”. Furthermore, we conducted short courses by ourselves. Here, the topics included basic introductions into MATLAB, object oriented programming concepts for geoscientists using MATLAB and an introduction to the Keyhole Markup Language (KML). Most of those short courses lasted several days and provided an excellent and unprecedented teaching experience for us. We were given credit by attending students for filling gaps in our university’s curriculum by providing in-depth and hands-on tutorials on topics, which were merely mentioned in regular lectures. To date, the major highlights of our activity are two international workshops: MatGeoS 2008 & 2009. During our second workshop, over thirty scientists representing government agencies, academia and non-profit research organizations worldwide participated. A number of interdisciplinary topics were intensively discussed. After the workshop, the decision was made to create a book based on the presented scientific work, which should be edited by the us, the students of the student chapter. Eventually, we called for papers, organized a full-scale peer-review and edited the book. It is scheduled to be published in the first quarter of 2013 and is entitled “Mathematical Geosciences: Theory, Methods and Applications”. The whole organizing process proved to be another excellent lesson to us, as it interfered with our overwhelming studying and research activities. It was necessary to learn how to organize and handle the mandatory communication and editing, while pursuing our regular duties. We consider the activities of the IAMG Student Chapter Freiberg as an example of what a group of enthusiastic and dedicated young professionals can achieve. Therefore, we encourage every similar group of students or “scientists in training” to just try to do something beyond the requirements and learn, while doing it. We proved that this is possible.