



IAMG Newsletter

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Official Newsletter of the International Association for Mathematical Geology

Contents

President's Forum	3
IAMG Journal Report	4
Delays in Mathematical Geology.....	4
Association Business	5
IAMG Awards for 2006	5
New Redesigned IAMG Website.....	5
Draft of IAMG Strategic Plan: 2007-2010.....	6-7
PERC - Pan-European Reserves & Resources Rept. Committee	8
Joint French-German PhD for Tobias Frank.....	8
2005 IAMG Distinguished Lecture Tour.....	9
Distinguished Lecturer 2006: Larry Lake.....	9
Member News.....	9
Student Affairs	10
Journal Contents.....	11-12
Membership Renewal Form.....	13
Upcoming Meetings.....	14
IGC2008 in Oslo, Norway	14
IAMG'06 in Liège	15
IAMG2007 Conference in Beijing.....	15
Announcements.....	16

Call for Award Nominations 2007

The Association invites all members to submit nominations for the
Felix Chayes Prize and
Andrei Borisovich Vistelius Award

Deadline: January 31st 2007

For details about prerequisites for nominations see the IAMG web site:
<http://www.iamg.org/> and choose "Awards / by Awards Committee."

There is also a list of past recipients and their laudatos on the web site.
Please have a look at it before sending your proposal!

The (informal) documents which should accompany each proposal are:

- a short statement summarizing the relevant qualifications of the nominee
- a curriculum vitae of the nominee

The proponent may also get additional information or support for his proposal from other members of IAMG and from successful examples published on our website.

Please submit documentation (preferable in electronic format) to:

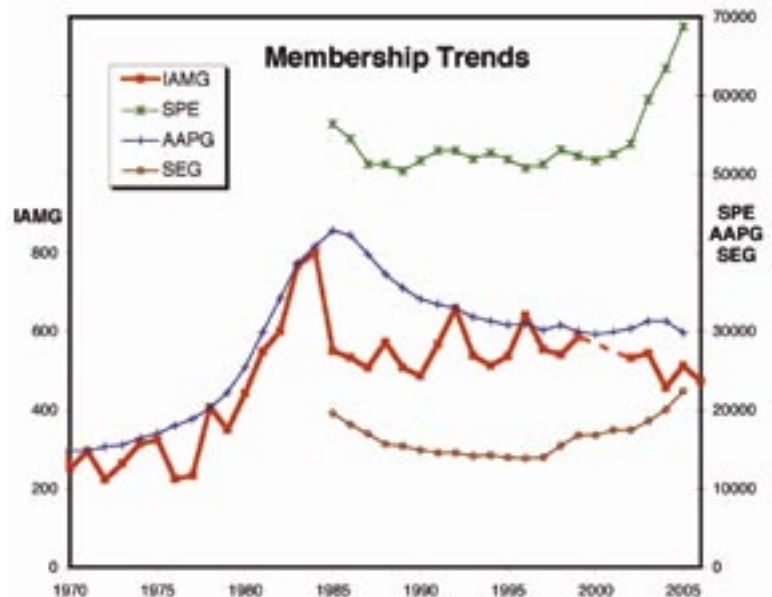
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In its April Explorer issue the American Association of Petroleum Geologists (AAPG) was bemoaning the fact that their membership numbers are flat or declining despite "a high degree of satisfaction with the Association and its product". With a bit of envy it is pointed out that the "sister societies", the Society of Exploration Geophysicists (SEG) and the Society of Petroleum Engineers (SPE) show moderately to strongly increasing trends over the last few years.

How do we at IAMG compare with these trends? The chart below shows that we are more like AAPG than SEG or SPE. The overall trend is decreasing or flat but with a lot more ups and downs, and, of course, on a different scale (left y-axis).

From the Editor
From the Editor
From the Editor

Recent membership increases at SEG and SPE come from new international members and appear to be the result of adjusting dues to ability to pay as well as making it easier to join. They have recently established a graduated dues structure based on World Bank classifications. AAPG blames some of its problems on it being "more



exclusive as to who can be a member, and thus more difficult to join".

President Agterberg has addressed IAMG's membership trend on page 3. A large part of the fluctuation is the result of non-renewals due to retirements, non-interest after Annual Meeting registration, and just plain forgetfulness. The latter is being addressed by reminders and "exit interviews". Compared to the big associations we shouldn't have any problems with dues being too high since we instituted the \$10 membership. Increased recruitment in non-American countries could help reverse the trend as it did for SEG and SPE, but our best strategy should be the emphasis on student members and student chapters that is just starting to take off; they represent the future of IAMG.

Harald S. Poelchau

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PRESIDENT'S FORUM

In general, the IAMG Board meets once a year during our annual conference. This includes a quadrennial meeting during an International Geological Congress when there is a change of Council. Because IAMG members have multiple choices during elections, which are held shortly before IGCs, candidates generally do not know in advance whether or not they will be elected. Planning to go to the next IGC needs significant lead time, and it may be too late for newly elected board members to travel to an IGC if they were not planning to attend it in the first place.

This is a reason why relatively few newly elected board members may be in attendance at IGCs. Initially new members may not know each other very well because candidates run individually for election. Consequently, some time is needed before a new board becomes fully functional as a single entity. The present board was elected two years ago but it took a year before all officers and most Council members had met each other in person.

During our second year in office we began functioning as a team with the officers and councilors complementing each other. At IAMG 2005 in Toronto it was decided to review the ways in which the IAMG operates. Recently, you should have received the draft of our Strategic Plan for 2007-2010 (see pp. 6-7). Your comments on it will be appreciated. Adoption of this plan is to be decided at the General Assembly during IAMG'06 in Liège.

A special meeting of your Executive at the end of February 2006 in Lawrence, Kansas, was a first of its kind in that it was held outside the framework of our annual conferences. New initiatives spearheaded by officers with approval of Council, which are now well underway and nearing completion, include (1) use of a new process for defining our long-term and short-term objectives, (2) re-development of our website, which is the IAMG's face to the world, and (3) a prognostic budget and first formal audit of the IAMG's books. The results of these projects are bound to improve the ways in which the IAMG operates. One project that remains to be done during our tenure is revision of IAMG guidelines. New procedures as well as Executive and Council decisions taken during the past six years should be precisely reflected in the guidelines.

Maintaining and expanding our membership continues to be a major concern. In the past, our total number of members has fluctuated between about 700 and 500. To give you some idea: in August 2002 we had 532 members. This total included 60 new members who had joined during 2002 but as many as 203 people who were members in 2000 and/or 2001 had not renewed their membership at that time. More recent years show similar statistics: numbers of members who let their membership lapse by not renewing during the following year were 112 (in 2003), 173 (2004), and 92 (2005). At the end of January 2006, as

many as 212 members had not yet re-applied for 2006 membership. This was before 2006 reminders were sent out.

Currently (31 May 2006), the membership stands at 484 with non-renewals for 93 people who had paid for membership in 2005. The options of 4-year and life-time membership available since 2004 were adopted by about 40% of ordinary members. Currently there are 87 four-year members and 76 life members. In order to get a better idea of why so many members did not renew, a membership exit interview was conducted with the help of the IAMG Office in February 2006.

In total, 319 former IAMG members who had last paid their dues during the 3-year period 2002-2004 were asked to participate. Only 36 people responded. Comments from this small subgroup (11% response rate) were positive. Twenty-five members had not yet renewed despite several reminders; only 9 former members in the subgroup had really left us and documented the reason why they had not renewed.

Some trends seem to be as follows: a number of non-member scientists joined IAMG by paying the reduced registration fee at an annual conference and stayed members for one year only. Also, during the past six years relatively many senior members have retired. On the other hand, we are now attracting increasingly large numbers of student members.

Our main source of income remains royalties received from the publishers of our three scientific journals. A second source of income is return from our investments which can be regarded as an endowment. Especially during the past 10 years our investments were increased significantly because of annual surpluses. The endowment is now increasingly being used as a source for funding educational activities.

Recently, the IAMG Council has voted to increase total research grants for students from US\$5,000 to US\$12,000 per year. Additionally, every student chapter is to receive an annual grant of US\$2,000 and there will be travel grants for student members participating in future IAMG and IAMG-sponsored meetings. This year new student chapters are being formed in Budapest, Edmonton, Porto Alegre, and Stanford. Plans exist for the creation of new student chapters in Chile, France and Vietnam.

Other measures to maintain and increase membership include the following: we are planning to facilitate the membership renewal process by making it web-based. Membership benefits will be increased so more scientists can be made to feel at home within the IAMG. New sections can be formed for subgroups of members with similar interests who wish to operate more or less independently. This may include a section of young quantitative geoscientists. We expect to attract more new members by expanding our range of activities.

Frits Agterberg



IAMG Journal Report



On June 1st, Friso Veenstra, the new Elsevier Manager in charge of a number of scientific journals including Computers & Geosciences was in Ottawa for discussions with Graeme and Eric. Other organizational changes are in progress, not only for C&G but for Mathematical Geology and Natural Resources Research, too. In future, Associate Editors of our journals will receive increased responsibilities including selection of reviewers in the fields of which they will be in charge.

Also, I am happy to announce that we have reached an agreement with Springer Science+Business Media, Inc. (as successor to Plenum Publishing Corp., New York) regarding continuation of the publication of Natural Resources Research. The new contract first was read and approved by our Publications Committee chaired by **Mike Hohn**. Initially, the contract will be in effect for a period of one year; subsequently the agreement will be reinstated for three years renewable terms if both IAMG and Springer agree to this.

In the previous contract (with Plenum), the IAMG was not to be paid annual royalties on the first 300 institutional subscriptions. We never reached the 301-1000 non-member subscription rate for which the percentage of cash receipts paid to IAMG was 7%. In the new contract (with Springer) IAMG shall be paid a 7% profit share on the Net Proceeds including monies received from institutional subscriptions to the print and electronic editions of NRR. Some of us remember that in the early days when NRR was published by Oxford University Press, the IAMG had to pay the publisher US \$20,000 annually for publication. It is good for the financial health of our association that our third journal now also will begin to generate annual royalty checks.

New C&G and MG Editors

Two of our three journals now have new Editors-in-Chief. **Roussos Dimitrakopoulos** is taking over *Mathematical Geology* from **Ed Sharp**, and **Eric Grunsky** has just been confirmed to be Editor in Chief of *Computers & Geosciences* after **Graeme Bonham-Carter**'s many years of editorship.

Anyone for Editor of NRR?

We will also need a new Editor-in-Chief for Natural Resources Research. **Dan Merriam** has reached the age of 80 and is retiring from the position. Dan founded both *Mathematical Geology* and *Computers & Geosciences*, and was their Editor-in-Chief for many years. After serving as Editor-in-Chief of Natural Resources Research for the past eight years, he feels that the time has come that somebody else takes over from him.

Dan mentioned that he has gone through five production editors in seven years, at least three publishing editors, and three publishers, Plenum, Kluwer, and Springer, which appeared outwardly to be just a publisher's name change, but in fact, amounted to a change in publishing philosophy. Like *Mathematical Geology* and *Computers & Geosciences*, NRR is now processed in India. From an economic perspective: under Dan's direction, NRR circulation has increased to the extent that we are expecting our first royalty payment for this year.

Dan suggests that his replacement must:

1. be a member of both IAMG and AAPG
2. have or have access to up-to-date computer facilities
3. be prepared to go electronic in all phases of the editorial process
4. be acquainted with the latest developments in natural resources
5. have good connections with academia and industry
6. know those working in resource areas (petroleum, metals, and nonmetals)
7. be aggressive
8. have command of the English language and preferably editorial experience
9. do some good PR for the journal and attend meetings
10. and walk on water.

The new NRR Editor-in-Chief should be selected by the end of summer so that he/she can see what is involved with the last issue of 2006. He/she would take over processing papers for volume 16 (2007). Please let **Mike Hohn** or me know if you know a dynamic scientist who can follow in Dan's footsteps.

Or for IAMG Archivist?

Dan is also resigning as the IAMG's archivist. A thought which occurs to me, and on which I would like your feedback, is as follows: perhaps the position of archivist can be combined with the position of webmaster which is vacant as well. As you know, Eric was the IAMG's first and only webmaster; currently the website is being redeveloped under the direction of Clayton Deutsch but somebody will have to be found who can manage our website in future.

The IAMG archive has been kept at the Kansas Geological Survey in Lawrence but will have to be moved out from there soon. Threatening noises are being heard that it might be thrown out otherwise. The Lawrence archive fills about 30

boxes. We are grateful to Ricardo who, some years ago, worked on the IAMG archive separating more relevant parts from less important material. More work along these lines would remain to be done, however. Under Ricardo and Eric, the tradition was established that our website became a depository of archival material. Perhaps, in addition to new entries pertaining to current developments, the historically relevant material should be selected/scanned and stored on our website so that members who are interested could have access to it.

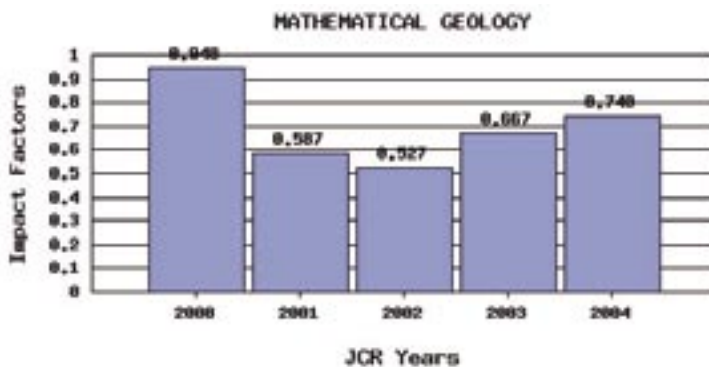
Frits Agterberg

Mathematical Geology News

Roussos Dimitrakopoulos has agreed to become the next editor-in-chief of *Mathematical Geology*. The transition from the current editor, **Ed Sharp**, to Roussos will take place during this summer with work on the 2007 issues of the journal.

Many readers will know Roussos through his many publications in the field of geostatistics. He has worn several academic hats over the years, recently moving back to Canada to take up the prestigious *Canada Research Chair in Sustainable Mineral Resource Development under Uncertainty* at McGill University. Before that he directed the W.H. Bryan Mining Geology Research Centre at the University of Queensland, Australia. In addition to his papers, he has edited special issues for *Mathematical Geology*, and a book in celebration of the life and work of Michel David.

In his recommendation that the IAMG appoint Roussos as his successor, Ed Sharp cited the scientific and administrative background that Roussos brings to the job as valuable skills in working with authors and the publisher.



Delays in Mathematical Geology

Subscribers to *Mathematical Geology* no doubt have noticed an ever-increasing delay in its appearance in the mail box. The officers of the IAMG and the Publications Committee are concerned about this slow-down in publication rate and are looking into the matter.

You may be aware that some time ago, Springer purchased Kluwer, which had been publishing the journal since they purchased Plenum in about 2000. I can recall delays in the delivery of *Mathematical Geology* during 2001, but never to the extent we are facing now. After each of these industry consolidations, the promised efficiencies seem to take time to establish. In this situation, consolidation is happening during a broad industry move to de-emphasize paper publications in favor of online access. This change purportedly means that papers become available to subscribers as soon as final editing and proofing is complete. Meanwhile, delay.

This time the consolidation seems to have reached into the production staff of the combined company, such that manuscripts sent to the publisher are going through additional steps. I'm sure the editor, Ed Sharp is reluctant to suggest that he should not have every opportunity to proof-read the papers and issues as they progress through the production process, because he has seen revisions not made and even whole manuscripts gone missing. On the other hand, it seems these are problems that can be corrected as new staff learns new procedures. A few checks with libraries have shown that other journals published by Springer are showing up late, so the problem is not limited to IAMG's journals.

Estimating from how long it has taken in the past for an issue to reach the mail box after final editing and proofing, Ed Sharp anticipates the January 2006 issue of the journal not to be mailed before September. Meanwhile, we anticipate that in the future manuscripts will become available online once they have passed all editorial steps.

Michael Ed. Hohn
Publications Committee

Association Business

IAMG Awards for 2006

The Awards Committee, consisting of Antonella Buccianti, Jeff Caers, Qiuming Cheng, Stephen Henley, IAMG president Frits Agterberg (non-voting) and chair Heinz Burger, has completed the selection of award recipients for 2006, who are:

Krumbein Medal: Vera Pawlowsky-Glahn (Spain)

Griffiths Award: Paul Switzer (USA)

The Krumbein medal is the highest honour bestowed by the Association to recognize distinguished research, service to IAMG, and service to the profession. The John Cedric Griffiths Teaching Award is presented to honor outstanding teaching, with preference for teaching that involves application of mathematics or informatics to the Earth's nonrenewable natural resources or to sedimentary geology.



In this award round we had four nominees for the Griffiths Award and six for the Krumbein Medal. The evaluation of all nominees was based on resumes and accompanying statements distributed electronically among all members of the Committee.

According to the guidelines, Committee members assigned numerical scores to all candidates in relevant categories that vary from award to award. For the Krumbein Medal there are three criteria, for which Vera Pawlowsky got the highest ranks: a) distinction in application of mathematics or informatics in the earth sciences; b) service to IAMG; and c) support of professions involved in the earth sciences, while Paul Switzer got the highest rank for outstanding teaching in general and teaching that involves application of mathematics. So he is winner of the 2006 Griffiths award.

All nominees who did not make it in this round will be automatically considered for the next selection, but fresh nominations are always welcome.

Presentation of all the awards is scheduled to take place during the IAMG conference in Liege, Belgium. Laudatios for the winners of the 2006 Awards will be written by J. Aitchison and H. Parker. These laudatios will appear on the Association's web site. Furthermore, citations of Krumbein medalists will be published in *Mathematical Geology* and of Griffiths awardees in *Computers & Geosciences*.

This 2006 award evaluation was my final task as chair of the IAMG Awards Committee. I would like to thank all persons for their active support of the Awards Committee during the last four years, either as submitters of nominations and/or writers of laudatios. It makes the work much more pleasant and, without their effort, our task would be impossible.



Paul Switzer

Heinz Burger, Chair Awards Committee

New Awards Committee Chair and Member

For the last four years **Heinz Burger** has chaired the IAMG Awards Committee and had **Antonella Buccianti, Jef Caers, Qiuming Cheng, and Steve Henley** to assist him as ordinary members. Earlier this year this committee has worked together selecting Vera Pawlowsky-Glahn as our 2006 Krumbein Medalist and Paul Switzer as the 2006 John Cedric Griffiths Teaching Award winner.

We are grateful to Heinz Burger and his Committee for providing us with this valuable service. Heinz is now retiring from the position and has recommended that Steve Henley succeeds him as the new Chair. Steve has been confirmed by the Council as the new Award Committee Chair.

Steve's appointment has created a vacancy on the committee and Prof. **Alexei Victorov** of the Institute of Environmental Sciences, Moscow, Russia, has been suggested and confirmed as new member. Alexei is an active IAMG member - he participated in IAMG2005 in Toronto last August presenting a paper on "Mathematical Model of Thermokarst and Fluvial Erosion Plains". His appointment contributes to the geographic diversification in the composition of the Awards Committee.

Steve's term as Committee Chair runs from 2006 to 2010, and Alexei will serve for the same length of time.

New Redesigned IAMG Website

Our Website is, to a large extent, our face to the world. **Eric Grunsky** has been the first and only IAMG webmaster as far back as anyone can remember, and has finally retired from this job. He has done a terrific job, and he will still be managing the C&G Published Program Code website.

Clayton Deutsch has reviewed the websites of many other professional societies and composed a list of the features and organization we would like. Mathieu ("Mat") Bergeron (www.pensee.ca) was selected to design and build our new website using Mambo. Mambo is a business-oriented open source content management system written in PHP and use the MySQL database. It can be hosted on any server that runs PHP and MySQL. Clayton has involved the IAMG Office in the choice of hosting company for the website.



The newly redesigned website is now up and running nicely. It includes a new Forum to exchange ideas and views for which you'll have to register to participate. Take a look (www.iamg.org) and give Clayton some feedback about what you like and what you think could be improved.



Co-operation between IAMG and CGI formalized

At a recent meeting the IAMG Executive has agreed to collaborate with the Commission for the Management and Application of Geoscience Information (CGI). Kristine Ash at the Federal Institute for Geosciences and Natural Resources (BGR) in Hannover, Germany, is the Chairperson of CGI. The areas of collaboration are:

1. The organization and sponsoring of technical sessions and workshops at IAMG Annual Conferences that relate to the management and application of geoscience information.
2. The co-sponsoring and co-organization of sessions at other conferences and meetings that relate to the management and applications of geoscience information.
3. The co-sponsoring and co-organization of sessions at other conferences and meetings that may present an opportunity to take forward improved management and applications of geoscience information.
4. Use of IAMG journals, and IAMG expertise in publishing, to disseminate material relating to geoscience information management and applications. All manuscripts to be submitted are subject to final approval by the Editor-in-Chief of the IAMG journal selected for publication.
5. The exploration of opportunities to publish material on geoscience information management and applications through new on-line publications or dedicated issues of IAMG publications.
6. The establishment of "test-bed" projects involving members of both our organizations for evaluation of standards that CGI may endorse or develop.

For more information on CGI go to www.bgs.ac.uk/cgi_web/

Draft of IAMG Strategic Plan: 2007–2010

Introduction

The International Association for Mathematical Geology was founded on 22 August 1968 in Prague during the 24th International Geological Congress. On that occasion it was decided that the IAMG's aim is "to promote international cooperation in the application and use of mathematics in geological research and technology". This continues to be our main purpose; in the proposed new mission statement, "mathematics" is replaced by "mathematics, statistics and informatics" and "geological research and technology" by "the Geosciences".

Continually we have to consider how we should be directing our efforts and resources in order to pursue our mission to the fullest potential and increase our visibility. During IAMG 2005 in Toronto last August, the IAMG Executive decided that we should have a Strategic Plan for the next four years providing a firm foundation for annual operational plans and budgeting activities. Last fall the IAMG Council approved the formation of a Strategic Planning Commission chaired by Vice President Nick Fisher. During the past 10 years Nick has been instrumental in developing strategic plans, first for the Statistical Society of Australia and, more recently, for the International Statistical Institute. The ISI is one of our two parent organizations: since 1968, IAMG has been affiliated continually with both IUGS and ISI.

The Planning Commission worked according to an agenda with strict deadlines allowing it two weeks to carry out each specific action, followed by three weeks for feedback from reference groups comprising the IAMG Council and Past Presidents. Last February, the Executive met in Lawrence, Kansas to assess final results obtained by the Commission. This led to nine strategic objectives, which were circulated requesting feedback from the reference groups. The resulting revised version was submitted to Council and met with full approval. The proposed plan has been distributed to the IAMG Membership for consideration. The final product will be presented to a General Assembly to be held during IAMG'06 in Liège, September 2006.

It is important to keep in mind that this strategic plan is not part of the IAMG's Statutes and By-laws. It is a working document that will be reviewed annually and modified to stay abreast of new developments and changing circumstances. Its purpose is to provide a new type of framework for both planning and budgeting. Its acceptance also would serve as an encouragement to the Executive separately to initiate work on restructuring the IAMG. The benefits of the whole exercise are clarification of IAMG priorities, more efficient and effective use of our resources, a sounder basis for financial planning, increased membership, and guidance to future Executives and Councils about how the IAMG is governed and what should be achieved.

The Strategic Planning Commission commenced its work by performing a SWOT analysis (Strengths or Weaknesses, and Opportunities or Threats). Our strengths include publication of three successful international journals and significant financial reserves. Weaknesses are rather small membership and lack of institutional support. Examples of opportunities are strengthening our student grant programs and support of IAMG activities among young professionals and in developing countries. A threat is that we could lose critical mass due to retirements of senior scientists without replacement. Broadening our membership can prevent this. Development and publication of clearly defined benefits will encourage new geoscientists to join the IAMG.

Strategic objectives have to be SMART (Specific, Measurable, Achievable, Realistic and Time-bounded). Each of the nine strategic objectives is preceded by a preamble, in which some SWOT analysis results are summarized, and followed by actions to be taken about it during the next four years (2007-2010). These strategies specify how the goals are to be achieved allowing measurements of degrees of success.

*Frits Agterberg
IAMG President*

IAMG Mission Statement

To promote, worldwide, the advancement of mathematics, statistics and informatics in the Geosciences.

The IAMG will pursue its mission by

- a) promoting excellence in applying mathematics, statistics and informatics to solve geoscientific problems, with particular reference to problems of societal relevance;
- b) disseminating the results of new theory and applications in international journals and other appropriate publications, particularly those sponsored by the Association;
- c) providing coordinating services, such as a broad-based website, an annual conference, promotion of professional standards, development of outreach programs, and affiliation with other international bodies;
- d) promoting worldwide cooperation between individual earth scientists, and between academic, industrial and government geoscience institutions;
- e) promoting international educational programs focusing on important and relevant geoscience issues;
- f) developing new initiatives to maintain leadership of an evolving discipline in changing environments;
- g) fostering the appreciation in governments, industry and the public at large of the true value of quantitative methods in solving significant earth resource and environmental problems.

Strategic Objectives

	Preamble	Objective	Four-year strategy 2007 - 2010
1	Membership Traditionally, membership of the IAMG is rather small and, in recent years, there has been high annual turnover.	Stabilize and increase IAMG membership. Target: 1500 members by 2010	(a) Raise the IAMG's profile by improving the website with more "outreach" inside and outside Geoscience; (b) Update and publicize a clear statement of the benefits of IAMG membership ¹ ; (c) Facilitate the process of joining and renewing membership.
2	Publications High-quality publications are vital to the needs of IAMG members.	Promote and disseminate research on applications of mathematics, statistics and informatics in the geosciences.	(a) Continue to publish three peer-reviewed journals in areas of relevance to IAMG's Mission; (b) Explore the possibility of web-site based publication of research notes or implementing new electronic-only journal; (c) Apply for Information Sciences Institute (ISI) certification of NRR.
3	Young quantitative geoscientists Many young geoscientists are interested in quantitative geoscientific research, but few are aware of IAMG and how it can help their careers.	Attract and retain young people in IAMG.	(a) Update and improve the existing Student Grant program; (b) Increase the number and effectiveness of Student Chapters; (c) Establish a Young GeoQuant group.
4	Continuing education There is an ongoing need for IAMG members to stay abreast of current developments.	Develop and implement a program of Professional Development / Continuing Education for IAMG members.	(a) Devise a program for identifying needs and course presenters; (b) Review and improve Distinguished Lecturer program.
5	Developing countries A truly worldwide IAMG needs an ongoing program to assist members in developing countries.	Develop and implement a program to promote participation by people in developing countries.	(a) Establish a tiered membership structure and associated fees and benefits, with developing countries as defined by UN criteria; (b) Facilitate group payment and involvement; (c) Support workshops and other professional development activities.
6	Sections The IAMG covers many areas of scientific endeavour, and these need to be continually encouraged.	Provide more customized products and services.	Introduce Sections in at least two areas, <i>e.g.</i> Geostatistics, Multivariate Analysis in Geoscience, Geoinformatics, GIS/ Remote Sensing, and Computational Methods.
7	Conferences and workshops Annual meetings and special topics workshops are important in terms of providing learning and networking opportunities for IAMG members, and also as a source of revenue for IAMG.	Run high-quality conferences and workshops, with a return to the IAMG.	Review and improve the process for organizing conferences and workshops.
8	Efficient operations The IAMG needs appropriate processes and structures to assure the sustainability of the organization.	Establish an efficient operational basis for IAMG activities. Target: operational costs covered by operational revenue by 2010.	(a) Develop and implement a plan to provide a balanced income stream. (b) Establish an independent IAMG Office and Business Manager.
9	Governance At present, a complete changeover of Executive members occurs every 4 years.	Implement a way of improving 'corporate memory' in the Executive.	Review and improve the IAMG's governance arrangements.

¹ Proposed benefits: Discounts for journals (paper and electronic), conference fees, short courses, discounted membership fees for other societies, access to code, e-access to past journals, access to Members Only forum on Website, job posting/job network, access to database of members, Newsletter, 'packaged benefits', access to research and travel grants

PERC - Pan-European Reserves and Resources Reporting Committee

Following a series of mergers of professional institutions, the Reserves Committee set up by the Institution of Mining and Metallurgy, to set standards for reporting mineral resources and reserves has been re-constituted with a broader remit, as the Pan-European Reserves and Resources Reporting Committee (PERC).

PERC is the European equivalent of the Australasian JORC, SAMREC in South Africa, and similar reserves standards bodies in the USA, Canada, and Chile, and with them is a constituent member of the Committee for (Mineral) Reserves International Reporting Standards (CRIRSCO - www.crirSCO.com). Representation on PERC covers major and junior mining sectors, industrial minerals, aggregates, coal and diamonds, the investment and financial community and the professional accreditation organisations including the European Federation of Geologists, the Geological Society of London, the Institute of Geologists of Ireland, and the Institute of Materials, Minerals, and Mining. PERC has the following terms of reference:

- to promote the consistency and improvement of national reporting standards for Mineral Exploration Results, Mineral Resources and Reserves, through consultation and cooperation at national and international level.
- to represent the minerals industry and related stake holders on resource and reserve reporting issues.
- to maintain international reciprocity of Competent Persons through nationally-based Recognised Overseas Professional Organisation (“ROPO”) schemes.
- to maintain, improve and promote the use of the Reporting Code covering Mineral Exploration Results, Mineral Resources and Reserves, recognising from time to time developments and improvements relating to the CRIRSCO International Reporting Template.
- to facilitate the exchange of information and dialogue among CRIRSCO members and other stake holders through an actively managed web site that promotes discussion on current issues.

Its principal activities will be:

- to manage and update the Reporting Code, which is the successor to the former 1991 IMM code
- to represent the European region on CRIRSCO, the international body harmonising reserves reporting standards around the world
- to liaise with the London Stock Exchange, AIM, and other stock exchanges in Europe, to encourage them to incorporate into their rules the use of the Reporting Code in particular and CRIRSCO-compliant codes in general
- to promote good practice in the reporting and estimation of mineral resources and reserves

The committee's initial membership reflects the interests of its sponsoring institutions and principal sectors of the minerals industry. Membership of the committee is open to participation by other minerals-related organisations within the region. Further information about PERC may be obtained from chairman Professor **Gordon Riddler** (gordon.riddler@btinternet.com) or secretary/vice-chairman Dr **Stephen Henley** (stephen.henley@resourcescomputing.com).

Stephen Henley

Joint French-German PhD for Tobias Frank

Tobias Frank received a joint French-German PhD (cotutelle de thèse) from the “Institut National Polytechnique de Lorraine (INPL), Ecole Nationale Supérieure de Géologie (ENSG), Nancy, France, and from the Department of Geosciences, Freiberg University of Mining and Technology, Germany. His supervisors were Jean-Laurent Mallet, Nancy, und Helmut Schaab, Freiberg. The title of his PhD thesis is “Advanced visualization and modeling of tetrahedral meshes”.

The thesis by Tobias Frank is the second joint French-German PhD project between the Ecole Nationale Supérieure de Géologie, Nancy, France, and the Geoscience Department of Freiberg University of Mining and Technology. It is another example of the cooperation between the two laboratories and institutions on the field of geomodeling. In his thesis Tobias Frank addresses the cornerstone – at least from the users’ perspective – of geological modeling, modeling of tetrahedral meshes and visualization of geological information with respect to these tetrahedral meshes. It is approached in a fundamental way taking advantage of most recent achievements of information technology which in turn leads to novel and breathtaking results.

Over the past 15 years, methods have been developed to model both subsurface geometry and properties. So far, these two aspects of geomodeling were handled separately. The geometry of geological interfaces (horizons and faults) was modeled with triangulated surfaces while the properties were modeled at the nodes and cells of curvilinear stratigraphic grids (SGrids), whose cells are hexahedra. Such an approach had two major drawbacks:

- Geometry and properties of geological objects are modeled independently. As a consequence, any modification of the geometry requires a reconstruction of the modeled property.
- Geometry of triangulated surfaces corresponding to faults and horizons is often too complex and cannot be honored by SGrids filling the geological volumes. As a consequence, these SGrids have to be simplified, resulting in a loss of information and precision of the model.

To overcome these difficulties a new approach of geomodeling based on the GeoChron model has been proposed by the gOcad research group. Faults are first modeled as triangulated surfaces and the 3D domain of interest is then filled with a tetrahedral mesh honoring the faults. The nodes of such a tetrahedral mesh are used to model three functions $u(x,y,z)$, $v(x,y,z)$ and $t(x,y,z)$ such that

- $u(x,y,z)$ and $v(x,y,z)$ corresponds to the paleo-geographic coordinates of the sediment particle observed today at location (x,y,z) in the geological space G ;
- $t(x,y,z)$ corresponds to the (arbitrarily scaled) geological time of deposition of the particle of sediment observed today at location (x,y,z) in the geological space G .

Corresponding to this setting, the thesis Tobias Frank develops novel methods and algorithms to

- extract iso-value surfaces; an individual geological or geophysical property (attribute) of the geo-objects and the iso-surface, respectively, is rendered by texture mapping which seems to be processed by the GPU.
- simultaneously render multiple attributes of the geo-objects by multi-texturing techniques; then multi-texturing is generalized for Boolean operations like intersection, union, complement, and applied to visualization with respect to solid geometric modeling. These Boolean operations together with the appropriate data models have been introduced as essentials of 3D geoscientific information systems by Marcus Apel in the first cotutelle de these (Apel, 2004), and now Tobias Frank has developed genuine tools for the visualization of their results.
- model tetrahedral meshes, in particular their local refinement.
- fit an arbitrarily complex surface to a set of given points with special consideration of poor properties of the geometrical configuration of the points as familiar in geological modelling in terms of an implicit function.
- update and edit a geomodel in real time, which is assumed to be a most essential tool. Corresponding to the approach by implicitly defined functions representing geo-objects, the deformation, or more appropriately the updating, of the shape of the geo-object is accomplished by displacement of control points marking the boundary of the geo-object.

Summarizing, each chapter of Tobias Frank’s thesis addresses a classic problem of geo-modeling. He has developed original and innovative methods for their resolution, and designed algorithms for the modeling and visualization with respect to tetrahedral meshes. He has encoded the algorithms as a gOcad plug-in using C++, OpenGL and CG and taking advantage of recent hardware developments, in particular of the possibilities to run the code on the GPU. He has demonstrated the versatility of the new methods by convincing examples, and their real-time performance emphasizes the intellectual skills of their author.

Helmut Schaab, Freiberg

2005 IAMG Distinguished Lecture Tour Lawrence J. Drew

Summary of Eastern European DL Tour, May 2005

May 2 to May 6: Prague, The Czech Republic;
Host: Czech Geological Survey;

Talks (2): To audiences of between 20 to 25 students and professors;

Local support: all room costs and most food and taxi costs.



With Petr Rambousek, Václav Němec and students at Charles University in Prague

May 6 to May 12: Sofia, Bulgaria; Hosts: Two universities and the South Eastern Europe Exploration Conference;

Talks (3): To audiences ranging from 25 to 80. One to geology students and professors; another to about 20 hydrogeologists

and hydrologists; one as a plenary speaker at the SEEE conference.

Local support: all room costs and most food and taxi costs.



With Václav Němec overlooking the Vltava River in Prague

May 12 to 16: Belgrade, Serbia; Hosts: Belgrade University and Eurasian Minerals Corp.

Talks (2): To audiences of 10 and 45 students and professors;

Local support: all room costs and most food and taxi costs.



Dept. of Geology and Mining, Belgrade University

May 16 to 22: Budapest, Hungary; Hosts: MAFI, Geological Society of Hungary, Szeged University, George Bardossy, Member of the National Academy of Sciences of Hungary;

Talks (2): Key-note speaker at the 9th Symposium on Geomathematics in Szeged (50 in audience) and another to an audience of employees of MAFI and the MOL



Prof. György Bardossy at the MAFI (Geol. Survey) in Budapest, Hungary

Oil Company (11 in audience).

Local support: all room costs and most food and taxi costs.

Distinguished Lecturer 2006: Larry Lake

Larry W. Lake is a professor of the Department of Petroleum and Geosystems Engineering at The University of Texas at Austin and director of the Enhanced Oil Recovery Research program. He holds B.S.E and Ph.D. degrees in Chemical Engineering from Arizona State University and Rice University. Dr. Lake has published widely and frequently conducts industrial and professional society short courses in enhanced oil recovery and reservoir characterization. He is the author or co-author of more than 100 technical papers, three textbooks and the editor of three bound volumes. He has been teaching at UT for 24 years prior to which he worked for Shell Development Company in Houston, Texas. He was chairman of the department from 1989 to 1997 and formerly held the Shell Distinguished Chair and the W.A. (Tex) Moncrief, Jr. Centennial Endowed Chair in Petroleum Engineering. He currently holds the W.A. (Monty) Moncrief Centennial Chair in Petroleum Engineering. He has served on the Board of Directors for the Society of Petroleum Engineers (SPE) as well as on several of its committees; he has been an SPE distinguished lecturer. Dr. Lake is a member of the National Academy of Engineers and won the 1996 Anthony F. Lucas Gold Medal of the SPE. He also has won the 1999-2000 Billy and Claude R. Hocott Distinguished Research Award and The University of Texas and the SPE/DOE Symposium IOR Pioneer Award in 2000. In 2000 he was also awarded the SPE Distinguished Service Award, and in 2001, was chosen as a member of the Texas Society of Professional Engineers Dream Team.



Since he was selected as IAMG Distinguished Lecturer for 2006 Larry Lake has given about a dozen lectures so far. Total audience has been about 350-400 people with a nearly even mix of students and professionals. Among other locations he has spoken at Sandia (about 70 people), and he did a great job of publicizing IAMG. He has also done a tour through Canada in late May including, among others, a visit at the University of British Columbia, Memorial University of Newfoundland, and a talk at the Geological Survey with the title: "The Oil Business; A Personal Assessment of Uncertainty".

A tour of Europe is in the planning stages, in connection with attending the annual meeting in Liège, Belgium.

We are still looking for nominations for the IAMG Distinguished Lecturer for 2007. Please send your ideas to:

Sean McKenna
Geohydrology Department, Sandia National Laboratories,
P.O. Box 5800 MS0735, Albuquerque, NM 87185-0735, USA,
Tel: 505-844-2450, Fax: 505-844-7354, E-mail: samcken@sandia.gov

And, it's not too early to think about suggestions for the 2008 Distinguished Lecturer!

Member News

Ricardo Olea has been spending the Winter Quarter in Stanford with Andre Journel.

Stephen Henley has been elected vice-chair and secretary of the new PERC committee which is the European equivalent of JORC, responsible for setting (solid) mineral reporting standards - s. p.8 for details.

Student Affairs

The IAMG Council has voted to increase research grants for students from US\$5,000 to an annual total of US\$12,000. Also, every student chapter will receive annual support of US\$2,000, and there will be travel grants for student members participating in IAMG and IAMG-sponsored meetings.

New student chapters have been established in **Edmonton** and **Stanford**. **Budapest** also seems to be moving towards a proposal. Possible new chapters may be created in **Vietnam** and **Nancy** (France). **Clayton Deutsch** also is encouraging the formation of new student chapters in **Chile** and **Porto Alegre**, Brazil.

Budapest, Edmonton, Porto Alegre, and Stanford. Plans exist for the creation of new student chapters in Chile, France and Vietnam.

Student Grant Awards for 2005

The Student Affairs Committee has ranked the fourteen 2005 Student Grant Candidates (cf. IAMG Newsletter No. 71, December 2005). The top five applicants are (in ranking order; 1 = highest rank):

1. **Zhijun Chen** (China)

GIS-based Local Singularity Analysis Method: Anisotropic Multifractal Model And Application In Geochemical Anomaly – Identification For Gejiu Mineral District, Yunnan Province, China

2. **Anthony Stevens** (U.S.A.)

Visualization of Basin Geometry Evolution In Northern Chile Using ARC GIS

3. **Coralie Genty** (U.S.A.)

Geostatistical Relationships Between Pore Facies and NMR T2relaxation Times in Carbonate Reservoirs

4. **Deb Prasad Jaisi** (U.S.A.; previously Asian Institute of Technology, Thailand)

Modelling Of Technetium (Tc) Reduction by Modified Smectite

5. **James D. McCarthy** (Canada)

Rule-based Reasoning on Sensor Data for the Evaluation Of Geotechnical Hazard Potential

Each shall receive US\$ 1,000 out of IAMG's students' grants program. All other applicants will not receive any grant.

Xiaogang presented "Centralized Management Approach and Database Development of Multisource Geoscientific Information". As one of the two student members of IAMG Student Affairs Committee, Zhijun participated in the IAMG Council Meeting and reported IAMG-SCC's development to the council. Zhijun also was awarded the student grant in 2005 as the first Asian recipient.

After the IAMG2005 conference, Zhijun stayed as a visiting graduate student at the Geomatics Research Lab at York University under Dr. Qiuming Cheng's supervision. After he came back from Canada he presented his research done in Canada as well as many things about western culture including Thanksgiving Day, All Saint's Day, Christmas day etc. He also introduced how Chinese in Canada celebrate Chinese Festivals such as Mid-Autumn Festival, and Chinese New Year.

During Zhijun's absence, Ms. Kun Wang, a Ph. D. student of Dr. Qiuming Cheng at CUG was the acting chair who together with other members



IAMG-SCC members helped preparing the Proceedings of IAMG'05 Annual Conference printed in CUG.

of the executive committee has maintained the healthy activities of IAMG-SCC. A Chinese-English website has been developed and linked to the IAMG website. Kun has also assisted in developing the website of the State Key Lab of Geological Processes and Mineral Resources (GPMR). GPMR is the host of the Chapter and provides some financial help as well as seminar room and facilities to support the Chapter. More than ten seminars were held involving the application of fractal theory, GIS/RS techniques in geosciences, geophysical and geochemical data processing, the introduction to nontraditional mineral resources, etc. by our student and faculty members including Dr. Shouyun Chen, Dr. Jianguo Chen, Dr. Qinglin Xia, Dr. Shuyun Xie, Dr. Yaosong Dong, etc. In addition, Dr. Shun Xie and Mr. Zhijun Chen have organized activities to promote IAMG-SCC in other areas including (1) the undergraduate students of the Faculty of Earth Sciences, Faculty of Earth Resources and Department of Maths & Physics; (2) the CUG Doctoral Symposium; and (3) the GIS programmers with interests in spatial analysis used in GIS Companies. These activities have increased the awareness of a broad audience in CUG.

Now, IAMG-SCC is looking forward to participating in the upcoming IAMG'07 annual conference to be held on Campus of CUG in the summer of 2007. A special session for students has been proposed by the IAMG-SCC and Dr. Qiuming Cheng, one of the organizers of IAMG'07.

Zhijun Chen

Report from the IAMG Student Chapter at China University of Geosciences

The IAMG Student Chapter at China University of Geosciences (IAMG-SCC) has gone through many hoops since being established in December, 2004. The number of members this year has increased to 52 including 13 paid for IAMG memberships. Some interesting activities were carried out especially during the last half year and have made a notable impact on the students and teachers at CUG.

IAMG-SCC has been participating in IAMG activities, to name a few here. A group of students at IAMG-SCC helped with preparation of the IAMG2005 Annual Conference Proceedings (some of the students are in the picture below holding the proceedings). Mr. Zhijun Chen and Mr. Xiaogang Ma (member of IAMG-SCC), attended the IAMG2005 in Toronto. Zhijun gave an oral presentation titled "Significance of Fractal Measure in Local Singularity Analysis of Multifractal Model" and



A snapshot of the IAMG-SCC website at <http://www.gpmr.cug.edu.cn/i-amg-scc/index.htm>

JOURNAL CONTENTS

MATHEMATICAL GEOLOGY

Volume 38, Number 3 April 2006

Stereological analysis of fracture networks along cylindrical galleries — A.K. Gupta & P.M. Adler

Bayesian mixture modelling in geochronology via Markov chain Monte Carlo — A. Jasra, D.A. Stephens, K. Gallagher & C.C. Holmes

Simultaneous integration of pressure, water cut, and 4-D seismic data in geostatistical reservoir modeling — X.-H. Wen, S. Lee & T. Yu

Effects of local dispersion and kinetic sorption on evolution of concentration variance in a heterogeneous aquifer — B.X. Hu & C. He

Mean travel time curves analysis: a method to improve understanding of data behavior in 2-D transmission tomography at the pre-inversion stage — J.L. Fernandez Martinez, J.P. Fernandez Alvarez & L.M. Pedruelo Gonzalez

Discrimination of two planar structures in directional data — Y. Shan, L. Liu & S. Peng

BOOK REVIEW — Harmonic mapping in the plane by P. Duren — Reviewed by J.-L. Mallet

ASSOCIATION ANNOUNCEMENT Sebastian Strebelle: 2005 Vistelius Research Award — Laudatio by A. Journel

MG Volume 38, Number 4 May, 2006

Localized uniform conditioning (LUC): A new approach for direct modelling of small blocks — M.Z. Abzalov

Block kriging for lognormal spatial processes — N. Cressie

Quantifying uncertainty in mineral resources by use of classification schemes and conditional simulations — X. Emery, J.M. Ortiz & J.J. Rodriguez

Typing mineral deposits using their associated rocks, grades and tonnages using a probabilistic neural network — D.A. Singer

Semivariogram models based on geometric offsets — M.J. Pyrcz & C.V. Deutsch

Theoretical estimation of critical sampling size for homogeneous ore bodies with small nugget effect — K. Modis & K. Papaodysseus

LETTERS TO THE EDITOR Comment on "A Markov chain model for subsurface characterization: Theory and applications" by A. Elfeki & M. Dekking — A.G. Chessa

Reply to the comments by A.G. Chessa — A.M.M. Elfeki

BOOK REVIEW Statistical Methods for Spatial Data Analysis by O. Schabenberger & C.A. Gotway — Reviewed by T.C. Coburn

MG Volume 38, Number 5 July, 2006

Modeling spatial variability along drainage networks with geostatistics — by J.-S. Bailly, P. Monestiez & P. Lagacherie

New indices for characterizing spatial models of ore deposits by the use of a sensitivity vector and an influence factor — K. Koike & S. Matsuda

Semi-analytic modelling of subsidence — P.A. Fokker & B. Orlic

The necessity of a multiple-point prior model — A. Journel & T. Zhang

A connectivity index for discrete fracture networks — C. Xu, P.A. Dowd, K.V. Mardia & R.J. Fowell

Qualitative and quantitative characteristics of modeled and natural oscillatory zoning patterns in calcite — N.A. Bryksina, N.M. Halden & S. Mejia

BOOK REVIEW Data Visualization in the Geosciences by J.R. Carr — Reviewed by W.E. Sharp

MG Volume 38, Number 6 August, 2006

Special Issue: Practical applications of mathematical models in geology from the 32nd International Geological Congress, Florence, 2004; Guest Editor: Hannes Thiergaertner

Theory and practice in mathematical geology - Introduction and discussion — H. Thiergaertner

Fourier analysis applied to Mimomys (Arvicolidae, Rodentia, Mammalia) first lower molars - Biochronological implications — F. Marcolini

Hypsometric curves as a tool for paleosurface mapping — P.C. Soares & S.B. Riffel

Visualization of volcanic rock geochemical data and classification with artificial neural networks — J.P. Lacassie, J.R. del Solar, B. Roser & F. Herve

A method for modeling of a creeping slope with a visco-hypoplastic material law — G. van den Ham, J. Rohn, T. Meier & K. Czurda

A comparison of Greenland ice and Baltic sea sediment record - A contribution to climate change analysis — S. Kotov & J. Harff

Factor analysis of soil and attic dust to separate mining and metallurgy influence, Meza valley, Slovenia — R. Sajn

A mathematical model of phenolic groundwater contamination at a brownfield site based on few available data — H. Thiergaertner

Identification of anthropogenic features through application of principal component analysis to hydrochemical data from the Sines Coastal Aquifer, SW Portugal — P. Galego Fernandes, P. Carreira & M. Oliveira da Silva —

Natural Resources Research

volume 15, number 1 (2006)

A hybrid fuzzy weights-of-evidence model for mineral-potential mapping — A. Porwal, E.J.M. Carranza, and M. Hale

Prediction of arsenic bedrock derived stream sediments at a gold mine site under conditions of sparse data — N.K.C. Twarakavi, D. Misra, and S. Bandopadhyay

Quantitative analysis of scale of aeromagnetic data raises questions about geologic-map scale — V. Nykänen and G.L. Raines

Prediction of sandstone porosity through quantitative estimation of its mechanical compaction during lithogenesis — L.A. Sadikh-Zadeh

Accounting for extensive secondary information to improve water table mapping — M.N.M. Boezilo, J.F.C.L. Costa, and J.C. Koppe.

Mineral-potential mapping: a comparison of weight-of-evidence and fuzzy methods — T.F.P. deQuadros, J.C. Koppe, A.J. Strieder, and J.F.C.L. Costa

NRR volume 15, number 2 (2006)

Special Issue on Oil Sands and Heavy Oil

Oil sands and heavy oil in North America: an overview & summary — F.J. Hein

The Athabasca oil sands - a regional geological perspective, Fort McMurray area, Alberta, Canada — F.J. Hein and D.K. Cotterill

Prediction of shale plugs between wells in heavy oil sands using seismic attributes — F.D. Gray, P.F. Anderson, and J.A. Gunderson

Reservoir characterization of McMurray Formation by 2D geostatistical modeling — W. Ren, J.A. McLennan, O. Leuangthong, and C.V. Deutsch.

Optimization of SAGD well elevation — J.A. McLennan, W. Ren, O. Leuangthong, and C.V. Deutsch

Computers & Geosciences

C&G Volume 32, Issue 1 (2006)

Bayesian network classifiers for mineral potential mapping — Alok Porwal, E.J.M. Carranza and M. Hale

Integrated conditional global optimisation for discrete fracture network modelling — Nam H. Tran, Zhixi Chen and Sheik S. Rahman

A geo-spatial data management system for potentially active volcanoes—GEOWARN project — Radu C. Gogu, Volker J. Dietrich, Bernhard Jenny, Florian M. Schwandner and Lorenz Hurni

A Java application for quality weighted 3-D interpolation — Wolfram Rühaak

3-D symbolization of L-S fabrics as an aid to the analysis of geological structures — Eric A. de Kemp, Ernst M. Schetselaar and Kevin Sprague

A general simulator for reaction-based biogeochemical processes — Yilin Fang, Steven B. Yabusaki and Gour-Tsyh Yeh

Interactive exploration of tensor fields in geosciences using volume rendering — Björn Zehner

An advanced video-based system for monitoring active volcanoes — Bruno Andò and Emilio Pecora

RVR Meander: A toolbox for re-meandering of channelized streams — Jorge D. Abad and Marcelo H. Garcia

FOLD PROFILER: A MATLAB®-based program for fold shape classification — R.J. Lisle, J.L. Fernández Martínez, N. Bobillo-Ares, O. Menéndez, J. Aller and F. Bastida

SUA: A computer program to compute regolith site-response and estimate uncertainty for probabilistic seismic hazard analyses — David Robinson, Trevor Dhu and John Schneider

Comparing predicted and observed spatial boundaries of geologic phenomena: Automated Proximity and Conformity Analysis applied to ice sheet reconstructions — Jacob Napieralski, Yingkuai Li and Jon Harbor

Monitoring soil moisture and water table height with a low-cost data logger — Timothy C. Riley, Theodore A. Endreny and John D. Halfman

CLIM-X-DETECT: A Fortran 90 program for robust detection of extremes against a time-dependent background in climate records — Manfred Mudelsee

C&G Volume 32, Issue 2 (2006)

TOUGHREACT—A simulation program for non-isothermal multiphase reactive geochemical transport in variably saturated geologic media: Applications to geothermal injectivity and CO₂ geological sequestration — Tianfu Xu, Eric Sonnenthal, Nicolas Spycher and Karsten Pruess

MATLAB functions to analyze directional (azimuthal) data—I: Single-sample inference — Thomas A. Jones

MATLAB functions to analyze directional (azimuthal) data—II: Correlation — Thomas A. Jones

The potential of XML encoding in geomatics converting raster images to XML and SVG — Byron Antoniou and Lysandros Tsoulos

Remote sensing data change detection based on the CI test of Bayesian networks — Dai Qin, Ma Jianwen and Ou Yang Yun

A window-based inquiry system for design discharge based on geomorphic runoff modeling — Kwan Tun Lee, Yi-Ru Chung, Chi-Chung Lau, Chung-Chieh Meng and Shen Chiang

Geological uncertainties associated with 3-D subsurface models — L. Tacher, I. Pomian-Szrednicki and A. Parriaux

From 3-D geomodelling systems towards 3-D geoscience information systems: Data model, query functionality, and data management — Marcus Apel

Nonlinear inversion of potential-field data using a hybrid-encoding genetic algorithm — Chao Chen, Jianghai Xia, Jiangping Liu and Guangding Feng

Mathematical modeling of steam-assisted gravity drainage — Serhat Akin

Building a terabyte NEXRAD radar database for hydrometeorology research — A. Kruger, Ramon Lawrence and E.C. Dragut

An efficient Matlab script to calculate heterogeneous anisotropically elastic wave propagation in three dimensions — Oliver S. Boyd

A note on the dipole coordinates — Akira Kageyama, Tooru Sugiyama, Kuni-hiko Watanabe and Tetsuya Sato

Use of spatial SQL to assess the practical significance of the Modifiable Areal Unit Problem — Arthur J. Lembo, Jr., Megan Young Lew, Magdeline Laba and Philippe Baveye

A revision of the FORTRAN codes GRAVW to compute deformation produced by a point magma intrusion in elastic-gravitational layered earth models — José Fernández, María Charco, John B. Rundle and Kristy F. Tiampo

C&G Volume 32, Issue 3 (2006)

A GIS-based methodology for the assessment of weather radar beam blockage in mountainous regions: two examples from the US NEXRAD network — Witold F. Krajewski, Alexandros A. Ntekos and Radosław Goska

Using SDI and web-based system to facilitate disaster management — A. Mansourian, A. Rajabifard, M.J. Valadan Zoj and I. Williamson

GRANTISM: An Excel™ model for Greenland and Antarctic ice-sheet response to climate changes — Frank Pattyn

Multivectors: Nine components represented on a ternary diagram — John V. Smith and Eberhard Beermann

The groundwater modeling tool for GRASS (GMTG): Open source groundwater flow modeling — J.J. Carrera-Hernández and S.J. Gaskin

Monte Carlo simulation as a tool to predict blasting fragmentation based on the Kuz-Ram model — Mario A. Morin and Francesco Ficarazzo

The application of geostatistics in defining the characteristic distance for grain size trend analysis — E. Poizot, Y. Mear, M. Thomas and S. Garnaud

GCLgrid: A three-dimensional geographical curvilinear grid library for computational seismology — Chengliang Fan, Gary L. Pavlis and Kagan Tuncay

Direct sequential simulation with histogram reproduction: A comparison of algorithms — Robyn K. Robertson, Ute A. Mueller and Lynette M. Bloom

Spatial targeting using queries in a 3-D GIS environment with application to mineral exploration — Kevin Sprague, Eric de Kemp, Winston Wong, John McGaughey, Gervais Perron and Tucker Barrie

Erratum to: "Semivariogram modeling by weighted least squares": [Computers & Geosciences, 22(4) 387–397] — Ricardo A. Olea

C&G Volume 32, Issue 4 (2006)

Modelling electrical conductivity of groundwater using an adaptive neuro-fuzzy inference system — B. Tutmez, Z. Hatipoglu and U. Kaymak

Computer simulation of landslides by the contact element method — Jiang Xiaoyu, Qiao Jianping, Wang Chenghua and Zhao Yu

Spherical harmonic analysis and synthesis using FFT: Application to temporal gravity variation — Chinway Hwang and Yu-Chi Kao

Algorithm for dealing with depressions in dynamic landscape evolution models — A.J.A.M. Temme, J.M. Schoorl and A. Veldkamp

Positional error modeling for line simplification based on automatic shape similarity analysis in GIS — Chui Kwan Cheung and Wenzhong Shi

A TSAR model for daily evapotranspiration at broad spatial scales: A case study in Northern China — Yunhao Chen, Xiaobing Li and Jing Li

A committee machine with empirical formulas for permeability prediction — Chang-Hsu Chen and Zsay-Shing Lin

First Arrival Seismic Tomography (FAST) vs. PStomo_eq applied to crooked line seismic data from the Siljan ring area — Johiris I. Rodríguez-Tablante, Christopher Juhlin and Björn Bergman

A lava flow simulation model for the development of volcanic hazard maps for Mount Etna (Italy) — M.L. Damiani, G. Groppelli, G. Norini, E. Bertino, A. Gigliuto and A. Nucita

PSGRN/PSCMP—a new code for calculating co- and post-seismic deformation, geoid and gravity changes based on the viscoelastic-gravitational dislocation theory — Rongjiang Wang, Francisco Lorenzo-Martín and Frank Roth

The spacing calculator software—A Visual Basic program to calculate spatial properties of lineaments — Thushan C. Ekneligoda and Herbert Henkel

GeoPlot: An Excel VBA program for geochemical data plotting — Jibin Zhou and Xianhua Li

C&G Volume 32, Issue 5 (2006)

Editorial — G. Bonham-Carter

Optimizing the use of aeromagnetic data for predictive geological interpretation: an example from the Grenville Province, Quebec — Sharon Parsons, Léopold Nadeau, Pierre Keating and Chang-Jo Chung

FluorMODgui V3.0: A graphic user interface for the spectral simulation of leaf and canopy chlorophyll fluorescence — P.J. Zarco-Tejada, J.R. Miller, R. Pedrós, W. Verhoef and M. Berger

3GRAINS: 3D Gravity Interpretation Software and its application to density modeling of the hellenic subduction zone — K. Snopek and U. Casten

Automated classification of landforms on Mars — B.D. Bue and T.F. Stepinski

An efficient depression processing algorithm for hydrologic analysis — Qing Zhu, Yixiang Tian and Jie Zhao

Analysis of factors influencing the solution of the consolidation problem by using an element-free Galerkin method — Zhi-Liang Wang and Yong-Chi Li

BaTri: A two-dimensional bathymetry-based unstructured triangular grid generator for finite element circulation modeling — Ata Bilgili, Keston W. Smith and Daniel R. Lynch

An interactive and open approach for the analysis and diffusion of geoscientific data — G. Descamps, P. Therrien and R. Therrien

Iterative solutions of the gradient wind equation — John A. Knox and Paul R. Ohmann

VisualAnomaly: A GIS-based multifractal method for geochemical and geophysical anomaly separation in Walsh domain — Qingmou Li and Qiuming Cheng

MAP IT: The GIS software for field mapping with tablet PC — Mauro De Donatis and Lorenzo Bruciatelli

Wavelet extractor: A Bayesian well-tie and wavelet extraction program — James Gunning and Michael E. Glinisky

A Visual Basic program for analyzing oedometer test results and evaluating intergranular void ratio — M. Murat Monkul and Okan Onal

KGS-HighK: A Fortran 90 program for simulation of hydraulic tests in highly permeable aquifers — Xiaoyong Zhan and James J. Butler, Jr.

Comment on 'LUMPED: a Visual Basic code of lumped-parameter models for mean residence time analyses of groundwater systems by Ozyurt and Bayari, Computers & Geosciences 29 (2003) 79–90' — L.F. Han and P. Maloszewski





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Upcoming Meetings

ACCURACY 2006 - 7th international symposium on spatial accuracy assessment in natural resources and environmental sciences, Lisbon, Portugal, **5-7 July, 2006**. Secretary: Maria Pereira (Portuguese Geographic Institute, PT), <http://2006.spatial-accuracy.org>

The Application of EARTH SYSTEM MODELLING to Exploration, Snowbird, Utah, USA, **11-13 July 2006**. SEPM (Society for Sedimentary Geology) & The Geological Society of London. Howard Harper, 6128 E. 38th St., Tulsa, OK 74135, Phone: 918-610-3361 x24, EMail: hharper@sepm.org

4-D Testing of CONTINENTAL EVOLUTION, Irkutsk, Russia, **24 July - 1 Aug 2006**. International Basement Tectonics Association, Institute of the Earth's Crust of the Siberian Branch of the Russian Academy of Sciences. Dr. Dmitry Gladkochub, EMail: dima@crust.irk.ru

2006 JOINT STATISTICAL MEETINGS, Seattle, Washington, **6 -10 August 2006**. Elaine Powell, Phone: 703-684-1221 or 800-308-8943, Fax: 703-684-8069, EMail: jsm@amstat.org, www.amstat.org/meetings/index.cfm?fuseaction=main

Ninth BALTIC Sea Geological Conference, Bulduri, Latvia, **28-30 August 2006**. Ervins Lukševičs, Department of Geology, University of Latvia, Rainis Blvd 19, Riga LV-1586, LATVIA, Phone: +371 7 331 766, Fax: + 371 7 332 704, Ervins.Luksevis@lu.lv

Red Herring Asia. Hong Kong, China, **28 - 30 Aug 2006**. Red Herring Events, Maggie Xiao, 650-585-3419, <http://www.herringevents.com/rhasia06>

IAMG 2006 Liège, Belgium, **3 - 8 Sept. 2006**. Eric Pirard, Université de Liège, Chemin des chevreuils - B52 / 3, Sart Tilman, B-4000 Liège, BELGIUM, Tel: 32-4-3669528, Fax: 32-4-3669520, E-mail: eric.pirard@ulg.ac.be, <http://www.ulg.ac.be/geomac>

ENGINEERING GEOLOGY for tomorrow's cities (10th IAEG International Congress), Nottingham, UK, **6-10 September 2006**. info@iaeg2006.com or www.iaeg2006.com/

Managing DROUGHT AND WATER SCARCITY in Vulnerable Environments: Creating a Roadmap for Change in the United States, Longmont, Colorado, USA, **18 - 20 Sep 2006**. Geological Society of America. Deborah Nelson, Phone: +1-303-357-1014, EMail: dnelson@geosociety.org, Web: <http://www.geosociety.org/meetings/06drought/>

Ninth International Symposium on MINERAL EXPLORATION (ISME IX), Bandung, Indonesia, **19-21 September 2006**. <http://www.mining.itb.ac.id/agenda/agenda.php>

INFOMINA 2006 - VI International Symposium of INFORMATION TECHNOLOGY APPLIED TO MINING, Lima, Peru, **19-22 Sep 2006**. Peruvian Institute of Mining Engineers. Liliana Alvizuri, Los Canarios 154, Urb San César, Lima 12, Perú, Phone: (51-1) 349-0449 Ext 332, FAX: (51-1) 349-0449 Ext 326, EMail: infomina@iimp.org.pe, Web: <http://www.infomina.com.pe>

SPE Annual Technical Conference and Exhibition, San Antonio, TX, USA, **24-27 Sept. 2006**. Society of Petroleum Engineers. Debbie Weaver, P.O. Box 833836, Richardson, TX 75083-3836, FAX: 972-952-9435, EMail: dweaver@spe.org, Web: <http://www.spe.org>

From Seismic Interpretation to Stratigraphic and Basin Modelling - Present and Future, EAGE Research Workshop 2006, Grenoble, France, **25 - 27 September 2006**. <http://www.eage.org/events/>

International Workshop on SPATIO-TEMPORAL MODELLING, Pamplona, SPAIN, **27-29 September 2006**. Lola Ugarte, Phone: 34 948169202, Fax: 34 948169204, Email: metma3@unavarra.es, www.unavarra.es/metma3

AAPG (International Conference & Exhibition), Perth, Australia, **20-25 October 2006** (tentative). AAPG Convention Dept., P.O. Box 979, Tulsa, OK 74101-0979, USA; Phone: (888) 945-2274 (USA and Canada only) or +1 918 560 2679; Fax: +1 918 560 2684; E-mail: convene@aapg.org

GSA Geological Society of America (Annual Meeting), Philadelphia, Pennsylvania, USA, **22-25 October 2006**. GSA Meetings Dept., P.O. Box 9140, Boulder, CO 80301-9140, Phone: +1 303 447 2020; Fax: +1 303 447 1133; E-mail: meetings@geosociety.org; <http://www.geosociety.org/meetings/index.htm>

geoENV VI, the 6th annual European Conference on Geostatistics for Environmental Applications, Island of Rhodes, Greece, **25-27 October 2006**. web site: <http://geoenvia.org/>

EARLY PLANETARY DIFFERENTIATION. A Multi-Planetary and Multi-Disciplinary Perspective, Sonoma, California, USA, **08-10 Dec 2006**. Lunar and Planetary Institute, NASA. Charles Shearer, Institute of Meteoritics, Phone: 505-277-9159, EMail: cshearer@unm.edu, Web: <http://www.lpi.usra.edu/meetings/epd2006/>

AGU American Geophysical Union (Fall Meeting), San Francisco, California, USA, **11-15 December 2006**. E. Terry, AGU Meetings Department, 2000 Florida Avenue, NW, Washington, DC 20009 USA ; Phone: +1 202 777 7335; Fax: +1 202 328 0566; E-mail: eterry@agu.org; or meetinginfo@agu.org; <http://www.agu.org/meetings>

RESERVOIR SIMULATION Symposium. Society of Petroleum Engineers. Houston, TX, USA, **26 - 28 Feb 2007**. 972-952-9393 or 800-456-6863, fax: 972-952-9435, <http://www.spe.org/>

SIAM Conference on Mathematical and Computational Issues in the GEOSCIENCES, Santa Fe, New Mexico, **19-22 March 2007**. <http://siam.org/meetings/calendar.php>

AAPG and SEPM (Joint Annual Meeting), Long Beach, California, USA, **1-4 April 2007**. AAPG Conventions Department, P O Box 979, 1444 S. Boulder Ave., Tulsa, OK 74101-0979, USA. Phone: +1 918 560 2679; Fax: +1 918 560 2684; E-mail: convene@aapg.org, www.aapg.org

LANDSLIDES AND SOCIETY (1st North American Conference), Vail, Colorado, USA, **3-8 June 2007**. Dr. Keith Turner, E-mail: kturner@mines.edu; Web Site: <http://www.mines.edu/academic/geology/landslidevail2007/>

IUGG (24th General Assembly), Perugia, Italy, **2-13 July 2007**. E-mail: Secretary@IUGG2007Perugia.it, Web Site: <http://www.iugg2007perugia.it/>
2007 JOINT STATISTICAL MEETINGS, Salt Lake City, Utah, **29 July - 2 August 2007**. <http://www.amstat.org/meetings/index.cfm?fuseaction=main>

ISI International Statistical Institute, 56th Biennial Session: Includes meetings of the Bernoulli Society, the International Association for Statistical Computing, the International Association of Survey Statisticians, the International Association for Official Statistics and the International Association for Statistical Education, Lisboa, Portugal, **22 - 29 August 2007**. ISI Permanent Office, 428 Prinses Beatrixlaan, P.O. Box 950, 2270 AZ Voorburg, The Netherlands, Phone: +31-70-3375737, Fax: +31-70-3860025, E-mail: isi@cbs.nl, <http://www.isi2007.com.pt/>

IAMG 2007 Beijing, China, **23-30 September 2007**. Zhao Pengda, China University of Geosciences, Wuhan, & Qiuming Cheng, York University, Toronto, Canada, E-mail: qiuming@yorku.ca, qiuming@cug.edu.cn, Website: www.iamg2007.org

IGC2008 in Oslo, Norway

Call for Proposals for IAMG-sponsored Symposia

The 33rd International Geological Congress will be organized by the Nordic countries and held in Oslo, Norway, August 5-14, 2008. IAMG member Richard Sinding-Larsen is VP International Relations on the Congress Organizing Committee. Traditionally, the IAMG sponsors or co-sponsors several Symposia at the quadrennial IGCs. Our organization was founded in 1968 during the 23rd IGC in Prague. During the first 25 years of our existence, IGCs constituted the main venue for holding IAMG Symposia.

We have received an invitation to submit IAMG proposals for Topical and General Symposia to be held in Oslo and IAMG members are invited to make proposals (themes, organizers/chairs). Proposals for multidisciplinary topical symposia are particularly welcome. General symposia cover all individual disciplines of the Earth Sciences including mathematical geology. Please submit your proposal to Secretary General Clayton Deutsch or to Felix Gradstein who is our Council member for the 33rd IGC (see p. 2 for contact info). The deadline for making proposals is 31st August 2006. President Frits Agterberg plans to visit Felix in Oslo during the last week of August. We can submit the complete IAMG proposal to the 33rd IGC Congress Science Committee at that time. For more information on Oslo-2008, see www.33igc.org.



Liège, Belgium
3-8 September 2006

“Quantitative Geology from Multiple Sources”

Liège, Luik or Lüttich - three names for the same city where this year's IAMG Conference will be held. Belgium being a trilingual country with French, Flemish and a small section in the east speaking German, this may confuse you when you drive to IAMG'06 because road signs may just show one of these names depending on where you are. Fortunately many Belgians speak English too, so you can always stop and ask for help or directions.

Liège lies at the crossroads of Europe. It is the metropolis of the Meuse-Rhine “Euregio” which includes the Liège, Aachen and Maastricht areas. Only 30 kms from the Netherlands and 45 kms from Germany, it lies at the very centre of a seven branch-network of motorways on the TGV route London-Brussels-Berlin. It is the third-biggest river port in Europe, a conference centre, the host to international fairs and the economic capital of the Walloon region.

Liège also lies at the geological crossroads between the Paleozoic



outcrops to the south and the Cretaceous-Tertiary to the north and west. A lot of the Belgian towns sound familiar because they gave their names as type localities to many of the Devonian and Carboniferous stages as well as some of the Cretaceous and Tertiary. The simplified geological map above shows several of those places. (Cretaceous is shown in green, Carboniferous in blue and Devonian in browns).

Several excursions are planned for the conference on Wednesday afternoon; they will sample the coal measures (Exc. 2) and the carbonates (Exc. 3) of the Carboniferous near Liège and Namur, respectively, as well as the waters of Spa in the Devonian domain (Exc. 1).

Liège was one of the first area in Europe to start mining coal. Between 1831 and 1984, 2170 million tons of coal were extracted from the subsurface deposits which extend eastward into Germany. Production remained steady until the end of the fifties, with a production exceeding 20 million tons of coal per year. The coal mining activity stopped on the 30th September 1984. The Westphalian (Upper Carboniferous) sediments are 1250 meters thick in the Liège Basin and contain more than fifty coal layers of about seventy centimeters.

Carbonate sediments in Belgium have contributed greatly to the economic development of the country, especially the world-class limestone and dolomite deposits in the Namur region of Dinantian age (Lower Carboniferous). Two of the world's leading lime producers, Lhoist and Carmeuse, are Belgian companies. During this excursion, we will visit the Marche-Les-Dames dolomite open-pit and the Lhoist Company plant which processes 5 million tons of rock per year.

IAMG2007 Conference in Beijing

The IAMG2007 annual conference will be held August 26-31, 2007, in Beijing, China. The conference location is the Academy Exchange Center at the China University of Geosciences and will be hosted by GPRM (see below). The principal theme of the conference is “Geomathematics and GIS Analysis of Resources, Environment, and Hazards”. Preparations for the conference are going smoothly. The first circular will be out shortly and distributed to participants during the IAMG2006 annual conference. Many sessions are already being planned; suggestions for additional sessions, workshops, and short courses are welcome. Co-sponsored events can be organized as well. If you are interested in proposing a session in your field, please contact the conference chairs Prof. **Zhao Pengda** at pdzhao@cugb.edu.cn, Dr. **Frits Agterberg** at agterber@NRCan.gc.ca, or general secretary **Qiuming Cheng** at qiuming@yorku.ca. Both oral and poster presentations are encouraged. Limited exhibition space will be available for companies, institutions and research centers to display their programs and products. Keynote speakers will be invited, and the Chayes Prize and Vistelius Award winners also will deliver keynote lectures. Four Field Trips will be organized, as well as a number of social events. We look forward to welcoming you to Beijing. More information about the conference will be available in the near future at www.iamg2007.org.

IMPORTANT DATES

- January 15, 2007 Abstracts Due
- March 31, 2007 Author Notification
- May 31, 2007 Early Registration
Workshop Registration
Short Course Registration
- June 15, 2007 Camera-Ready Paper Due

GPMR — “State Key Laboratory of Geological Processes and Mineral Resources” in China

The State Key Laboratory of Geological Processes and Mineral Resources (GPMR) was established recently (November 2004) within the **China University of Geosciences** sponsored by the Chinese Ministry of Science and Technology. It is the national research center integrating relevant resources from six existing key laboratories sponsored by the Chinese Ministry of Education and the Ministry of Land and Resources. Its main themes cover the following five associated areas of mineral resources research:

- 1) Composition, Structure and Evolution of Lithosphere and Geological Background of Mineralization;
- 2) Geosphere Interaction and Mineralization Processes;
- 3) Metallogeny and Spatial-Temporal Distribution of Mineral Resources;
- 4) Mineral Exploration and Mineral Resources Assessment;
- 5) Survey and Spatial Information Technology for Mineral Resources Research.

GPMR consists of five research divisions with six fellows of the Chinese Academy of Science on the advisory committee (Profs. Zhao Pengda, Yin Hongfu, Yu Chongwen, Zhai Yusheng, Zhang Benren and Jin Zhenming). It hosts 42 full-time researchers, 22 part-time researchers, visiting scholars, postdoctoral fellows, and graduates students. GPMR provides financial support for short- and long-term external visiting scientists to conduct collaborative research.

GPMR is equipped with a broad spectrum of analytical instruments (ICP-MS, H-8100 TEM, MM5400 spectrometer, EMPA 1600, RM1000 Laser Ramon, etc.), modern survey equipment and advanced spatial information technology (ArcGIS, MapGIS, ERMapper). It has also developed its own sophisticated and specialized spatial information systems (MapGIS, MOPARS, GeoView, and GeoDAS) for mineral resources research.

GPMR has a strong group of mathematical geology and geoinformatics including Prof. Zhao Pengda, Prof. Hu Guangdao, Prof. Wu Chonglong, Prof. Wu Xincai. Frits Agterberg, Zhao Pengda and Qiuming Cheng (Director of GPMR) are on the Academy Committee. It co-organized the IAMG2005 in Toronto last year and will organize the IAMG2007 in Beijing next summer. The second IAMG Student Chapter with about 50 student members is also hosted in GPMR.

Announcements

Episodes: Your Window to the World

Episodes is the official quarterly journal of the International Union of Geological Sciences (IUGS – www.iugs.org). It covers developments of regional and global importance in the earth sciences and is distributed worldwide in four issues (March, June, September and December) each about 80 pages long. The journal is likely the most widely distributed earth science journal since copies go to more than 150 countries worldwide. Articles cover a wide range of earth sciences and authors are from all over the world. The content is of interest to a broad audience of professional earth scientists having diverse cultural and linguistic backgrounds. Whether you live in the developing or developed world, you will find lots of content of interest. Published articles include current reviews, new results from research projects of more than local significance, and discussion of the infrastructure of science, including techniques, research programs, organizations, science policy, or technical assistance. The journal offers earth scientists:

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