



## Why establish a Geostatistical Association ?

When I arrived in Australia in June 1996, I was surprised to find that a Geostatistical Association did not yet exist here. Statistical and geostatistical techniques have been used in the Australian mining industry for more than 10 years and a wealth of publications by Australian geologists, mining engineers and mathematicians exists! All this work demonstrates the usefulness of geostatistical methods, if applied properly, in for example the mining industry, the petroleum industry and the environmental field.

The critical role played by a sound geological interpretation, combined with the continuous updating of the geological models, cannot be emphasised enough. After using geostatistical methods in minerals exploration and mining for over 15 years, I learned the hard way that, as a geostatistician, I often did not communicate sufficiently with geologists and mining engineers. Too often I thought that I had explained precisely how the resource model, interpreted on the basis of the latest available geological information, could be used and where its usefulness ended. I admit that even after all those years, I still find this one of the most difficult issues to get right. Too often, a geostatistician does not have the chance to follow up on the resource model by fine-tuning the results, too often the users of the geostatistical end-product do not get a chance to ask the right questions, too often potential users do not have suffi-

cient opportunity to discuss the advantages and limits of new interpolation methods. I believe that the creation of an environment where the right people are brought together in an atmosphere that enhances the objective appraisal of the possibilities and limitations, of the advantages and disadvantages of various methods, will provide a valuable platform for exchanging experience that is of direct benefit to the minerals industry, the petroleum industry, the emerging environmental industry, etc. I thus appreciated the opportunity to announce the creation of the Geostatistical Association of Australasia at the 5<sup>th</sup> International Geostatistical Congress in Wollongong in September 1996.

The response to our Questionnaire has been very positive, the Establishing Committee has worked very hard behind the scenes to set up a preliminary structure for the Association and we are now able to announce the Inaugu-

ral Meeting of GAA in Perth on Friday 18 April 1997. Our first GAA Newsletter, explains the issues so far addressed by the Establishing Committee. It describes GAA's aims and tasks and it proposes an organisational structure incorporating regional branches in 'Australasia'. GAA's success will depend on contributions from members. The Establishing Committee invites all who are interested in the Association to attend the Inaugural Meeting. Those of you who are unable to attend in Perth on that date, but have further suggestions and comments, are welcome to send us a fax or email. I sincerely hope that GAA will lead to a better understanding of the possibilities of applying geostatistical methods. May GAA provide a positive forum for practical users of geostatistics in Australasia for a long time to come.

*Louis Voortman*

## Introducing the Executive Committee for 1997-1998

The following played an active role in the Establishing Committee and they have been nominated for GAA's Executive Committee for the year 1997-1998:

*John Vann (President)*  
*Louis Voortman (Vice-President)*  
*Julian Barnes (Treasurer)*  
*Ian Glacken (Secretary)*  
*Lyn Bloom*

*Donna Kelly*  
*Brian Davis*  
*Roussos Dimitrakopoulos*  
*John Henstridge*

John Vann is a member of the JORC Committee and is a Consultant Geostatistician and Geoval's Manager for Western Australia. He has been working in the mining industry for over 12 years, of which 7 years as a professional geostatistician. Louis Voortman has been Consultant Geostatistician with Snowden Associates since June 1996 and was

previously the Geostatistics Manager for Gencor in Johannesburg and Chairman of GASA in South Africa in 1991. Ian Glacken is Manager Ore Reserve Systems - Nickel at WMC, Julian Barnes is Managing Director of RSG, Lyn Bloom is Senior Lecturer and Acting Head of the Department of Mathematics at Edith Cowan University, John Hen-

stridge is Managing Director of Data Analysis Australia, Brian Davis is Senior Resource Geologist at Great Central Mines, Donna Kelly is a Senior Resource Geologist at KCGM and Roussos Dimitrakopoulos is Professor in Geostatistics at the University of Queensland in Brisbane. An excellent and diverse team! GAA is already represented in the 'regions' in Kalgoorlie (Donna Kelly), Sydney (Daniel Guibal, Henry Sanguinetti, Jenette and Mike Binns), Melbourne (John Cottle, Stuart Masters), Townsville (Phil Agnew), Wollongong (Ernest Baafi), Brisbane (Roussos Dimitrakopoulos) and Tom Price (Jim Weekes). We hope that these activities will soon evolve into healthy local branches. We are pleased that there are already two statisticians on the first Executive Committee and we are currently looking for a representative from the petroleum industry and one from the mining industry, who is not a consultant. GASA in Johannesburg (Winfred Assibey-Bonsu) has indicated that they are interested in establishing close ties with GAA. Stuart Masters has just been based in Indonesia where he may possibly act as a representative for Indonesia. Profes-

sor Danie Krige recently contacted us to ask how the new Association is coming along!

As soon as the Association has been formally established and our Constitution has been finalised and properly validated by a democratic voting procedure, subsequent Executive Committees need to be duly elected at every Annual Meeting. The Establishing Committee has decided to nominate the first Executive Committee. Formal rules for Committee Membership, Membership to the Association and elective rules are already being worked in detail and will be completed during 1997. At present, the Association is set up based on the experiences obtained from GASA, the AIG, the AusIMM, and from members of the Establishing Committee. Needless to say a considerable amount of time and money has already gone into this (Brian Davis has been very active in drawing up a detailed draft Constitution). We are currently investigating the level of minimum legal and business requirements, including annual auditing of accounts of GAA. We are confident that the Association can 'swing into action' directly after the Inaugural Meeting.

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## The objectives of GAA

It is important to put together a clear and unambiguous Constitution for our new Association as soon as possible. Before this can be done however, our aims and objectives must be defined precisely. Below is a list of the objectives as 'hammered out' by the Establishing Committee, after taking into account all the input from those of you who completed the Questionnaire. We have tried to include all the points raised, but we have had to find a balance between various issues. Should you wish to comment on the definitions as given below, you are welcome to send your comments, in written format, to reach us before 10 April 1997. This will give the Establishing Committee time to discuss your contribution before our Inaugural meeting.

The objectives of GAA are to:

- Promote the good practice, development, study and application of geostatistics in the mining, petroleum, environment and related fields.
- Increase the awareness and status of geostatistics in its various fields of application.
- Promote co-operation and fellowship among the geostatistical community in Australasia.
- Provide a forum for the exchange of ideas among membership of the Association on technical and professional matters.
- Print or publish (including by electronic means) any periodicals, newsletters, journals, books or leaflets that the Association may think desirable for the promotion of its objectives.
- Organise and promote lectures, meetings, symposia and other activities to further the professional development of membership.
- Promote liaison of the Association and its membership with their colleagues internationally.
- Foster and develop good relations and cooperative efforts with other relevant professional and industry bodies, both locally and internationally, in order to further the objectives of the Association.
- Foster and develop good relations and cooperative efforts with universities currently teaching or having research efforts in the field of geostatistics (or closely related fields), both locally and internationally, in order to further the objectives of the Association.
- Recognise outstanding contributions to the Association, or to the promotion or development of geostatistics, by granting awards.

*Brian Davis, John Vann*

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## Drafting of the GAA Constitution

At the first meeting of the GAA Establishing Committee, Brian Davis and John Vann accepted the task of producing a draft constitution for the GAA. With much appreciated inspiration from the Geostatistical Association of South Africa (GASA), as well as consulting the constitutions of the Statistical Society of Australia (SSA) and the AIG as models, the drafting is now under way. It is intended that the provisional constitution be available at the inaugural meeting of GAA.

### Communication with Committee members: the necessity of local branches

Australasia covers a vast area. This implies that a very important role has to be played by 'local branches'. Fortunately, in a number of key areas, GAA already is represented by a number of experienced persons who are willing to get local branches off the ground. When joining GAA, you are advised to also establish contact with your nearest GAA representative. John Henstridge has already established a GAA email address ([gaa@daa.com.au](mailto:gaa@daa.com.au)) on his server computer and we have obtained a PO Box address in West Perth. If you wish to send us mail, please use this postal address: PO Box 1719, West Perth 6872. You can reach us best by email or surface mail as we all have busy jobs and we will not be able to spend much time on the phone.

What local branches may offer, is described by Donna Kelly in Kalgoorlie: "My objective is to establish informal discussion groups, almost like 'self help groups', whereby mining professionals contemplating or practising geostatistics will immediately benefit from each other's site experience". Depending on interest, quarterly meetings may be appropriate with an annual dinner and social get-together perhaps coinciding with the Kalgoorlie Mining Expo. Of course, Donna adds, the venue would have to be within walking distance of a good pub! I don't think that you need much encouragement to send Donna your nicest ideas (of course, which pub?) via "kcgm!openpits!kempl@kcgm.attmail.com".

### Revision of JORC Code

The Joint Ore Reserves Committee of the AusIMM, the AIG and the Minerals Council of Australia has commenced a revision of the *Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves* (the 'JORC Code'). This will be of obvious importance to those involved in the field of mining geostatistics. Written submissions, especially those which propose drafted alternatives, are invited and should be sent to: Secre-

tary, JORC, PO Box 2271, Gosford NSW 2250, Fax (043) 234 654

### Environmental and Geotechnical Applications

GAA was established with the aim of being inclusive for people involved in all fields of application of geostatistics. A recent book edited by Rouhani et al., "Geostatistics for Environmental and Geotechnical Applications" (ASTM, 1996, 280pp, ISBN 0-8031-

2414-7) will be of interest to those trying to apply geostatistics to these problems. The format of the book includes short case studies by a range of practitioners, as well as four "overview papers". Are there any environmental scientists or geotechnical engineers out there who would like to review the book for this newsletter? Contact John Vann on email "geoval@ozemail.com.au"



This is your GAA logo!  
Brian Davis and Donna Kelly



Completed by a professional graphics/desktop publishing designer after came up with a number of ideas. It didn't take the Establishing Committee long to decide on the basic lay-out. Designer Murray Jones was so kind to do the final professional design, taking into account those hidden issues like reproducibility by photocopy, schemes, etc. Our sincere thanks to Murray who did the work rapidly, modern outlook, colour and with a smile! You will soon find those logo's everywhere....



## GAA's Inaugural Meeting on Friday 18 April 1997

Thanks to the efforts of Ian Glacken, we will have our Inaugural Meeting in style! The venue is the "Level 2 Theatre" in the QV1 building. A nice place indeed to kick-start our Association. Ian has also agreed to be our first speaker. He will repeat his Wollongong paper "Change of support and use of economic parameters for block selection", to offer those who could not attend the 5<sup>th</sup> International Geostatistics Congress in September in Wollongong a chance to attend the presentation in Perth. The subject is highly appropriate to the modern assessment of mining ventures, especially with metal prices being so difficult to forecast. GAA will invite a number of 'Distinguished Personages' within the geostatistical community in Australia. The idea behind the 'personalised invitations' is that GAA wishes to honour the pioneers of the use of geostatistics in the Australian mining environment. Especially at our Inaugural Meeting we may not forget those who laid the basis for our current work. Join us in Perth on the day and meet those early Oz geostatistics pioneers in person.

<b>Date:</b>	<b>Friday 18 April 1997</b>
<b>Time:</b>	<b>04.30 to 06.30 pm</b>
<b>Venue:</b>	<b>2<sup>nd</sup> Floor, QV1 Building, 250 St. Georges' Terrace, Perth (corner St. Georges' Terrace and Milligan Street)</b>
<b>Parking:</b>	<b>there are several parking garages in the immediate area, for example QV1 Car Park, entrance off Murray Street, Wilson's City Parking in Mount Street, etc.</b>

# THE GEOSTATISTICAL ASSOCIATION OF AUSTRALASIA

## WHAT IS THE GAA?

**A group dedicated to the representation of geostatisticians from all branches of the Earth Sciences, including**

Mining	Research	Palaeontology	Exploration
Education	Archaeology	Geophysics	Management
Biological Sciences	Environment	Economics	Information Technology
Geochemistry	Petrology	Metallurgy	Resources
Meteorology	Hydrology	Consulting	Physical Sciences
Petroleum Engineering	Engineering	Geomechanics	

**A group promoting and representing the professional interests of geostatisticians by:**

- Increasing community awareness of the role of geostatistics
- Assisting the development of quality education and training of practitioners
- Maintaining professional standards and ethics among practicing geostatisticians
- Representing professional geostatisticians to organisations such as the Stock Exchange, Federal and State Governments, other mining bodies, etc.
- Providing channels for communication and exchange of information within the field of geostatistics throughout the Australasian region

## WHAT DOES GAA MEMBERSHIP PROVIDE ?

- Regular meetings and discussions with invited eminent speakers
- An informative and lively Newsletter which provides a vehicle for dissemination of news, topical issues, technical contributions, and member feedback
- Special events, such as seminars and workshops, covering a wide range of topics which contribute to the continuing professional development of members
- A network and 'peer group' of experienced professional geostatisticians, having diverse interests, yet sharing a common desire to assist others with career development and maintain the quality and integrity of the field
- A source of advice and representation to its members, and to other organisations and statutory bodies

## Types of Membership

- Ordinary Membership (full voting rights) annual contribution \$ 30.00
- Associate Membership (no voting rights) annual contribution \$ 15.00
- Student Membership (no voting rights) annual contribution \$ 5.00
- Company Membership (by invitation of the Executive Committee)

Membership Forms will be available at the Inaugural Meeting and may be requested by email after that date.

*For further information contact:*

*GAA Secretary, PO Box 1719, West Perth WA 6872*

*email: [gaa@daa.com.au](mailto:gaa@daa.com.au)*